APPENDICES

Notice of Preparation of a Draft Environmental Impact Report

Date: July 25, 2023

To: Responsible Agencies, Interested Parties and Organizations

Subject: Notice of Preparation of an Environmental Impact Report for the proposed Henderson Commercial Project

Lead Agency: City of Porterville

Project Applicant: Henderson & 65, LLC

Contact: Jason Ridenour, Assistant City Manager
City of Porterville
291 N. Main Street
Porterville, CA 93257
(559) 782-7460
jridenour@ci.porterville.ca.us

Project Title: Henderson Commercial Project

Notice is Hereby Given: The City of Porterville (City) is the Lead Agency on the below-described Henderson Development Project (Project) and has prepared a Notice of Preparation (NOP) of an Environmental Impact Report (EIR), pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The NOP is intended to disclose environmental information and to solicit the views of the public, interested parties, and/or agencies as to the scope and content of the environmental information. Specifically, the City is requesting that commenters provide comments on the NOP, identify additional environmental topics (and/or special studies) that they believe need to be explored in the forthcoming EIR, and to identify other relevant environmental issues related to the scope and content of the forthcoming EIR.

Project Location: The proposed Project is located on approximately 10.54-acres in the north-central area of the City of Porterville, California and is at the northwest corner of State Route (SR) 65 and West Henderson Avenue. The Project includes six parcels: Assessor's Parcel Numbers 246-111-065, -026, -046, -043 and -045, and 246-240-020. The site is vacant while single-family residences lie to the west, commercial business and a shopping center to the west and south, SR 65 to the east, and single-family residences to the north. APNs 246-111-065, -026, -046, -045, -043 are designated as Retail Centers and APN 246-240-020 is designated as Low Density Residential by the Porterville General Plan while the entire site is zoned as CR (Retail Centers). See Figure 1 – Location Map and Figure 2 – Site Aerial.

Project Description: The proposed Project consists of the development of retail and restaurant buildings on approximately 10.54 acres of land, for a total of 91,335 square feet of building. Specific project components include:

- Three quick serve drive-thru buildings
    - +/- 3,750 square feet
    - +/- 5,500 square feet
    - +/- 4,500 square feet
- Inline major buildings and retail buildings totaling +/- 77,585 square feet to be used for:
    - General Retail
    - Grocery store with alcohol sales
    - 24-hour drug store

- Installation of a new east-bound left turn lane off West Henderson Avenue
- New signage including:

    - 80’ pylon sign in the northeast site corner
    - 60’ pylon sign in the southeast site corner
- 20’ monument sign along West Henderson Avenue.
- Associated improvements including parking areas, nighttime lighting and site landscaping, in accordance with Porterville City standards.

Existing City services (water, sewer, and stormwater) are located in W. Henderson Avenue and the applicant will be required to tie into these existing facilities. The proposed Project would require gas, telephone, cable, and electrical improvements. Natural gas would be provided by The Gas Company; telephone services would be provided by AT&T; electric power would be provided by Southern California Edison Company; and cable television would be provided by Charter Communication. The extent of work required for utilities and gas would be determined during final project design.

Since the development is proposed to be greater than 50,000 square feet, a Conditional Use Permit is required for project approval and a General Plan Amendment is required to change APN 246-240-020 from Low Density Residential to Retail Centers. Additionally, a Parcel Map may be required to reconfigure parcel lines and/or create new parcels meeting the requirements of all applicable codes for sale or lease.

Scope of the Environmental Impact Report: The forthcoming EIR will address the following CEQA Guidelines Appendix G topics: Aesthetics, Agriculture/Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire. The EIR will also review Project alternatives as well as cumulative impacts. To support the analysis in the EIR, the following technical studies will be prepared: Air Quality / Greenhouse Gases / Energy Study, Cultural Resources Records Search, and a Traffic Impact Study. There is a potential impact identified with the Intersection Level of Service at N. Prospect St & W. Henderson Ave exceeding the City’s’ minimum acceptable limit after mitigation, which would result in a significant impact in the EIR.

Document Availability and Public Review Timeline: Due to the time limits mandated by State law, your response to the NOP must be sent *no later than 30 days* after receipt of this notice. The review period for the NOP will be from July 25, 2023 to August 25, 2023. Copies of the NOP can be obtained by request to Jason Ridenour, whose contact information is given below. Electronic copies can also be accessed on the City’s website at: https://www.ci.porterville.ca.us/government/city_manager/public_notices.php

Submitting Comments: Comments and suggestions as to the appropriate scope of analysis of the EIR are invited from all interested parties. Written comments or questions concerning the EIR for the proposed Project should be directed to the City of Porterville’s Assistant City Manager at the following address by 5:00 p.m. on August 18, 2023. Please include the commenter’s full name and address. Please submit comments to:

Jason Ridenour, Assistant City Manager
City of Porterville
291 N. Main Street
Porterville, CA 93257
(559) 782-7460
jridenour@ci.porterville.ca.us

Figure 1 –Location Map

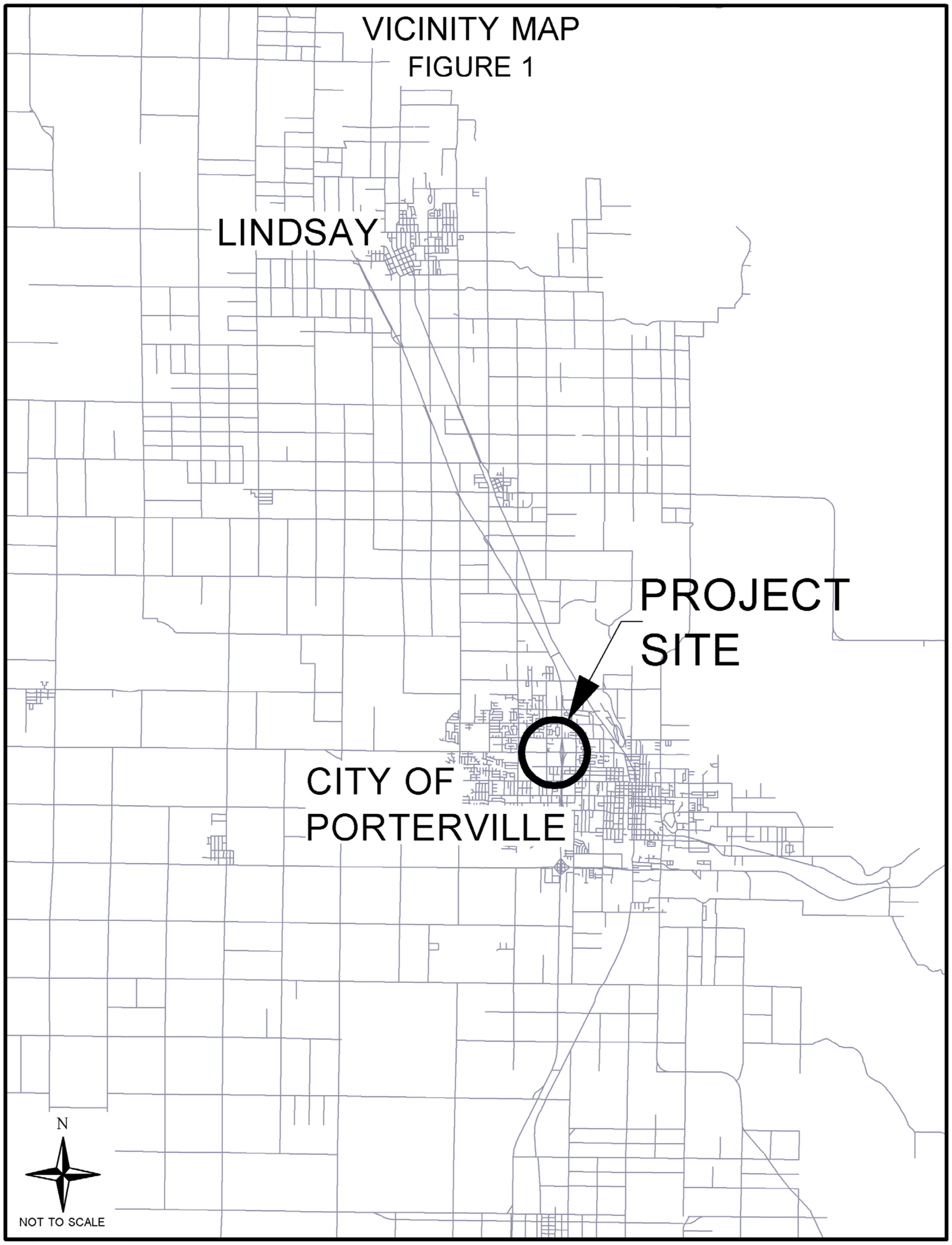

Figure 2 – Site Aerial

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

June 16, 2023

Jason Ridenour
City of Porterville
291 N Main St.
Porterville, CA 93257

Re: 2023060320, Henderson Development Project, Tulare County

Dear Mr. Ridenour:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
- **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
- **b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
- **a.** If part or all of the APE has been previously surveyed for cultural resources.
- **b.** If any known cultural resources have already been recorded on or adjacent to the APE.
- **c.** If the probability is low, moderate, or high that cultural resources are located in the APE.
- **d.** If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
- **a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
- **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Cameron.Vela@nahc.ca.gov

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

cc: State Clearinghouse

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

July 12, 2023

Jason Ridenour, Assistant City Manager
City of Porterville
291 North Main Street
Porterville, California 93257
(559) 782-7460
jridenour@ci.porterville.ca.us

Subject: Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the Proposed Henderson Commercial Project
State Clearinghouse No: 2023060320

Dear Jason Ridenour:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) from the City of Porterville for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id*., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

PROJECT DESCRIPTION SUMMARY

Proponent: Henderson and 64, LLC.

Objective: The proposed Project consists of the development of retail and restaurant buildings on approximately 10.54 acres of land, for a total of 91,335 square feet of building. Specific project components include: Three quick serve drive-thru buildings, +/- 3,750 square feet, +/- 5,500 square feet, +/- 4,500 square feet. Inline major buildings and retail buildings totaling +/- 77,585 square feet to be used for: General retail, a grocery store with alcohol sales and a 24-hour drug store. The proposed Project also includes the installation of a new east-bound left turn lane off West Henderson Avenue, new signage including: an 80-foot pylon sign in the northeast site corner, a 60-foot pylon sign in the southeast site corner, and a 20-foot monument sign along West Henderson Avenue. And associated improvements including parking areas, nighttime lighting, and site landscaping, in accordance with Porterville City standards.

The existing City services (water, sewer, and stormwater) are located in West Henderson Avenue and the applicant will be required to tie into these existing facilities. The proposed Project would require gas, telephone, cable, and electrical improvements. Natural gas would be provided by The Gas Company; telephone services would be provided by AT&T; electric power would be provided by Southern California Edison Company; and cable television would be provided by Charter Communication. The extent of work required for utilities and gas would be determined during final project design. A General Plan Amendment is required to change APN 246-240-020 from Low Density Residential to Retail Centers. Since the development is proposed to be greater than 50,000 square feet, a Conditional Use Permit is required for project approval.

Additionally, a Parcel Map may be required to reconfigure parcel lines and/or create new parcels meeting the requirements of all applicable codes for sale or lease.

Location: The proposed Project is located on the northwest corner of State Route (SR) 65 and West Henderson Avenue in the north-central area of the City of Porterville, California. The site comprises six parcels: APNs 246-111-065, -026, -046, -043, and -045, and 246-240-020. The site is vacant, while single-family residences lie to the west, commercial businesses and a shopping center to the west and south, SR 65 to the east, West Henderson Avenue to the south, and single-family residences to the north. APNs 246-111-065, -026, -046, -045, are -043 are designated as Retail Centers and APN 246-240-020 is designated as Low Density Residential by the Porterville General Plan. The entire site is zoned as CR (Retail Centers). There are no aquatic resources present within the proposed Project area or adjacent area per Google aerial photography and Street View.

Timeframe: n/a

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the City of Porterville in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

The NOP indicates that the forthcoming Environmental Impact Report (EIR) will address CEQA Guidelines including but not limited to Biological Resources. The EIR will also analyze Project alternatives as well as cumulative impacts. When an EIR is prepared, the specifics of mitigation measures may be deferred, provided the lead agency commits to mitigation and establishes performance standards for implementation.

Special-Status Species: Based on aerial imagery and species occurrence records as documented in the California Natural Diversity Database (CNDDB), the proposed Project site has the potential to support special-status species (CDFW 2023). These resources may need to be evaluated and addressed prior to any approvals that would allow ground disturbing activities. CDFW is concerned regarding potential impacts to special-status species including, but not limited to, the State Threatened (ST) Swainson's hawk (*Buteo swainsoni*), the State candidate-listed as endangered (SCE) Crotch bumble bee (*Bombus crotchii*,), and the State species of special concern (SSC) American badger (*Taxidea taxus*).

Swainson's Hawk (*Buteo swainsoni)*

Swainson's hawks (SWHA) exhibit high nest-site fidelity year after year in the San Joaquin Valley (CDFW 2016). There was a SWHA occurrence approximately 2.5-miles west of Project limits in 2017 (CDFW 2023). Per Google Earth historical imagery, the proposed Project site habitat has been grassland and has frequently been disturbed since at least 1994. There was an orchard directly to the west until 2011 and by 2014, the site appears to have been graded/disturbed and still appears to contain grasslands. This habitat has the potential to contain insects, rodents, etc., that could serve as prey for this species. Trees that remain in the Project vicinity are located to the east, adjacent to SR 65.

The Project as proposed would involve noise, groundwork, and movement of workers that could affect nests and has the potential to result in nest abandonment, significantly impacting local nesting SWHA. Without appropriate avoidance and minimization measures for SWHA, potential significant impacts that may result from Project activities include nest abandonment, and reduced nesting success (loss or reduced health or vigor of eggs or young) from loss of foraging habitat. CDFW recommends the CEQA document prepared for this Project address potential impacts to SWHA by including the following avoidance and minimization measures.

CDFW recommends compensation for the loss of Swainson’s hawk foraging habitat as described in the Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Staff Report) (CDFG 1994) to reduce impacts to foraging habitat to less than significant. The Staff Report recommends that mitigation for habitat loss occur within a minimum distance of 10 miles from known nest sites. CDFW has the following recommendations based on the Staff Report:

- For projects within 1 mile of an active nest tree, a minimum of one acre of habitat management (HM) land for each acre of development is advised.
- For projects within 5 miles of an active nest but greater than 1 mile, a minimum of 0.75 acres of HM land for each acre of development is advised.
- For projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree, a minimum of 0.5 acres of HM land for each acre of development is advised.

SWHA are known to travel for miles to forage. Therefore, CDFW recommends surveys be conducted as part of the biological technical studies conducted in support of the CEQA document by a qualified biologist with knowledge of SWHA natural history and behaviors, following the survey methods developed by the Swainson’s Hawk Technical Advisory Committee (SWHA TAC 2000). CDFW recommends that the survey be conducted by a qualified biologist again within the survey season immediately prior to project implementation. CDFW recommends a minimum no-disturbance buffer of 0.5-mile be delineated around active nests until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. If an active SWHA nest is detected during surveys and a 0.5-mile buffer is not feasible, consultation with CDFW is warranted to discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the acquisition of an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

Crotch Bumble Bee (*Bombus crotchii*)

The Crotch bumble bee (CBB) has the potential to occur within the Project site. CBB was once common throughout most of central and southern California. However, it now appears to be absent from most of their range, especially in the central portion of its historic range within California's Central Valley (Hatfield et al. 2014). Analyses by the Xerces Society et al. (2018) suggest there have been sharp declines in relative abundance by 98% and persistence by 80% over the last ten years.

Suitable CBB habitat includes areas of grasslands and upland scrub that contain requisite habitat elements, such as small mammal burrows, which may be present within Project limits. CBB primarily nest in late February through late October underground in abandoned small mammal burrows but may also nest under perennial bunch grasses or thatched annual grasses, under brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014; Hatfield et al. 2015). Overwintering sites utilized by CBB mated queens include soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). Therefore, ground disturbance and vegetation removal associated with project activities have the potential to significantly impact local CBB populations.

CDFW recommends that a habitat assessment be conducted by a qualified biologist for suitable CBB habitat as part of the biological technical studies conducted in support of the CEQA document and that surveys be conducted for CBB, CBB nesting habitat, and CBB foraging resources. With the highest detection probability occurring from April through August. If ground-disturbing activities will occur during the overwintering period (October through February), consultation with CDFW is warranted to discuss how to implement project activities and avoid take. Any detection of CBB prior to or during project implementation warrants consultation with CDFW to discuss how to avoid take.

On-site surveys provide the most valuable information for determining potential impacts of proposed projects and activities on the CBB, and subsequently developing measures to avoid or minimize take of this species. Survey efforts should include multiple on-site surveys and should be developed to detect foraging bumble bees and potential nesting sites (nesting surveys). Survey timing should be determined on a project-by-project basis based on seasonality and when activity or foraging will most likely occur each year. Timing of the surveys may vary depending on the location, elevation, seasonal rainfall, average ambient air temperatures, and local seasonal weather conditions. To increase probability of detection, bumble bee survey efforts should be conducted during the Colony Active Period (April-August) and when floral resources are present, ideally during peak bloom. Surveys efforts should occur and results should be submitted to

CDFW prior to initiation of ground disturbing project activities. The number and type of surveys conducted during a survey effort may vary on a project- and site-specific basis. For very large project sites, for example, surveyors should use large meandering transects that incorporate patches of floral resources across the landscape. It is recommended that at least 3 on-site surveys take place prior to project implementation. Each survey should ideally be spaced 2-4 weeks apart during the Colony Active Period to ensure that they cover a range of dates and account for variability in resource use by the candidate species and floral resource phenology within the site.

While surveys conducted using these flight seasons/active periods as a guide are considered the most effective and protective to the species, surveys may fail to detect the presence of CBB. Therefore, some project proponents may choose to assume presence and rely on habitat as an indicator of presence in lieu of, or in addition to, surveys. CBB move nests sites each year; therefore, surveys should be conducted each year that project activities will occur. Even if surveys from a particular project site failed to detect CBB one year, project proponents should perform a full round of surveys each year that project activities will occur or assume presence.

American Badger (*Taxidea taxus*)

American badgers (AMBA) occupy sparsely vegetated land cover with dry, friable soils to excavate dens, which they use for cover, and that support fossorial rodent prey populations (i.e., ground squirrels, pocket gophers, etc.) (Zeiner et. al 1990). Per Google aerial and Street View imagery (2023), the Project site appears to have been disturbed, and contains grassland habitat, which may support burrows and dens. There are also disturbed areas to the immediate west of the Project site.

Habitat loss is a primary threat to AMBA (Gittleman et al. 2001). The Project will result in a high degree of land conversion and potential habitat fragmentation. As a result, ground-disturbing activities have the potential to significantly impact local populations of AMBA.

CDFW recommends that a qualified biologist conduct focused surveys for AMBA as part of the biological technical studies conducted in support of the CEQA document and perform an analysis of the Project's direct, indirect, and cumulative impacts to AMBA in this area. Regardless of the results of the initial surveys, CDFW recommends pre-construction surveys for AMBA be performed for each phase of the Projects development at least ten days prior to the beginning of project activities. Avoidance whenever possible is encouraged via delineation and observation of a 50-foot no-disturbance buffer around dens until it is determined through non-invasive means that individuals occupying the den have dispersed.

CNDDB: Please note that the CNDDB is populated by and records voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDB but where there is suitable habitat and features capable of supporting species. A lack of an occurrence record in the CNDDB does not mean a species is not present. In order to adequately assess any potential Project-related impacts to biological resources, surveys conducted by a qualified wildlife biologist during the appropriate survey period(s) and using the appropriate protocol survey methodology are warranted in order to determine whether or not any special status species are present at or near the Project area.

Project Alternatives Analysis: CDFW recommends that the information and results obtained from the biological technical surveys, studies, and analysis conducted in support of the project's CEQA document be used to develop and modify the project's alternatives to avoid and minimize impacts to biological resources to the maximum extent possible. When efforts to avoid and minimize have been exhausted, remaining impacts to sensitive biological resources should be mitigated to reduce impacts to a less than significant level, if feasible.

Cumulative Impacts: CDFW recommends that a cumulative impact analysis be conducted for all biological resources that will either be significantly or potentially significantly impacted by implementation of the project, including those whose impacts are determined to be less than significant with mitigation incorporated or for those resources that are rare or in poor or declining health and will be impacted by the project, even if those impacts are relatively small (i.e. less than significant). Cumulative impacts should be analyzed using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects on resources and should be focused specifically on the resource, not the project. An appropriate resource study area should be identified and utilized for this analysis. CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice of

Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CDFW appreciates the opportunity to comment on the Project to assist the City of Porterville in identifying and mitigating the Project's impacts on biological resources.

If you have any questions, please contact Jaime Marquez, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 580-3200, or by electronic mail at Jaime.Marquez@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Sarah Paulson
E9964E60293D40A...

Sarah Paulson for Julie A. Vance
Regional Manager

ec: City of Porterville
jridenour@ci.porterville.ca.us

State Clearinghouse, Governor's Office of Planning and Research
State.Clearinghouse@opr.ca.gov

Jaime Marquez
California Department of Fish and Wildlife

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FENNEMORE.
DOWLING AARON

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August 21, 2023

Mr. Jason Ridenour, Assistant City Manager
City of Porterville
291 N. Main Street
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(559) 782-7460
jridenour@ci.porterville.ca.us

RE: Comments Regarding Notice of Preparation of an Environmental Impact Report for the Proposed Henderson Commercial Project

Dear Mr. Ridenour:

I am writing in regards to the Notice of Preparation of Draft EIR for the proposed Henderson Commercial Project (the "Project"). As you know, our office represents Mr. Gary Geiger, who is the owner of the Burger King located at 1092 W. Henderson Avenue (the "Burger King"), which is adjacent to the proposed Henderson Commercial Project and is likely to be significantly impacted from the Project.

We have reviewed the Notice of Preparation and have prepared the following comments regarding the proposed commercial Project on Henderson that are being submitted on behalf of our client. As you know, the City has a responsibility to properly evaluate all of the potential impacts caused by a project to the surrounding environment and communities. We do not believe that the City has yet satisfied its duty in evaluating the impacts caused by the proposed Project. The following environmental impacts and concerns must be investigated as part of the Draft EIR. (CEQA, Section 15082 (b).)

a. *Traffic Impacts Must Be Adequately Studied and Evaluated.*

After reading the proposed Project plans, there are several traffic concerns that must be addressed in the Draft EIR. As the City knows, existing traffic on Henderson Avenue is already a concern to surrounding businesses and property owners without the Project being developed. The Draft EIR must: (1) consider the impacts of the current design of the ingress and egress directing traffic into the exit lane of the approach; (2) address and/or correct the insufficiency of the prior August 2020 Traffic Study; (3) properly inform Caltrans of the risks with the Project and involve Caltrans with the Draft EIR; (4) evaluate the traffic impact from the Project on Prospect Street; (5) address the inclusion of cross access agreements; and (6) address the risk of the Project design constituting an inverse condemnation to the Burger King.

i. *Current Design of Ingress and Egress Directs Traffic into Opposite Lanes*

According to the City of Porterville Engineering Division, the current design of ingress and egress from Henderson Avenue into the Project is not consistent with City Standards. According to City Standard T-7, the proposed median for the project is required to have 40' inner turn radius and a 50' outer turn radius. However, the City's own Engineering Division has noted that if the T-7 standard was applied to the proposed layout, left turning traffic would be directed into the exit lane of the approach. To remedy this, the Engineering Division states that it is, "…necessary to shift the approach west in order to direct left turning traffic to the proper lane of the approach." (*Id.*) However, the further west the approach is created, the greater the potential impact to the existing ingress and egress to existing businesses, including my client Burger King. Therefore, the Draft EIR must adequately study and consider the impacts of the current design of the ingress and egress.

ii. *August 2020 Traffic Study is Insufficient and the Draft EIR Must Evaluate Issues Not Discussed in the Study*

It is unclear at this point what traffic study the Project will rely upon. What is clear is that the August 2020 Traffic Study ("2020 Traffic Study") was wholly inadequate and insufficient. As such, the City cannot rely upon that 2020 Traffic Study and a new and appropriate study must be completed to evaluate impacts to traffic on the already heavily congested Henderson Avenue. The 2020 Traffic Study's insufficiencies include: (1) failure to include the required CEQA-level VMT analysis; (2) failure to address the impacts of the lack of Prospect Street access to the Project; (3) failure to include the trip distribution map; (4) failure to consider the traffic impacts to surrounding businesses, including my client's Burger King; and (5) failure to evaluate any traffic signal mitigation measures.

1. CEQA-Level VMT Analysis

The 2020 Traffic Study failed to conduct or recommend a CEQA-level VMT analysis. That study assumed that the proposed Project would incorporate a locally-serving retail Project, and thus, did not recommend a full CEQA-level VMT analysis. However, the Project does not qualify for local-serving and is instead regional-serving based on the size of the proposed Project, the close proximity of the proposed location to other regional-serving retail centers, and the inclusion of two large retail businesses.

As the City and the Project proponent are aware, Regional-serving Projects, "can lead to substitution of longer trips for shorter ones, may tend to have a significant impact." (Technical Advisory on Evaluating Transportation Impacts in CEQA, State of California Governor's Office of Planning and Research, December 2018, page 16.) State guidance on this topic shows that in general, "…retail Project including stores *larger than 50,000 square feet* might be considered regional-serving, and so lead agencies *should undertake an analysis to determine whether the project might increase or decrease VMT.*" (Technical Advisory on Evaluating Transportation Impacts in CEQA, page 17 (2018), (emphasis added).)

Here, the Project includes a combined retail space of approximately 73,500 square feet. (*Id.*) Thus, the proposed retail Project qualifies as regional serving and not local-serving.

Further, the Project is located adjacent to other existing regionally-serving retail shopping centers, such as the Walmart retail center at the northwest corner of the Henderson Avenue/Prospect Avenue intersection, and the Target/Kohl's retail center at the southwest corner of the Henderson Avenue/Prospect Avenue intersection. This further supports the conclusion that the project is regional-serving along with the fact that the Project will provide retail space for a DD's Discount, Ross Dress for Less, Five Below, and Burlington Coat Factory. (See, Project Map, NWC Henderson Avenue & State HW 65, Retail California). Ross Dress for Less and Burlington Coat Factory are both regional-serving retail. Thus, the proposed retail center is regional-serving. and will likely lead to an a net increase in total VMT and a likelihood of significant transportation impacts that must be fairly evaluated. (See, Technical Advisory on Evaluating Transportation Impacts in CEQA, page 26.)

The Project proponent and the City cannot end run around CEQA's VMT analysis requirement by simply concluding under these circumstances that the Project is "local-serving". To do so would make the final EIR completely inadequate and defective. Therefore, the EIR must appropriately consider the proposed retail Project as regional-serving and undertake a CEQA-level VMT analysis.

2. Impacts on Prospect Street Access Issues.

The 2020 Traffic Study assumed that there would be full project ingress and egress from Prospect Street. However, it does not appear that appropriate evaluation had been made of the impacts of the lack of Prospect Street access to the Project. Under the 2020 Traffic Study, Prospect Street access was not fairly considered because it was not contemplated that access via this route would be provided by the Project's opening year due to delays in the development of the adjacent hotel project the west of the proposed retail Project. If Prospect Street access to the Project will not be required at this time, but is contemplated at some point in the near future, it would be inappropriate to avoid any analysis and/or would constitute improper piecemealing.

The City has stated in its September 4, 2020 letter to Project Development Team that, "[t]he Fire Department requires an alternative fire access that is readily accessible and separate from the primary point of access. Given the commercial nature of this area, and the residential use and zoning of the northerly properties, Prospect and Henderson have been consistently cited as points of connection." (September 4, 2020 Letter from Community Development Department to Project Development Team.) Similarly, the City has stated that, "[b]uilding permits will not be issued without the recorded cross access agreements in place. The Project Code references the importance of adequate circulation, but the requirement to provide access for all parcels to Henderson Avenue and to Prospect Street is generated by the Fire Department." (September 4, 2020 Letter from Community Development Department to Project Development Team.) Thus, Prospect Street will provide potential fire access to the project and the Project will have an impact on the Prospect Street access and the scope of the Draft EIR must evaluate the traffic impacts on Prospect Street.

Further, even if Prospect Street access is not required for some period of time, traffic will be loaded to the two unsignalized, access-restricted driveways on Henderson Avenue. This will lead to excessive queueing and delay in several driveways along the Henderson Avenue. The previous 2020 Traffic Study did not adequately analyze the potential impact of full or partial removal of access at the Prospect Street / Project Access intersection. The excessive queuing at Henderson Avenue will lead to significant traffic safety risks and need to be addressed in the Draft EIR.

3. *Trip Distribution Map of the Study Must be Included.*

The previous 2020 Traffic Study did not provide a trip distribution map of the study area. Instead, the Traffic Study only provided a brief table that summarized the percent trip distribution by direction instead of on specific roadways in the study area. Thus, it is not clear what the north/south trip distribution is along Prospect Street compared to State Route 65. Further, the Traffic Study did not provide the trip distribution percentages of the project driveway or the number of trips that would access the project site from Henderson Avenue. As a result, the Traffic Study did not completely summarize the estimated traffic volumes, delays or queue lengths that would occur at the existing and proposed driveway intersections along Henderson Avenue. Therefore, the Draft EIR must analyze the trip distribution percentages of the project and accurately calculate the estimated traffic volumes, delays and queue lengths.

4. *Traffic Impacts to Existing Surrounding Businesses Must Be Studied and Fairly Considered.*

The City must study and fully analyze the impacts of the Project on the surrounding businesses. Previous studies did not include the project trips at the two project driveways on Henderson Avenue on its project trip assignment exhibit and did not conduct the level of service (LOS) analyses for the two project driveways on Henderson Avenue. Additionally, the Traffic Study did not disclose or fairly evaluate that the two-proposed driveways on Henderson Avenue would severely impact the existing driveways that currently serve the Burger King restaurant located at 1092 W. Henderson Avenue or collect traffic counts at the existing driveways to determine the impact of the proposed retail project traffic on the existing Burger King driveway operations. The scope of the Draft EIR must study and evaluate the impacts of the Project on surrounding businesses.

5. *Traffic Signal Mitigation Measure Must Be Evaluated and Included.*

Existing Henderson Avenue traffic without this project is already a mess. Prior studies of the Project recommended either a left-in worm island median or a single-lane roundabout instead of the traffic signal. However, that study did not provide any explanation as to why the installation of a traffic signal was not recommended at the intersection, despite the installation of the traffic signal being warranted under every analysis scenario, including existing conditions. Additionally, the Traffic Study did not analyze the impact of not including a traffic signal at the intersection, which would potentially contribute to excessive queueing and an increase of idling cars, potentially also affecting the off ramps of SR-65. Therefore, the scope of the Draft EIR must include fully examining the impacts of not having the traffic signal or alternatively installing a traffic signal to control the traffic surrounding the Project.

iii. *Potential Impacts to SR-65.*

It is our understanding that the Traffic Study was not reviewed by Caltrans, despite the Traffic Study intersections including the SR-65 / Henderson Avenue interchange. The Project is in close proximity to SR-65, and is located in the northwest quadrant of the SR-65 / Henderson Avenue interchange. Caltrans states that it, "…anticipates that the proposed Project would impact the SR 65/Henderson Avenue interchange." (December 9, 2019 Letter from Caltrans to Julie D. Phillips, Community Project Manager for City of Porterville.) As discussed above, the proposed Project will likely cause significant queueing on Henderson Avenue. This may have a direct impact on the SR-65 / Henderson Avenue. Thus, Caltrans has a direct interest in the Project. Therefore, the Draft EIR must evaluate the potential impacts to SR-65 and include appropriate input from Caltrans on that issue.

b. *Air Quality Concerns That Must Be Addressed.*

There will likely be an increase in idling cars because of the (1) the design of the ingress and egress into the Project and (2) the inclusion of three drive-thrus in the Project. The scope of the Draft EIR must therefore include any environmental impacts from excessive idling from vehicles at the Project site. As discussed above, the current design of the ingress and egress will likely lead to excessive queueing on Henderson Avenue. The excessive queueing on Henderson Avenue will mean that there will be a large number of idling cars, which will likely have significant air impacts. Additionally, the Project involves the addition of three quick serve drive-thru buildings. Two of the spaces are anticipated to be a Raising Canes and a Chick-Fil-A, which have a notorious reputation for having long queues. The long queues will likely lead to a large line of vehicles that will be idling for significant periods of time. The idling cars will potentially cause significant air impacts that must be investigated. Therefore, the Draft EIR must discuss the significant air impacts potentially caused by (1) the excessive queueing on Henderson Avenue and (2) the inclusion of three drive-thrus in the Project.

c. Impacts from Loss of Residential Dues to Rezoning.

According to the submitted Notice of Preparation, the proposed Project requires that the zoning designation of APN 246-240-020 change from Low Density Residential to Retail Centers. This proposed change will lead to additional impacts to the surrounding environment and community that must be reviewed by the Draft EIR. If portions of the Project include areas that must be rezoned from residential, the scope of the Draft EIR must include an evaluation of the loss of residential properties and any mitigation efforts required of the project proponent resulting from the loss of residential development. This is particularly important given the significance of residential development in California, which already has a large residential housing shortage. Further, the loss of residential zoning will increase the traffic in the area. This is especially true since the previous zone was Low-Density Residential, which would have provided less traffic to the area than the Retail Center zone. Thus the rezone will increase the amount of traffic to the area. As a result, there will be additional impacts to air quality because of this change. Therefore, the Draft EIR must investigate the impacts caused by the loss of residential dues.

d. *Conclusion.*

The City has a responsibility to fully analyze and consider the potential impacts that the proposed Project will have on the surrounding environment and the community. As it stands, there are several environmental and traffic concerns regarding the proposed Project that have not yet been considered. The City must investigate the following environmental impacts and concerns must as part of the Draft EIR

The Draft EIR must explore several traffic and air quality concerns relating to the Project. Regarding traffic concerns, the Draft EIR must: (1) address the current design of the ingress and egress which directs vehicles into the opposite lane; (2) address the issues that were not adequately addressed by the Traffic Study; (3) include input from Caltrans and inform Caltrans of the risks to the SR-65 / Henderson interchange; (4) evaluate the traffic impact on Prospect Street; (5) address the inclusion of cross access agreements; and (6) address the current design of ingress and egress potentially constituting an inverse condemnation of the Burger King.

The Draft EIR must address air quality concerns caused by (1) the Henderson Avenue ingress and egress and (2) the inclusion of three drive-thrus in the Project and impacts from nay loss of residential housing due to any areas of the Project rezoned from residential to commercial to accommodate the needs of the proposed Project.

The Draft EIR must also address the impacts caused to the surrounding community and environment by rezoning APN 246-240-020 from Low Density Residential to Retail Center. The removal of the residential space will lead to additional traffic and air quality concerns. The loss of residential space is also significant in California because of its existing housing crisis.

Sincerely,

FENNEMORE DOWLING AARON

Daniel C. Stein

DCST/csua

29774089.1/058354.0001

From: Jason Ridenour
To: Emily Bowen; Jeff O"Neal; Julia Lew; Oscar Zepeda; Rocio Mejia
Subject: Fw: Henderson Project
Date: Wednesday, August 2, 2023 3:43:28 PM
Attachments: Outlook-tjtzyq1h.png

Team,

Please see the email below regarding the Henderson Commercial Project.

Thank you,

Jason Ridenour
Assistant City Manager
City of Porterville
559-782-7460
ChoosePorterville.com

From: mndbikies@ocsnet.net <mndbikies@ocsnet.net>
Sent: Wednesday, August 2, 2023 3:17 PM
To: Jason Ridenour <jridenour@ci.porterville.ca.us>
Subject: Henderson Project

Mr. Jason Ridenour
City of Porterville Assistant City Manager
Re.: Henderson (Commercial/Development) Project (the subject text and aerial are not consistent)

Hi Jason,

The proposed commercial project is a large and exciting one for the City. Hopefully there is enough support from our community to allow these new businesses and our existing businesses to flourish once these new projects are completed.

Reading the public notice, there is a Traffic Impact Study (TIS) completed with findings of existing conditions as well as projected conditions once the projects are completed. And it appears to have recommendations to mitigate impacts created by this project. I did not look up the current level of service for the impacted intersections (hopefully the study includes Indiana Street to Prospect Street area, on Henderson Avenue), but there was reference to Prospect Street in the public notice.

I would request a copy of this TIS be forwarded to me. Email is fine unless only hard copies are available, just let me know.

My comments regarding the proposed projects deal with traffic and the relationship between vehicular and non-vehicular traffic. As a city employee, you know from the level of complaints the street/engineering/public works departments may receive regarding current traffic congestion between Indiana Street and Prospect Street on Henderson Avenue. 5 signal-controlled intersections that (cannot/are never) synchronized and the multitude of commercial ingress/egresses. Add the very inadequate length of timing of green lights on Henderson Avenue in the east-west direction during school hours (Monache High School in particular) and congestion is the worst in the city during school months. I understand the coordination with Highway 65 for the on and off ramps is a burden the city must coordinate with CalTrans as well. This corridor has been the ideal example of how the increases in population and vehicles have created the congestion that exists now. Ingress/egress for this proposed project is multiplying congestion to an already impacted area (it is not identified on the published map where the ingress/egress is proposed).

There could be a number of designs that include all users of the public right of way that could be model for future right of way in congested areas for our city. It of course takes a consultant with significant complete streets experience and staff support to propose these bold changes in our small town. And of course, a city council that is willing to see and support needed changes.

Your job is an ever challenging one especially with a project as this. I look forward to seeing the TIS and proposed mitigation measures and if the city is looking at public right of way for users that include more than just vehicles.

Best regards,

Michael Camarena
1965 West Mulberry Avenue

From:	Jason Ridenour
To:	Emily Bowen; Jeff O"Neal
Cc:	Julia Lew
Subject:	Fw: Re: Henderson Project
Date:	Monday, August 21, 2023 7:52:25 AM
Attachments:	Outlook-n2cyo4rt.png

Good morning,

Please see the follow-up to Mike Camarena's first comment and request for traffic study.

Thank you,

Jason Ridenour
Assistant City Manager
City of Porterville
559-782-7460
ChoosePorterville.com

From: mndbikies@ocsnet.net <mndbikies@ocsnet.net>
Sent: Sunday, August 20, 2023 2:19 PM
To: Jason Ridenour <jridenour@ci.porterville.ca.us>
Subject: RE: Re: Henderson Project

Thank you, Jason. The site plan is ?? Impactful, exciting, curious, you pick a verb you think would be best for the city. Of course, the limited ingress/egress is frustrating, but if the future hotel development on the adjacent property to the west allows this parking area to connect to Prospect, then the circulation improves? If the hotel even happens in the near term.

The Level of Service (LoS) for three intersections is challenging (Newcomb, Prospect and Porter on Henderson), but what is not included, and experienced in current conditions (without this large commercial development) is the lack of signalized coordination with the two Caltrans signalized intersections. That is frustrating as while the TIS shows the LoS to 2043 as a B for the on-ramp signals, in today's real-world experience, the delays and impacts are at the Porter intersection. Of course, that is included as a LoS D now and into 2043. And this is acceptable?

The mitigation measures identified for the vehicle miles traveled include walking, bicycling or transit. The (draft) site plan shows no proposed improvements to accommodate these mitigation measures. In my travels, I have seen use of electric scooters, bicycles and other electric transportation devices for work, school, and general transportation. Where and when will this project, and the city take these types of transportation factors into account for design considerations?

The TIS identifies Monache High School (misspelled once, page 1) within the project vicinity. I hope that once electric scooters or bicycles are easier for the student households to afford, these will be a good alternative for transportation. And the same for the working population that may have to travel much further distances to the retail centers (both existing and this proposed shopping center) for employment.

I refer back to the overall design criteria of the City regarding right of way areas. Our current transit opportunities are good. Although I am not a user, I see buses and vans throughout the city and county areas in my miles traveled via bicycle. That leaves walking and cycling as alternatives for future transportation improvements. Wider sidewalks to accommodate more users, more bicycle lanes and narrower vehicle lanes would contribute to allowing a more complete street design.

Thanks for all your time and support. I am more than happy to sit with you and other Porterville staff to chat about my experiences riding in our city. I see much more by bike than almost any vehicle every day.

Best regards,
Michael Camarena

Air Quality, Greenhouse Gas, and Energy Analysis Report
Henderson Commercial Development Project
City of Porterville, California

Prepared for:

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Visalia, CA 93291
emily@candbplanning.com
Contact: Emily Bowen
LEED AP, Principal Environmental Planner

Prepared by:
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Air Quality Specialist

May 24, 2023 (Revised April 9, 2024)

Table of Contents

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ACRONYMS AND ABBREVIATIONS

$\mu g/m^3$	micrograms per cubic meter
AB	Assembly Bill
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
BAU	Business as Usual
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CCS	Carbon Capture and Storage
CEQA	California Environmental Quality Act
CO	carbon monoxide
CO_2	carbon dioxide
COG	Council of Governments
District	San Joaquin Valley Air Pollution Control District
DPM	diesel particulate matter
EMFAC	Emission FACtors Model
EPA	United States Environmental Protection Agency
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GHG Rx	Greenhouse Gas Reduction Exchange
GHG(s)	greenhouse gas(es)
GWP	global warming potential
HAP	hazardous air pollutant
HFC(s)	hydrofluorocarbon(s)
HRA	health risk assessment
IPCC	United Nations Intergovernmental Panel on Climate Change
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
$MTCO_2e$	metric tons of carbon dioxide equivalent
NO_X	nitrogen oxides
PG&E	Pacific Gas & Electric
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppb	parts per billion
ppm	parts per million
ROG	reactive organic gases
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill

SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SLCP	Short-Lived Climate Pollutant
SJVAPCD	San Joaquin Valley Air Pollution Control District
SoCAB	South Coast Air Basin
SoCalGas	Southern California Gas Company
SO_X	sulfur oxides
TCAG	Tulare County Association of Governments
VOC	volatile organic compounds

SECTION 1: EXECUTIVE SUMMARY

1.1—Purpose and Methods of Analysis

The following air quality, greenhouse gas (GHG), and energy analyses were prepared to evaluate whether the estimated criteria air pollutants, toxic air contaminants (TACs), and GHG emissions generated from the Henderson Commercial Development Project (project) would cause significant impacts to air resources in the project area. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The methodology follows the Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) prepared by the San Joaquin Valley Air Pollution Control District (SJVAPCD or District) for quantification of emissions and evaluation of potential impacts to air resources,[1] and the SJVAPCD's Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA.[2] An energy analysis was prepared to satisfy the requirements of CEQA Guidelines.

1.2—Project Description

1.2.1 - Project Location and Surrounding Land Use

The project is located in the City of Porterville within Tulare County, California at the northwest corner of West Henderson Avenue and Highway 65. This project lies within the San Joaquin Valley Air Basin.

North of the project is primarily residential housing and a few schools and commercial businesses over a quarter mile away. West of the project is a small residential neighborhood followed by a shopping center, several restaurants, and a high school. Beyond the high school is primarily residential housing. Immediately south of the project is primarily commercial businesses including shopping centers, fast food restaurants, a car wash, and a movie theatre. Farther south is a mix of residential housing, schools, medical facilities, hotels, and other commercial businesses with downtown Porterville to the southeast and a wastewater treatment plant to the southwest. Immediately east of the project is a mix of commercial businesses including a grocery store, car dealership, and fast-food restaurants. There is also a small park just east of the project followed by primarily residential housing and a mix of businesses and schools.

1 San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. March 19. Website: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf. Accessed May 1, 2023.

2 San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009a. Guidance for Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. Website: www.valleyair.org /programs/CCAP/11-05-09/3_CCAP_FINAL_LU_Guidance_Nov_05_2009.pdf. Accessed May 1, 2023.

1.2.2 - Project Description

The project consists of approximately 92,0060 square feet of retail and restaurant buildings on approximately 10.24 acres. The project components are listed below.

- Development of approximately 92,060 square feet consisting of
    - Three quick serve drive-thru buildings
        - +/- 3,750 square feet
        - +/- 5,500 square feet
        - +/- 4,500 square feet
    - Inline major buildings and retail buildings totaling +/- 77,585 square feet[3] to be used for:
        - General Retail
        - Grocery store with alcohol sales
        - 24-hour drug store
- Installation of a new east-bound left turn lane off West Henderson Avenue
- New signage including:
    - 80’ pylon sign in the northeast site corner
    - 60’ pylon sign in the southeast site corner
- 20’ monument sign along West Henderson Avenue.
- Associated improvements including parking areas, nighttime lighting and site landscaping, in accordance with Porterville City standards.

1.3—Summary of Analysis Results

The following is a summary of the analysis results. As shown below, the project would result in less than significant impacts for air quality impacts and less than significant for the air quality, GHG, and energy impact criteria analyzed.

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. **Less than significant impact.**

Impact AIR-2: The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors). **Less than significant impact.**

Impact AIR-3: The project would not expose sensitive receptors to substantial pollutant concentrations. **Less than significant impact with incorporation of mitigation.**

Impact AIR-4: The project would not create objectionable odors affecting a substantial number of people. **Less than significant impact.**

[3] Note: For the purposes of estimating emissions, the shopping center land use was increased from 77,585 to 78,310 to account for a total up to 92,060 total building square feet.

Impact GHG-1: The project would not generate direct or indirect greenhouse gas emissions that would result in a significant impact on the environment. **Less than significant impact.**

Impact GHG-2: The project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of greenhouse gases. **Less than significant impact**.

Impact ENERGY-1: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. **Less than significant impact.**

Impact ENERGY-2: The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **Less than significant impact.**

1.4—Standard Conditions and Mitigation Measures Applied to the Project

The following standard conditions are required by existing regulation:

SC AIR-1 The project would be subject to SJVAPCD Rule 9510 – Indirect Source Review and shall comply with this rule. The Air Impact Assessment application shall be submitted prior to the final discretionary approval, per Rule 9510.

SC AIR-2 The project would be subject to Regulation VIII—Fugitive PM_{10} Prohibitions and would be required to submit a Dust Control Plan to the SJVAPCD. The project shall prepare and submit a Dust Control Plan to the SJVAPCD to comply with Regulation VIII. An approved Dust Control Plan for the project must be available prior to the commencement of any earth-moving activity or construction associated with the project.

SC AIR-3 Individual businesses subject to SJVAPCD Rule 9401 – Employee Trip Reduction, shall comply with this rule. Compliance with SJVAPCD 9401 will promote trip reductions through the use of strategies that may include, but are not limited to:

- Employee carpool/ride sharing program.
- Flex scheduling/compressed scheduling.
- Posting information about public transit, bicycling, and pedestrian facilities and programs in public areas and in employee breakrooms.
- Promote available websites providing transportation options for residents and businesses.
- Create and distribute a “new tenant” information packet addressing alternative modes of transportation for residential residents and commercial employees.
- Providing incentives for carpooling/ride sharing, transit ridership, bicycling, walking, and other forms of non-single occupant vehicle travel.
- Providing employee lockers.
- Providing preferential parking for carpool/ride share vehicles.

- Providing bicycle storage facilities in convenient and secure locations.

Implement the following mitigation measure:

MM AIR-3a Before a construction permit is issued for the proposed project, the project applicant, project sponsor, or construction contractor shall submit provide reasonably detailed compliance with one of the following requirements to the City of Porterville:

Option 1) Where portable diesel engines are used during construction, all off-road equipment with engines greater than 75 horsepower shall have engines that meet either United States Environmental Protection Agency (EPA) or California Air Resources Board (ARB) Tier 4 Interim off-road emission standards.

Option 2) Prior to the issuance of any demolition, grading, or building permits (whichever occurs earliest), the project applicant and/or construction contractor shall prepare a construction operations plan that, during construction activities, requires all off-road equipment with engines greater than 75 horsepower to meet either the particulate matter emissions standards for Tier 4 Interim engines or be equipped with Level 3 diesel particulate filters. Tier 4 Interim engines shall, at a minimum, meet EPA or ARB particulate matter emissions standards for Tier 4 Interim engines. Alternatively, use of ARB-certified Level 3 diesel particulate filters on off-road equipment with engines greater than 75 horsepower can be used in lieu of Tier 4 Interim engines or in combination with Tier 4 Interim engines. The construction contractor shall maintain records documenting its efforts to comply with this requirement, including equipment lists. Off-road equipment descriptions and information shall include, but are not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, and engine serial number. The project applicant, project sponsor, or construction contractor shall submit the records of compliance to the City of Porterville.

SECTION 2: AIR QUALITY SETTING

2.1—Environmental Setting

Air quality impacts are both local and regional. Local and regional air quality is impacted by topography, dominant airflows, atmospheric inversions, location, and season. The project is located in the San Joaquin Valley Air Basin (Air Basin), which experiences some of the most challenging environmental conditions for air quality in the nation. The following section describes these conditions as they pertain to the Air Basin. The information in this section is primarily from the SJVAPCD's GAMAQI.[4]

[4] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. March 19. Website: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf. Accessed May 15, 2023.

2.1.1 - San Joaquin Valley Air Basin

Topography

The topography of a region is important for air quality because mountains can block airflow that would help disperse pollutants and can channel air from upwind areas that transports pollutants to downwind areas. The SJVAPCD covers the entirety of the Air Basin. The Air Basin is generally shaped like a bowl. It is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada mountains are along the eastern boundary (8,000 to 14,000 feet in elevation), the Coast Ranges are along the western boundary (3,000 feet in elevation), and the Tehachapi Mountains are along the southern boundary (6,000 to 8,000 feet in elevation).

Climate

The climate is important for air quality because of differences in the atmosphere's ability to trap pollutants close to the ground, which creates adverse air quality; inversely, the atmosphere's ability to rapidly disperse pollutants over a wide area prevents high concentrations from accumulating under different climatic conditions. The Air Basin has an "inland Mediterranean" climate and is characterized by long, hot, dry summers and short, foggy winters. Sunlight can be a catalyst in the formation of some air pollutants (such as ozone); the Air Basin averages over 260 sunny days per year.

Inversion layers are significant in determining pollutant concentrations. Concentration levels can be related to the amount of mixing space below the inversion. Temperature inversions that occur on the summer days are usually encountered 2,000 to 2,500 feet above the valley floor. In winter months, overnight inversions occur 500 to 1,500 feet above the valley floor.

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the Air Basin form natural horizontal barriers to the dispersion of air contaminants. The wind generally flows south-southeast through the valley, through the Tehachapi Pass and into the Mojave Desert Air Basin portion of Kern County. As the wind moves through the Air Basin, it mixes with the air pollution generated locally, generally transporting air pollutants from the north to the south in the summer and in a reverse flow in the winter.

The winds and unstable air conditions €ed during the passage of winter storm€ result in periods of low pollutant concentrations and excellent visibility. Between winter storms, high pressure and light winds allow cold moist air to pool on the San Joaquin Valley floor. This creates strong, low-level temperature inversions and very stable air conditions, which can lead to Tule fog. Wintertime conditions favorable to fog formation are also conditions favorable to high concentrations of $PM_{2.5}$ and PM_{10}.

2.2—Regulatory Setting

Air pollutants are regulated to protect human health and for secondary effects such as visibility and building soiling. The Clean Air Act of 1970 tasks the United States Environmental Protection Agency (EPA) with setting air quality standards. The State of California also sets air quality standards, which are in some cases more stringent than federal standards, in addition to addressing additional pollutants. The following section describes these federal and state standards and the health effects of the regulated pollutants.

2.2.1 - Clean Air Act

Congress established much of the basic structure of the Clean Air Act (CAA) in 1970 and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants) are addressed in the CAA: particulate matter, ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. The EPA labels these pollutants as criteria air pollutants because they are regulated by developing human health-based and/or environmentally based criteria (science-based guidelines), which sets permissible levels. The set of limits based on human health are called primary standards. Another set of limits intended to prevent environmental and property damage are called secondary standards.[5]

The federal standards are called National Ambient Air Quality Standards (NAAQS). The air quality standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards. The criteria pollutants are:

- Ozone
- Nitrogen dioxide (NO_2)
- Lead
- Particulate matter (PM_{10} and $PM_{2.5}$)
- Carbon monoxide (CO)
- Sulfur dioxide

The federal standards were set to protect public health, including that of sensitive individuals; thus, the EPA is tasked with updating the standards as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health.

2.2.2 - California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and continue to be some of the most severe in the nation and require additional actions beyond the federal mandates. The California Air Resources Board (ARB) administers California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The 10 state air pollutants are the six federal standards listed above as well visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The EPA authorized California to adopt its own regulations for motor vehicles and other sources that are more stringent than similar federal regulations implementing the CAA.

2.2.3 - Toxic Air Contaminants

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public

[5] U.S. Environmental Protection Agency (EPA). 2014. Clean Air Act Requirements and History. Website: https://www.epa.gov/clean-air-act-overview/clean-air-act-requirements-and-history. Accessed May 15, 2023.

health even at low concentrations. There are no ambient air quality standards for TAC emissions. TACs are regulated in terms of health risks to individuals and populations exposed to the pollutants. The 1990 Clean Air Act Amendments significantly expanded the EPA's authority to regulate hazardous air pollutants (HAP). Section 112 of the Clean Air Act lists 187 hazardous air pollutants to be regulated by source category. Authority to regulate these pollutants was delegated to individual states. ARB and local air districts regulate TACs and HAPs in California.

2.2.4 - Air Pollutant Description and Health Effects

The federal and state ambient air quality standards, relevant effects, properties, and sources of the pollutants are summarized in Table 1.

Table 1: Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Ozone	1 Hour	0.09 ppm	—	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), NO_X, and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO_X) are mobile sources (on-road and off-road vehicle exhaust).
	8 Hour	0.070 ppm	0.070 ppm[f]			
Carbon monoxide (CO)	1 Hour	20 ppm	35 ppm	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.
	8 Hour	9.0 ppm	9 ppm			
Nitrogen dioxide[b] (NO_2)	1 Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contribution to atmospheric discoloration; increased visits to hospital for respiratory illnesses.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO_X (NO, NO_2, NO_3, N_2O, N_2O_3, N_2O_4, and N_2O_5). NO_X is a precursor to ozone, PM_{10}, and $PM_{2.5}$ formation. NO_X can react with compounds to form nitric acid and related small particles and result in PM-related health effects.	NO_X is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide (NO_2) forms quickly from NO_X emissions. NO_2 concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.
	Annual	0.030 ppm	0.053 ppm			

Table 1 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfur dioxide[c] (SO_2)	1 Hour	0.25 ppm	0.075 ppm	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO_X) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM_{10}.	Human-caused sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethylsulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.
	3 Hour	—	0.5 ppm			
	24 Hour	0.04 ppm	0.14 (for certain areas)			
	Annual	—	0.030 ppm (for certain areas)			
Particulate matter (PM_{10})	24 Hour	50 µg/m^3	150 µg/m^3	• Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravates existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. • Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM_{10} refers to particulate matter that is between 2.5 and 10 microns in diameter (1 micron is one-millionth of a meter). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal; and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.
	Mean	20 µg/m^3	—			
Particulate matter ($PM_{2.5}$)	24 Hour	—	35 µg/m^3			
	Annual	12 µg/m^3	12.0 µg/m^3			
Visibility-reducing particles	8 Hour	See note below[d]				

Table 1 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfates	24 Hour	25 µg/m³	—	(a) Decrease in ventilatory function; (b) aggravation of asthmatic €ptoms; (c) aggravation of cardio-pulmonary disease; (d) vegeta€n damage; (e) degradation of visibility; (f) property damage.	The sulfate ion is a polyatomic anion with the empirical formula SO_4^{2-}. Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.
Lead[e]	30-day	1.5 µg/m³	—	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQ.	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded state or federal standards at any monitoring station since 1982.	Lead ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.
	Quarter	—	1.5 µg/m³			
	Rolling 3-month average	—	0.15 µg/m³			
Vinyl chloride[e]	24 Hour	0.01 ppm	—	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, ARB identified vinyl chloride as a toxic air contaminant and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.
Hydrogen sulfide	1 Hour	0.03 ppm	—	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and	Hydrogen sulfide (H_2S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary

Table 1 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
				respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.		sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur-containing fuels (oil and coal).
Volatile organic compounds (VOC)		There are no state or federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as toxic air contaminants.	Reactive organic gases (ROG), or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROG and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility.
Diesel particulate matter (DPM)		There are no ambient air quality standards for DPM.		Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.	DPM is a source of $PM_{2.5}$—diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total particulate matter mass, which consists of compounds such as hydrocarbons and their derivatives, and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, a number of which are found in diesel exhaust.	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.

Table 1 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources

Notes:

ppm = parts per million (concentration) μg/m^3 = micrograms per cubic meter Annual = Annual Arithmetic Mean 30-day = 30-day average Quarter = Calendar quarter

[a] Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3 Hour SO_2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[b] To attain the 1-hour NO_2 national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb) (0.100 ppm).

[c] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

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

[e] The ARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[f] The EPA Administrator approved a revised 8-hour ozone standard of 0.07 ppb on October 1, 2015. The new standard went into effect 60 days after publication of the Final Rule in the Federal Register. The Final Rule was published in the Federal Register on October 26, 2015 and became effective on December 28, 2015.

Several pollutants listed in Table 1 are not addressed in this analysis. Analysis of lead, hydrogen sulfide, sulfates, and vinyl chloride are not included in this report because no new sources of these pollutant emissions are anticipated with the project. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed as PM_{10} and $PM_{2.5}$.

Toxic Air Contaminants Health Effects

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. There are no ambient air quality standards for TAC emissions. TACs are regulated in terms of health risks to individuals and populations exposed to the pollutants. The 1990 Clean Air Act Amendments significantly expanded the EPA's authority to regulate hazardous air pollutants. Section 112 of the Clean Air Act lists 187 hazardous air pollutants to be regulated by source category. Authority to regulate these pollutants was delegated to individual states. ARB and local air districts regulate TACs and hazardous air pollutants in California.

Exposures to TACs emissions can have both chronic long-term (over a year or longer) and acute short-term (over a period of hours) health impacts. The TACs of greatest concern are those that cause serious health problems or affect many people. Health problems can include cancer, respiratory irritation, nervous system problems, and birth defects. Some health problems occur very soon after a person inhales a TAC. These immediate effects may be minor, such as watery eyes, or they may be serious, such as life-threatening lung damage. Other health problems may not appear until many months or years after a person's first exposure to the TAC. Cancer is one example of a delayed health problem.

The California Almanac of Emissions and Air Quality—2009 Edition[6] presents the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data. The ten TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

DPM

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program[7] demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increased risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause a cough, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions,

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[6] California Air Resources Board (ARB). 2009b. The California Almanac of Emissions and Air Quality—2009 Edition. Chapter 4, Air Basin Trends and Forecasts—Criteria Pollutants. Website: https://www.cityofdavis.org/home/showdocument?id=4101. Accessed November 8, 2022.

[7] California Air Resources Board (ARB). 1998. The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines. Website: http://www.arb.ca.gov /toxics/dieseltac/factsht1.pdf. Accessed November 8, 2022.

emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that it is not a single substance, but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on: engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The ARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the ARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of DPM.

Health risks attributable to the top 10 TACs listed above are available from the ARB as part of its California Almanac of Emissions and Air Quality. As shown therein for data collected at air monitoring stations in urban areas of the San Joaquin Valley Air Basin, cancer risks attributable to all of the listed TACs above with the exception of DPM have declined about 70 percent from the mid-1990s to 2007. Risks associated with DPM emissions are provided only for the year 2000 and have not been updated in the Almanac. Although more recent editions of the Almanac do not provide estimated risk, they do provide emission inventories for DPM for later years. The 2013 Almanac provides emission inventory trends for DPM from 2000 through 2035. The same Almanac reports that DPM emissions were reduced in the SJVAB from 16 tons per day in 2000 to 11 tons per day in 2010, a 31 percent decrease. DPM emissions in the San Joaquin Valley are projected to decrease to 6 tons per day by 2015, a 62 percent reduction from year 2000 levels. ARB predicts a reduction to three tons per day by 2035, which would be an 81 percent reduction from year 2000 levels. Continued implementation of the ARB's Diesel Risk Reduction Plan is expected to provide continued reductions in DPM well into the future.[8]

Benzene

Out of the toxic compounds emitted from gasoline stations, benzene, ethylbenzene, and naphthalene have cancer toxicity values. However, benzene is the TAC which drives the risk, accounting for 85 percent of cancer risk from gasoline vapors. Furthermore, benzene constitutes more than three to four times the weight of gasoline than ethylbenzene and naphthalene, respectively.[9] Therefore, ethylbenzene and naphthalene have not been modeled and are instead considered significant in the case that benzene emissions are significant. Additionally, there are substances emitted from gasoline stations, such as toluene and xylene which possess acute adverse health effects (though not cancer risk). However, it is not until the benzene concentrations are more than two orders of magnitude above 10 in one million that the emissions of toluene and xylene begin to cause adverse health effects.[10] Therefore, toluene and xylene emissions have not been modeled and are instead considered significant in the case that benzene concentrations are identified at two orders of magnitude above 10 in one million cancer risk.

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8 California Air Resources Board (ARB). 2013. The California Almanac of Air Quality and Emissions—2013 Edition. Website: http://www.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm. Accessed May 1, 2023.

9 South Coast Air Quality Management District (SCAQMD). 2015. Risk Assessment Procedures for Rules 1401, 1401.1, and 212. Website: http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/appx_1401riskassessproc_071517nw.pdf. Accessed May 1, 2023.

10 California Air Pollution Control Officers Association (CAPCOA). 1997. Gasoline Service Station Industrywide Risk Assessment Guidelines. Website: https://www.co.monterey.ca.us/home/showdocument?id=22409. Accessed May 1, 2023.

Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present. No naturally occurring asbestos is located near the project site.

2.3—Existing Air Quality Conditions

The EPA developed the Air Quality Index (AQI) as an easy-to-understand measure of health impacts compared with concentrations in the air. Table 2 provides a description of the health impacts of ozone at different concentrations.[11]

Table 2: Air Quality Index and Health Effects from Ozone

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
AQI 51–100—Moderate Concentration 55–70 ppb	**Sensitive Groups:** Children and people with asthma are the groups most at risk.
	Health Effects Statements: Unusually sensitive individuals may experience respiratory symptoms.
	Cautionary Statements: Unusually sensitive people should consider limiting prolonged outdoor exertion.
AQI 101–150—Unhealthy for Sensitive Groups Concentration 71–85 ppb	**Sensitive Groups:** Children and people with asthma are the groups most at risk.
	Health Effects Statements: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults and people with respiratory disease, such as asthma.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
AQI 151–200—Unhealthy Concentration 86–105 ppb	**Sensitive Groups:** Children and people with asthma are the groups most at risk.
	Health Effects Statements: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population.

[11] Ozone is a nonattainment pollutant of concern in the San Joaquin Valley Air Basin; see Table 4 for attainment statuses.

	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
AQI 201–300—Very Unhealthy Concentration 106–200 ppb	**Sensitive Groups:** Children and people with asthma are the groups most at risk.
	Health Effects Statements: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.
Source: Air Now[12] 2021.	

In addition to ozone, another nonattainment pollutant of concern is PM2.5. An AQI of 100 or lower is considered moderate and would be triggered by a 24-hour average concentration of 12.1 to 35.4 µg/m^3. The relationship of the AQI to health effects in shown Table 3.

Table 3: Air Quality Index and Health Effects of Particulate Pollution

Air Quality Index/ $PM_{2.5}$ Concentration	Health Effects Description
AQI 51–100—Moderate Concentration 12.1–35.4 µg/m^3	**Sensitive Groups:** Some people who may be unusually sensitive to particle.
	Health Effects Statements: Unusually sensitive people should consider reducing prolonged or heavy exertion.
	Cautionary Statements: Unusually sensitive people: Consider reducing prolonged or heavy exertion. Watch for symptoms such as coughing or shortness of breath. These are signs to take it easier.
AQI 101–150—Unhealthy for Sensitive Groups Concentration 35.5–55.4 µg/m^2	**Sensitive Groups:** Sensitive groups include people with heart or lung disease, older adults, children, and teenagers.
	Health Effects Statements: Increasing likelihood of respiratory symptoms in sensitive individuals, aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease, and the elderly.
AQI 151–200—Unhealthy Concentration 55.5–150.4 µg/m^3	**Sensitive Groups:** Everyone
	Health Effects Statements: Increased aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; increased respiratory effects in general population.
	Cautionary Statements: Sensitive groups: Avoid prolonged or heavy exertion. Consider moving activities indoors or rescheduling. Everyone

[12] Air Now. 2021. AQI Calculator: AQI to Concentration. Website: https://www.airnow.gov/aqi/aqi-calculator-concentration/. Accessed November 8, 2022.

	else: Reduce prolonged or heavy exertion. Take more breaks during outdoor activities.
AQI 201–300—Very Unhealthy	**Sensitive Groups:** Everyone
Concentration 150.5–250.4 µg/m^3	**Health Effects Statements:** Significant aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; significant increase in respiratory effects in general population.
	Cautionary Statements: Sensitive groups: Avoid all physical activity outdoors. Move activities indoors or reschedule to a time when air quality is better. Everyone else: Avoid prolonged or heavy exertion. Consider moving activities indoors or rescheduling to a time when air quality is better.
Source: Air Now [13]2021.	

2.3.1 - Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

Each standard has a different definition, or "form" of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the three-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.

The current attainment designations for the Air Basin are shown in Table 4. The Air Basin is designated nonattainment for ozone, PM_{10}, and $PM_{2.5}$.

Table 4: San Joaquin Valley Air Basin Attainment Status

Pollutant	State Status	National Status
Ozone—One Hour	Nonattainment/Severe	No Standard
Ozone—Eight Hour	Nonattainment	Nonattainment/Extreme
Carbon monoxide	Attainment/Unclassified	Merced, Madera, and Kings Counties are unclassified; others are in Attainment
Nitrogen dioxide	Attainment	Attainment/Unclassified
Sulfur dioxide	Attainment	Attainment/Unclassified
PM_{10}	Nonattainment	Attainment

[13] Air Now. 2021. AQI Calculator: AQI to Concentration. Website: https://www.airnow.gov/aqi/aqi-calculator-concentration/. Accessed November 8, 2022.

$PM_{2.5}$	Nonattainment	Nonattainment
Lead	Attainment	No Designation/Classification
Source of State status: California Air Resources Board (ARB 2013).[14] Source of National status: U.S. Environmental Protection Agency (EPA 2021).[15] Source of additional status information (SJVAPCD 2017).[16]		

2.4—Air Quality Plans and Regulations

Air pollutants are regulated at the national, state, and air basin or county level, and each agency has a different level of regulatory responsibility: the EPA regulates at the national level, the ARB at the state level, and the SJVAPCD at the air basin level.

The EPA is responsible for national and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance for air pollution programs, and sets National Ambient Air Quality Standards—also known as the federal standards described earlier.

A State Implementation Plan (SIP) is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The SIP for the State of California is administered by the ARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's SIP incorporates individual federal attainment plans for regional air districts; specifically, an air district prepares their federal attainment plan, which is sent to ARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms. The ARB then submits the SIP to the EPA for approval. After reviewing submitted SIPs, the EPA proposes to approve or disapprove all or part of each plan. The public has an opportunity to comment on the EPA's proposed action. The EPA considers public input before taking final action on a state's plan. If the EPA approves all or part of a SIP, those control measures are enforceable in federal court. If a state fails to submit an approvable plan or if the EPA disapproves a plan, the EPA is required to develop a federal implementation plan (FIP). The SIP approval process often takes several years.

Areas designated nonattainment must develop air quality plans and regulations to achieve standards by specified dates, depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain air quality standards on schedule. For

[14] California Air Resources Board (ARB). 2013. Area Designation Maps/State and National. 2012 State Area Designations. Page last reviewed October 18, 2017. Website: https://ww2.arb.ca.gov /resources/documents/maps-state-and-federal-area-designations. Accessed May 15, 2023.

[15] U.S. Environmental Protection Agency (EPA). 2021. Green Book Nonattainment Areas for Criteria Pollutants as of September 30, 2021. Website: https://www.epa.gov/green-book. Accessed May 15, 2023.

[16] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2017. Ambient Air Quality Standards & Valley Attainment Status. Website: https://www.valleyair.org/aqinfo/attainment.htm. Accessed May 15, 2023.

many areas of California, however, additional state and local regulation is required to achieve the standards. Regulations adopted by California are described below.

2.4.1 - California Regulations

Low-Emission Vehicle Program

The ARB first adopted Low-Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 State Implementation Plan. In 2012, ARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Car Program include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and GHGs for new passenger vehicles.[17]

On-Road Heavy-Duty Vehicle Program

The ARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, as well as test procedures. ARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.[18]

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low-use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.[19]

ARB Truck and Bus Regulation

The latest amendments to the Truck and Bus regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

[17] California Air Resources Board (ARB). 2012. Low Emission Vehicle Program. Website: http://www.arb.ca.gov/msprog/levprog/levprog.htm. Accessed May 15, 2023.

[18] California Air Resources Board (ARB). 2013. The California Almanac of Air Quality and Emissions—2013 Edition. Website: http://www.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm. Accessed May 15, 2023.

[19] California Air Resources Board (ARB). 2015. Regulation for Reducing Emissions from Consumer Products. Website: https://ww2.arb.ca.gov/our-work/programs/consumer-products-program/current-regulations. Accessed May 15, 2023.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low-use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.[20]

Advanced Clean Truck Regulation

The Advanced Clean Trucks regulation was approved on June 25, 2020 and has two main components, a manufacturers ZEV sales requirement and a one-time reporting requirement for large entities and fleets. Promoting the development and use of advanced clean trucks will help ARB achieve its emission reduction strategies as outlined in the SIP, Sustainable Freight Action Plan, Senate Bill (SB) 350, and Assembly Bill (AB) 32.

The proposed regulation has two components: a manufacturer sales requirement and a reporting requirement.

- Zero-emission truck sales: Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines would be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b–3 truck sales, 75% of Class 4–8 straight truck sales, and 40% of truck tractor sales.
- Company and fleet reporting: Large employers—including retailers, manufacturers, brokers, and others—would be required to report information about shipments and shuttle services. Fleet owners (those with 50 or more trucks) would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.[21]

ARB Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the ARB adopted a regulation to reduce DPM and nitrous oxide (NO_X) emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than five consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. The ARB is enforcing that part of the rule with fines up to $10,000 per day for each vehicle in violation. Performance requirements of the rule are based on a fleet's average NO_X emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements, making the first compliance deadline January 1, 2014 for large fleets

[20] California Air Resources Board (ARB). 2015a. On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. Website: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed May 15, 2023.

[21] California Air Resources Board (ARB). 2020a. Advanced Clean Trucks Fact Sheet. Website: https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet. Accessed May 15, 2023.

(over 5,000 horsepower), 2017 for medium fleets (2,501–5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).

ARB Regulation for Consumer Products

The ARB Consumer Products Regulation was last amended in January 2015. The ARB regulates the VOC content of a wide variety of consumer products sold and manufactured in California. The purpose of the regulation is to reduce the emission of ozone precursors, TACs, and GHG emissions in products that are used by homes and businesses. The regulated products include but are not limited to solvents, adhesives, air fresheners, soaps, aromatic compounds, windshield cleaners, charcoal lighter, dry cleaning fluids, floor polishes, and general cleaners and degreasers.[22]

ARB Airborne Toxic Control Measure for Asbestos

In July 2001, the ARB approved an Air Toxic Control Measure for construction, grading, quarrying, and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires application of best management practices to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than one acre in size. These projects require the submittal of a “Dust Mitigation Plan” and approval by the air district prior to the start of a project.

Construction sometimes requires the demolition of existing buildings where construction occurs. The project includes no demolition. Asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

The ARB has an Air Toxic Control Measure for construction, grading, quarrying, and surface mining operations, requiring the implementation of mitigation measures to minimize emissions of asbestos-laden dust. The measure applies to road construction and maintenance, construction and grading operations, and quarries and surface mines when the activity occurs in an area where naturally occurring asbestos is likely to be found. Areas are subject to the regulation if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity.

[22] California Air Resources Board (ARB). 2015. Regulation for Reducing Emissions from Consumer Products. Website: https://ww2.arb.ca.gov/our-work/programs/consumer-products-program/current-regulations. Accessed May 15, 2023.

Diesel Risk Reduction Plan

The ARB's Diesel Risk Reduction Plan has led to the adoption of new state regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90 percent overall from year 2000 levels. The projected emission benefits associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010, and 85 percent by 2020.[23]

2.4.2 - San Joaquin Valley Air Pollution Control District

The SJVAPCD is responsible for controlling emissions primarily from stationary sources. The SJVAPCD, in coordination with the eight countywide transportation agencies, is also responsible for developing, updating, and implementing air quality attainment plans for the Air Basin. The SJVAPCD also has roles under CEQA, which are described below after the rules and regulations.

SJVAPCD Rules and Regulations

The SJVAPCD rules and regulations that may apply to projects that will occur during buildout of the project include but are not limited to the following:

Rule 4102—Nuisance. The purpose of this rule is to protect the health and safety of the public, and applies to any source operation that emits or may emit air contaminants or other materials. This rule is enforced on a complaint basis.

Rule 4601—Architectural Coatings. The purpose of this rule is to limit Volatile Organic Compounds (VOC) emissions from architectural coatings. Emissions are reduced by limits on VOC content and providing requirements on coatings storage, cleanup, and labeling. Only compliant components are available for purchase in the San Joaquin Valley.

Rule 4641—Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641. This regulation is enforced on the asphalt provider.

Regulation VIII—Fugitive PM_{10} Prohibitions. Rules 8011–8081 are designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and trackout, etc. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

Rule 9510—Indirect Source Review. This rule reduces the impact of NO_X and PM_{10} emissions from growth within the Air Basin. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through on-site mitigation, off-site District-administered projects, or a combination of the two. This project is subject to Rule 9510.

[23] California Air Resources Board (ARB). 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles. Website: http://www.arb.ca.gov/diesel /documents/rrpfinal.pdf. Accessed May 1, 2023.

CEQA

The SJVAPCD has three roles under CEQA:

1. **Lead Agency:** Responsible for preparing environmental analyses for its own projects (adoption of rules, regulations, or plans) or permit projects filed with the SJVAPCD where the SJVAPCD has primary approval authority over the project.
2. **Responsible Agency:** The discretionary authority of a responsible agency is more limited than a lead agency; having responsibility for mitigating or avoiding only the environmental effects of those parts of the project which it decides to approve, carry out, or finance. The SJVAPCD defers to the lead agency for preparation of environmental documents for land use projects that also have discretionary air quality permits, unless no document is prepared by the lead agency and potentially significant impacts related to the permit are possible. The SJVAPCD regularly submits comments on documents prepared by lead agencies to ensure that the SJVAPCD's concerns are addressed.
3. **Commenting Agency:** The SJVAPCD reviews and comments on air quality analyses prepared by other public agencies (such as the proposed project).

The SJVAPCD also provides guidance and thresholds for CEQA air quality and GHG analyses. The result of this guidance, as well as state regulations to control air pollution, is an overall improvement in the Air Basin. In particular, the SJVAPCD's 2015 GAMAQI states the following:

1. The District's Air Quality Attainment Plans include measures to promote air quality elements in county and city general plans as one of the primary indirect source programs. The general plan is the primary long-range planning document used by cities and counties to direct development. Since air districts have no authority over land use decisions, it is up to cities and counties to ensure that their general plans help achieve air quality goals. Section 65302.1 of the California Government Code requires cities and counties in the San Joaquin Valley to amend appropriate elements of their general plans to include data, analysis, comprehensive goals, policies, and feasible implementation strategies to improve air quality in their next housing element revisions.
2. The Air Quality Guidelines for General Plans (AQGGP), adopted by the District in 1994 and amended in 2005, is a guidance document containing goals and policy examples that cities and counties may want to incorporate into their General Plans to satisfy Section 65302.1. When adopted in a general plan and implemented, the suggestions in the AQGGP can reduce vehicle trips and miles traveled and improve air quality. The specific suggestions in the AQGGP are voluntary. The District strongly encourages cities and counties to use their land use and transportation planning authority to help achieve air quality goals by adopting the suggested policies and programs.

2.4.3 - Local

The City of Porterville 2030 General Plan was adopted on March 4, 2008. The City's applicable air quality goals and policies from the Air Quality section are listed below.

City of Porterville Air Quality Goals and Policies

The General Plan lists the following policies that are supportive of improved air quality. Policies that are directly related to the project are listed below:

Land Use Element

LU-G-3: Promote sustainability in the design and development of public and private development projects.

LU-G-11: Foster strong, visually attractive regional commercial centers with a mix of tenants to serve both local and regional needs.

LU-I-20: Establish standards for pedestrian-oriented design in neighborhood centers. Pedestrian-oriented design standards may include, but would not be limited to:

- Limitations on maximum block length;
- Minimum sidewalk width;
- Required streetscape improvements, including street trees;
- Building height and articulation;
- Building setbacks;
- Location of entries; and
- Parking location and required landscaping.

The City also may provide additional incentives for projects that contribute to the pedestrian, bicycle and transit networks, and/or the open space network.

Circulation Element

C-G-3: Make efficient use of existing transportation facilities and, through coordinated land use planning, strive to improve accessibility to shops, schools, parks and employment centers and reduce total vehicle miles traveled per household to minimize vehicle emissions and save energy.

C-I-2: Require all new developments to provide right-of-way and improvements consistent with the General Plan street designations and City street section standards.

C-I-3: Provide for greater street connectivity by: Incorporating in subdivision regulations requirements for a minimum number of access points to existing local or collector streets for each development;

Encouraging roundabouts over signals, where feasible and appropriate;

Requiring the bicycle and pedestrian connections from cul-de-sacs to nearby public areas and main streets; and

Requiring new residential communities on undeveloped land planned for urban uses to provide stubs for future connections to the edge of the property line. Where stubs exist on adjacent properties, new streets within the development should connect to these stubs.

C-G-8: Promote the use of public transit for daily trips to schools and work and for other purposes.

C-G-9: Promote the use of bicycles to alleviate vehicle traffic and improve public health.

C-G-10: Promote pedestrian activity.

C-I-21: Develop a series of continuous walkways within new office parks, commercial districts, and residential neighborhoods so they connect to one another.

Open Space & Conservation Element

OSC-G-9: Improve and protect Porterville's air quality by making air quality a priority in land use and transportation planning and in development review.

OSC-I-58: Continue to assess air quality impacts through environmental review and require developers to implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects.

The City will use the San Joaquin Valley Air Pollution Control District (SJVAPCD) Guidelines for Assessing and Mitigating Air Quality Impacts for determining and mitigating project air quality impacts and related thresholds of significance for use in environmental documents. The City shall cooperate with the SJVAPCD in the review of development proposals.

BMPs could include transportation demand management strategies for large development

projects such as:

- Providing bicycle access and parking facilities;
- Providing preferential parking for high-occupancy vehicles, carpools, or alternative fuels vehicles;
- Establishing telecommuting programs or satellite work centers;
- Allowing alternative work schedules;
- Subsidizing public transit costs for employee; and
- Scheduling deliveries at off-peak traffic periods.

OSC-I-59: Require preparation of a Health Risk Assessment for any development subject to the Air Toxics "Hot Spots" Act.

OSC-I-60: Require dust control measures as a condition of approval for subdivision maps, site plans, and all grading permits.

OSC-I-61: Coordinate air quality planning efforts with other local, regional and State agencies.

OSC-I-62. Be proactive in educating the public about the linkages between land use, transportation and air quality.

OSC-I-63: Notify local and regional jurisdictions of proposed projects that may affect regional air quality.

OSC-I-65: When asbestos has been identified in the preliminary soils report, require all new development and public works projects to comply with all provisions of State and regional ATCM regulations for control of airborne asbestos emissions relating to construction, road maintenance, and grading activities.

The City will establish Best Management Practices for construction, grading, and road maintenance in areas with naturally occurring asbestos, consistent with State and regional regulations for Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations. BMPs may include but are not limited to:

- Wetting soil during excavation and other dust suppression measures;
- Wetting roads, excavated materials and rinsing equipment;
- Limiting vehicle speeds within construction areas;
- Creating wind breaks and berms;
- Suspending activities when wind creates visible dust;
- Prohibiting rock-crushing of asbestos-containing materials;
- Monitoring dust levels;
- Posting warning signs;
- Replanting; and
- Paving or other permanent sealants or covers.

2.4.4 - Existing Sources of Toxic Emissions

No existing sources were identified that exceed ARB recommendations in its Air Quality Land Use Handbook for siting sensitive land uses impact the project.

2.4.5 - ARB Air Quality Land Use Handbook

Table 5 lists the following ARB advisory recommendations that address the issue of siting "sensitive land uses" near specific sources of air pollution:[24]

- High traffic freeways and roads
- Refineries

[24] California Air Resources Board (ARB). 2005. California Environmental Protection Agency. Air Quality and Land Use Handbook: A Community Health Perspective. April 2005. Website: www.arb.ca.gov/ch/landuse.htm. Accessed May 15, 2023.

- Distribution centers
- Rail yards
- Ports
- Chrome plating facilities
- Dry cleaners
- Large gas dispensing facilities

The analysis examines the area around the site to determine if potential sources of TAC emissions may impact the project, based on the ARB recommended screening distances.

Table 5: Recommendations on Siting New Sensitive Land Uses

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	Avoid siting new sensitive land uses within 300 feet of any dry-cleaning operation. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult with the local air district. Do not site new sensitive land uses in the same building with perchloroethylene dry cleaning operations.
Gasoline Dispensing Facilities	Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities.
Note: These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.	

SECTION 3: CLIMATE CHANGE SETTING

3.1—Climate Change

Climate change is a change in the average weather of the earth that is measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance, specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. In its Fourth Assessment Report, the IPCC predicted that the global mean temperature change from 1990 to 2100, given six scenarios, could range from 1.1 degrees Celsius (°C) to 6.4°C. Regardless of analytical methodology, global average temperatures and sea levels are expected to rise under all scenarios (IPCC 2007a)[25]. The report also concluded that "[w]arming of the climate system is unequivocal," and that "most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations."

An individual project cannot generate enough GHG emissions to cause a discernible change in global climate. However, the project participates in the potential for global climate change by its incremental contribution of GHGs—and when combined with the cumulative increase of all other sources of GHGs—constitute potential influences on global climate change.

3.1.1 - Consequences of Climate Change in California

In California, climate change may result in consequences such as the following:[26,27]

- **A reduction in the quality and supply of water from the Sierra snowpack.** If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.

[25] Intergovernmental Panel on Climate Change (IPCC). 2007a. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller [eds.]). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, Website: https://www.ipcc.ch /report/ar4/wg1/. Accessed May 1, 2023.

[26] California Climate Change Center (CCCC). 2006. Our Changing Climate, Assessing the Risks to California: A Summary Report from the California Climate Change Center. July 2006. CEC-500-2006-077. Website: www.scc.ca.gov/webmaster/ftp/pdf/climate_change /assessing_risks.pdf. Accessed May 1, 2023.

[27] Moser et al. 2009. Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-071. Website: http://www.susannemoser.com/documents/CEC-500-2008-071_Moseretal_FutureisNow.pdf. Accessed May 1, 2023.

- **Increased risk of large wildfires.** If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of southern California are estimated to increase by approximately 30 percent toward the end of the 21st century because more winter rain will stimulate the growth of more plant "fuel" available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- **Reductions in the quality and quantity of certain agricultural products.** The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- **Exacerbation of air quality problems.** If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- **A rise in sea levels resulting in the displacement of coastal businesses and residences.** During the past century, sea levels along California's coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.
- **An increase in temperature and extreme weather events.** Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- **A decrease in the health and productivity of California's forests.** Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.

3.2—Greenhouse Gases

Gases that trap heat in the atmosphere are referred to as GHGs. The effect is analogous to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide, methane, NO_X, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. Natural processes and human activities emit GHGs. The presence of GHGs in the atmosphere affects the earth's temperature. It is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Climate change is driven by forcings and feedbacks. Radiative forcing is the difference between the incoming energy and outgoing energy in the climate system. Positive forcing tends to warm the surface while negative forcing tends to cool it. Radiative forcing values are typically expressed in watts per square meter. A feedback is a climate process that can strengthen or weaken a forcing. For example, when ice or snow melts, it reveals darker land underneath which absorbs more radiation and causes more warming. The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere. The global warming potential of a gas is essentially a measurement of the radiative forcing of a GHG compared with the reference gas, CO_2.

Individual GHG compounds have varying global warming potential and atmospheric lifetimes. CO_2, the reference gas for global warming potential, has a global warming potential of one. The global warming potential of a GHG is a measure of how much a given mass of a GHG is estimated to contribute to global warming. To describe how much global warming a given type and amount of GHG may cause, the carbon dioxide equivalent is used. The calculation of the carbon dioxide equivalent is a consistent methodology for comparing GHG emissions since it normalizes various GHG emissions to a consistent reference gas, CO_2. For example, CH_4's warming potential of 25 indicates that CH_4 has 25 times greater warming effect than CO_2 on a molecule-per-molecule basis. A carbon dioxide equivalent is the mass emissions of an individual GHG multiplied by its global warming potential. GHGs defined by Assembly Bill (AB) 32 (see the Climate Change Regulatory Environment section for a description) include CO_2, CH_4, NO_X, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. They are described in Table 6. A seventh GHG, nitrogen trifluoride, was added to Health and Safety Code section 38505(g)(7) as a GHG of concern. The global warming potential amounts are from IPCC Fourth Assessment Report (AR4). The AR4 global warming potential (GWP) amounts, incorporated into the CalEEMod version 2020.4.0, are used in this analysis. Although the newer IPCC Fifth Assessment Report (AR5) includes new global warming potential amounts, ARB continues to use AR4 rates for inventory purposes, including the 2018 inventory released on October 19, 2020, to ensure consistency with past inventories. Until such time as ARB updates its Scoping Plan inventories to utilize AR5 GWPs, it is appropriate to continue using AR4 GWPs for CEQA analyses, which are based on Scoping Plan consistency.

Table 6: Description of Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Nitrous oxide	Nitrous oxide (laughing gas) is a colorless GHG. It has a lifetime of 114 years. Its global warming potential is 298.	Microbial processes in soil and water, fuel combustion, and industrial processes.
Methane	Methane is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 25.	Methane is extracted from geological deposits (natural gas fields). Other sources are landfills, fermentation of manure, and decay of organic matter.
Carbon dioxide	Carbon dioxide (CO_2) is an odorless, colorless, natural GHG. Carbon dioxide's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.

Chlorofluorocarbons	These are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). Global warming potentials range from 124 to 14,800.	Chlorofluorocarbons were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987.
Perfluorocarbons	Perfluorocarbons have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Global warming potentials range from 7,390 to 12,200.	Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential of 22,800.	This gas is man-made and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas.
Nitrogen trifluoride	Nitrogen trifluoride (NF_3) was added to Health and Safety Code section 38505(g)(7) as a GHG of concern. It has a high global warming potential of 17,200.	This gas is used in electronics manufacture for semiconductors and liquid crystal displays.
Sources: Compiled from a variety of sources, primarily Intergovernmental Panel on Climate Change 2007a and 2007b.		

The State has begun addressing pollutants referred to as short-lived climate pollutants. Senate Bill (SB) 605, approved by the governor on September 14, 2014 required the ARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants by January 1, 2016. ARB was required to complete an emission inventory of these pollutants, identify research needs, identify existing and potential new control measures that offer co-benefits, and coordinated with other state agencies and districts to develop measures. The Short-Lived Climate Pollutant Strategy was approved by the ARB on March 24, 2017. The strategy calls for reductions of 50 percent from black carbon, 40 percent from methane, and 40 percent from hydrofluorocarbons (HFCs) from the 2030 Business as Usual (BAU) inventory for these pollutants.[28]

The short-lived climate pollutants include three main components: black carbon, fluorinated gases, and methane. Fluorinated gases and methane are described in Table 6 and are already included in the California GHG inventory. Black carbon has not been included in past GHG inventories; however, ARB will include it in its comprehensive strategy.[29]

Ozone is another short-lived climate pollutant that will be part of the strategy. Ozone affects evaporation rates, cloud formation, and precipitation levels. Ozone is not directly emitted, so its

[28] California Air Resources Board (ARB). 2017. Short-Lived Climate Pollutant Reduction Strategy. March. Website: https://www.arb.ca.gov/cc/shortlived/meetings/03142017/final_slcp_report.pdf. Accessed May 1, 2023.

[29] California Air Resources Board (ARB). 2015. Short-Lived Climate Pollutant Reduction Strategy, Concept Paper. May. Website: https://ww2.arb.ca.gov/resources/documents/slcp-strategy-draft-may2015. Accessed May 1, 2023.

precursor emissions, volatile organic compounds (VOC) and oxides of nitrogen (NO_X) on a regional scale and CH_4 on a hemispheric scale will be subject of the strategy.[30]

Black carbon is a component of fine particulate matter. Black carbon is formed by incomplete combustion of fossil fuels, biofuels, and biomass. Sources of black carbon within a jurisdiction may include exhaust from diesel trucks, vehicles, and equipment, as well as smoke from biogenic combustion. Biogenic combustion sources of black carbon include the burning of biofuels used for transportation, the burning of biomass for electricity generation and heating, prescribed burning of agricultural residue, and natural and unnatural wildfires. Black carbon is not a gas but an aerosol—particles or liquid droplets suspended in air. Black carbon only remains in the atmosphere for days to weeks, whereas other GHGs can remain in the atmosphere for years. Black carbon can be deposited on snow, where it absorbs sunlight, reduces sunlight reflectivity, and hastens snowmelt. Direct effects include absorbing incoming and outgoing radiation; indirectly, black carbon can also affect cloud reflectivity, precipitation, and surface dimming (cooling).

Global warming potentials for black carbon were not defined by the IPCC in its Fourth Assessment Report. The ARB has identified a global warming potential of 3,200 using a 20-year time horizon and 900 using a 100-year time horizon from the IPCC Fifth Assessment. Sources of black carbon are already regulated by ARB, and air district criteria pollutant and toxic regulations that control fine particulate emissions from diesel engines and other combustion sources.[31] Additional controls on the sources of black carbon specifically for their GHG impacts beyond those required for toxic and fine particulates are not likely to be needed.

Water vapor is also considered a GHG. Water vapor is an important component of our climate system and is not regulated. Increasing water vapor leads to warmer temperatures, which causes more water vapor to be absorbed into the air. Warming and water absorption increase in a spiraling cycle. Water vapor feedback can also amplify the warming effect of other GHGs, such that the warming brought about by increased carbon dioxide allows more water vapor to enter the atmosphere.[32]

3.2.1 - Emissions Inventories

An emissions inventory is a database that lists, by source, the amount of air pollutants discharged into the atmosphere of a geographic area during a given time period. Figure 1 shows the contributors of GHG emissions in California between years 2000 and 2019 by Scoping Plan category. The main contributor was transportation. The second highest sector in 2019 was industrial, which includes sources from refineries, general fuel use, oil and gas extraction, cement plants, and cogeneration heat output. Emissions from the electricity sector account for 14 percent of the inventory and have

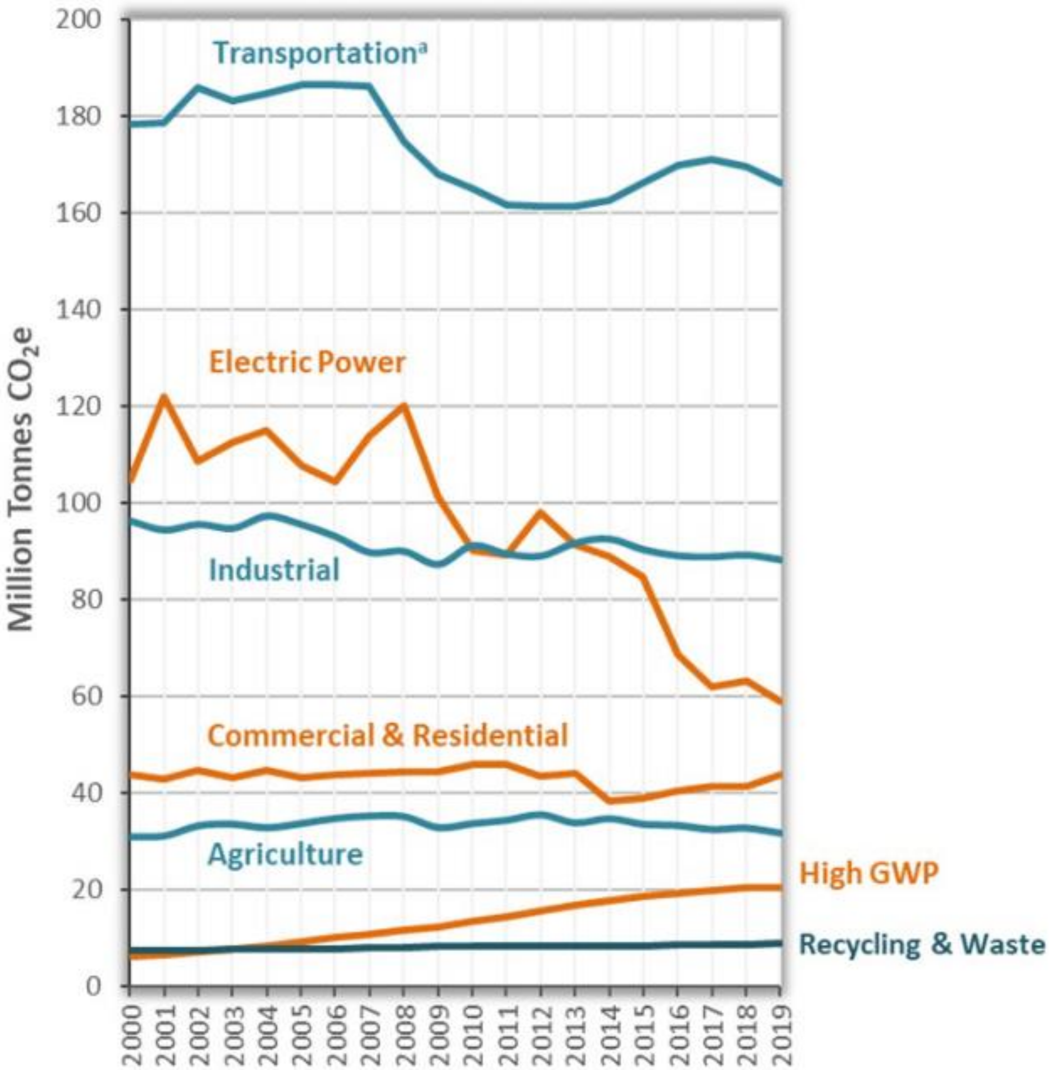
30 California Air Resources Board (ARB). 2015c. Short-Lived Climate Pollutant Reduction Strategy, Concept Paper. May. Website: https://ww2.arb.ca.gov/resources/documents/slcp-strategy-draft-may2015. Accessed May 15, 2023.

31 California Air Resources Board (ARB). 2015d. ARB Emissions Trading Program. Website: http://www.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf. Accessed May 15, 2023.

32 National Aeronautics and Space Administration (NASA). 2021. NASA—Global Climate Change, Vital Signs of a Planet. September 28. Website: http://climate.nasa.gov/causes/. Accessed May 15, 2023.

shown a substantial decrease in 2019 due to increases in renewables. ARB reported that California's GHG emissions inventory was 418.2 $MMTCO_2e$ in 2019.[33]

Figure 1: Greenhouse Gas Emission Trends by Scoping Plan Category in California



Source: ARB 2021.[34]

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33 California Air Resources Board (ARB). 2021b. California Greenhouse Gas Emissions for 2000 to 2019: Trends of Emissions and Other Indicators. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf. July 28. Accessed November May 15, 2023.

34 California Air Resources Board (ARB). 2021b. California Greenhouse Gas Emissions for 2000 to 2019: Trends of Emissions and Other Indicators. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf. July 28. Accessed May 15, 2023.

3.3—Regulatory Environment

3.3.1 - Federal Regulations

The following are actions regarding the federal government, GHGs, and fuel efficiency that are relevant to the proposed project.

Greenhouse Gas Endangerment. *Massachusetts v. EPA* (Supreme Court Case 05-1120) was argued before the United States Supreme Court on November 29, 2006, in which it was petitioned that the EPA regulate four GHGs, including carbon dioxide, under Section 202(a)(1) of the Clean Air Act. A decision was made on April 2, 2007, in which the Supreme Court found that GHGs are air pollutants covered by the Clean Air Act. The Court held that the Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section "Clean Vehicles" below. After a lengthy legal challenge, the United States Supreme Court declined to review an Appeals Court ruling upholding the EPA Administrator findings.[35]

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, former President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon; that is, if the automobile industry were to meet this CO_2 level solely through

[35] U.S. Environmental Protection Agency (EPA). 2009c. Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act. Website: https://www.epa.gov/ghgemissions/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-clean-air-act. Accessed May 15, 2023.

fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the National Highway Safety Administration issued final rules on a second-phase joint rulemaking, establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012.[36] These standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and medium duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO_2 in model year 2025, which is equivalent to 54.5 miles per gallon if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that began in the 2014 model year and achieve up to a 20-percent reduction in CO_2 emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10-percent reduction for gasoline vehicles, and a 15-percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). For vocational vehicles, the engine and vehicle standards would achieve up to a 10-percent reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

In September 2020, Governor Gavin Newsom issued Executive Order N-79-20, which requires sales of all new passenger vehicles to be zero-emission by 2035 and additional measures to eliminate harmful emissions from the transportation sector.

Mandatory Reporting of Greenhouse Gases. The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the United States, and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the EPA.

New Source Review. The EPA issued a final rule on May 13, 2010 that establishes thresholds for GHGs, which will define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial

[36] U.S. Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. Website: https://nepis.epa.gov/Exe/ZyNET.exe/P100EZ7C.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2011+Thru+2015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C11thru15%5CTxt%5C00000005%5CP100EZ7C.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL. Accessed May 15, 2023.

facilities. This final rule "tailors" the requirements of these Clean Air Act permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the federal code of regulations, the EPA states:

> This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the Clean Air Act, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to greenhouse gas sources, starting with the largest greenhouse gas emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources, but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for greenhouse gas emissions until at least April 30, 2016.

The EPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units. As required by a settlement agreement, the EPA proposed new performance standards for emissions of carbon dioxide for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts would be required to meet an output based standard of 1,000 pounds of carbon dioxide per megawatt-hour, based on the performance of widely used natural gas combined cycle technology. Former President Trump signed the Executive Order on Energy Independence (E.O. 13783), which calls for a review of the Clean Power Plan. On October 16, 2017, the EPA issued the proposed rule Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units an Energy Independence.[37]

Cap-and-Trade. Cap-and-Trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. There is no federal GHG Cap-and-Trade program currently; however, some states have joined to create initiatives to provide a mechanism for Cap-and-Trade.

The Regional Greenhouse Gas Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps carbon dioxide emissions from power plants, auctions carbon dioxide emission

[37] U.S. Environmental Protection Agency (EPA). 2017. Electric Utility Generating Units: Repealing the Clean Power Plan. Website: https://www.epa.gov/stationary-sources-air-pollution/electric-utility-generating-units-repealing-clean-power-plan. Accessed May 1, 2023.

allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners are California, British Columbia, Manitoba, Ontario, and Quebec.[38]

3.3.2 - California

Legislative Actions to Reduce GHGs

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation such as the landmark AB 32 California Global Warming Solutions Act of 2006 was specifically enacted to address GHG emissions. Other legislation such as Title 24 and Title 20 energy standards were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

AB 32. The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include carbon dioxide, methane, NO_X, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The ARB is the state agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

The ARB approved the 1990 GHG emissions level of 427 $MMTCO_2e$ on December 6, 2007.[39] Therefore, to meet the State's target, emissions generated in California in 2020 are required to be equal to or less than 427 $MMTCO_2e$. Emissions in 2020 in a BAU scenario were estimated to be 596 $MMTCO_2e$, which do not account for reductions from AB 32 regulations.[40] At that rate, a 28 percent reduction was required to achieve the 427 $MMTCO_2e$ 1990 inventory. In October 2010, ARB prepared an updated 2020 forecast to account for the effects of the 2008 recession and slower forecasted growth. The 2020 inventory without the benefits of adopted regulation was then

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[38] Center for Climate and Energy Solutions (C2ES). 2015. Multi-State Climate Initiatives. Website: http://www.c2es.org/us-states-regions/regional-climate-initiatives. Accessed November 8, 2022.

[39] California Air Resources Board (ARB). 2007. Staff Report. California 1990 Greenhouse Gas Level and 2020 Emissions Limit. November 16, 2007. Website: www.arb.ca.gov/cc/inventory /pubs/reports/staff_report_1990_level.pdf. Accessed November 9, 2022.

[40] California Air Resources Board (ARB). 2008. (includes edits made in 2009) Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed November 8, 2022.

estimated at 545 $MMTCO_2e$. Therefore, under the updated forecast, a 21.7 percent reduction from BAU is required to achieve 1990 levels.[41]

Calculation of the original 1990 limit approved in 2007 was revised in 2014 using the scientifically updated IPCC AR4 global warming potential values, to 431 $MMTCO_2e$. ARB approved 431 $MMTCO_2e$ as the 2020 emission limit with the approval of the First Update to the Scoping Plan on May 22, 2014.

Progress in Achieving AB 32 Targets

The State made steady progress in implementing AB 32 and achieving targets included in Executive Order S-3-05. The progress was evident in emission inventories prepared by ARB, which showed that the State inventory dropped below 1990 levels for the first time in 2016.[42] The 2017 Scoping Plan Update includes projections indicating that the State will meet or exceed the 2020 target with adopted regulations.[43] In 2019, emissions from GHG emitting activities statewide were 418.2 $MMTCO_2e$, 7.2 $MMTCO_2e$ lower than 2018 levels and almost 13 $MMTCO_2e$ below the 2020 GHG Limit of 431 $MMTCO_2e$.[44]

ARB 2008 Scoping Plan. The ARB's Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 to comply with AB 32 (ARB 2008)[45]. The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;

[41] California Air Resources Board (ARB). 2010. 2020 Greenhouse Gas Emissions Projection and BAU Scenario Emissions Estimate. Website: https://ww3.arb.ca.gov/cc/inventory/archive /captrade_2010_projection.pdf. Accessed May 1, 2023.

[42] California Air Resources Board (ARB). 2018. Climate Pollutants Fall Below 1990 Levels for the First Time. Website: https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time. Accessed May 1, 2023.

[43] California Air Resources Board (ARB). 2017. The 2017 Climate Change Scoping Plan Update, the Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. January 17, 2017. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed May 1, 2023.

[44] California Air Resources Board (ARB). 2021. California Greenhouse Gas Emissions for 2000 to 2019: Trends of Emissions and Other Indicators. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf. July 28. Accessed May 1, 2023.

[45] California Air Resources Board (ARB). 2008. (includes edits made in 2009) Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed May 1, 2023.

- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

Cap-and-Trade Program. The Cap-and-Trade Program is a key element of the Scoping Plan. It sets a statewide limit on sources responsible for 85 percent of California's GHG emissions, and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The program is designed to provide covered entities the flexibility to seek out and implement the lowest cost options to reduce emissions. The program conducted its first auction in November 2012. Compliance obligations began for power plants and large industrial sources in January 2013. Other significant milestones include linkage to Quebec's Cap-and-Trade system in January 2014 and starting the compliance obligation for distributors of transportation fuels, natural gas, and other fuels in January 2015.[46]

The Cap-and-Trade Program provides a firm cap, ensuring that the 2020 statewide emission limit will not be exceeded. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are guaranteed only on an accumulative basis. As summarized by ARB in the First Update:

> The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative.[47]

The Cap-and-Trade Program works with other direct regulatory measures and provides an economic incentive to reduce emissions. If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. Thus, the Cap-and-Trade Program assures that California will meet its 2020 GHG emissions reduction mandate:

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[46] California Air Resources Board (ARB). 2015. ARB Emissions Trading Program. Website: http://www.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf. Accessed May 15, 2023.

[47] California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed May 15, 2023.

> The Cap-and-Trade Program establishes an overall limit on GHG emissions from most of the California economy—the "capped sectors." Within the capped sectors, some of the reductions are being accomplished through direct regulations, such as improved building and appliance efficiency standards, the [Low Carbon Fuel Standard] LCFS, and the 33 percent [Renewables Portfolio Standard] RPS. Whatever additional reductions are needed to bring emissions within the cap is accomplished through price incentives posed by emissions allowance prices. Together, direct regulation and price incentives assure that emissions are brought down cost-effectively to the level of the overall cap. The Cap-and-Trade Regulation provides assurance that California's 2020 limit will be met because the regulation sets a firm limit on 85 percent of California's GHG emissions. In sum, the Cap-and-Trade Program will achieve aggregate, rather than site specific or project-level, GHG emissions reductions. Also, due to the regulatory architecture adopted by ARB in AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures.[48]

AB 398. The Governor signed AB 398 on July 25, 2017 to extend the Cap-and-Trade Program to 2030. The legislation includes provisions to ensure that offsets used by sources are limited to 4 percent of their compliance obligation from 2021 through 2025 and 6 percent from 2026 through 2030. AB 398 also prevents Air Districts from adopting or implementing emission reduction rules from stationary sources that are also subject to the Cap-and-Trade Program.[49]

SB 32 and the 2017 Scoping Plan. The Governor signed SB 32 on September 8, 2016. SB 32 now gives ARB the statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. SB 32 states that "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the state [air resources] board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030." The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017. The major elements of the framework proposed to achieve the 2030 target are as follows:

1. SB 350
   - Achieve 50 percent Renewables Portfolio Standard (RPS) by 2030.
   - Doubling of energy efficiency savings by 2030.
2. Low Carbon Fuel Standard (LCFS)
   - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
   - Maintaining existing GHG standards for light- and heavy-duty vehicles.

[48] California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed May 1, 2023.

[49] Climate Action Reserve (CAR). 2017. AB 398: California Extends Cap-and-Trade Program. Website: http://www.climateactionreserve.org/blog/2017/07/20/ab-398-california-extends-cap-and-trade-program/. Accessed May 1, 2023.

- Put 4.2 million zero-emission vehicles (ZEVs) on the roads.
- Increase ZEV buses, delivery and other trucks.

4. Sustainable Freight Action Plan
   - Improve freight system efficiency.
   - Maximize use of near-zero emission vehicles and equipment powered by renewable energy.
   - Deploy over 100,000 zero-emission trucks and equipment by 2030.

5. Short-Lived Climate Pollutant (SLCP) Reduction Strategy
   - Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
   - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.
6. SB 375 Sustainable Communities Strategies
   - Increased stringency of 2035 targets.

7. Post-2020 Cap-and-Trade Program
   - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
   - ARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements. In Fall 2016, ARB staff described potential future amendments including reducing the offset usage limit, redesigning the allocation strategy to reduce free allocation to support increased technology and energy investment at covered entities and reducing allocation if the covered entity increases criteria or toxics emissions over some baseline.

8. 20 percent reduction in greenhouse gas emissions from the refinery sector.

9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.[50]

ARB's 2022 Scoping Plan

The most recent version of the ARB's Scoping Plan, the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), was adopted in December 2022. The 2022 Scoping Plan provides a detailed sector-by-sector guide to address climate change by reducing GHG emissions by 85 percent and achieving carbon neutrality by 2045, with the bulk of emission reductions efforts being tackled in the transportation and energy sectors.

The elements of the framework proposed to achieve the emission reduction targets are as follows:

- Transportation
  - Achieve 100 percent ZEV sales of light-duty vehicles by 2035 and medium heavy-duty vehicles by 2040.
  - Achieve a 20 percent zero-emission target for the aviation sector.

[50] California Air Resources Board (ARB). 2017b. The 2017 Climate Change Scoping Plan Update, the Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. January 17, 2017. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed May 1, 2023.

  - Prioritize and increase funding for clean transportation equity programs.
  - Accelerate the reduction and replacement of fossil fuel production and consumption in California.
  - Increase the stringency and scope of the Low Carbon Fuel Standard.
  - Achieve a per capita VMT reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below by 2045.

- Clean Electricity Grid
  - Per SB 350, double Statewide energy efficiency savings by 2030.
  - Use long-term planning processes to support grid reliability and expansion of renewable and zero-carbon development.
  - Per SB 100 and 1020, achieve 90 percent, 95 percent, and 100 percent renewable and zero-carbon retail sales by 2035, 2040, and 2045, respectively.

- Sustainable Manufacturing and Buildings
  - Maximize air quality benefits using the best available control technologies for stationary sources in communities most in need.
  - Implement SB 905, which requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon capture, utilization, and sequestration and carbon dioxide removal projects and technology.
  - End fossil gas infrastructure expansion for newly constructed buildings.
  - Develop a net-zero cement strategy to meet SB 956 targets for the GHG intensity of cement use.
  - Leverage energy efficiency and low carbon hydrogen programs.
  - Prioritize most vulnerable residents with the majority of funds in the new $922 million Equitable Building Decarbonization program.
  - Achieve three million all-electric and electric-ready homes by 2030 and seven million by 2035 with six million heat pumps installed by 2030.
  - Adopt a zero-emission standard for new space and water heaters sold in California beginning in 2030.
  - Implement biomethane procurement targets for investor-owned utilities as specified in SB 1440.

- Carbon Dioxide Removal and Capture
  - Implement SB 905.
  - Achieve the 85 percent reduction in anthropogenic sources below 1990 levels per AB 1279 by incorporating Carbon Capture and Storage (CCS) into sectors and programs beyond transportation.
  - Evaluate and propose the role for CCS in cement decarbonization and as part of hydrogen peroxide pathways.
  - Explore carbon capture application for zero-carbon power for reliability needs per SB 100.

- Short-Lived Climate Pollutants (Non-Combustion Gases)
  - Install anaerobic digesters to maximize air and water quality protection, maximize biomethane capture, and direct biomethane to specific sectors.
  - Increase alternative manure management projects.
  - Expand markets for products made from organic waste.

- Pursuant to SB 1137, develop leak detection and repair plans for facilities in health protection zones, implement emission detection system standards, and provide public access to emissions data.
- Convert large HFC emitters to the lowest practical global warming potential (GWP) technologies.

- Natural and Working Lands
  - Implement AB 1757 and SB 27.
    - AB 1757 requires state agencies to set targets for natural carbon removal and emissions reductions on natural and working lands. AB 1757 is expected to catalyze natural carbon sequestration in California by: requiring California Natural Resources Agency and CARB to establish targets for sequestration on natural and working lands for 2030, 2038, and 2045; ensuring that natural sequestration projects have rigorous measurement and verification; and establishing an expert committee to advise state agencies on modeling and implementation.[51]
    - SB 27 is designed to accelerate the removal of carbon from the atmosphere by expanding California's carbon removal capability (i.e. sequestration) and improve the carbon retention of the state's natural and working lands.[52]
  - Implement the Climate Smart Strategy.
  - Accelerate the pace and scale of climate smart forest management to at least 2.3 million acres annually by 2025.
  - Accelerate the pace and scale of healthy soils practices to 80,000 acres annually by 2025, conserve at least 8,000 acres of annual crops annually, and increase organic agriculture to 20 percent of all cultivated acres by 2045.
  - Restore 60,000 acres of Delta wetlands annually by 2045.
  - Increase urban forestry investment annually by 200 percent, relative to business as usual.

Senate Bill 375—the Sustainable Communities and Climate Protection Act of 2008

Senate Bill (SB) 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

SB 375—The Sustainable Communities and Climate Protection Act of 2008. SB 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG

[51] The Climate Center. 2022. Press Release: Governor Newsom Signs California's Natural Climate Solutions Bill AB 1757 into Law. September 16. Website: https://theclimatecenter.org/carbon-sequestration/governor-newsom-signs-californias-natural-climate-solutions-bill-ab-1757-into-law/. Accessed April 4, 2024.

[52] Senate District 09 Office. 2021. Press Release: Newsom Greenlights Skinner's Carbon Removal Bill, SB 27, Along with $15B Climate & Wildfire Package. Website: https://sd09.senate.ca.gov/news/20210923-newsom-greenlights-skinners-carbon-removal-bill-sb-27-along-15b-climate-wildfire. Accessed April 4, 2024.

emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Concerning CEQA, SB 375—as codified in Public Resources Code Section 21159.28—states that CEQA findings determinations for certain projects are not required to reference, describe, or discuss (1) growth-inducing impacts or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network if the project:

1. Is in an area with an approved Sustainable Communities Strategy or an alternative planning strategy that the ARB accepts as achieving the greenhouse gas emission reduction targets;
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies); and
3. Incorporates the mitigation measures required by an applicable prior environmental document.

The ARB has prepared the Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets.

AB 1493 Pavley Regulations and Fuel Efficiency Standards. California AB 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. It should be noted that the EPA reinstated California's waiver for its GHG and ZEV mandates that were more stringent than other federal regulations implementing the Clean Air Act.[53]

The second phase of the implementation for the Pavley Bill was incorporated into Amendments to the Low emission Vehicle Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation is anticipated to reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles and hydrogen fuel cell cars.

SB 1368—Emission Performance Standards. In 2006, the State Legislature adopted SB 1368, which was subsequently signed into law by the governor. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Because of the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants.

53 United States Environmental Protection Agency (EPA). 2022. What They Are Saying: EPA Restoration of California Waiver Will Support State Climate Action, Improve Air Quality, and Advance our Electric Vehicle Future. March 11. Website: https://www.epa.gov/newsreleases/what-they-are-saying-epa-restoration-california-waiver-will-support-state-climate. Accessed May 1, 2023.

Accordingly, the new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 lbs. CO_2 per megawatt-hour (MWh).

SB 1078—Renewable Electricity Standards. On September 12, 2002, Governor Gray Davis signed SB 1078, requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the ARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020 The ARB approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23. In 2011, the state legislature adopted this higher standard in SB X1-2. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas.

SB 350—Clean Energy and Pollution Reduction Act of 2015. The legislature approved and the governor then signed SB 350 on October 7, 2015, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Provisions for a 50 percent reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States (515).

SB 100—California Renewables Portfolio Standard Program. The Governor approved SB 100 on September 10, 2018. The legislation revised the Renewable Portfolio Standard goals to achieve the 50 percent renewable resources target by December 31, 2026, and to achieve a 60 percent target by December 31, 2030. The bill would require that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030.[54]

SBX 7-7—The Water Conservation Act of 2009. The legislation directs urban retail water suppliers to set individual 2020 per capita water use targets and begin implementing conservation measures to achieve those goals. Meeting this statewide goal of 20 percent decrease in demand was projected to result in a reduction of almost 2 million acre-feet in urban water use in 2020. This is relevant to GHG emissions because water use at the project site would result in indirect GHG emissions from the electricity use needed to convey water.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of executive orders. Although not regulatory, they set the tone for the State and guide the actions of state agencies.

Executive Order S-3-05. On June 1, 2005, former California Governor Arnold Schwarzenegger announced through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce greenhouse gas emissions to 2000 levels.
- By 2020, reduce greenhouse gas emissions to 1990 levels.
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order B-30-15. On April 29, 2015, former Governor Edmund G. Brown Jr. issued an executive order to establish a California GHG reduction target of 40 percent below 1990 levels by 2030.[55] The Governor's executive order aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The executive order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050, and directs the ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of $MMTCO_2e$. The executive order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this executive order is not legally enforceable against local governments and the private sector. Legislation that would update AB 32 to provide post-2020 targets was signed by the Governor in 2016. SB 32 includes a 2030 mandate matching the requirements of the Executive Order.

[54] California Legislative Information (California Leginfo). 2018. Senate Bill 100 California Renewables Portfolio Standard Program. Website: https://leginfo.legislature.ca.gov/faces /billNavClient.xhtml?bill_id=201720180SB100. Accessed May 1, 2023.

[55] Brown, Edmund G. Jr. 2015. Press Release: California Establishes Most Ambitious Greenhouse Gas Goal in North America. Website: https://www.ca.gov/archive/gov39/2015/04/29 /news18938/index.html. Accessed May 1, 2023.

Executive Order S-01-07—Low Carbon Fuel Standard. The governor signed Executive Order S 01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels (State Alternative Fuels Plan adopted by California Energy Commission on December 24, 2007) and was submitted to ARB for consideration as an "early action" item under AB 32. The ARB adopted the Low Carbon Fuel Standard on April 23, 2009.

The Low Carbon Fuel Standard was subject to legal challenge in 2011. Ultimately, ARB adopted a new LCFS regulation in 2015. The updated LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The Office of Administrative Law (OAL) approved the regulation on November 16, 2015.[56] The regulation was amended in 2018 to strengthen and smooth carbon intensity benchmarks through 2030, in-line with GHG reduction target enacted through SB 32.

ARB passed the Advanced Clean Fleets Regulations in 2020 and aims to transform California's medium- and heavy-duty diesel-fueled truck fleets to zero-emission vehicles in less than 20 years.[57]

Executive Order S-13-08. Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (lll Resources Agency 2009) was adopted, which is the ". . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-55-18. Executive Order B-55-18 issued by Governor Brown on September 10, 2018 establishes a new statewide goal to achieve carbon neutrality as soon as possible, but no later than 2045, and achieve and maintain net negative emissions thereafter. The executive order directs ARB to work with relevant state agencies to develop a framework for implementation and accounting that tracks progress toward this goal.[58]

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56 California Air Resources Board (ARB). 2015e. Low Carbon Fuel Standard Regulation. Website: http://www.arb.ca.gov/regact/2015/lcfs2015/lcfs2015.htm. Accessed May 1, 2023.

57 California Air Resources Board (ARB). 2022. CARB Advanced Clean Fleet Regulation.

58 Edmund G. Jr. 2018. EO B-55-18. Website https://www.ca.gov/archive/gov39/wp- Brown content/uploads/2018/09/9.10.18-Executive-Order.pdf. Accessed May 1, 2023.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Regulations. California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601–1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations including lighting, air conditioning, and most home appliances. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the State and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.[59]

Title 24 Energy Efficiency Standards. California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020.[60] The 2022 Standards went into effect January 1, 2023.

Title 24 California Green Building Standards Code (California Code of Regulations Title 24, Part 11 code) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011. The code is updated on a regular basis, with the most recent update consisting of the 2016 California Green Building Code Standards that became effective January 1, 2017. Local jurisdictions are permitted to adopt more stringent requirements, as state law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided they provide a minimum 50-percent diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. State building code provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

The California Green Building Standards Code (California Code of Regulations Title 24, Part 11 code) requires:

- **Short-term bicycle parking.** If a commercial project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily

[59] California Energy Commission (CEC). 2018a. California Code of Regulations Title 20, Division 2, Article 4 Appliance Efficiency Regulations. Website: https://govt.westlaw.com/calregs /Browse/Home/California/CaliforniaCodeofRegulations?guid=I8F8F3BC0D44E11DEA95CA4428EC25FA0&originationContext=documenttoc&transition Type=Default&contextData=(sc.Default). Accessed May 1, 2023.

[60] California Energy Commission (CEC). 2018b. 2019 Building Energy Efficiency Standards Frequently Asked Questions. Website: https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf. Accessed May 1, 2023.

visible to passers-by, for five percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack (5.106.4.1.1).

- **Long-term bicycle parking.** For buildings with over 10 tenant-occupants, provide secure bicycle parking for five percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space (5.106.4.1.2).
- **Designated parking.** Provide designated parking in commercial projects for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- **Recycling by Occupants.** Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of nonhazardous materials for recycling. (5.410.1).
- **Construction waste.** A minimum 50-percent diversion of construction and demolition waste from landfills, increasing voluntarily to 65 and 80 percent for new homes and 80-percent for commercial projects. (5.408.1, A5.408.3.1 [nonresidential], A5.408.3.1 [residential]). All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled (5.408.3).
- **Wastewater reduction.** Each building shall reduce the generation of wastewater by one of the following methods:
  1. The installation of water-conserving fixtures or
  2. Using nonpotable water systems (5.303.4).
- **Water use savings.** Twenty percent mandatory reduction in indoor water use with voluntary goal standards for 30, 35, and 40 percent reductions (5.303.2, A5303.2.3 [nonresidential]).
- **Water meters.** Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day (5.303.1).
- **Irrigation efficiency.** Moisture-sensing irrigation systems for larger landscaped areas (5.304.3).
- **Materials pollution control.** Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particleboard (5.404).
- **Building commissioning.** Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies (5.410.2).

Model Water Efficient Landscape Ordinance. The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881 Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SBX-7-7) 2020 mandate are expected for the ordinance. Former Governor Brown's Drought Executive Order of April 1, 2015

(EO B-29-15) directed DWR to update the ordinance through expedited regulation.[61] The California Water Commission approved the revised ordinance on July 15, 2015, which became effective on December 15, 2015. New development projects that include landscaped areas of 500 square feet or more are subject to the ordinance. The update requires:

- More efficient irrigation systems
- Incentives for graywater usage
- Improvements in on-site stormwater capture
- Limiting the portion of landscapes that can be planted with high water use plants
- Reporting requirements for local agencies.

SB 97 and the CEQA Guidelines Update. Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states: "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)."

Section 21097 was also added to the Public Resources Code. This provided an exemption until January 1, 2010 for transportation projects funded by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, or projects funded by the Disaster Preparedness and Flood Prevention Bond Act of 2006—in stating that the failure to analyze adequately the effects of GHGs would not violate CEQA. The Natural Resources Agency completed the approval process and the Amendments became effective on March 18, 2010. The Natural Resources Agency adopted additional amendments related to greenhouse gases in the 2019 CEQA Guidelines Update adopted on December 28, 2018.

The 2010 CEQA Amendments along with the 2018 CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing CEQA Guidelines to reference climate change.

Section 15064.4(b) of the CEQA Guidelines provides direction for lead agencies for assessing the significance of impacts of GHG emissions:

- The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; or
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse

[61] Brown, Edmund G. Jr. 2015. Press Release: California Establishes Most Ambitious Greenhouse Gas Goal in North America. Website: https://www.ca.gov/archive/gov39/2015/04/29 /news18938/index.html. Accessed May 1, 2023.

> gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

Section 15064.4(c) states that a lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

The 2018 CEQA Guidelines include the following discussion regarding thresholds of significance.

> (d) Using environmental standards as thresholds of significance promotes consistency in significance determinations and integrates environmental review with other environmental program planning and regulation. Any public agency may adopt or use an environmental standard as a threshold of significance. In adopting or using an environmental standard as a threshold of significance, a public agency shall explain how the particular requirements of that environmental standard reduce project impacts, including cumulative impacts, to a level that is less than significant, and why the environmental standard is relevant to the analysis of the project under consideration. For the purposes of this subdivision, an "environmental standard" is a rule of general application that is adopted by a public agency through a public review process and that is all of the following:
>
> (1) a quantitative, qualitative or performance requirement found in an ordinance, resolution, rule, regulation, order, plan or other environmental requirement;
> (2) adopted for the purpose of environmental protection;
> (3) addresses the environmental effect caused by the project; and,
> (4) applies to the project under review.

In addition, the 2018 amendments revised Appendix G Checklist questions to include a new question specifically on energy conservation, which focuses on potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

CEQA emphasizes that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (see CEQA Guidelines Section 15130(f)).

California Supreme Court GHG Ruling

A November 30, 2015 ruling, the *California Supreme Court in Center for Biological Diversity (CBD) v. California Department of Fish and Wildlife (CDFW)* on the Newhall Ranch project, concluded that whether the project was consistent with meeting statewide emission reduction goals is a legally permissible criterion of significance, but the significance finding for the project was not supported by a reasoned explanation based on substantial evidence. The Court offered potential solutions on pages 25 to 27 of the ruling to address this issue summarized below.

Specifically, the Court advised that:

- **Substantiation of Project Reductions from BAU.** A lead agency may use a BAU comparison based on the Scoping Plan's methodology if it also substantiates the reduction a particular project must achieve to comply with statewide goals. The Court suggested a lead agency could examine the "data behind the Scoping Plan's business-as-usual model" to determine the necessary project-level reductions from new land use development at the proposed location.
- **Compliance with Regulatory Programs or Performance Based Standards.** "A lead agency might assess consistency with A.B. 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities. (See Final Statement of Reasons, supra, at p. 64 [greenhouse gas emissions 'may be best analyzed and mitigated at a programmatic level.'].) To the extent a project's design features comply with or exceed the regulations outlined in the Scoping Plan and adopted by the Air Resources Board or other state agencies, a lead agency could appropriately rely on their use as showing compliance with 'performance based standards' adopted to fulfill 'a statewide . . . plan for the reduction or mitigation of greenhouse gas emissions.' (CEQA Guidelines § 15064.4(a)(2), (b)(3); see also id., § 15064(h)(3) [determination that impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including 'plans or regulations for the reduction of greenhouse gas emissions'].)".
- **Compliance with GHG Reduction Plans or Climate Action Plans (CAPs).** A lead agency may utilize "geographically specific GHG emission reduction plans" such as climate action plans or greenhouse gas emission reduction plans to provide a basis for the tiering or streamlining of project-level CEQA analysis.
- **Compliance with Local Air District Thresholds.** A lead agency may rely on "existing numerical thresholds of significance for greenhouse gas emissions" adopted by, for example, local air districts.

Therefore, consistent with CEQA Guidelines Appendix G, the three factors identified in CEQA Guidelines Section 15064.4 and the recently issued Newhall Ranch opinion, the GHG impacts would be considered significant if the project would:

- Conflict with a compliant GHG Reduction Plan if adopted by the lead agency;
- Exceed the SJVAPCD GHG Reduction Threshold; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs.

3.3.3 - San Joaquin Valley Air Pollution Control District

Climate Change Action Plan

On August 21, 2008, the SJVAPCD Governing Board approved a proposal called the Climate Change Action Plan (CCAP). The CCAP began with a public process bringing together stakeholders, land use agencies, environmental groups, and business groups to conduct public workshops to develop comprehensive policies for CEQA guidelines, a carbon exchange bank, and voluntary GHG emissions mitigation agreements for the Board's consideration. The CCAP contains the following goals and actions:

- Develop GHG significance thresholds to address CEQA projects with GHG emission increases.
- Develop the San Joaquin Valley Carbon Exchange for banking and trading GHG reductions.
- Authorize use of the SJVAPCD's existing inventory reporting system to allow use for GHG reporting required by AB 32 regulations.
- Develop and administer GHG reduction agreements to mitigate proposed emission increases from new projects.
- Support climate protection measures that reduce greenhouse gas emissions as well as toxic and criteria pollutants. Oppose measures that result in a significant increase in toxic or criteria pollutant emissions in already impacted areas.

On December 17, 2009, the SJVAPCD Governing Board adopted "Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA," and the policy "District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency." The SJVAPCD concluded that the existing science is inadequate to support quantification of the impacts that project-specific GHG emissions have on global climatic change. The SJVAPCD found the effects of project-specific emissions to be cumulative, and without mitigation, their incremental contribution to global climatic change could be considered cumulatively considerable. The SJVAPCD found that this cumulative impact is best addressed by requiring all projects to reduce their GHG emissions, whether through project design elements or mitigation.

The SJVAPCD's approach is intended to streamline the process of determining if project-specific GHG emissions would have a significant effect. Projects exempt from the requirements of CEQA, and projects complying with an approved plan or mitigation program would be determined to have a less than significant cumulative impact. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources, and must have a certified final CEQA document.

For non-exempt projects, those projects for which there is no applicable approved plan or program, or those projects not complying with an approved plan or program, the lead agency must evaluate the project against performance-based standards and would require the adoption of design elements, known as a Best Performance Standard, to reduce GHG emissions. The Best Performance Standards (BPS) have not yet fully been established, though they must be designed to achieve a 29 percent reduction when compared with the BAU projections identified in ARB's AB 32 Scoping Plan.

BAU represents the emissions that would occur in 2020 if the average baseline emissions during the 2002–2004 period were grown to 2020 levels, without control. Thus, these standards would carry with them pre-quantified emissions reductions, eliminating the need for project-specific quantification. Therefore, projects incorporating BPS would not require specific quantification of GHG emissions, and automatically would be determined to have a less than significant cumulative impact for GHG emissions.

For stationary source permitting projects, BPS means, "The most stringent of the identified alternatives for control of GHG emissions, including type of equipment, design of equipment and operational and maintenance practices, which are achieved-in-practice for the identified service, operation, or emissions unit class." The SJVAPCD has identified BPS for the following sources: boilers; dryers and dehydrators; oil and gas extraction; storage, transportation, and refining operations; cogeneration; gasoline dispensing facilities; volatile organic compound control technology; and steam generators.

For development projects, BPS means, "Any combination of identified GHG emission reduction measures, including project design elements and land use decisions that reduce project-specific GHG emission reductions by at least 29 percent compared with business as usual."

Projects not incorporating BPS would require quantification of GHG emissions and demonstration that BAU GHG emissions have been reduced or mitigated by 29 percent. As stated earlier, ARB's adjusted inventory reduced the amount required by the State to achieve 1990 emission levels from 29 percent to 21.7 percent to account for slower growth experienced since the 2008 recession. The SJVAPCD has not yet adopted BPS for development projects. The SJVAPCD has not updated its guidance to address SB 32 2030 targets or AB 1279 2045 targets.

San Joaquin Valley Carbon Exchange

The SJVAPCD initiated work on the San Joaquin Valley Carbon Exchange in November 2008. The purpose of the carbon exchange is to quantify, verify, and track voluntary GHG emissions reductions generated within the San Joaquin Valley. However, the SJVAPCD has pursued an alternative strategy that incorporates the GHG emissions into its existing Rule 2301—Emission Reduction Credit Offset Banking that formerly only addressed criteria pollutants. The SJVAPCD is also participating with the California Air Pollution Control Officers Association (CAPCOA), of which it is a member, in the CAPCOA Greenhouse Gas Reduction Exchange (GHG Rx). The GHG Rx is operated cooperatively by air districts that have elected to participate. Participating districts have signed a Memorandum of Understanding (MOU) with CAPCOA and agree to post only those credits that meet the Rx standards for quality. The objective is to provide a secure, low-cost, high-quality greenhouse gas exchange for credits created in California. The GHG Rx is intended to help fulfill compliance obligations or mitigation needs of local projects subject to environmental review, reducing the uncertainty of using credits generated in distant locations. The SJVAPCD currently has no credits posted to the GHG Rx website as of this writing.[62]

[62] California Air Pollution Control Officers Association (CAPCOA). 2021. CAPCOA Greenhouse Gas Reduction Exchange. Website: http://www.ghgrx.org/. Accessed May 1, 2023.

Rule 2301

While the Climate Change Action Plan indicated that the GHG emission reduction program would be called the San Joaquin Valley Carbon Exchange, the District incorporated a method to register voluntary GHG emission reductions into its existing Rule 2301—Emission Reduction Credit Banking through amendments of the rule. Amendments to the rule were adopted on January 19, 2012. The purposes of the amendments to the rule include the following:

- Provide an administrative mechanism for sources to bank voluntary GHG emission reductions for later use.
- Provide an administrative mechanism for sources to transfer banked GHG emission reductions to others for any use.
- Define eligibility standards, quantitative procedures, and administrative practices to ensure that banked GHG emission reductions are real, permanent, quantifiable, surplus, and enforceable.

Tulare County Association of Governments

Regional Transportation Plan

Tulare County Association of Governments (TCAG)[63] is the Metropolitan Planning Organization (MPO) for Tulare County and has responsibilities as Tulare County's Council of Governments (COG), transportation authority, and the Regional Transportation Planning Agency (RTPA).

The Regional Transportation Plan (RTP) is a long-range plan that every MPO is required to complete. The plan is meant to provide a long-range, fiscally constrained guide for the future of Tulare County's transportation system. The 2018 RTP plan extends to the year 2042 in its scope. As required by the Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375), the 2018 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) contains a Sustainable Communities Strategy that considers both land use and transportation together in a single, integrated planning process that accommodates regional housing needs and projected growth.[64] The 2018 RTP/SCS meets the requirements of SB 375 and demonstrates how the integrated land use and transportation plan achieves the region's mandated GHG emission targets for passenger vehicles.

3.3.4 - Local

The City of Porterville General Plan includes a number of air quality and energy policies that reduce GHG emissions. The air quality policies are listed in the Air Quality Section of this document. The energy policies are listed below.

[63] Tulare County Association of Governments (TCAG). Planning: Regional Transportation Plan (RTP). Website: https://tularecog.org/tcag/planning/rtp/. Accessed May 1, 2023.

[64] Tulare County Association of Governments (TCAG). Planning: Regional Transportation Plan (RTP). Website: https://tularecog.org/tcag/planning/rtp/. Accessed May 1, 2023.

City of Porterville General Plan

The City of Porterville General Plan includes numerous policies aimed at reducing and controlling GHG emissions. The General Plan includes the following goals and policies that would reduce GHG emissions:

> **OSC-G-10:** Reduce and conserve energy use in existing and new commercial, industrial, and public structures.
>
> **OSC-I-66:** Adopt guidelines and incentives for using green building standards in new construction. Green building design guidelines may include required and recommended "green" design and construction strategies including: Building Site and Form, Natural Heating or Cooling, transportation, Building Envelope and Space Planning, Building Materials, Water Systems, Electrical Systems, HVAC Systems, Construction Management, and Commissioning.
>
> **OSC-I-70:** Ensure City codes allow for environmentally acceptable alternative forms of energy production and green building techniques.

Waste Diversion

With the passage of SB 1016, the Per Capita Disposal Measurement System, only per capita disposal rates are measured. Targets are based on the per capita and employee disposal rates. The City of Porterville's disposal rate for 2018 was 4.6 pounds per person per day, and 13.2 pounds per employee per day, which is well below the target of 7.6 pounds per person per day and 18 pounds per day.[65]

[65] California Department of Resources Recycling and Recovery (CalRecycle). 2020. Countywide, Regionwide, and Statewide Jurisdiction Diversion/Disposal Progress Report06). Website https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DiversionDisposal. Accessed May 1, 2023.

SECTION 4: MODELING PARAMETERS AND ASSUMPTIONS

4.1—Model Selection and Guidance

Air pollutant emissions can be estimated by using emission factors and a level of activity. Emission factors represent the emission rate of a pollutant given the activity over time; for example, grams of NO_X per horsepower-hour or grams of NO_X per vehicle mile traveled. The ARB has published emission factors for on-road mobile vehicles/trucks in the EMission FACtors Model (EMFAC) mobile source emissions model and emission factors for off-road equipment and vehicles in the OFFROAD emissions model. An air emissions model (or calculator) combines the emission factors and the various levels of activity and outputs the emissions for the various pieces of equipment.

The California Emissions Estimator Model (CalEEMod) was developed by the South Coast Air Quality Management District in cooperation with other air districts throughout the State. CalEEMod is designed as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with construction and operation from a variety of land uses. CalEEMod version 2020.4.0 was launched on June 1, 2021, as part of a coordinated effort between air districts throughout California, California Air Pollution Control Officers Association (CAPCOA), and Trinity Consultants.

CalEEMod version 2020.4.0 was used to estimate construction and operational impacts of the proposed project. The web-based version of CalEEMod (CalEEMod 2022) is currently available; however, SJVAPCD is accepting the use of CalEEMod 2020.4.0 at the time modeling was completed for this technical report (May 2023). Furthermore, the SJVAPCD is currently recommending the use of CalEEMod version 2020.4.0, as the web-based version is currently awaiting approval from EPA.

The modeling follows SJVAPCD guidance where applicable from its GAMAQI. The models used in this analysis are summarized as follows:

- Construction emissions: CalEEMod, version 2020.4.0
- Operational emissions: CalEEMod, version 2020.4.0
- Dispersion Model: American Meteorological Society/ Environmental Protection Agency Regulatory Model (AERMOD), version 22112
- Fuel Efficiency: ARB's EMission FACtor (EMFAC) Model 2017 and 2021

4.2—Air Pollutants and GHGs Assessed

4.2.1 - Criteria Pollutants Assessed

The following air pollutants are assessed in this analysis:

- Reactive organic gases (ROG)
- Nitrogen oxides (NO_X)
- Carbon monoxide (CO)
- Sulfur dioxide (SO_2)

- Particulate matter less than 10 microns in diameter (PM_{10})
- Particulate matter less than 2.5 microns in diameter ($PM_{2.5}$)

Note that the project would emit ozone precursors ROG and NO_X. However, the project would not directly emit ozone, since it is formed in the atmosphere during the photochemical reaction of ozone precursors. Other criteria pollutants such as vinyl chloride, hydrogen sulfide, lead, and sulfates were not included because of their low levels of emissions from the project.

As noted previously, the project would emit ultrafine particles. However, there is currently no standard separate from the $PM_{2.5}$ standards for ultrafine particles and there is no accepted methodology to quantify or assess the significance of such particles.

4.2.2 - Toxic Air Contaminants Assessed

Construction DPM emissions (represented as PM_{10} exhaust) were estimated using CalEEMod Version 2020.4.0, while operational DPM emissions were estimated using EMFAC 2021. Construction DPM emissions were estimated for the unmitigated scenario and a scenario with clean construction equipment engines (mitigated scenario 1: Tier 4 mitigated for a portion of the off-road construction equipment; mitigated scenario 2: Level 3 filters for equipment 75 HP or greater). Equipment tiers refer to a generation of emission standards established by the EPA and ARB that apply to diesel engines in off-road equipment. The "tier" of an engine depends on the model year and horsepower rating; generally, the newer a piece of equipment is, the higher the tier level the equipment is likely to have. Excluding engines greater than 750 horsepower, Tier 1 engines were manufactured generally between 1996 and 2003. Since Tier 1 emission standards were established by the EPA in 1994, increasingly more stringent Tier 2, Tier 3, and Tier 4 (interim and final) standards were adopted by the EPA, as well as ARB.

4.2.3 - Greenhouse Gases Assessed

This analysis is restricted to GHGs identified by AB 32, which include carbon dioxide, methane, NO_X, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The project would generate a variety of GHGs, including several defined by AB 32 such as carbon dioxide, methane, and NO_X.

The project may emit GHGs that are not defined by AB 32. For example, the project may generate aerosols through emissions of DPM from the vehicles and trucks that would access the project site. Aerosols are short-lived particles, as they remain in the atmosphere for about one week. Black carbon is a component of aerosol. Studies have indicated that black carbon has a high global warming potential; however, the Intergovernmental Panel on Climate Change states that it has a low level of scientific certainty.[66]

Water vapor could be emitted from evaporated water used for landscaping, but this is not a significant impact because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks rather than emissions from project-related activities.

[66] Intergovernmental Panel on Climate Change (IPCC). 2007a. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller [eds.]). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, Website: https://www.ipcc.ch /report/ar4/wg1/. Accessed May 1, 2023.

The project would emit nitrogen oxides and volatile organic compounds, which are ozone precursors. Ozone is a GHG; however, unlike the other GHGs, ozone in the troposphere is relatively short-lived and can be reduced in the troposphere on a daily basis. Stratospheric ozone can be reduced through reactions with other pollutants.

Certain GHGs defined by AB 32 would not be emitted by the project. Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, none of which would be used by the project. Therefore, it is not anticipated that the project would emit perfluorocarbons or sulfur hexafluoride.

4.3—Construction Modeling Assumptions

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM_{10}) from disturbed soil. Additionally, paving operations and application of architectural coatings would release VOC emissions. Off-site emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM_{10} and $PM_{2.5}$).

4.3.1 - Project Schedule

The project was assumed to be built in a single phase, with construction activities to begin as early as the third quarter of 2023. The use of an earlier construction schedule in this analysis represents a conservative estimate of emissions, as emissions resulting from construction equipment and vehicle use are expected to decrease over time due to turnover and other factors. Overall CalEEMod default HP hours were retained. In instances where the CalEEMod default schedule was modified for ground-up construction to reflect the anticipated buildout schedule, equipment usage was proportionally modified to retain the overall HP hours. Full assumptions are provided and summarized in Appendix A.

4.3.2 - Construction Equipment Emission Factors

The analysis uses CalEEMod default assumptions for the equipment used during construction. CalEEMod default construction equipment and equipment activity are based on surveys of construction projects of various sizes conducted for development in Southern California and may overstate equipment use for larger project sites in regions outside of Southern California and should be considered highly conservative. The full modeling assumptions can be reviewed in the modeling results included in Appendix A of this report. CalEEMod contains an inventory of construction equipment that incorporates estimates of the number of equipment, age, horsepower, and equipment emission, and control level or tier from which rates of emissions are developed. The CalEEMod default equipment assumptions were used in this analysis for the estimation of emissions from on-site construction equipment. CalEEMod's off-road emission factors and load factors are from the ARB OFFROAD model.

4.4—Operation

Operational emissions are those emissions that occur when the project is occupied by the future residents. The major sources are summarized below.

4.4.1 - Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the automobiles that would travel to and from the project.

Project trip generation rates were obtained from the project Traffic Impact Study and are provided in Appendix A.

A pass-by trip accounts for vehicles already on the roadway network that stop at the project site as they pass-by; the pass-by trips are existing vehicle trips in the community. CalEEMod default rates of three percent pass-by trips were used in this analysis for the commercial shopping center. The pass-by trips for the fast-food land uses were adjusted to match project-specific values provided in the project Traffic Impact Study.

The vehicle fleet mix is defined as the mix of motor vehicle classes active during the operation of the project. Emission factors are assigned to the expected vehicle mix as a function of vehicle class, speed, and fuel use (gasoline and diesel-powered vehicles). The CalEEMod default vehicle fleet mixes were used to estimate emissions.

4.4.2 - Architectural Coatings (Painting)

Paints release VOC emissions during application and drying. The buildings in the project would be repainted on occasion. The project is required to comply with the SJVAPCD Rule 4601—Architectural Coatings. The rule required flat paints to meet a standard of 50 grams per liter (g/l) and gloss paints 100 g/l by 2012 for an average rate of 65 g/l. Most of the coatings used for residential and shopping center/nonresidential painting are flat paints. Effective January 1, 2022, nonflat gloss and semi-gloss paints are required to meet the 50 g/l standard, providing lower VOC emissions for buildings constructed after that date.

4.4.3 - Consumer Products

Consumer products are various solvents used in non-industrial applications, which emit VOCs during their product use. “Consumer Product” means a chemically formulated product used by household and institutional consumers, including but not limited to: detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. It does not include other paint products, furniture coatings, or architectural coatings.[67] CalEEMod includes default consumer product use rates based on building square footage. The default emission factors developed for CalEEMod were used for consumer products.

[67] California Air Resources Board (ARB). 2020. Website: https://ww2.arb.ca.gov/sites/default/files/2020-12/cp_reg_article-2.pdf. Accessed May 1, 2023.

4.4.4 - Landscape Equipment

CalEEMod estimated the landscaping equipment using the default assumptions in the model.

4.4.5 - Electricity

Electricity used by the project (for lighting, etc.) would result in emissions from the power plants that would generate electricity distributed on the electrical power grid. Electricity emissions estimates are only used in the GHG analysis. CalEEMod was used to estimate these emissions from the project.

4.4.6 - Electricity Consumption

CalEEMod has three categories for electricity consumption: electricity that is impacted by Title 24 regulations, non-Title 24 electricity, and lighting. The Title 24 uses are defined as the major building envelope systems covered by California's Building Code Title 24 Part 6, such as space heating, space cooling, water heating, and ventilation. Lighting is separate since it can be both part and not part of Title 24. Since lighting is not considered as part of the building envelope energy budget, CalEEMod does not consider lighting to have any further association with Title 24 references in the program. Non-Title 24 includes everything else such as appliances and electronics. Total electricity consumption in CalEEMod is divided into the three categories. The percentage for each category is determined by using percentages derived from the CalEEMod default electricity intensity factors. The percentages are then applied to the electricity consumption to result in the values used in the analysis.

4.4.7 - Natural Gas

The project would generate emissions from the combustion of natural gas for water heaters, heat, etc. CalEEMod has two categories for natural gas consumption: Title 24 and non-Title 24. CalEEMod defaults were used.

4.4.8 - Water and Wastewater

GHG emissions are emitted from the use of electricity to pump water to the project and to treat wastewater. CalEEMod defaults were used.

4.4.9 - Refrigerants

During operation, air conditioners and refrigeration systems may leak refrigerants (hydrofluorocarbons). Hydrofluorocarbons are typically used for refrigerants, which are long-lived GHGs. Regional and neighborhood commercial uses of refrigerants are minor; therefore, they were not estimated.

4.4.10 - Solid Waste

GHG emissions would be generated from the decomposition of solid waste generated by the project. CalEEMod was used to estimate the GHG emissions from this source. The CalEEMod default for the mix of landfill types is as follows:

- Landfill no gas capture: 6%
- Landfill capture gas flare: 94%

- Landfill capture gas energy recovery: 0%

4.4.11 - Vegetation

There is currently limited carbon sequestration occurring on-site from existing vegetation in the form of existing agricultural uses. The project would plant trees and integrate landscaping into the project design, which would provide carbon sequestration. However, the number of trees to be planted is unknown and data are insufficient to accurately determine the impact that existing plants have on carbon sequestration. For this analysis, it was assumed that the loss and addition of carbon sequestration that are due to the project would be balanced; therefore, emissions due to carbon sequestration were not included.

SECTION 5: AIR QUALITY IMPACT ANALYSIS

This section calculates the expected emissions from construction and operation of the project as a necessary requisite for assessing the regulatory significance of project emissions on a regional and localized level.

5.1—CEQA Guidelines

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on air quality, the type, level, and impact of emissions generated by the project must be evaluated.

The following air quality significance thresholds are contained in Appendix G of the current CEQA Guidelines. A significant impact would occur if the project would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable national or state ambient air quality standard;

c) Expose sensitive receptors to substantial pollutant concentrations; or

d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people).

While the final determination of whether a project is significant is within the purview of the lead agency pursuant to Section 15064(b) of the CEQA Guidelines, the SJVAPCD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. If the lead agency finds that the project has the potential to exceed these air pollution thresholds, the project should be considered to have significant air quality impacts. The applicable SJVAPCD thresholds and methodologies are contained under each impact statement below.

5.2—Impact Analysis

5.2.1 - Consistency with Air Quality Plan

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan.

Impact Analysis

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI indicates that projects that do not exceed SJVAPCD regional criteria pollutant emissions quantitative thresholds would not conflict with or obstruct the applicable air quality plan (AQP). An additional criterion regarding the project's implementation of control measures was assessed to provide further evidence of the project's consistency with current AQPs. This document proposes the following criteria for determining project consistency with the current AQPs:

1. Will the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs?
2. Will the project comply with applicable control measures in the AQPs? The primary control measures applicable to development projects include Regulation VIII—Fugitive PM_{10} Prohibitions and Rule 9510 Indirect Source Review.

Contribution to Air Quality Violations

A measure for determining if the project is consistent with the air quality plans is if the project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plans. Regional air quality impacts and attainment of standards are the result of the cumulative impacts of all emission sources within the air basin. Individual projects are generally not large enough to contribute measurably to an existing violation of air quality standards. Therefore, the cumulative impact of the project is based on its project-level contribution of regional air pollutants. Because of the region's nonattainment status for ozone, $PM_{2.5}$, and PM_{10}—if project-generated emissions of either of the ozone precursor pollutants (ROG and NO_X), PM_{10}, or $PM_{2.5}$ would exceed the SJVAPCD's significance thresholds—then the project would be considered to contribute to violations of the applicable standards and conflict with the attainment plans.

As discussed in Impact AIR-2 below, emissions of ROG, NO_X, CO, PM_{10}, and $PM_{2.5}$ associated with the operation of the project would not exceed the SJVAPCD's regional significance thresholds.

Compliance with Applicable Control Measures

The AQP contains a number of control measures, which are enforceable requirements through the adoption of rules and regulations. A description of rules and regulations that apply to this project is provided below.

SJVAPCD Rule 9510—Indirect Source Review (ISR) is a control measure in the 2006 PM_{10} Plan that requires NO_X and PM_{10} emission reductions from development projects in the San Joaquin Valley. The NO_X emission reductions help reduce the secondary formation of PM_{10} in the atmosphere (primarily ammonium nitrate and ammonium sulfate) and also reduce the formation of ozone. Reductions in directly emitted PM_{10} reduce particles such as dust, soot, and aerosols. Rule 9510 is also a control measure in the 2016 Plan for the 2008 8-Hour Ozone Standard. Developers of projects subject to Rule 9510 must reduce emissions occurring during construction and operational phases through on-site measures, or pay off-site mitigation fees. The project is required to comply with Rule 9510.

Regulation VIII—Fugitive PM_{10} Prohibitions is a control measure that is one main strategies from the 2006 PM_{10} for reducing the PM_{10} emissions that are part of fugitive dust. Residential projects over 10 acres and non-residential projects over 5 acres are required to file a Dust Control Plan (DCP) containing dust control practices sufficient to comply with Regulation VIII. The project will be required to prepare a DCP to comply with Regulation VIII.

Other control measures that apply to the project are Rule 4641—Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operation that requires reductions in VOC emissions during paving and Rule 4601—Architectural Coatings that limits the VOC content of all types of paints and coatings sold in the San Joaquin Valley. These measures apply at the point of sale of the asphalt and the coatings, so project compliance is ensured without additional mitigation measures.

The project would comply with all applicable SJVAPCD rules and regulations. Therefore, the project complies with this criterion and would not conflict with or obstruct implementation of the applicable air quality attainment plan under this criterion.

Conclusion

The project's emissions are less than significant for all criteria pollutants at the regional level and would not result in inconsistency with the AQP for this criterion. The project complies with applicable control measures of the AQP. Therefore, the project is consistent with the AQP, and the impact would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

5.2.2 - Cumulative Criteria Pollutant Impacts

Impact AIR-2: The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.

Impact Analysis

To result in a less than significant impact, emissions of nonattainment pollutants must be below the SJVAPCD's regional significance thresholds. This is an approach recommended by the SJVAPCD in its GAMAQI.

Regional Emissions

Air pollutant emissions have both regional and localized effects. This analysis assesses the regional effects of the project's criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for short-term construction activities and long-term operation of the project. Localized emissions from project construction and operation are assessed under Impact AIR-3—Sensitive Receptors using concentration-based thresholds that determine if the project would result in a localized exceedance of any ambient air quality standards or would make a cumulatively considerable contribution to an existing exceedance.

The primary pollutants of concern during project construction and operation are ROG, NO_X, PM_{10}, and $PM_{2.5}$. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO_X, ROG, SO_X, PM_{10}, and $PM_{2.5}$.

Ozone is a secondary pollutant that can be formed miles from the source of emissions, through reactions of ROG and NO_X emissions in the presence of sunlight. Therefore, ROG and NO_X are termed ozone precursors. The Air Basin often exceeds the state and national ozone standards. Therefore, if the project emits a substantial quantity of ozone precursors, the project may contribute to an exceedance of the ozone standard. The Air Basin also exceeds air quality standards for PM_{10}, and $PM_{2.5}$; therefore, substantial project emissions may contribute to an exceedance for these pollutants. The District's annual emission significance thresholds used for the project define the substantial contribution for both operational and construction emissions as follows:

- 100 tons per year CO
- 10 tons per year NO_X
- 10 tons per year ROG
- 27 tons per year SO_X
- 15 tons per year PM_{10}
- 15 tons per year $PM_{2.5}$

The project does not contain sources that would produce substantial quantities of SO_2 emissions during construction and operation. Modeling conducted for the project show that SO_2 emissions are well below the SJVAPCD GAMAQI thresholds, as shown in the modeling results contained in Appendix A. No further analysis of SO_2 is required.

Construction Emissions

Construction emissions were modeled using the CalEEMod version 2020.4.0. It should be noted that unmitigated construction emissions incorporate the basic dust control measures required under District Rule 8021, which requires that vehicle speeds on unpaved roads and surfaces be reduced to no more than 15 miles per hour and exposed construction areas are watered during earthmoving activities. The results of the modeling are presented in Table 7 below.

Table 7: Construction Air Pollutant Emissions Summary (Unmitigated)

Construction Activity	Emissions (tons per construction period)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition	0.01	0.11	0.10	0.01	< 0.01
Site Preparation	0.01	0.14	0.09	0.05	0.03
Grading	0.05	0.55	0.44	0.09	0.05
Building Construction	0.32	2.59	3.23	0.38	0.17
Paving	0.02	0.10	0.15	0.01	0.01
Architectural Coating	0.30	0.01	0.03	< 0.01	< 0.01
Grand Total for All Construction Activities	**0.71**	**3.50**	**4.04**	**0.54**	**0.26**
Significance threshold (tons/year)	**10**	**10**	**100**	**15**	**15**
Exceed threshold—significant impact?	**No**	**No**	**No**	**No**	**No**
Notes:					

PM_{10} and $PM_{2.5}$ emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM_{10} Prohibitions. ROG = reactive organic gases NO_X = nitrogen oxides PM_{10} and $PM_{2.5}$ = particulate matter Source: CalEEMod output (Appendix A).

As shown in Table 7, annual average emissions are below the applicable SJVAPCD significance thresholds. Therefore, regional construction emissions would have a less-than-significant impact on a project basis.

Operational Emissions

Operational emissions occur over the lifetime of the project and are from two main sources: area sources and motor vehicles, or mobile sources. The SJVAPCD considers construction and operational emissions separately when making significance determinations. For assumptions in estimating the emissions, please refer to Section 4, Modeling Parameters and Assumptions. The emissions modeling results for project operation are summarized in Table 8.

Table 8: Operational Air Pollutant Emissions

Source	Emissions (tons per year)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Project Operational Emissions					
Area	0.42	< 0.01	< 0.01	< 0.01	< 0.01
Energy	0.02	0.18	0.15	0.01	0.01
Mobile	6.19	8.79	49.91	10.23	2.80
Total Project Emissions	**6.63**	**8.98**	**50.07**	**10.25**	**2.81**
Significance threshold	**10**	**10**	**100**	**15**	**15**
Exceed threshold—significant impact?	**No**	**No**	**No**	**No**	**No**

Notes:
ROG = reactive organic gases NO_X = nitrogen oxides PM_{10} and $PM_{2.5}$ = particulate matter
Area source emissions include emissions from natural gas, landscape, and painting.
Source: CalEEMod output (Appendix A).

As shown in Table 8, operational emissions are below the SJVAPCD significance thresholds prior to application of mitigation measures and, therefore, would result in a less than significant impact.

Conclusion

The project's estimated emissions would not exceed SJVAPCD's applicable regional criteria pollutant thresholds for ROG, NO_X, CO, PM_{10}, or $PM_{2.5}$ during project construction operations. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

5.2.3 - Sensitive Receptors

Impact AIR-3: The project could expose sensitive receptors to substantial pollutant concentrations.

Impact Analysis

Sensitive Receptors

Those who are sensitive to air pollution include children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. The SJVAPCD considers a sensitive receptor a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. The closest off-site sensitive receptors are existing residences located adjacent to the project site to the north, east, south, and west. Specifically, the closest sensitive receptor is an apartment building located within approximately 30 feet of the project boundary to the west. Due to the prevailing wind direction and other factors, the maximally exposed sensitive receptor was determined to be an existing single-family residence located approximately 100 feet north of the project site at 36°05'00.9"N 119°02'23.9"W. The surrounding land uses are as follows:

- North—To the north of the project is primarily residential housing with a few schools and commercial businesses over a quarter mile away, followed by agricultural land over a mile away. The residences and schools would be considered as sensitive receptor land uses.
- East—Immediately East of the project is a mix of commercial businesses, including: a grocery store, car dealership, and a few fast-food restaurants. There is also a small park just east of the project, followed by residential housing, commercial businesses and schools. Over two miles east is agricultural land. The residences and schools would be considered sensitive receptor land uses.
- South—Immediately south of the project is primarily commercial businesses, including: shopping centers, fast food restaurants, a movie theater and a car wash. Farther south is a mix of residential housing, schools, medical facilities, hotels and other commercial businesses with downtown Porterville to the southeast and a Wastewater Treatment Plant to the southwest. Over three miles directly south is agricultural land but up to five miles to the southeast is East Porterville with a mix of residences, businesses and schools followed by agricultural land. The residences, schools, hotels and medical facilities would be considered sensitive receptor land uses.
- West—To the west of the project is a small residential neighborhood followed by: a shopping center, several restaurants and a High School. Beyond the High School is primarily residential housing followed by a few more schools to the southwest. Just over two miles west is agricultural land. The residences and schools would be considered sensitive receptor land uses.

Off-site Sensitive Receptors

Impacts to receptors located outside the project boundaries would occur primarily during project construction. Construction emissions were modeled to begin as early as July 2023 and continue until the end of August 2024. The use of an earlier construction schedule presents a conservative estimate of construction emission and related impacts, as emissions for the same level of activity are expected to decrease in future years due to the replacement of older equipment with cleaner models, increasingly more stringent regulations, and technological improvements.

Construction activities emissions are expected to occur mostly during the initial site preparation and grading activities and to a lesser extent during ground-up construction. For criteria pollutants, impacts to receptors located outside of the project are based on emissions during the highest emissions during any construction year. As shown in Table 9, emissions generated from construction of the project are less than SJVAPCD screening criteria. As shown in Table 10, the project would not exceed SJVAPCD screening thresholds for localized operational criteria pollutant impacts for NO_X, PM_{10}, or $PM_{2.5}$; however, emissions would exceed the localized screening thresholds for CO. Although the project exceeds the 100-pound-per screening threshold for CO, the majority of the estimated emissions are from mobile sources. Therefore, the project's operational impacts from CO are assessed by evaluating the project's potential to create or contribute to a CO hotspot. As discussed below, the proposed project would not result in a CO hotspot. As such, emissions of CO from mobile sources would not have a localized significant impact. Considering all of the information discussed above, this impact would be less than significant.

Construction: ROG

ROG is emitted during the application of architectural coatings (painting). The amount emitted is dependent on the amount of ROG (or VOC) in the paint. ROG emissions are typically an indoor air quality health hazard concern rather than an outdoor air quality health hazard concern. In addition, SJVACDP Rule 4601 Architectural Coatings limits the VOCs allowed in architectural coatings used in the San Joaquin Valley. As any architectural coating activities associated with buildout and development contemplated under the proposed project would be subject to compliance with Rule 4601, these activities would not create a localized impact. Therefore, exposure to ROG during architectural coatings is a less than significant health impact.

There are three types of asphalt that are typically used in paving: asphalt cements, cutback asphalts, and emulsified asphalts. However, SJVAPCD Rule 4641 prohibits the use of the following types of asphalt: rapid cure cutback asphalt; medium cure cutback asphalt; slow cure asphalt that contains more than one-half (0.5) percent of organic compounds that evaporate at 500 degrees Fahrenheit (°F) or lower; and emulsified asphalt containing organic compounds, in excess of 3 percent by volume, that evaporate at 500°F or lower. An exception to this is medium cure asphalt when the National Weather Service official forecast of the high temperature for the 24-hour period following application is below 50°F.

The acute (short-term) health effects from worker direct exposure to asphalt fumes include irritation of the eyes, nose, and throat. Other effects include respiratory tract symptoms and pulmonary function changes. The studies were based on occupational exposure of fumes. Residents are not in the immediate vicinity of the fumes; therefore, they would not be subjected to concentrations high enough to evoke a negative response. In addition, the restrictions that are placed on asphalt in the

San Joaquin Valley reduce ROG emissions from asphalt and exposure. The impact to nearby sensitive receptors from ROG during construction would be less than significant.

Localized Pollutant Screening Analysis

Emissions occurring at or near the project have the potential to create a localized impact, also referred to as an air pollutant hotspot. Localized emissions are considered significant if, when combined with background emissions, they would result in exceedance of any health-based air quality standard. The impact from localized pollutants is based on the impact to the nearest sensitive receptor.

The SJVAPCD's GAMAQI includes screening thresholds for identifying projects that need detailed analysis for localized impacts. Projects with on-site emission increases from construction activities or operational activities that exceed the 100 pounds per day screening level of any criteria pollutant after compliance with Rule 9510 and implementation of all enforceable mitigation measures would require preparation of an ambient air quality analysis. The criteria pollutants of concern for localized impact in the SJVAB are PM_{10}, $PM_{2.5}$, NO_X, and CO. There is no localized emission standard for ROG and most types of ROG are not toxic and have no health-based standard; however, ROG was included for informational purposes only.

The highest daily emissions occur during project grading activities except for ROG emissions, which are highest during application of architectural coatings. Daily emissions would not exceed the screening thresholds. The results of the construction screening analysis are presented in Table 9.

Table 9: Maximum Daily Air Pollutant Emissions during Construction (Unmitigated)

Maximum Daily Emissions by Development	Emissions (pounds per day)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Project Site 2023	4.65	34.90	36.09	0.06	10.12
Project Site 2024	32.34	18.31	23.28	0.04	0.85
Highest Daily Emissions	**32.34**	**34.90**	**36.09**	**0.06**	**10.12**
Screening Thresholds	**—**	**100**	**100**	**100**	**100**
Exceeds Threshold?	**—**	**No**	**No**	**No**	**No**

Notes:
NO_X = nitrogen oxides CO = carbon monoxide PM_{10} and $PM_{2.5}$ = particulate matter
N/A = Not applicable
Emissions shown are from the winter model output. There is no ambient air quality standard for ROG.
Source: CalEEMod output (Appendix A).

Maximum Daily Operational Emissions

An analysis of maximum daily emissions during operation was conducted to determine if emissions would exceed 100 pounds per day for any pollutant of concern. Using earlier operational years constitutes a conservative analysis because emissions decline over time as older, high-emitting vehicles are replaced with new low-emitting vehicles compliant with current emission standards.

Operational emissions include emissions generated on-site by area sources such as natural gas combustion and landscape maintenance, and off-site by motor vehicles accessing the project. Most motor vehicle emissions would occur distant from the site and would not contribute to a violation of ambient air quality standards; therefore, only emissions from vehicles operating within 0.25 mile of the site were included in the assessment. The results of the screening analysis are presented in Table 10.

Table 10: Maximum Daily Air Pollutant Emissions during Operations

Maximum Daily Emissions per Source Category	Emissions (pounds per day)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Project Operations					
Area	2.28	< 0.01	0.01	< 0.01	< 0.01
Energy	0.11	1.00	0.84	0.08	0.08
Mobile	35.48	16.73	115.39	3.02	0.86
Maximum Daily Total	**37.87**	**17.73**	**116.24**	**3.10**	**0.94**
Screening threshold	**—**	**100**	**100**	**100**	**100**
Exceed screening threshold?	**—**	**No**	**Yes**	**No**	**No**

Notes:
NO_X = nitrogen oxides CO = carbon monoxide PM_{10} and $PM_{2.5}$ = particulate matter
N/A = Not applicable
Source: CalEEMod output (Appendix A).

The project would not exceed SJVAPCD screening thresholds for localized operational criteria pollutant impacts for NO_X, PM_{10}, or $PM_{2.5}$; however, emissions would exceed the localized screening thresholds for CO. The exceedance for CO is primarily due to emissions from mobile sources. Therefore, further a CO hotspot analysis was conducted to determine if the project would result in a significant adverse impact to air quality resources due to the generation of localized CO during project operations. This discussion is provided further below.

Operation: ROG

During operation, ROG would be emitted primarily from motor vehicles. Direct exposure to ROG from project motor vehicles would not result in health effects, because the ROG would be distributed across miles and miles of roadway and in the air. The concentrations would not be great enough to result in direct health effects.

Operation: PM_{10}, $PM_{2.5}$, NO_2

As shown in Table 10, localized emissions of PM_{10}, $PM_{2.5}$ and NO_X would not exceed the SJVAPCD screening thresholds at full project buildout. The largest source of emissions from commercial projects is motor vehicles. Most motor vehicle emissions occur when employee and customer vehicles travel to and from the project site and not during parking and idling on the site. The localized emissions of PM_{10}, $PM_{2.5}$, and NO_X would not exceed the screening threshold; therefore, the project would not expose sensitive receptors located near the commercial sites to substantial criteria air pollutant concentrations during operation.

Carbon Monoxide Hot Spot Analysis

As shown in Table 10, the majority of CO emissions would be from mobile sources, such as passenger vehicles driven by future customers, employees, and other visitors to access the project site. Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. A CO hotspot represents a condition wherein high concentrations of CO may be produced by motor vehicles accessing a congested traffic intersection under heavy traffic volume conditions. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Accordingly, vehicle emissions standards have become increasingly more stringent to help remedy this impact.

The analysis prepared for CO attainment in the South Coast Air Basin (SoCAB) by the South Coast Air Quality Management District (SCAQMD) has been used to assist in evaluating potential for CO exceedances in other air basins. Although the SoCAB and the SCAQMD would not be the applicable air basin or air district for the project, applying this guidance is appropriate in this analysis because CO exceedances are caused by idling vehicles and regardless of air district. For example, any project-generated vehicles trips would result in idling of passenger vehicles or trucks at the project site and on adjacent roadways that could lead to a CO exceedance. By using the 1992 CO Plan as a worst-case scenario, the proposed project can measure CO impacts against intersections that experienced significantly more vehicle traffic than adjacent to the proposed project. The 1992 CO Plan is used as a worst-case scenario because it included a CO hot spot analysis for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. Subsequently the CO Plan determined that no CO hotspot would occur even with 100,000 vehicles per day at this one intersection.

The traffic volumes near the project site, with project trips, are provided in the project-specific traffic impact analysis. The project-specific traffic impact study reported the number of average daily trips for the proposed project: 11,453 average weekday trips after adjustments for internal capture and pass-by trips.[68] The traffic impact study also analyzed the traffic volumes at seven (7) intersections near the project site. In the “2025 + Project” scenario, the highest peak-hour traffic was projected to be 3,596 vehicles (PM peak-hour at N Prospect Street & W Henderson Avenue). The PM peak-hour traffic volume at N Prospect Street & W Henderson Avenue was projected to be 4,280 trips in the “2043 + Project” scenario. At a maximum of 4,280 vehicles at any one intersection during peak hours under any cumulative scenario, the traffic volumes at intersections in the study area around the project are lower than what was analyzed in the 1992 CO Plan. Therefore, none of the intersections near the project site would have peak-hour traffic volumes exceeding those at the intersections modeled in the 1992 CO Plan. Furthermore, there would not be any reason unique to the local meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail because the project site is not located in an area where air flow would be severely restricted, such as a tunnel or canyon. In conclusion, the addition of the proposed project’s daily trips would

[68] Ruettgers & Schuler Civil Engineers. 2023. Traffic Study: Proposed Commercial Development Henderson Avenue & State Route 65 City of Porterville. May.

not generate a CO hotspot at local intersections and operational CO impact would be less than significant. In addition, the highest background 8-hour average CO concentration during the latest year it was monitored is 2.06 ppm, which is 78 percent lower than the CAAQS of 9.0 ppm or the NAAQS of 9 ppm. Therefore, the project would not significantly contribute to an exceedance of state or federal CO standards.

Toxic Air Contaminants

Project construction would involve the use of diesel-fueled vehicles and equipment that emit DPM, which is considered a TAC. The SJVAPCD's latest threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in a million (formerly 10 in a million). The SJVAPCD's 2015 GAMAQI does not currently recommend analysis of TAC emissions from project construction activities, but instead focuses on projects with operational emissions that would expose sensitive receptors over a typical lifetime of 70 years. However, SJVAPCD comment letters in recent years have emphasized that multi-year construction projects are also of concern in the San Joaquin Valley and have the potential to expose sensitive receptors to significant health risk impacts.

Health Risk Assessment

During construction and operation, the proposed project would result in emissions of several TACs that could potentially impact nearby sensitive receptors. As previously noted, the SJVAPCD has defined health risk significance thresholds. These thresholds are represented as a cancer risk to the public and a non-cancer hazard from exposures to TACs. Cancer risk represents the probability (in terms of risk per million individuals) that an individual would contract cancer resulting from exposure to TACs continuously over a period of several years. The principal TAC emission analyzed in this assessment was DPM from operation of off-road equipment and diesel-powered delivery and worker vehicles during construction and operation. DPM has been identified by the ARB as a carcinogenic substance. For purposes of this analysis, DPM is represented as exhaust emissions of PM_{10}. DPM represented as exhaust PM_{10} adequately addresses impacts from PM_{10} and $PM_{2.5}$ emissions, as $PM_{2.5}$ comprises a component of PM_{10}. Fugitive dust components of PM_{10} and $PM_{2.5}$ would be controlled through the use of required dust control practices during project construction.

Exposures to TACs can also result in both short-term (acute) or long-term (chronic) non-cancer health impacts. Such impacts could include illnesses related to reproductive effects, respiratory effects, eye sensitivity, immune effects, kidney effects, blood effects, central nervous system, birth defects, or other adverse environmental effects.

Estimation of Cancer Risks

Cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer as a direct result of exposure to potential carcinogens over a specified exposure duration. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). A risk level of 20 in a million implies a likelihood (or risk) that up to 20 persons, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer risk that is in addition to any environmental cancer risk borne by a person not exposed to these air toxics.

California Office of Environmental Health Hazard Assessment (OEHHA) has developed guidance for estimating cancer risks that considers the increased sensitivity of infants and adults to TAC emissions, different breathing rates, and time spent at home. This guidance was applied in estimating cancer risks from the construction and operation of the proposed project.

The recommended method for the estimation of cancer risk is shown in the equations.

$$\text{Cancer Risk} = C_{DPM} \text{ x Inhalation Exposure Factor} \quad \text{(EQ-1)}$$

Where:

Cancer Risk = Total individual excess cancer risk defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular source for specified exposure durations; this risk is defined as an excess risk because it is above and beyond the background cancer risk to the population; cancer risk is expressed in terms of risk per million exposed individuals.

C_{DPM} = Period average DPM air concentration calculated from the air dispersion model in $\mu g/m^3$

Inhalation is the most important exposure pathway to impact human health from DPM and the inhalation exposure factor is defined as follows:

$$\text{Inhalation Exposure Factor} = \text{CPF x EF x ED x DBR x AAF/AT} \quad \text{(EQ-2)}$$

Where:

CPF = Inhalation cancer potency factor for the TAC: 1.1 $(mg/kg\text{-}day)^{-1}$ for DPM
EF = Exposure frequency (days/year)
ED = Exposure duration (years of construction)
AAF = set of age-specific adjustment factors that include age sensitivity factors (ASF), daily breathing rates (DBR), and time at home factors (TAH)
AT = Averaging time period over which exposure is averaged (days)

Estimation of Chronic Non-Cancer Hazards

An evaluation of potential non-cancer effects of chronic chemical exposures was also conducted. Adverse health effects are evaluated by comparing the annual receptor concentration of each chemical compound with the appropriate Reference Exposure Level (REL). Available RELs promulgated by OEHHA were considered in the assessment.

Risk characterization for non-cancer health hazards from TACs is expressed as an HI. The HI is a ratio of the predicted concentration of the project’s emissions to a concentration considered acceptable to public health professionals, termed the REL.

To quantify non-carcinogenic impacts, the HI approach was used.

$$HI = C_{ann}/REL \quad \text{(EQ-3)}$$

Where:

HI = chronic hazard index
C_{ann} = annual average concentration of TAC as derived from the air dispersion model ($\mu g/m^3$)
REL = reference exposure level above which a significant impact is assumed to occur ($\mu g/m^3$)

The HI assumes that chronic exposures to TACs adversely affect a specific organ or organ system (toxicological endpoint) of the body. For each discrete chemical exposure, target organs presented in regulatory guidance were used. To calculate the HI, each chemical concentration or dose is divided by the appropriate toxicity REL. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds 1, a health hazard is presumed to exist. OEHHA has defined a REL for DPM of 5 $\mu g/m^3$. The principal toxicological endpoint assumed in this assessment was through inhalation.

Toxic Air Contaminant Construction Analysis

Major sources of DPM during construction include off-road construction equipment and heavy-duty delivery truck activities. The results of the HRA prepared for project construction for cancer risk and long-term chronic cancer risk are summarized below. Air dispersion modeling was utilized to assess the project's potential health risks using AERMOD Version 22112, which is an air dispersion model accepted by the EPA and the Valley Air District for preparing HRAs. Exhaust emissions of DPM (as PM_{10} exhaust) were estimated using CalEEMod Version 2020.4.0. Construction emissions were estimated assuming adherence to all applicable rules, regulations, and project design features. The construction emissions were assumed to be distributed over the project area with a working schedule of eight hours per day and five days per week. Emissions were adjusted by a factor of 4.2 to convert for use with a 24-hour-per-day, 365 day-per-year averaging period. Detailed parameters, a description of methodology, and complete calculations are contained in Appendix B.

The estimated health and hazard impacts at the Maximally Exposed Receptor (MER) from the project's construction emissions are provided in Table 11.

Table 11: Estimated Health Risks and Hazards During Project Construction (Unmitigated)

Source	Cancer Risk (risk per million)	Chronic Non-Cancer HI
Risks and Hazards at the MER	14.50	0.014
Significance Threshold	**20**	**1**
Exceeds Individual Source Threshold?	**No**	**No**
Source: Health Risk Assessments (Appendix B).		

As shown above in Table 11, the proposed project's construction DPM emission would not exceeed the health risk thresholds at the MER prior to incorporation of any mitigation; however, mitigation is required to reduce potential impacts when health risks from construction and operations are combined (see below). As noted in Table 14 below, the proposed project's combined construction and operational DPM emissions would not exceed the health risk thresholds at the MER after incorporation of MM AIR-3a.

Toxic Air Contaminant Operational Analysis

Operational DPM emissions from diesel trucks were estimated using emission factors from the EMFAC 2021 database, based on estimated truck travel and idling at the project site. The emissions were entered into the SJVAPCD Prioritization Screening Tool to determine the risk scores. Complete calculations and assumptions are included as part of Appendix B. The results of the operational screening analysis are provided in Table 12.

Table 12: Prioritization Tool Health Risk Screening Results – Project Operations

Impact Source	Cancer Risk (risk per million)	Chronic Non-Cancer HI
Project Operations (DPM)	53.81	0.580
Screening Risk Score Threshold	**10**	**1**
Screening Thresholds Exceeded?	**Yes**	**No**
Source: Operational health risk screening (Appendix B).		

As noted in Table 12, cancer risks from project operations do not fall under the SJVAPCD prioritization screening level of 10 in million. A prioritization score of 10 or greater is considered to be potentially significant and a refined HRA using dispersion modeling and a health risk model should be performed to determine significance. Therefore, a project-specific HRA was conducted for the proposed project.

Results of the HRA are summarized in Table 13 below. Because the same receptors could be exposed to project operations and project construction, Table 13 also includes health risks from project operations plus construction. The complete HRA prepared for the proposed project, including HARP2 calculations, is included as part of Appendix B of this technical report.

Table 13: Health Risk Assessment Results – Project Operations and Combined Health Risks from Construction and Operations (Unmitigated Construction)

Source	Cancer Risk (risk per million)	Chronic Non-Cancer HI
Project Operations	9.19	0.002
Project Operations + Construction	23.69	0.016
Risks and Hazards at the MER (Highest of Either Scenario)	**23.69**	**0.016**
Significance Threshold	**20**	**1**
Exceeds Individual Source Threshold?	**Yes**	**No**
Source: Health Risk Assessments (Appendix B).		

As noted in Table 13, the proposed project's combined construction and operational DPM emissions would exceed the cancer risk significance threshold at the MER. Implementation of MM AIR-3a would reduce estimated health risks and hazards during project construction compared to the results presented in the unmitigated scenario. Estimated health risks and hazards during project construction and operations, after application of MM AIR-3a is presented below in Table 14.

Table 14: Estimated Health Risks and Hazards During Project Construction and Operations (Mitigated Construction)

Source	Cancer Risk (risk per million)	Chronic Non-Cancer HI
Construction Impacts after Incorporation of MM AIR-3a		
Risks and Hazards at the MER (Tier 4 Option)	1.73	0.002
Risks and Hazards at the MER (Level 3 Filters Option)	2.89	0.003
Combined Construction and Operational Impacts after Incorporation of MM AIR-3a		
Risks and Hazards at the MER (Tier 4 Option)	10.92	0.004
Risks and Hazards at the MER (Level 3 Filters Option)	12.08	0.005
Risks and Hazards at the MER (Highest of Either Two Options)	**12.08**	**0.005**
Significance Threshold	**20**	**1**
Exceeds Individual Source Threshold?	**No**	**No**
Source: Health Risk Assessments (Appendix B).		

As shown in Table 14, the project would not exceed the cancer risk or chronic hazard threshold levels with incorporation of MM AIR-3a. The primary source of the emissions responsible for chronic risk are from diesel trucks. DPM does not have an acute risk factor. Since the project does not exceed the applicable SJVAPCD health risk thresholds for cancer risk, acute risk, or chronic risk, after incorporation of MM AIR-3a this impact would be less than significant.

Valley Fever

Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities.

The San Joaquin Valley is considered an endemic area for Valley fever. During 2000–2018, a total of 65,438 coccidioidomycosis cases were reported in California; median statewide annual incidence was 7.9 per 100,000 population and varied by region from 1.1 in Northern and Eastern California to 90.6 in the Southern San Joaquin Valley, with the largest increase (15-fold) occurring in the Northern San Joaquin Valley. Incidence has been consistently high in six counties in the Southern San Joaquin Valley (Fresno, Kern, Kings, Madera, Tulare, and Merced counties) and Central Coast (San Luis Obispo

County) regions.[69] California experienced 6,490 new cases of Valley fever in 2020. A total of 195 Valley fever cases were reported in Tulare County in 2020.[70]

The distribution of *C. immitis* within endemic areas is not uniform and growth sites are commonly small (a few tens of meters) and widely scattered. Known sites appear to have some ecological factors in common suggesting that certain physical, chemical, and biological conditions are more favorable for *C. immitis* growth. Avoidance, when possible, of sites favorable for the occurrence of *C. immitis* is a prudent risk management strategy. Listed below are ecologic factors and sites favorable for the occurrence of *C. immitis*:

1) Rodent burrows (often a favorable site for *C. immitis*, perhaps because temperatures are more moderate and humidity higher than on the ground surface)
2) Old (prehistoric) Indian campsites near fire pits
3) Areas with sparse vegetation and alkaline soils
4) Areas with high salinity soils
5) Areas adjacent to arroyos (where residual moisture may be available)
6) Packrat middens
7) Upper 30 centimeters of the soil horizon, especially in virgin undisturbed soils
8) Sandy, well-aerated soil with relatively high water-holding capacities

Sites within endemic areas less favorable for the occurrence of *C. immitis* include:

1) Cultivated fields
2) Heavily vegetated areas (e.g. grassy lawns)
3) Higher elevations (above 7,000 feet)
4) Areas where commercial fertilizers (e.g. ammonium sulfate) have been applied
5) Areas that are continually wet
6) Paved (asphalt or concrete) or oiled areas
7) Soils containing abundant microorganisms
8) Heavily urbanized areas where there is little undisturbed virgin soil (USGS 2000).

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69 Centers for Disease Control and Prevention (CDC). 2020. Regional Analysis of Coccidioidomycosis Incidence—California, 2000–2018. Website: https://www.cdc.gov/mmwr/volumes/69/wr /mm6948a4.htm?s_cid=mm6948a4_e. Accessed May 1, 2023.

70 California Department of Public Health (CDPH). 2021. Coccidioidomycosis in California Provisional Monthly Report January 2021. Website: https://www.cdph.ca.gov/Programs/CID /DCDC/CDPH%20Document%20Library/CocciinCAProvisionalMonthlyReport.pdf. Accessed May 1, 2023.

The project site is situated in a city growth area. The project includes urbanization of a site that was formerly used for agricultural purposes. Therefore, implementation of the project would have a low probability of the site having *C. immitis* growth sites and exposure to the spores from disturbed soil.

Construction activities would generate fugitive dust that could contain *C. immitis* spores. The project will minimize the generation of fugitive dust during construction activities by complying with the District's Regulation VIII. Therefore, this regulation, combined with the relatively low probability of the presence of *C. immitis* spores, would reduce Valley fever impacts to less than significant.

During operations, dust emissions are anticipated to be negligible, because most of the project area would be occupied by buildings, pavement, and landscaped areas. This condition would preclude the possibility of the project from providing habitat suitable for *C. immitis* spores and for generating fugitive dust that may contribute to Valley fever exposure. Impacts would be less than significant.

Naturally Occurring Asbestos

According to a map of areas where naturally occurring asbestos in California are likely to occur,[71] there are no such areas in the project area. Ultramafic rock that contains asbestos is located at various locations in the foothills of Tulare County but are not near the project site. Therefore, development of the project is not anticipated to expose receptors to naturally occurring asbestos. Impacts would be less than significant.

Summary

In summary, the project would not exceed SJVAPCD localized emission daily screening levels for any criteria pollutant during construction and would not result in a significant impact for any criteria pollutant during operations. The project would not result in TAC emissions that could cause a significant health impact after incorporation of MM AIR-3a. The project is not a significant source of TAC emissions during operation. The project is not in an area with suitable habitat for Valley fever spores and is not in an area known to have naturally occurring asbestos. Therefore, the project would not result in significant impacts to sensitive receptors.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM AIR-3a Before a construction permit is issued for the proposed project, the project applicant, project sponsor, or construction contractor shall submit provide reasonably detailed compliance with one of the following requirements to the City of Porterville:

Option 1) Where portable diesel engines are used during construction, all off-road equipment with engines greater than 75 horsepower shall have engines that meet

[71] U.S. Geological Survey. 2011. Van Gosen, B.S., and Clinkenbeard, J.P. California Geological Survey Map Sheet 59. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California. Open-File Report 2011-1188 Website: http://pubs.usgs.gov/of/2011/1188/. Accessed May 15, 2023.

either United States Environmental Protection Agency (EPA) or California Air Resources Board (ARB) Tier 4 Interim off-road emission standards..

Option 2) Prior to the issuance of any demolition, grading, or building permits (whichever occurs earliest), the project applicant and/or construction contractor shall prepare a construction operations plan that, during construction activities, requires all off-road equipment with engines greater than 75 horsepower to meet either the particulate matter emissions standards for Tier 4 Interim engines or be equipped with Level 3 diesel particulate filters. Tier 4 Interim engines shall, at a minimum, meet EPA or ARB particulate matter emissions standards for Tier 4 Interim engines. Alternatively, use of ARB-certified Level 3 diesel particulate filters on off-road equipment with engines greater than 75 horsepower can be used in lieu of Tier 4 Interim engines or in combination with Tier 4 Interim engines. The construction contractor shall maintain records documenting its efforts to comply with this requirement, including equipment lists. Off-road equipment descriptions and information shall include, but are not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, and engine serial number. The project applicant, project sponsor, or construction contractor shall submit the records of compliance to the City of Porterville.

Level of Significance After Mitigation

Less than significant impact.

5.2.4 - Objectionable Odors

Impact AIR-4: The project would not create objectionable odors affecting a substantial number of people.

Impact Analysis

Thresholds of Significance

Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. According to the *CBIA v. BAAQMD* ruling, impacts of existing sources of odors on the project are not subject to CEQA review. The SJVAPCD has determined the common land use types that are known to produce odors in the Air Basin. These types are shown in Table 15.

Table 15: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile

Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source: SJVAPCD 2015.[72]	

According to the SJVAPCD GAMAQI, analysis of potential odor impacts should be conducted for the following two situations:

- **Generators:** projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate, and
- **Receivers:** residential or other sensitive receptor projects or other projects built for the intent of attracting people located near existing odor sources.

Project Analysis

Project as a Generator

Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, feed lots, coffee roasters, asphalt batch plants, and rendering plants. The project would not engage in any of these activities. Therefore, the project would not be considered a generator of objectionable odors during operations.

During construction, the various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and would not likely be noticeable for extended periods of time beyond the project's site boundaries. The potential for diesel odor impacts would therefore be less than significant.

Project as a Receptor

As a commercial development, the project would not locate residential or other sensitive receptors. However, employees and visitors could be subject to existing sources of TACs at the project site. With the *CBIA v. BAAQMD* ruling, analysis of odor impacts on receivers is not required for CEQA compliance unless the project would exacerbate the impact. As discussed above, the proposed project would not be considered to be a generator of objectionable odors during operations.

[72] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Revised March 19, 2015. Website: http://www.valleyair.org /transportation/GAMAQI_3-19-15.pdf. Accessed May 1, 2023.

Therefore, the project would not exacerbate any potential odor impacts and further analysis is required.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

SECTION 6: GREENHOUSE GAS IMPACT ANALYSIS

6.1—CEQA Guidelines

CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on GHGs, the type, level, and impact of emissions generated by the project must be evaluated.

The following GHG significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97 and most recently amended December 28, 2018. A significant impact would occur if the project would:

(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

(b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

6.2—Impact Analysis

6.2.1 - Greenhouse Gas Inventory

Impact GHG-1: **The project would generate direct and indirect greenhouse gas emissions; however, these emissions would not result in a significant impact on the environment.**

Impact Analysis

Threshold of Significance

Section 15064.4(b) of the CEQA Guidelines' 2018 amendments for GHG emissions states that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

- **Consideration #1**: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- **Consideration #2**: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration #3**: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of

impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

The SJVAPCD's *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* provides guidance for preparing a BAU analysis.[73] Under the SJVAPCD guidance, projects meeting one of the following would have a less than significant impact on climate change:

- Exempt from CEQA;
- Complies with an approved GHG emission reduction plan or GHG mitigation program;
- Project achieves 29 percent GHG reductions by using approved Best Performance Standards; and
- Project achieves AB 32 targeted 29 percent GHG reductions compared with "business as usual."

The SJVAPCD has not yet adopted BPS for development projects. For development projects, BPS means, "Any combination of identified GHG emission reduction measures, including project design elements and land use decisions that reduce project-specific GHG emission reductions by at least 29 percent compared with business as usual."

The 29 percent GHG reduction level is based on the target established by ARB's AB 32 Scoping Plan, approved in 2008. The GHG reduction level for the State to reach 1990 emission levels by 2020 was reduced to 21.7 percent from BAU in 2020 in the 2014 First Update to the Scoping Plan to account for slower than projected growth after the 2008 recession.[74] First occupancy at the project site is expected to occur in 2024, which is after the AB 32 target year. The SJVAPCD has not updated its guidance to address SB 32 2030 targets or AB 1279 2045 targets.

The analysis also addresses consistency with the SB 32 targets and the 2017 Scoping Plan Update with an assessment of the project's reduction from BAU based on emissions in 2030 compared with the 21.7 percent reduction and with a consistency analysis. This approach provides estimates of project emissions in the new 2030 milestone year with the existing threshold to address Considerations 1 and 2 above. Therefore, whether the project's GHG emissions would result in a significant impact on the environment is determined by assessing consistency with relevant GHG reduction plans.

Impact Analysis

The following analysis assesses the project's compliance with Consideration #3 regarding consistency with adopted plans to reduce GHG emissions. The City of Porterville has not adopted a GHG reduction plan. In addition, the City has not completed the GHG inventory, benchmarking, or goal-setting process required to identify a reduction target and take advantage of the streamlining provisions contained in the CEQA Guidelines amendments adopted for SB 97 and clarifications

[73] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009. "Final Staff Report, Addressing Greenhouse Gas Emissions Impacts under the California Environmental Quality Act." Website: http://www.valleyair.org/programs/CCAP/11-05-09/1_CCAP_FINAL_CEQA_GHG_Draft_Staff_Report_Nov_05_2009.pdf. December 2009. Accessed May 15, 2023.

[74] California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed May 15, 2023.

provided in the CEQA Guidelines amendments adopted on December 28, 2018. The SJVAPCD has adopted a Climate Action Plan, but it does not contain measures that are applicable to the project. Therefore, the SJVAPCD Climate Action Plan cannot be applied to the project. Since no other local or regional Climate Action Plan is in place, the project is assessed for its consistency with ARB's adopted Scoping Plans.

Consistency with ARB's Adopted Scoping Plans

The State's regulatory program implementing the 2008 Scoping Plan is now fully mature. All regulations envisioned in the Scoping Plan have been adopted, and the effectiveness of those regulations has been estimated by the agencies during the adoption process and then tracked to verify their effectiveness after implementation. The combined effect of this successful effort is that the State now projects that it will meet the 2020 target and achieve continued progress toward meeting post-2020 targets. Governor Brown, in the introduction to Executive Order B-30-15, stated "California is on track to meet or exceed the current target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32)."

Consistency with SB 32 and the 2017 Scoping Plan

Table 16 provides an analysis of the project's consistency with the 2017 Scoping Plan Update measures.

Table 16: Project Consistency with SB 32 2017 Scoping Plan Update

Scoping Plan Measure	Project Consistency
SB 350 50% Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33% in 2020 to 50% in 2030.	**Consistent**: The project will purchase electricity from a utility subject to the SB 350 Renewable Mandate.
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels	**Not Applicable**. This measure applies to existing buildings. New structures are required to comply with Title 24 Energy Efficiency Standards that are expected to increase in stringency until the State achieves zero net energy. Existing structures are not a part of the proposed development.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	**Consistent**. Vehicles accessing the project site will use fuel containing lower carbon content as the fuel standard is implemented.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario) Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Consistent**. Future project occupants and visitors can be expected to purchase increasing numbers of more fuel efficient and zero emission cars and trucks each year. The 2022 CALGreen Code requires commercial developments to include EV infrastructure. In addition, deliveries will be made by increasing numbers of ZEV delivery trucks.

Sustainable Freight Action Plan The plan's target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	**Not Applicable**. The measure applies to owners and operators of trucks and freight operations. Deliveries to the proposed commercial development are expected to be made by increasing number of ZEV delivery trucks.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	**Consistent**. Commercial uses contemplated as part of the proposed project are not expected to be sources of black carbon.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita vehicle miles traveled.	**Consistent**. The project will provide commercial development in the region that is consistent with the Regional Transportation Plan/Sustainable Communities Strategy (SCS) strategy to increase development densities to reduce VMT. The project is near existing residential and commercial development within the same area, which will also contribute to reductions in VMT.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	**Consistent.** The post-2020 Cap-and-Trade Program indirectly affects people who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the program's first compliance period.
Natural and Working Lands Action Plan. The ARB is working in coordination with several other agencies at the federal, state, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	**Not Applicable**. The project is commercial development and will not be considered natural or working lands.
Source: ARB 2017 Scoping Plan Update.	

As described in Table 16, the proposed project would be consistent with applicable 2017 Scoping Plan Update measures and would not obstruct the implementation of others that are not applicable. The

State's regulatory program is able to target both new and existing development because the two most important strategies, motor vehicle fuel efficiency and emissions from electricity generation, obtain reductions equally from existing sources and new sources. This is because all vehicle operators use cleaner low carbon fuels and buy vehicles subject to the fuel efficiency regulations and all building owners or operators purchase cleaner energy from the grid that is produced by increasing percentages of renewable fuels. This includes regulations on mobile sources such as the Pavley standards that apply to all vehicles purchased in California, the LCFS (Low Carbon Fuel Standard) that applies to all fuel sold in California, and the Renewable Portfolio Standard and Renewable Energy Standard under SB 100 that apply to utilities providing electricity to all California end users.

Moreover, the Scoping Plan strategy will achieve more than average reductions from energy and mobile source sectors that are the primary sources related to development projects and lower than average reductions from other sources such as agriculture. The proposed project's operational GHG emissions would principally be generated from electricity consumption and vehicle use (including heavy trucks), which are directly under the purview of the Scoping Plan strategy and have experienced reductions above the State average reduction. Considering the information summarized above, the proposed project would be consistent with the State's AB 32 and SB 32 GHG reduction goals. As such, the proposed project's GHG impacts would be less than significant.

Consistency Regarding GHG Reduction Goals for 2050 under Executive Order S-3-05 and GHG Reduction Goals for 2045 under the 2022 Scoping Plan

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed project would comply with whatever applicable measures are enacted that State lawmakers decide would lead to an 80 percent reduction below 1990 levels by 2050. Many of these measures will reduce GHG emissions in the transportation and energy sectors. For instance, the utility companies will be required to increase the percentage of renewable sources until all retail sales of electricity to customers are supplied by renewable and zero-carbon energy resources by 2045. As such, any electricity consumption at the project site received from the utility will be sourced from an GHG-free sources by 2045 without any additional steps taken by the project itself. Likewise, on average, automobiles visiting the project site are expected to get cleaner over time due to turnover and car manufacturers being subject to more stringent regulations.

ARB's 2022 Scoping Plan for Achieving Carbon Neutrality was approved in December 2022 and expands on prior Scoping Plans and legislations-such as AB 1279-by outlining a technologically feasible, cost-effective, and equity-focused path to achieve the State's climate target of reducing anthropogenic GHG emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045 or earlier.[75] To achieve carbon neutrality by 2045, the 2022 Scoping Plan contains GHG reductions, technology, and clean energy mandated by statutes, reduction of short-lived climate pollutants, and mechanical carbon dioxide capture and sequestration actions. Table 17 contains a list

[75] California Air Resources Board (ARB). 2022. Final 2022 Scoping Plan Update and Appendices. December. Website: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed April 9, 2024.

of key GHG emission reduction actions and strategies from the 2022 Scoping Plan and assesses the project's consistency with these actions and strategies.

Table 17: Project Consistency with 2022 Scoping Plan

2022 Scoping Plan Actions and Strategies	Responsible Party(ies)	Project Consistency
Transportation Technology • Achieve 100 percent ZEV sales of light duty vehicles by 2035 and medium heavy-duty vehicles by 2040. • Achieve 20 percent zero-emission target for the aviation sector. • Develop a rapid and robust network of ZEV refueling infrastructure to support needed transition to ZEVs. • Ensure that the transition of ZEV technology is affordable for low income households and communities of color and meets the needs of communities and small business. • Prioritize incentive funding for heavy-duty ZEV technology deployment in regions of the state with the highest concentrations of harmful criteria and toxic air contaminant emissions. • Promote private investment in the transition to ZEV technology, undergirded by regulatory certainty such as infrastructure credits in the Low Carbon Fuel Standard for hydrogen and electricity and hydrogen station grants from the CEC's Clean Transportation Program pursuant to Executive Order B-48-18. • Evaluate and continue to offer incentives similar to those through FARMER, Carl Moyer, the Clean Fuel Reward Program, the Community Air Protection Program, the Low Carbon Transportation, including CORE. Where feasible, prioritize and increase funding for clean transportation equity programs. • Continue and accelerate funding support for zero emission vehicles and refueling infrastructure through 2030 to ensure the rapid transformation of the transportation sector.	State agencies and local agencies	**No Conflict**: Vehicles must transition to zero-emission technology to decarbonize the transportation sector. Executive Order N-79-20 reflects the urgency of transitioning to zero emission vehicles (ZEVs) by establishing target dates for reaching 100 percent ZEV sales or fleet transitions to ZEV technology. EO N-79-20 calls for 100 percent ZEV sales of new light-duty vehicles by 2035. The Advanced Clean Cars II regulation fulfills this goal and serves as the primary mechanism to help deploy ZEVs. A number of existing incentive programs also support this transition, including the Clean Cars 4 All Program. EO N-79-20 also sets targets for transitioning the medium- and heavy-duty fleet to zero emissions: by 2035 for drayage trucks and by 2045 for buses and heavy-duty long-haul trucks where feasible. Replacing heavy-duty vehicles with ZEV technology will substantially reduce GHG emissions and diesel PM emissions in communities adjacent to ports, distribution centers, and highways. EO N-79-20 sets an off-road equipment target of transitioning the entire fleet to ZEV technology by 2035, where feasible. There are a number of funding sources available to support this transition, including FARMER, Carl Moyer, and Community Air Protection Incentives; as well as Low Carbon Transportation Incentives, including the Clean Off-Road Equipment program. Refueling infrastructure is a crucial component of transforming transportation technology. Electric vehicle chargers and hydrogen refueling stations must become easily accessible for all drivers to support a wholesale transition to ZEV technology. Deployment of ZEV refueling infrastructure is currently supported by a number of existing State public funding mechanisms. Intrastate aviation relies on internal combustion engine technology today, but battery-electric and hydrogen fuel cell aviation applications are in development, along with sustainable aviation fuel. GHG emissions generated by project-related passenger and truck vehicle travel would benefit from the above regulations and programs, and mobile source emissions generated by the proposed project would be reduced as automobiles and truck fleets are transitioned to ZEV

		technology. Additionally, the project would include EV charging infrastructure in accordance with regulations which would support the transition to EV technology. Thus, the project would not conflict with actions under the transportation technology sector.
Transportation Fuels • Accelerate the reduction and replacement of fossil fuel production and consumption in California. • Incentivize private investment in new zero-carbon fuel production in California. • Incentivize the transition of existing fuel production and distribution assets to support deployment of low- and zero-carbon fuels while protecting public health and the environment. • Invest in the infrastructure to support reliable refueling for transportation such as electricity and hydrogen refueling. • Evaluate and propose, as needed, changes to strengthen the Cap-and-Trade Program. • Initiate a public process focused on options to increase the stringency and scope of the LCFS: - Evaluate and propose accelerated carbon intensity targets pre-2030 for LCFS. - Evaluate and propose further declines in LCFS post-2030 carbon intensity targets to align with this 2022 Scoping Plan. - Consider integrating opt-in sectors into the program. - Provide capacity credits for hydrogen and electricity for heavy-duty fueling. • Monitor for and ensure that raw materials used to produce low-carbon fuels or technologies do not result in unintended consequences.	State agencies and local agencies	**No Conflict**: Private investment in alternative fuels will play a key role in diversifying the transportation fuel supply away from fossil fuels. EO N-79-20 calls on state agencies to support the transition of existing fuel production facilities away from fossil fuels and directs that this transition also protects and supports workers, public health, safety, and the environment. In-line with this direction, existing refineries could be repurposed to produce sustainable aviation fuel, renewable diesel, and hydrogen. GHG emissions generated by project-related passenger and delivery trucks would benefit from the above regulations and programs, and mobile source emissions generated by the project would be reduced with implementation of the wider use of zero-carbon fuels consistent with reduction of GHG emissions under AB 1279. Additionally, the project would utilize energy efficiency appliances and equipment and will meet the applicable energy standards in the Title 24 Building Energy Efficiency Standards and CALGreen Code, which will limit the amount of fossil fuel use and GHG emissions. During operations the project will provide improvements to the pedestrian network. Considering the actions and strategies require action by the state and local agencies, project consistency is determined by assessing whether the project would conflict with the actions needed in the transportation fuels sector. As supported by the information provided above, the project would not conflict with actions in the transportation fuels sector.
Vehicles Miles Traveled • Achieve a per capita VMT reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045. • Reimagine new roadway projects that decrease VMT in a way that meets community needs and reduces the need to drive. • Invest in making public transit a viable alternative to driving by increasing affordability, reliability, coverage, service frequency, and consumer experience. • Implement equitable roadway pricing strategies based on local context and need, reallocating revenues to improve transit,	State agencies and local agencies	**No Conflict**: VMT reductions will play a crucial role in reducing overall transportation energy demand and achieving California's climate, air quality, and equity goals. ARB did not set regulatory limits on VMT in the 2022 Scoping Plan because the authority to reduce VMT largely lies with state, regional, and local transportation, land use, and housing agencies, along with the Legislature and its budgeting choices. The project-specific traffic report includes a VMT analysis for the project.[76] The traffic report found that, after mitigation, the project would have a less than significant VMT impact. As such, the project would not conflict with actions in the vehicle miles traveled sector.

[76] Ruettgers & Schuler Civil Engineers. 2023. Traffic Study: Proposed Commercial Development Henderson Avenue & State Route 65 City of Porterville. May.

bicycling, and other sustainable transportation choices. • Expand and complete planned networks of high-quality active transportation infrastructure. • Channel the deployment of autonomous vehicles, ride-hailing services, and other new mobility options toward high passenger-occupancy and low VMT-impact service models that complement transit and ensure equitable access or priority populations. • Streamline access to public transportation through programs such as the California Integrated Travel Project. • Ensure alignment of land use, housing, transportation, and conservation planning in adopted regional plans and local plans (e.g., general plans, zoning, and local transportation plans), and develop tools to support implementation of these plans. • Accelerate infill development and housing production at all affordability levels in transportation-efficient places, with a focus on housing for lower income residents.		
Clean Electricity Grid • Per SB 350, double statewide energy efficiency savings in electricity and fossil gas end uses by 2030, through a combination of energy efficiency and fuel substitution actions. • Use long-term planning processes to support grid reliability and expansion of renewable and zero-carbon resource and infrastructure deployment. • Complete systemwide and local reliability assessments. Such assessments should be completed before state agencies update their electricity sector GHG targets. • Prioritize actions to mitigate impacts to electricity reliability and affordability and provide sufficient flexibility in the state's decarbonization roadmap for adjustments as may be needed. • Facilitate long lead-time resource development. • Continue coordination between energy agencies and energy proceedings to maximize opportunities for demand response. • Continue to explore the benefits of regional markets to enhance decarbonization, reliability, and affordability. • Address resource build-out challenges, including permitting, interconnection, and transmission network upgrades.	State agencies and local agencies	**No Conflict**: Decarbonizing the electricity sector depends on both using energy more efficiently and replacing fossil-fueled generation with renewable and zero carbon resources, including solar, wind, energy storage, geothermal, biomass, and hydroelectric power. The RPS Program and the Cap-and-Trade Program continue to incentivize dispatch of renewables over fossil generation to serve state demand. SB 100 increased RPS stringency to require 60 percent renewables by 2030 and for California to provide 100 percent of its retail sales of electricity from renewable and zero-carbon resources by 2045. Furthermore, SB 1020 has added interim targets to SB 100's policy framework to require renewable and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent of all electricity retail sales by 2040; establish a planning goal of at least 20 GW of offshore wind by 2045; and that state agencies plan for an energy transition that avoids the need for new fossil gas capacity to meet California's long-term energy goals. California also continues to advance its appliance and building energy efficiency standards to reduce growth in electricity consumption and meet the SB 350 goal to double statewide energy efficiency savings in electricity and fossil gas end uses by 2030. Increased transportation and building electrification and continued policy commitment to behind-the-meter solar and storage will

• Explore new financing mechanisms and rate designs to address affordability. • Per SB 100 and SB 1020, achieve 90 percent, 95 percent, and 100 percent renewable and zero-carbon retail sales by 2035, 2040, and 2045, respectively. • Evaluate and propose, as needed, changes to strengthen the Cap-and-Trade Program. • Target programs and incentives to support and improve access to renewable and zero-carbon energy projects (e.g., rooftop solar, community owned or controlled solar or wind, battery storage, and microgrids) for communities most at need, including frontline, low-income, rural, and indigenous communities. • Prioritize public investments in zero-carbon energy projects to first benefit the most overly burdened communities affected by pollution, climate impacts, and poverty.		continue to drive growth of microgrids and other distributed energy resources. Continued transition to renewable and zero-carbon electricity resources will enable electricity to become a zero-carbon substitute for fossil fuels. This transformation will drive investments in a large fleet of generation and storage resources but will also require significant transmission to accommodate these new capacity additions. Resources such as storage and demand-side management are essential to maintain reliability with high concentrations of renewables. Hydrogen produced from renewable resources and renewable feedstocks can serve a dual role as a low-carbon fuel for existing combustion turbines or fuel cells, and as energy storage for later use. The proposed project would utilize energy efficiency appliances and equipment and will meet the applicable energy standards in the Title 24 Building Energy Efficiency Standards and CALGreen Code. As such, the project would not conflict with actions under the clean electricity grid sector.
Sustainable Manufacturing and Buildings • Maximize air quality benefits using the best available control technologies for stationary sources in communities most in need. • Implement SB 905, which requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon capture, utilization, and sequestration and carbon dioxide removal projects and technology. • End fossil gas infrastructure expansion for newly constructed buildings. • Develop a net-zero cement strategy to meet SB 956 targets for the GHG intensity of cement use. • Leverage energy efficiency and low carbon hydrogen programs. • Prioritize most vulnerable residents with the majority of funds in the new $922 million Equitable Building Decarbonization program. • Achieve three million all-electric and electric-ready homes by 2030 and seven million by 2035 with six million heat pumps installed by 2030. • Adopt a zero-emission standard for new space and water heaters sold in California beginning in 2030. • Implement biomethane procurement targets for investor-owned utilities as specified in SB 1440.	State agencies and local agencies	**No Conflict**: The 2022 Scoping Plan reduces dependence on fossil gas in the industrial and building sectors by transitioning substantial energy demand to alternative fuels. Combustion of fossil gas, other gaseous fossil fuels, and solid fossil fuels provide energy to meet three broad industry needs: electricity, steam, and process heat. Non-combustion emissions result from fugitive emissions and from the chemical transformations inherent to some manufacturing processes. Decarbonizing industrial facilities depends upon displacing fossil fuel use with a mix of electrification, solar thermal heat, biomethane, low- or zero-carbon hydrogen, and other low-carbon fuels to provide energy for heat and reduce combustion emissions. Emissions also can be reduced by implementing energy efficiency measures and using substitute raw materials that can reduce energy demand and some process emissions. Some remaining combustion emissions and some non-combustion CO_2 emissions can be captured and sequestered. This sector has a continuing demand for fossil gas due to lack of non-combustion technologically feasible or cost-effective alternatives for certain industrial sectors. Microgrids powered by renewable resources and with battery storage are emerging as a key enabler of electrification and decarbonization at industrial facilities. The project is a commercial project and would not include industrial uses. The project will utilize energy efficiency appliances and equipment and will meet the applicable energy standards in the Title 24 Building Energy Efficiency Standards and CALGreen Code. During operations, the project will provide improvements to the pedestrian network and would have a less-than-significant VMT

		impact after mitigation identified in the traffic report.[77] As such, the project would not conflict with sustainable manufacturing buildings industry sector.
Carbon Dioxide Removal and Capture Sector • Implement SB 905. • Achieve the 85 percent reduction in anthropogenic sources below 1990 levels per AB 1279 by incorporating Carbon Capture and Storage (CCS) into sectors and programs beyond transportation. • Evaluate and propose the role for CCS in cement decarbonization and as part of hydrogen peroxide pathways. • Explore carbon capture application for zero-carbon power for reliability needs per SB 100.	State agencies and local agencies	**No Conflict**: ARB has acknowledged that the deployment of carbon dioxide removal to counterbalance hard-to-abate residual emissions is needed to achieve net zero GHG emissions. Modeling shows that emissions from the AB 32 GHG Inventory sources will continue to persist even if all fossil related combustion emissions are phased out. Carbon dioxide removal includes both sequestration in natural and working lands and mechanical approaches such as: direct air capture, CCS (which is carbon capture from anthropogenic point sources involves capturing carbon from a smokestack of an emitting facility), or direct air capture (which captures carbon directly from the atmosphere). The project would not conflict with measures to increase carbon dioxide removal and capture. As such, the project would not conflict with action under the carbon dioxide removal and capture sector.
Short-Lived Climate Pollutants (Non- Combustion Gases) • Install anaerobic digesters to maximize air and water quality protection, maximize biomethane capture, and direct biomethane to specific sectors. • Increase alternative manure management projects. • Expand markets for products made from organic waste. • Pursuant to SB 1137, develop leak detection and repair plans for facilities in health protection zones, implement emission detection system standards, and provide public access to emissions data. • Convert large HFC emitters to the lowest practical global warming potential (GWP) technologies.	State agencies and local agencies	**No Conflict**: SLCPs include black carbon, methane, and fluorinated gases. Dairy and livestock are the largest source of methane emissions followed by landfills. Black Carbon (soot) comes primarily from transportation, specifically heavy-duty vehicles followed by fuel combustion for residential, commercial, and industrial uses. The project would not conflict with SLCP dairy and livestock methane sector actions in the 2022 Scoping Plan. The project is a commercial development and does not include dairy or livestock. Furthermore, the project does not include a new landfill or any oil or gas production, processing, or storage facilities. The project would comply with the 2022 CalGreen Code for energy efficiency and use of high-GWP refrigerants and would not conflict with these policies or actions. The project is a commercial development that would not include fireplaces and would not result in a significant VMT impact; lower VMT results in a reduction of fuel combustion. Considering the information presented above, the project would not conflict with SLCP sector actions in the 2022 Scoping Plan.
Natural and Working Lands • Implement AB 1757 and SB 27. • Implement the Climate Smart Strategy. • Accelerate the pace and scale of climate smart forest management to at least 2.3 million acres annually by 2025. • Accelerate the pace and scale of healthy soils practices to 80,000 acres annually by 2025,	State agencies and local agencies	**No Conflict**: AB 1757 requires state agencies to set targets for natural carbon removal and emissions reductions on natural and working lands. AB 1757 is expected to catalyze natural carbon sequestration in California by: requiring California Natural Resources Agency and ARB to establish targets for sequestration on natural and working lands for 2030, 2038, and 2045; ensuring that natural sequestration projects have rigorous measurement and verification; and

[77] Ruettgers & Schuler Civil Engineers. 2023. Traffic Study: Proposed Commercial Development Henderson Avenue & State Route 65 City of Porterville. May.

conserve at least 8,000 acres of annual crops annually, and increase organic agriculture to 20 percent of all cultivated acres by 2045. • Restore 60,000 acres of Delta wetlands annually by 2045. • Increase urban forestry investment annually by 200 percent, relative to business as usual.		establishing an expert committee to advise state agencies on modeling and implementation. SB 27 is designed to accelerate the removal of carbon from the atmosphere by expanding California's carbon removal capability (i.e. sequestration) and improve the carbon retention of the state's natural and working lands. The project is a commercial development and would not include natural working lands. As such, the project would not conflict with natural and working strategies under the 2022 Scoping Plan.
Source: ARB's 2022 Scoping Plan.		

As show above in Table 17, the project would not conflict with relevant 2022 Scoping Plan actions or strategies that aim to achieve the State's climate target of reducing anthropogenic emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045.

In its 2008 Scoping Plan, ARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail." In the First Scoping Plan Update; however, ARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately."

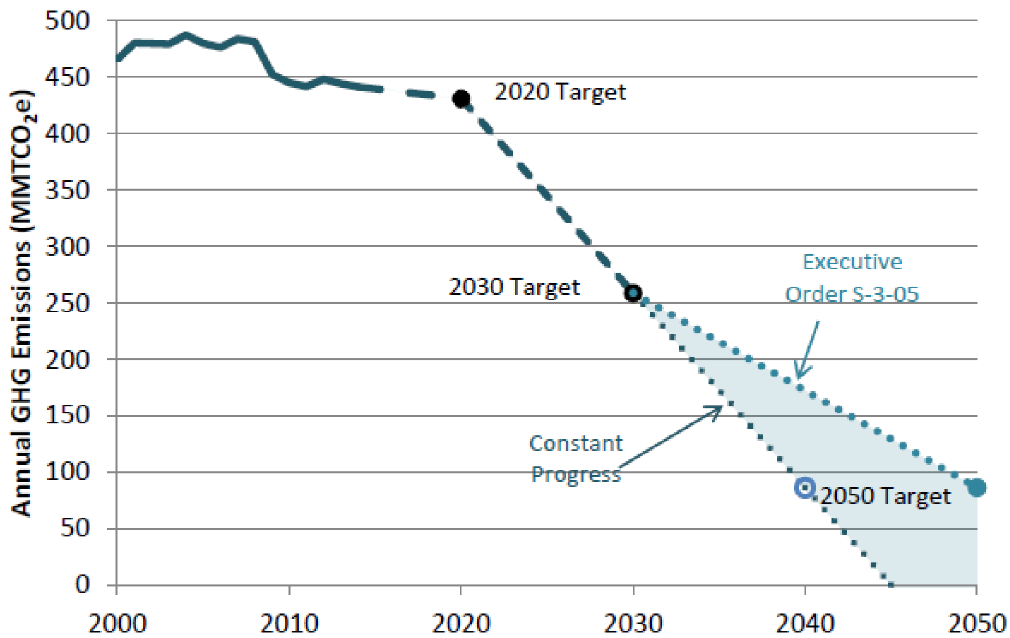
The ARB recognized that AB 32 established an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the State on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate." In addition, ARB's First Update "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction strategies recommended by ARB would serve to reduce the proposed project's post-2020 emissions level to the extent applicable by law:

- **Energy Sector:** Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the State's zero net energy building goals, would serve to reduce the proposed project's emissions level. Additionally, further additions to California's renewable resource portfolio would favorably influence the project's emissions level.
- **Transportation Sector:** Anticipated deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the project's emissions level.
- **Water Sector:** The project's emissions level will be reduced as a result of further desired enhancements to water conservation technologies.

- **Waste Management Sector:** Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the project's emissions level.

For the reasons described above, the project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets. The trajectory required to achieve the post-2020 targets is shown in Figure 2.

Figure 2: California's Path to Achieving the 2050 Target



Source: ARB 2017 Scoping Plan Update

In his January 2015 inaugural address, former Governor Brown expressed a commitment to achieve "three ambitious goals" that he would like to see accomplished by 2030 to reduce the State's GHG emissions:

- Increasing the State's Renewable Portfolio Standard from 33 percent in 2020 to 50 percent in 2030;
- Cutting the petroleum use in cars and trucks in half; and
- Doubling the efficiency of existing buildings and making heating fuels cleaner.

These expressions of executive branch policy may be manifested in adopted legislative or regulatory action through the state agencies and departments responsible for achieving the State's environmental policy objectives, particularly those relating to global climate change. Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target.

Given the proportional contribution of mobile source-related GHG emissions to the State's inventory, recent studies also show that relatively new trends—such as the increasing importance of web-based shopping, the emergence of different driving patterns, and the increasing effect of web-based applications on transportation choices—are beginning to substantially influence transportation choices and the energy used by transportation modes. These factors have changed the direction of transportation trends in recent years and will require the creation of new models to effectively analyze future transportation patterns and the corresponding effect on GHG emissions. For the reasons described above, the proposed project future emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets.

The 2017 Scoping Plan provides an intermediate target that is intended to achieve reasonable progress toward the 2050 target. In addition, the 2022 Scoping Plan outlines objectives, regulations, planning efforts, and investments in clean technologies and infrastructure that outlines how the State can achieve carbon-neutrality by 2045. Accordingly, taking into account the proposed project's design features (see Table 16and Table 17) and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the proposed project would be consistent with State GHG Plans and would further the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, carbon neutral by 2045, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

6.2.2 - Greenhouse Gas Reduction Plans

Impact GHG-2: The project would not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce the emissions of greenhouse gases.

Impact Analysis

The following analysis assesses the project's compliance with Consideration #3 regarding consistency with adopted plans to reduce GHG emissions. The City of Porterville has not adopted a GHG reduction plan. In addition, the City has not completed the GHG inventory, benchmarking, or goal-setting process required to identify a reduction target and take advantage of the streamlining provisions contained in the CEQA Guidelines amendments adopted for SB 97 and clarifications provided in the CEQA Guidelines amendments adopted on December 28, 2018. The SJVAPCD has adopted a Climate Action Plan, but it does not contain measures that are applicable to the project. Therefore, the SJVAPCD Climate Action Plan cannot be applied to the project. Since no other local or regional Climate Action Plan is in place, the project is assessed for its consistency with ARB's adopted Scoping Plans. This assessment is included under Impact GHG-1 above. As demonstrated in the analysis contained under Impact GHG-1, the project would not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce the emissions of greenhouse gases.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

SECTION 7: ENERGY

7.1—CEQA Guidelines

CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy. Appendix F of the CEQA Guidelines applies to the direct and indirect impact analysis, as well as the cumulative impact analysis.

7.2—Impact Analysis

7.2.1 - Energy

Impact ENERGY-1: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

Impact Analysis

Threshold of Significance

Appendix F does not prescribe a threshold for the determination of significance. Rather, Appendix F focuses on reducing and minimizing inefficient, wasteful, and unnecessary consumption of energy. Therefore, for the purposes of this analysis, a significant impact to energy would result if the project would:

1. Result in the wasteful and inefficient use of nonrenewable resources during its construction.
2. Result in the wasteful and inefficient use of nonrenewable resources during long-term operation.
3. Be inconsistent with Adopted Plans and Policies.

Construction Energy Consumption

Project construction is anticipated to be completed over approximately 1.2 years. Construction activities would consume energy through the operation of heavy off-road equipment, trucks, and worker traffic. Construction equipment fuel consumption for each of was based on equipment lists generated using CalEEMod default values. Equipment fuel consumption was calculated using Offroad2017 v1.0.1 for Tulare County. Fuel consumption was estimated assuming all equipment would be diesel-powered. and the horsepower, usage hours, and load factors from CalEEMod model runs prepared for the project's air quality analysis.

Based on the anticipated construction schedule and hours of use, off-road construction equipment would result in the consumption of approximately 20,693 gallons of diesel fuel over the entire construction period.

Worker, vendor, and haul trips would result in approximately 746,089 VMT over the entire construction period. Fuel consumption averages were calculated for worker, vendor, and haul trips separately and per phase based on data from EMFAC 2017 for Tulare County. EMFAC 2017 was used, as this database corresponds with the data used in CalEEMod version 2020.4.0. The results indicate that construction trips would consume approximately 37,908 gallons over the entire construction period.

Although the proposed project would result in the consumption of an estimated 20,693 gallons of diesel from off-road equipment and 37,908 gallons of motor vehicle fuels during construction, the project is expected to achieve energy efficiencies typical for commercial projects in the City of Porterville and the larger Tulare County area. Construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency, combined with local, state, and federal regulations limiting engine idling times and requiring recycling of construction debris, would further reduce the amount of transportation fuel demand during project construction. Considering these reductions in transportation fuel use, the proposed project would not result in the wasteful and inefficient use of energy resources during construction, and impacts would be less than significant. Detailed modeling results are provided in Appendix D of this technical report. Construction energy use is summarized in Table 18.

Table 18: Construction Energy Consumption

Activity		Energy Consumption Activity	Consumption Amount
Project Construction			
Construction Equipment Diesel Fuel Use	Off-road Construction Equipment fuel	982,497 Horsepower Hours (total)	20,693 gallons (diesel)
On-road Construction Vehicle Fuel	Worker	581,202 VMT (miles)	20,232 gallons (gasoline and diesel combined)
	Vendor	153,227 VMT (miles)	16,009 gallons (gasoline and diesel combined)
	Haul	11,660 VMT (miles)	1,667 gallons (diesel)
	Project Construction Vehicle Fuel Subtotal	*746,089 VMT (miles)*	*37,908 gallons (gasoline and diesel combined)*

Notes:
VMT = vehicle miles traveled
Source of data for construction and VMT: CalEEMod 2020.4.0
Source of data for consumption rates: EMFAC 2017 (see Appendix D).
Energy calculations are provided in Appendix D.

Operation Energy Consumption

Long-term energy consumption associated with the project includes electricity and natural gas consumption by businesses, energy required for water supply, treatment, distribution, and wastewater treatment, and motor vehicle travel.

Electricity and Natural Gas Consumption

During operations, the proposed project would consume natural gas for space heating, water heating, and cooking associated with the land uses on the project site. The natural gas consumption was estimated using the CalEEMod default values and results. The results of the analysis indicate that the proposed project would consume approximately 3,719,199 thousand British thermal units (kBTU) of natural gas per year during operation.

In addition to the consumption of natural gas, the proposed project would use electricity for lighting, appliances, and other uses associated with the project. Electricity use during operations was estimated using CalEEMod default values. The results of the modeling indicate that the proposed project would use approximately 1,137,299 kilowatt-hours (kWh) of electricity per year. Title 24 (2022 standards) requires the installation of solar panels in commercial developments, including most newly constructed shopping center developments. Variations in the amount installed can be due to local conditions and project design. In addition, some projects may use community solar instead of rooftop solar installations. Although the energy estimates show total consumption, a portion of the electricity used by the proposed project is expected to be generated by zero emission renewable sources. In addition, additional solar panels may be installed voluntarily to take advantage of energy cost savings that are increasingly possible as the cost of solar has declined over time.

As described above, the proposed project would result in a long-term increase in demand for electricity from SCE. However, the project would be designed to meet the most recent Title 24 standards. Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California in order to reduce energy demand and consumption. Title 24 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies. Therefore, impacts from the wasteful or inefficient use of electricity or natural gas during operation of the project would be less than significant.

Fuel Consumption

During the operation of the proposed project, vehicle trips would be generated by the employees, customers, deliveries, and other visitors. The project was modeled with CalEEMod using project-specific trip generation rates and default trip lengths. The results show that the vehicle trips generated would result in approximately 27,156,353 annual VMT from the proposed project. As shown in Table 19, the proposed project would result in the consumption of an estimated 1,084,804 gallons per year of transportation fuel.

Table 19: Long-term Operational Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips	Annual VMT	Average Fuel Economy (miles/gallon)	Total Annual Fuel Consumption (gallons)
Project				
Passenger Cars (LDA)	51.0	13,846,196	33.45	413,946
Light Trucks and Medium Duty Vehicles (LDT1, LDT2, MDV)	39.3	10,675,010	24.24	440,420
Light-Heavy to Heavy-Heavy Diesel Trucks (LHD1, LHD2, MHDT, HHDT)	6.7	1,828,113	9.62	190,121
Motorcycles (MCY)	2.4	639,641	37.85	16,900
Other (OBUS, UBUS, SBUS, MH)	0.6	167,392	7.15	23,416

Project Total	**100%**	**27,156,380**	**—**	**1,084,804**

Notes:
VMT = vehicle miles traveled
"Other" consists of buses and motor homes.
Source of data for vehicle trips and VMT: CalEEMod 2020.4.0
Source of Tulare County miles/gallon for the earliest operational year (2024): EMFAC 2017.
Energy calculations are provided in Appendix D.

Various federal and state regulations including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program would serve to reduce the project's transportation fuel consumption progressively into the future. In addition, the project would be located adjacent to a mix of commercial and residential uses, providing connectivity within an existing community. Therefore, the project would be designed to avoid the wasteful and inefficient use of transportation fuel during operations, and impacts would be less than significant.

State and federal regulatory requirements addressing fuel efficiency are expected to increase fuel efficiency over time as older, less fuel-efficient vehicles are retired. The efficiency standards and light/heavy vehicle efficiency/hybridization programs contribute to increased fuel efficiency and therefore would reduce vehicle fuel energy consumption rates over time. While the project would increase the consumption of gasoline and diesel proportionately with projected population growth, the increase would be accommodated within the projected growth as part of the energy projections for the State and the region and would not require the construction of new regional energy production facilities. Therefore, energy impacts related to fuel consumption/efficiency during project operations would be less than significant.

Impact Summary

As described above, the project would result in less than significant impacts on the wasteful, inefficient, or unnecessary use of energy due to project design features that will comply with the City's design guidelines and regulations that apply to the project such as Title 24 Building Energy Efficiency Standards and the California Green Building Standards Code that apply to commercial and residential buildings. The installation of solar panels required by 2022 Title 24 standards is expected to offset some of the electricity used by the proposed project. Furthermore, various federal and state regulations including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program would serve to reduce the transportation fuel demand by the project.

With the adherence to the increasingly stringent building and vehicle efficiency standards as well as implementation of the project's design features that would reduce energy consumption, the proposed project would not contribute to a cumulative impact to the wasteful or inefficient use of energy. As such, the project would not result in a significant environmental impact, due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. A summary of the project's estimated operational energy consumption is provided in Table 20.

Table 20: Summary of Estimated Operational Annual Energy Consumption

Energy Consumption Activity	Annual Consumption
Project Operations	
Electricity Consumption	1,137,299 kWh/year
Natural Gas Consumption	3,719,199 kBTU/year
Total Vehicle Fuel Consumption	1,084,804 gallons/year (gallons of gasoline and diesel)
Notes: kWh = kilowatt-hour kBTU = kilo-British Thermal Unit VMT = vehicle miles traveled Source: Appendix D.	

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

7.2.2 - Renewable Energy or Energy Efficiency Plans

Impact ENERGY-2: The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Impact Analysis

The City of Porterville General Plan includes goals and strategies related to energy efficiency. The following policies relate to energy efficiency and are relevant to the proposed project:

- **OSC-G-10:** Reduce and conserve energy use in existing and new commercial, industrial, and public structures.
- **OSC-I-66:** Adopt guidelines and incentives for using green building standards in new construction. Green building design guidelines may include required and recommended “green” design and construction strategies including: Building Site and Form, Natural Heating or Cooling, transportation, Building Envelope and Space Planning, Building Materials, Water Systems, Electrical Systems, HVAC Systems, Construction Management, and Commissioning.
- **OSC-I-70:** Ensure City codes allow for environmentally acceptable alternative forms of energy production and green building techniques.

Construction

As discussed under Impact ENERGY-1, the proposed project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. California Code of Regulations Title 13, Sections 2449(d)(3) and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. The proposed project would comply with these regulations. Consistent with required regulations, buildout of the proposed project would increase the use of energy conservation features and renewable sources of energy within the City due to the previously discussed project design features. Thus, the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, construction-related energy efficiency and renewable energy standards consistency impacts would be less than significant.

Operation

The proposed project would be served with electricity provided by SCE. SCE's 2019 Green Rate 50 percent option includes 67.5 percent eligible renewable resources, including wind, geothermal, solar, eligible hydroelectric, and biomass and biowaste; 4 percent large hydroelectric; 8.1 percent natural gas; 4.1 percent nuclear; 0.1 percent other; and 16.3 percent unspecified sources of power[78] SCE's 2019 Green Rate 100 percent option includes 100 percent eligible renewable resources, composed entirely of solar. Approximately 43 percent of the electricity that SCE delivered in 2020 was a combination of renewable and GHG-emissions-free resources.[79] SCE was ahead of schedule in meeting the California's RPS 2020 mandate of serving their load with at least 33 percent RPS-eligible resources. SCE would be required to meet California's RPS standards of 60 percent by 2030 and carbon-free sourced-electricity by 2045.

Part 11, Chapter 4 and 5, of the State's Title 24 energy efficiency standards establishes mandatory measures for residential and nonresidential buildings, including solar, electric vehicle (EV) charging equipment, bicycle parking, energy efficiency, water efficiency and conservation, and material conservation and resource efficiency. The proposed project would be required to comply with these mandatory measures. The proposed project would locate commercial uses, which results in employment opportunities, next to existing housing as well as existing commercial, which could help reduce motor vehicle travel for home-to-work trips. In addition, the project's location in an existing community provides connectivity through pedestrian connections. Compliance with these mandatory measures would ensure that the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, operational energy efficiency and renewable energy standards consistency impacts would be less than significant.

The project was reviewed for consistency with local and State of California plans that aimed to reduce GHG emissions in GHG impact analysis. These plans also serve as the applicable energy plans. The ARB 2008 Scoping Plan, the ARB 2017 Scoping Plan, and the ARB 2022 Scoping Plan provide the State's strategy for achieving legislated GHG reduction targets. Although the primary purpose of the Scoping Plans is to reduce GHG emissions, the strategies to achieve the GHG reduction targets rely on the use of increasing amounts of renewable fuels under the LCFS and RPS, and energy efficiency with updates to Title 24 and the CalGreen Code. Buildings constructed as part of the project will meet the latest efficiency standards. In addition, vehicles and equipment continue to become cleaner over time as new vehicles and equipment are required to adhere to the latest fuel efficiency standards. In addition, vehicles and equipment associated with the proposed project will use fuels subject to the LCFS.[80]

[78] "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

[79] Edison International. 2021. 2020 Sustainability Report. Website: https://www.edison.com/home/sustainability/sustainability-report.html. Accessed May 15, 2023.

[80] California Energy Commission (CEC). 2019. Final Staff Report 2019 California Energy Action Plan. Website: https://www.energy.ca.gov/filebrowser/download/1900. Accessed May 15, 2023.

Summary

The proposed project is consistent with applicable plans and policies and would not result in wasteful or inefficient use of nonrenewable energy sources; therefore, impacts would be less than significant.

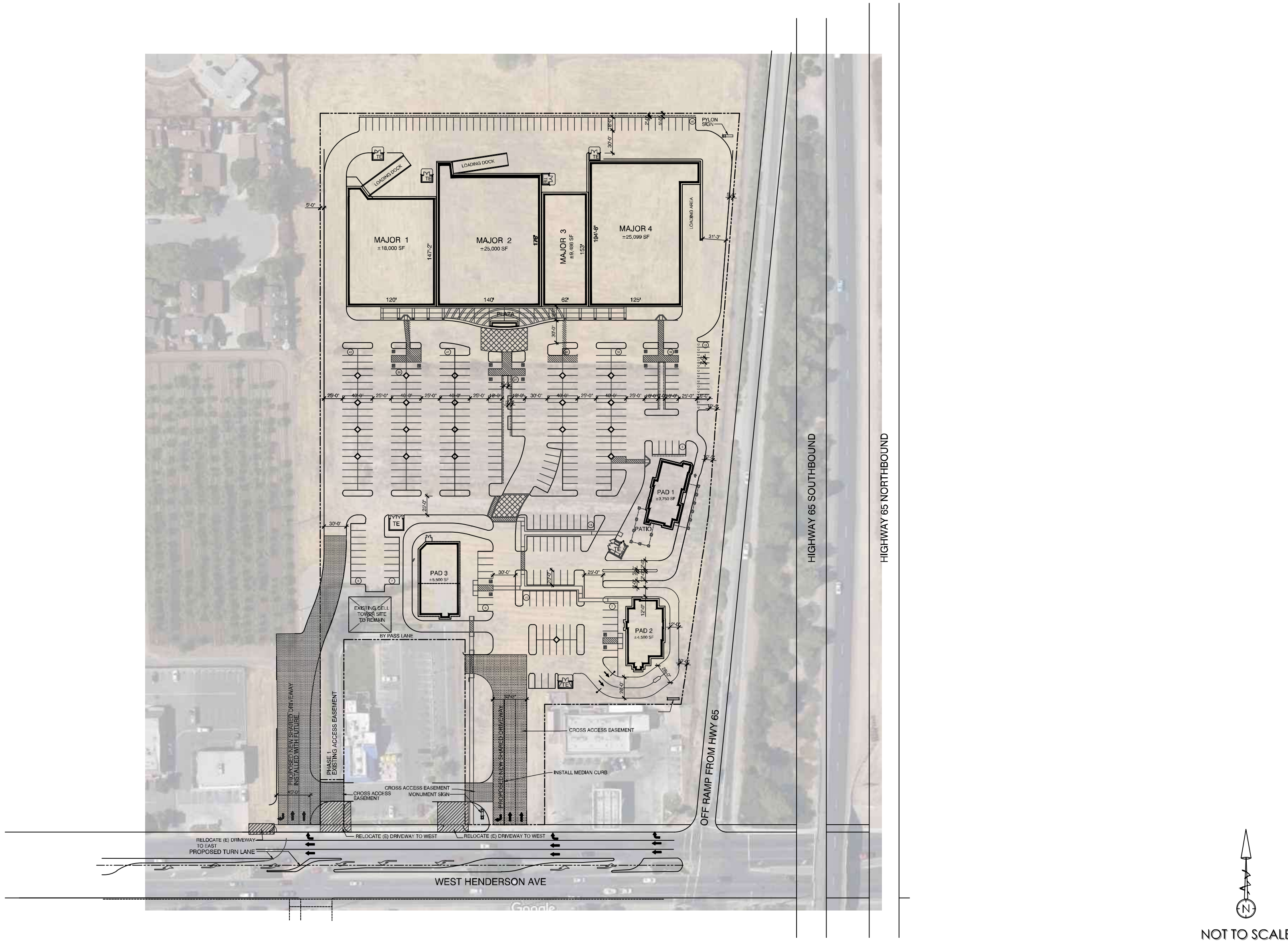
Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Appendix A: CalEEMod Modeling Assumptions and Results



EXHIBIT

REVISIONS	REV. BY	DATE

APPROVED

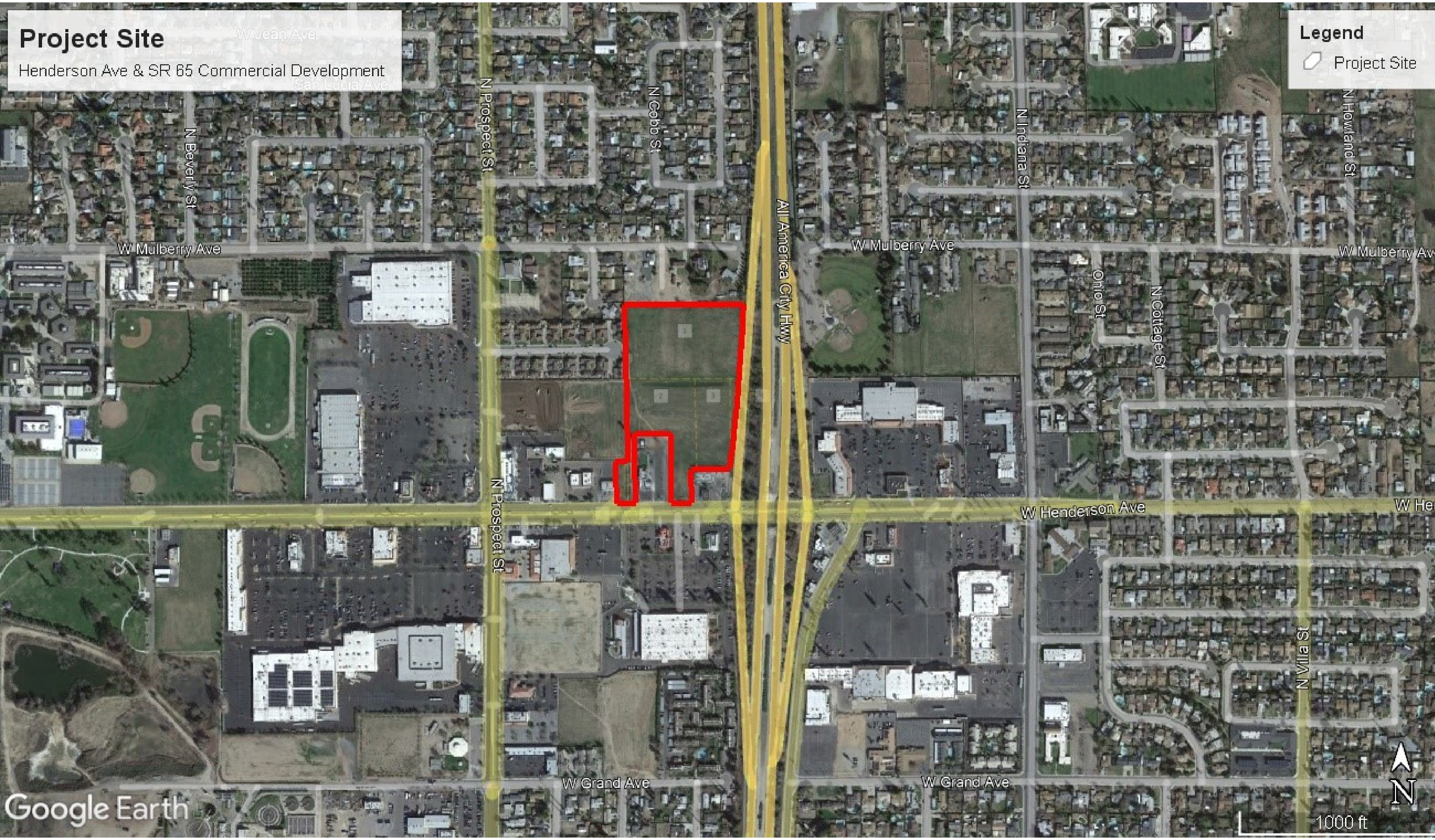
Jesse Allen Williams R.C.E. 64742

AWEngineering
810 W ACEQUIA AVENUE
VISALIA CA 93291
(559)713-6139

HENDERSON + HWY 65

PORTERVILLE CA 93257

SCALE: 1"= 30'
JOB #: 22045
FLOOD ZONE: "X"
DRAWN BY: RJY
SHEET C1


Project Site
Henderson Ave & SR 65 Commercial Development
Legend
Project Site
W Jean Ave
N Prospect St
N Cobb St
N Beverly St
W Mulberry Ave
All America City Hwy
N Indiana St
N Howland St
W Mulberry Ave
W Mulberry Ave
Ohio St
N Cottage St
W Henderson Ave
N Prospect St
N Vila St
W Grand Ave
W Grand Ave
Google Earth
N
1000 ft

Henderson Ave & SR 65 Commercial Project Construction Assumptions

Construction Phase

Phase Name	Start Date	End Date	Num Days Week	Num Days
Demolition	7/1/2023	7/14/2023	5	10
Site Preparation	7/15/2023	7/28/2023	5	10
Grading	7/29/2023	9/8/2023	5	30
Building Construction	9/9/2023	8/31/2024	5	255
Paving	9/9/2023	10/6/2023	5	20
Architectural Coating	8/5/2024	8/31/2024	5	20

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8	81	0.73
Demolition	Excavators	3	8	158	0.38
Demolition	Rubber Tired Dozers	2	8	247	0.40
Site Preparation	Rubber Tired Dozers	3	8	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37
Grading	Excavators	2	8	158	0.38
Grading	Graders	1	8	187	0.41
Grading	Rubber Tired Dozers	1	8	247	0.40
Grading	Scrapers	2	8	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37
Building Construction	Cranes	1	8.2	231	0.29
Building Construction	Forklifts	4	7.1	89	0.20
Building Construction	Generator Sets	2	4.7	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.2	97	0.37
Building Construction	Welders	2	4.7	46	0.45
Paving	Pavers	2	8	130	0.42
Paving	Paving Equipment	2	8	132	0.36
Paving	Rollers	2	8	80	0.38
Architectural Coating	Air Compressors	1	6	78	0.48

Construction Trips and VMT

Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length
Demolition	15	0	15	10.8	7.3	20
Site Preparation	18	0	14	10.8	7.3	20
Grading	20	0	516	10.8	7.3	20
Building Construction	203	82	24	10.8	7.3	20
Paving	15	4	12	10.8	7.3	20
Architectural Coating	41	0	2	10.8	7.3	20

Calculations for Adjustments to Conserve Default HP Hours

	Duration	
	CalEEMod Defaults	Revisions to Match Schedule
Building Construction	300	255

CalEEMod Defaults						Revisions						Cross-Check	
Building Construction						Building Construction							
Equipment	Amount	Usage Hours	Horsepower	Load Factor	HP Hours	Equipment	Amount	Usage Hours	Horsepower	Load Factor	HP Hours	Goal HP Hours	Difference
Cranes	1	7.0	231	0.29	140,679	Cranes	1	8.24	231	0.29	140,679	140,679	-
Forklifts	3	8.0	89	0.20	128,160	Forklifts	4	7.06	89	0.20	128,160	128,160	-
Generator Sets	1	8.0	84	0.74	149,184	Generator Sets	2	4.71	84	0.74	149,184	149,184	-
Tractors/Loaders/Backhoes	3	7.0	97	0.37	226,107	Tractors/Loaders/Backhoes	3	8.24	97	0.37	226,107	226,107	-
Welders	1	8.0	46	0.45	49,680	Welders	2	4.71	46	0.45	49,680	49,680	-
				Total	**693,810**					**Total**	**693,810**	693,810	-

Adjusted construction equipment usage to match CalEEMod default total building construction HP hours.

PROJECT TRIP GENERATION

The project trip generation and design hour volumes shown in Table 1 were estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. Trip rates, equations and directional splits for ITE Land Use Codes 820 and 934 were used to estimate project trips for weekday peak hour of adjacent street traffic based on information provided by the project applicant. The AM and PM peak hours of adjacent street traffic were determined to be between 7:30 AM and 8:30 AM, and between 4:30 PM and 5:30 PM, based on a review of historical count data obtained from the Tulare County Association of Governments (TCAG).

Table 1
Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
934	Fast-Food Restaurant w/Drive-Thru	13.75 1000 sq ft GFA	467.48	6428	44.61	51% 313	49% 301	33.03	52% 236	48% 218
820	Shopping Center	77.585 1000 sq ft GLA	eq	7889	eq	62% 111	38% 68	eq	48% 226	52% 244
sub-total				14,317		424	369		462	462
Adjustments										
Capture		5%		716		21	18		23	23
Pass-by		15%		2,148		64	55		69	69
Total				11,453		339	296		370	370

A capture rate of five percent was applied to account for internal trips generated by the project. These trips neither enter nor leave the project site, and therefore, have no impact on adjacent street traffic. A pass-by rate of 15 percent was applied to account for project trips that are made as intermediate stops between trip origin and primary destination. Pass-by trips are drawn from traffic passing the site, and therefore, do not add trips to the adjacent street system.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Henderson Ave & SR 65 Commercial - Unmitigated Construction & Operations

Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.00	43,560.00	0
Parking Lot	8.42	Acre	8.42	366,775.20	0
Fast Food Restaurant with Drive Thru	13.75	1000sqft	0.32	13,750.00	0
Regional Shopping Center	78.31	1000sqft	1.80	78,310.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	3			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Henderson Ave & SR 65 Commercial - Unmitigated Construction & Operations
Full buildout in anticipated earliest year of operations (2024)

Land Use - Based on project description, site plan, and project-specific traffic analysis
Shopping Center increased from 77,585 to 78,310 to account total up to 92,060 total building sq ft
10.54 acres site + 1 acre for off-site improvements

Construction Phase - No building demolition - There will be minor removal, replacement, and relocation of sidewalk and driveway approaches on West Henderson Ave.
Earliest construction schedule: 07/01/2023 - 08/31/2024

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction HP hours.

Trips and VMT - Additional haul trips for mobilization/demobilization of on-site equipment. Vendor trips added to the paving phase for delivery of materials.

Demolition - No building demolition
There will be minor removal, replacement, and relocation of sidewalk and driveway approaches on West Henderson Ave (see supporting calculations for tons of debris estimate).

Grading - The site is expected to balance with no import or export required. Included 2,000 cubic yards export and import to provide a conservative estimate of emissions and to account for small amounts might need to be imported or exported.

Architectural Coating - SJVAPCD Rule 4601 Architectural Coatings

Vehicle Trips - Trip rates based on traffic study (includes 5% internal capture, consistent with traffic study)

Area Coating - SJVAPCD Rule 4601 Architectural Coatings

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - SJVAPCD Rule 4601 Architectural Coatings

Mobile Land Use Mitigation - Walkability: project to connect within project site and to adjacent land uses

Area Mitigation -

Energy Mitigation - On-site renewable energy: solar to be included on buildings

Water Mitigation - Calgreen Code and MWELO water conservation compliance

Waste Mitigation - CalRecycle 75% recycling mandate (25% reduction from default baseline)

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	300.00	255.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialImported	0.00	2,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

tblOffRoadEquipment	UsageHours	7.00	8.20
tblOffRoadEquipment	UsageHours	8.00	7.10
tblOffRoadEquipment	UsageHours	8.00	4.70
tblOffRoadEquipment	UsageHours	7.00	8.20
tblOffRoadEquipment	UsageHours	8.00	4.70
tblTripsAndVMT	HaulingTripNumber	3.00	15.00
tblTripsAndVMT	HaulingTripNumber	0.00	14.00
tblTripsAndVMT	HaulingTripNumber	500.00	516.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	PB_TP	50.00	15.00
tblVehicleTrips	PR_TP	29.00	85.00
tblVehicleTrips	ST_TR	616.12	585.31
tblVehicleTrips	ST_TR	46.12	95.70
tblVehicleTrips	SU_TR	472.58	448.95
tblVehicleTrips	SU_TR	21.10	95.70
tblVehicleTrips	WD_TR	470.95	444.11
tblVehicleTrips	WD_TR	37.75	95.70

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2059	1.7476	1.8097	4.2500e-003	0.3333	0.0723	0.4056	0.1316	0.0673	0.1989	0.0000	380.3226	380.3226	0.0713	0.0140	386.2830
2024	0.5181	1.7576	2.2295	5.4500e-003	0.1923	0.0665	0.2588	0.0522	0.0626	0.1148	0.0000	489.7211	489.7211	0.0607	0.0241	498.4277
Maximum	**0.5181**	**1.7576**	**2.2295**	**5.4500e-003**	**0.3333**	**0.0723**	**0.4056**	**0.1316**	**0.0673**	**0.1989**	**0.0000**	**489.7211**	**489.7211**	**0.0713**	**0.0241**	**498.4277**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2059	1.7476	1.8097	4.2500e-003	0.2030	0.0723	0.2753	0.0736	0.0673	0.1409	0.0000	380.3223	380.3223	0.0713	0.0140	386.2827
2024	0.5181	1.7576	2.2295	5.4500e-003	0.1923	0.0665	0.2588	0.0522	0.0626	0.1148	0.0000	489.7208	489.7208	0.0607	0.0241	498.4274
Maximum	**0.5181**	**1.7576**	**2.2295**	**5.4500e-003**	**0.2030**	**0.0723**	**0.2753**	**0.0736**	**0.0673**	**0.1409**	**0.0000**	**489.7208**	**489.7208**	**0.0713**	**0.0241**	**498.4274**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	24.79	0.00	19.61	31.54	0.00	18.48	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2023	9-30-2023	1.1605	1.1605
2	10-1-2023	12-31-2023	0.8129	0.8129
3	1-1-2024	3-31-2024	0.7329	0.7329
4	4-1-2024	6-30-2024	0.7255	0.7255
5	7-1-2024	9-30-2024	0.7984	0.7984
		Highest	1.1605	1.1605

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4160	1.0000e-005	9.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8100e-003	1.8100e-003	0.0000	0.0000	1.9300e-003
Energy	0.0201	0.1823	0.1531	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	400.1653	400.1653	0.0208	5.7000e-003	402.3852
Mobile	6.2344	8.9274	50.6391	0.1063	10.3461	0.0945	10.4407	2.7690	0.0887	2.8577	0.0000	9,824.3253	9,824.3253	0.6251	0.5706	10,009.9793
Waste						0.0000	0.0000		0.0000	0.0000	48.8437	0.0000	48.8437	2.8866	0.0000	121.0082
Water						0.0000	0.0000		0.0000	0.0000	3.1644	11.9435	15.1079	0.3260	7.8000e-003	25.5817
Total	**6.6705**	**9.1097**	**50.7932**	**0.1074**	**10.3461**	**0.1084**	**10.4545**	**2.7690**	**0.1026**	**2.8716**	**52.0081**	**10,236.4359**	**10,288.4440**	**3.8585**	**0.5841**	**10,558.9563**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4160	1.0000e-005	9.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8100e-003	1.8100e-003	0.0000	0.0000	1.9300e-003
Energy	0.0201	0.1823	0.1531	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	400.1653	400.1653	0.0208	5.7000e-003	402.3852
Mobile	6.1931	8.7937	49.9118	0.1043	10.1392	0.0928	10.2320	2.7136	0.0871	2.8008	0.0000	9,635.7748	9,635.7748	0.6187	0.5622	9,818.7722
Waste						0.0000	0.0000		0.0000	0.0000	36.6328	0.0000	36.6328	2.1649	0.0000	90.7561
Water						0.0000	0.0000		0.0000	0.0000	2.5315	9.5548	12.0863	0.2608	6.2400e-003	20.4653
Total	**6.6292**	**8.9760**	**50.0658**	**0.1053**	**10.1392**	**0.1067**	**10.2459**	**2.7136**	**0.1010**	**2.8146**	**39.1642**	**10,045.4967**	**10,084.6609**	**3.0653**	**0.5741**	**10,332.3808**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.62**	**1.47**	**1.43**	**1.90**	**2.00**	**1.55**	**2.00**	**2.00**	**1.54**	**1.98**	**24.70**	**1.87**	**1.98**	**20.56**	**1.70**	**2.15**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2023	7/14/2023	5	10	
2	Site Preparation	Site Preparation	7/15/2023	7/28/2023	5	10	
3	Grading	Grading	7/29/2023	9/8/2023	5	30	

4	Building Construction	Building Construction	9/9/2023	8/31/2024	5	255	
5	Paving	Paving	9/9/2023	10/6/2023	5	20	
6	Architectural Coating	Architectural Coating	8/5/2024	8/31/2024	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 9.42

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 138,090; Non-Residential Outdoor: 46,030; Striped Parking Area: 24,620 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.20	231	0.29
Building Construction	Forklifts	4	7.10	89	0.20
Building Construction	Generator Sets	2	4.70	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.20	97	0.37
Building Construction	Welders	2	4.70	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	15.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	14.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	516.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	203.00	82.00	24.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	12.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	41.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.5000e-004	0.0000	3.5000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.1074	0.0982	1.9000e-004		4.9900e-003	4.9900e-003		4.6400e-003	4.6400e-003	0.0000	16.9960	16.9960	4.7600e-003	0.0000	17.1150
Total	**0.0114**	**0.1074**	**0.0982**	**1.9000e-004**	**3.5000e-004**	**4.9900e-003**	**5.3400e-003**	**5.0000e-005**	**4.6400e-003**	**4.6900e-003**	**0.0000**	**16.9960**	**16.9960**	**4.7600e-003**	**0.0000**	**17.1150**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	9.5000e-004	2.0000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4267	0.4267	0.0000	7.0000e-005	0.4468
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.8000e-004	2.0400e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4745	0.4745	2.0000e-005	2.0000e-005	0.4795
Total	**2.8000e-004**	**1.1300e-003**	**2.2400e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.9012**	**0.9012**	**2.0000e-005**	**9.0000e-005**	**0.9262**

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-004	0.0000	1.6000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.1074	0.0982	1.9000e-004		4.9900e-003	4.9900e-003		4.6400e-003	4.6400e-003	0.0000	16.9960	16.9960	4.7600e-003	0.0000	17.1150
Total	**0.0114**	**0.1074**	**0.0982**	**1.9000e-004**	**1.6000e-004**	**4.9900e-003**	**5.1500e-003**	**2.0000e-005**	**4.6400e-003**	**4.6600e-003**	**0.0000**	**16.9960**	**16.9960**	**4.7600e-003**	**0.0000**	**17.1150**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	9.5000e-004	2.0000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4267	0.4267	0.0000	7.0000e-005	0.4468
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.8000e-004	2.0400e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4745	0.4745	2.0000e-005	2.0000e-005	0.4795
Total	**2.8000e-004**	**1.1300e-003**	**2.2400e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.9012**	**0.9012**	**2.0000e-005**	**9.0000e-005**	**0.9262**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0983**	**6.3300e-003**	**0.1046**	**0.0505**	**5.8200e-003**	**0.0563**	**0.0000**	**16.7254**	**16.7254**	**5.4100e-003**	**0.0000**	**16.8606**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.9000e-004	1.9000e-004	0.0000	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3983	0.3983	0.0000	6.0000e-005	0.4170
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.4500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5694	0.5694	2.0000e-005	2.0000e-005	0.5753
Total	**3.3000e-004**	**1.1100e-003**	**2.6400e-003**	**1.0000e-005**	**8.4000e-004**	**1.0000e-005**	**8.5000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.9677**	**0.9677**	**2.0000e-005**	**8.0000e-005**	**0.9924**

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0442	0.0000	0.0442	0.0227	0.0000	0.0227	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0442**	**6.3300e-003**	**0.0506**	**0.0227**	**5.8200e-003**	**0.0286**	**0.0000**	**16.7253**	**16.7253**	**5.4100e-003**	**0.0000**	**16.8606**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.9000e-004	1.9000e-004	0.0000	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3983	0.3983	0.0000	6.0000e-005	0.4170
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.4500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5694	0.5694	2.0000e-005	2.0000e-005	0.5753
Total	**3.3000e-004**	**1.1100e-003**	**2.6400e-003**	**1.0000e-005**	**8.4000e-004**	**1.0000e-005**	**8.5000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.9677**	**0.9677**	**2.0000e-005**	**8.0000e-005**	**0.9924**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1383	0.0000	0.1383	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	**0.0498**	**0.5177**	**0.4208**	**9.3000e-004**	**0.1383**	**0.0214**	**0.1597**	**0.0548**	**0.0197**	**0.0745**	**0.0000**	**81.8028**	**81.8028**	**0.0265**	**0.0000**	**82.4642**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.5000e-004	0.0328	6.8400e-003	1.5000e-004	4.4000e-003	3.1000e-004	4.7100e-003	1.2100e-003	2.9000e-004	1.5100e-003	0.0000	14.6798	14.6798	7.0000e-005	2.3100e-003	15.3697
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	7.4000e-004	8.1600e-003	2.0000e-005	2.3900e-003	1.0000e-005	2.4000e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8979	1.8979	7.0000e-005	6.0000e-005	1.9178
Total	**1.6000e-003**	**0.0335**	**0.0150**	**1.7000e-004**	**6.7900e-003**	**3.2000e-004**	**7.1100e-003**	**1.8500e-003**	**3.0000e-004**	**2.1600e-003**	**0.0000**	**16.5777**	**16.5777**	**1.4000e-004**	**2.3700e-003**	**17.2875**

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0622	0.0000	0.0622	0.0247	0.0000	0.0247	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	**0.0498**	**0.5177**	**0.4208**	**9.3000e-004**	**0.0622**	**0.0214**	**0.0836**	**0.0247**	**0.0197**	**0.0443**	**0.0000**	**81.8027**	**81.8027**	**0.0265**	**0.0000**	**82.4641**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.5000e-004	0.0328	6.8400e-003	1.5000e-004	4.4000e-003	3.1000e-004	4.7100e-003	1.2100e-003	2.9000e-004	1.5100e-003	0.0000	14.6798	14.6798	7.0000e-005	2.3100e-003	15.3697
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	7.4000e-004	8.1600e-003	2.0000e-005	2.3900e-003	1.0000e-005	2.4000e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8979	1.8979	7.0000e-005	6.0000e-005	1.9178
Total	**1.6000e-003**	**0.0335**	**0.0150**	**1.7000e-004**	**6.7900e-003**	**3.2000e-004**	**7.1100e-003**	**1.8500e-003**	**3.0000e-004**	**2.1600e-003**	**0.0000**	**16.5777**	**16.5777**	**1.4000e-004**	**2.3700e-003**	**17.2875**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0739	0.6760	0.7636	1.2700e-003		0.0329	0.0329		0.0310	0.0310	0.0000	108.9166	108.9166	0.0259	0.0000	109.5642
Total	**0.0739**	**0.6760**	**0.7636**	**1.2700e-003**		**0.0329**	**0.0329**		**0.0310**	**0.0310**	**0.0000**	**108.9166**	**108.9166**	**0.0259**	**0.0000**	**109.5642**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	4.8000e-004	1.0000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2142	0.2142	0.0000	3.0000e-005	0.2243
Vendor	3.7000e-003	0.1478	0.0446	6.6000e-004	0.0217	9.4000e-004	0.0226	6.2700e-003	9.0000e-004	7.1700e-003	0.0000	63.7576	63.7576	2.9000e-004	9.5900e-003	66.6225
Worker	0.0284	0.0199	0.2208	5.6000e-004	0.0647	3.4000e-004	0.0650	0.0172	3.1000e-004	0.0175	0.0000	51.3689	51.3689	1.7600e-003	1.6600e-003	51.9085
Total	**0.0321**	**0.1681**	**0.2655**	**1.2200e-003**	**0.0864**	**1.2800e-003**	**0.0877**	**0.0235**	**1.2100e-003**	**0.0247**	**0.0000**	**115.3406**	**115.3406**	**2.0500e-003**	**0.0113**	**118.7553**

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0739	0.6760	0.7636	1.2700e-003		0.0329	0.0329		0.0310	0.0310	0.0000	108.9164	108.9164	0.0259	0.0000	109.5641
Total	**0.0739**	**0.6760**	**0.7636**	**1.2700e-003**		**0.0329**	**0.0329**		**0.0310**	**0.0310**	**0.0000**	**108.9164**	**108.9164**	**0.0259**	**0.0000**	**109.5641**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	4.8000e-004	1.0000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2142	0.2142	0.0000	3.0000e-005	0.2243
Vendor	3.7000e-003	0.1478	0.0446	6.6000e-004	0.0217	9.4000e-004	0.0226	6.2700e-003	9.0000e-004	7.1700e-003	0.0000	63.7576	63.7576	2.9000e-004	9.5900e-003	66.6225
Worker	0.0284	0.0199	0.2208	5.6000e-004	0.0647	3.4000e-004	0.0650	0.0172	3.1000e-004	0.0175	0.0000	51.3689	51.3689	1.7600e-003	1.6600e-003	51.9085
Total	**0.0321**	**0.1681**	**0.2655**	**1.2200e-003**	**0.0864**	**1.2800e-003**	**0.0877**	**0.0235**	**1.2100e-003**	**0.0247**	**0.0000**	**115.3406**	**115.3406**	**2.0500e-003**	**0.0113**	**118.7553**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1513	1.3820	1.6623	2.7700e-003		0.0631	0.0631		0.0593	0.0593	0.0000	238.3004	238.3004	0.0564	0.0000	239.7091
Total	**0.1513**	**1.3820**	**1.6623**	**2.7700e-003**		**0.0631**	**0.0631**		**0.0593**	**0.0593**	**0.0000**	**238.3004**	**238.3004**	**0.0564**	**0.0000**	**239.7091**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	1.0400e-003	2.2000e-004	0.0000	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4599	0.4599	0.0000	7.0000e-005	0.4815
Vendor	7.8600e-003	0.3232	0.0952	1.4300e-003	0.0474	2.0800e-003	0.0495	0.0137	1.9900e-003	0.0157	0.0000	137.3187	137.3187	6.2000e-004	0.0206	143.4817
Worker	0.0569	0.0382	0.4434	1.1800e-003	0.1415	6.9000e-004	0.1422	0.0376	6.4000e-004	0.0383	0.0000	108.5279	108.5279	3.4600e-003	3.3400e-003	109.6100
Total	**0.0648**	**0.3624**	**0.5388**	**2.6100e-003**	**0.1891**	**2.7800e-003**	**0.1919**	**0.0514**	**2.6400e-003**	**0.0540**	**0.0000**	**246.3065**	**246.3065**	**4.0800e-003**	**0.0240**	**253.5733**

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1513	1.3820	1.6623	2.7700e-003		0.0631	0.0631		0.0593	0.0593	0.0000	238.3002	238.3002	0.0564	0.0000	239.7088
Total	**0.1513**	**1.3820**	**1.6623**	**2.7700e-003**		**0.0631**	**0.0631**		**0.0593**	**0.0593**	**0.0000**	**238.3002**	**238.3002**	**0.0564**	**0.0000**	**239.7088**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	1.0400e-003	2.2000e-004	0.0000	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4599	0.4599	0.0000	7.0000e-005	0.4815
Vendor	7.8600e-003	0.3232	0.0952	1.4300e-003	0.0474	2.0800e-003	0.0495	0.0137	1.9900e-003	0.0157	0.0000	137.3187	137.3187	6.2000e-004	0.0206	143.4817
Worker	0.0569	0.0382	0.4434	1.1800e-003	0.1415	6.9000e-004	0.1422	0.0376	6.4000e-004	0.0383	0.0000	108.5279	108.5279	3.4600e-003	3.3400e-003	109.6100
Total	**0.0648**	**0.3624**	**0.5388**	**2.6100e-003**	**0.1891**	**2.7800e-003**	**0.1919**	**0.0514**	**2.6400e-003**	**0.0540**	**0.0000**	**246.3065**	**246.3065**	**4.0800e-003**	**0.0240**	**253.5733**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	0.0123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0227**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0269**	**20.0269**	**6.4800e-003**	**0.0000**	**20.1888**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	7.6000e-004	1.6000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3414	0.3414	0.0000	5.0000e-005	0.3574
Vendor	5.0000e-005	1.8000e-003	5.4000e-004	1.0000e-005	2.6000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7775	0.7775	0.0000	1.2000e-004	0.8125
Worker	5.2000e-004	3.7000e-004	4.0800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9489	0.9489	3.0000e-005	3.0000e-005	0.9589
Total	**5.8000e-004**	**2.9300e-003**	**4.7800e-003**	**2.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5900e-003**	**4.3000e-004**	**3.0000e-005**	**4.5000e-004**	**0.0000**	**2.0679**	**2.0679**	**3.0000e-005**	**2.0000e-004**	**2.1288**

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	0.0123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0227**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0268**	**20.0268**	**6.4800e-003**	**0.0000**	**20.1888**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	7.6000e-004	1.6000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3414	0.3414	0.0000	5.0000e-005	0.3574
Vendor	5.0000e-005	1.8000e-003	5.4000e-004	1.0000e-005	2.6000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7775	0.7775	0.0000	1.2000e-004	0.8125
Worker	5.2000e-004	3.7000e-004	4.0800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9489	0.9489	3.0000e-005	3.0000e-005	0.9589
Total	**5.8000e-004**	**2.9300e-003**	**4.7800e-003**	**2.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5900e-003**	**4.3000e-004**	**3.0000e-005**	**4.5000e-004**	**0.0000**	**2.0679**	**2.0679**	**3.0000e-005**	**2.0000e-004**	**2.1288**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2989					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	**0.3007**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5569**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.3000e-004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0559	0.0559	0.0000	1.0000e-005	0.0585
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3100e-003	8.8000e-004	0.0102	3.0000e-005	3.2700e-003	2.0000e-005	3.2800e-003	8.7000e-004	1.0000e-005	8.8000e-004	0.0000	2.5051	2.5051	8.0000e-005	8.0000e-005	2.5301
Total	**1.3100e-003**	**1.0100e-003**	**0.0103**	**3.0000e-005**	**3.2900e-003**	**2.0000e-005**	**3.3000e-003**	**8.7000e-004**	**1.0000e-005**	**8.9000e-004**	**0.0000**	**2.5609**	**2.5609**	**8.0000e-005**	**9.0000e-005**	**2.5885**

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2989					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	**0.3007**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5568**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.3000e-004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0559	0.0559	0.0000	1.0000e-005	0.0585
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3100e-003	8.8000e-004	0.0102	3.0000e-005	3.2700e-003	2.0000e-005	3.2800e-003	8.7000e-004	1.0000e-005	8.8000e-004	0.0000	2.5051	2.5051	8.0000e-005	8.0000e-005	2.5301
Total	**1.3100e-003**	**1.0100e-003**	**0.0103**	**3.0000e-005**	**3.2900e-003**	**2.0000e-005**	**3.3000e-003**	**8.7000e-004**	**1.0000e-005**	**8.9000e-004**	**0.0000**	**2.5609**	**2.5609**	**8.0000e-005**	**9.0000e-005**	**2.5885**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.1931	8.7937	49.9118	0.1043	10.1392	0.0928	10.2320	2.7136	0.0871	2.8008	0.0000	9,635.774 8	9,635.774 8	0.6187	0.5622	9,818.772 2
Unmitigated	6.2344	8.9274	50.6391	0.1063	10.3461	0.0945	10.4407	2.7690	0.0887	2.8577	0.0000	9,824.325 3	9,824.325 3	0.6251	0.5706	10,009.97 93

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	6,106.51	8,048.01	6173.06	14,570,857	14,279,440
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	7,494.27	7,494.27	7494.27	13,139,734	12,876,940
Total	13,600.78	15,542.28	13,667.33	27,710,592	27,156,380

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	85	0	15
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Other Asphalt Surfaces	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Parking Lot	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Regional Shopping Center	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	201.6949	201.6949	0.0170	2.0600e-003	202.7354
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	201.6949	201.6949	0.0170	2.0600e-003	202.7354
NaturalGas Mitigated	0.0201	0.1823	0.1531	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.4704	198.4704	3.8000e-003	3.6400e-003	199.6498
NaturalGas Unmitigated	0.0201	0.1823	0.1531	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.4704	198.4704	3.8000e-003	3.6400e-003	199.6498

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	2.88833e +006	0.0156	0.1416	0.1189	8.5000e-004		0.0108	0.0108		0.0108	0.0108	0.0000	154.1320	154.1320	2.9500e-003	2.8300e-003	155.0480
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	830869	4.4800e-003	0.0407	0.0342	2.4000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003	0.0000	44.3383	44.3383	8.5000e-004	8.1000e-004	44.6018
Total		**0.0201**	**0.1823**	**0.1531**	**1.0900e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**	**0.0000**	**198.4704**	**198.4704**	**3.8000e-003**	**3.6400e-003**	**199.6498**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	2.88833e+006	0.0156	0.1416	0.1189	8.5000e-004		0.0108	0.0108		0.0108	0.0108	0.0000	154.1320	154.1320	2.9500e-003	2.8300e-003	155.0480
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	830869	4.4800e-003	0.0407	0.0342	2.4000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003	0.0000	44.3383	44.3383	8.5000e-004	8.1000e-004	44.6018
Total		**0.0201**	**0.1823**	**0.1531**	**1.0900e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**	**0.0000**	**198.4704**	**198.4704**	**3.8000e-003**	**3.6400e-003**	**199.6498**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	388713	68.9364	5.8200e-003	7.1000e-004	69.2921
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	128371	22.7661	1.9200e-003	2.3000e-004	22.8835
Regional Shopping Center	620215	109.9924	9.2800e-003	1.1300e-003	110.5598
Total		**201.6949**	**0.0170**	**2.0700e-003**	**202.7354**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	388713	68.9364	5.8200e-003	7.1000e-004	69.2921
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	128371	22.7661	1.9200e-003	2.3000e-004	22.8835
Regional Shopping Center	620215	109.9924	9.2800e-003	1.1300e-003	110.5598
Total		**201.6949**	**0.0170**	**2.0700e-003**	**202.7354**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4160	1.0000e-005	9.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8100e-003	1.8100e-003	0.0000	0.0000	1.9300e-003
Unmitigated	0.4160	1.0000e-005	9.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8100e-003	1.8100e-003	0.0000	0.0000	1.9300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0299					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3861					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8100e-003	1.8100e-003	0.0000	0.0000	1.9300e-003
Total	**0.4161**	**1.0000e-005**	**9.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.8100e-003**	**1.8100e-003**	**0.0000**	**0.0000**	**1.9300e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0299					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3861					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8100e-003	1.8100e-003	0.0000	0.0000	1.9300e-003
Total	**0.4161**	**1.0000e-005**	**9.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.8100e-003**	**1.8100e-003**	**0.0000**	**0.0000**	**1.9300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	12.0863	0.2608	6.2400e-003	20.4653
Unmitigated	15.1079	0.3260	7.8000e-003	25.5817

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	4.17359 / 0.266399	5.4945	0.1364	3.2500e-003	9.8728
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	5.80062 / 3.55522	9.6134	0.1897	4.5400e-003	15.7088
Total		**15.1079**	**0.3260**	**7.7900e-003**	**25.5817**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	3.33887 / 0.213119	4.3956	0.1091	2.6000e-003	7.8983
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.6405 / 2.84417	7.6907	0.1517	3.6300e-003	12.5671
Total		**12.0863**	**0.2608**	**6.2300e-003**	**20.4653**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	36.6328	2.1649	0.0000	90.7561
Unmitigated	48.8437	2.8866	0.0000	121.0082

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	158.39	32.1517	1.9001	0.0000	79.6546
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	82.23	16.6920	0.9865	0.0000	41.3536
Total		**48.8437**	**2.8866**	**0.0000**	**121.0082**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	118.792	24.1138	1.4251	0.0000	59.7409
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	61.6725	12.5190	0.7399	0.0000	31.0152
Total		**36.6328**	**2.1649**	**0.0000**	**90.7561**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Henderson Ave & SR 65 Commercial - Mitigated Construction

Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.00	43,560.00	0
Parking Lot	8.42	Acre	8.42	366,775.20	0
Fast Food Restaurant with Drive Thru	13.75	1000sqft	0.32	13,750.00	0
Regional Shopping Center	78.31	1000sqft	1.80	78,310.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	3			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Henderson Ave & SR 65 Commercial - Mitigated Construction (Tier 4 Scenario)

Land Use - Based on project description, site plan, and project-specific traffic analysis
Shopping Center increased from 77,585 to 78,310 to account total up to 92,060 total building sq ft
10.54 acres site + 1 acre for off-site improvements

Construction Phase - No building demolition - There will be minor removal, replacement, and relocation of sidewalk and driveway approaches on West Henderson Ave.
Earliest construction schedule: 07/01/2023 - 08/31/2024

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction HP hours.

Trips and VMT - Additional haul trips for mobilization/demobilization of on-site equipment. Vendor trips added to the paving phase for delivery of materials.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition - No building demolition
There will be minor removal, replacement, and relocation of sidewalk and driveway approaches on West Henderson Ave (see supporting calculations for tons of debris estimate).

Grading - The site is expected to balance with no import or export required. Included 2,000 cubic yards export and import to provide a conservative estimate of emissions and to account for small amounts might need to be imported or exported.

Architectural Coating - SJVAPCD Rule 4601 Architectural Coatings

Vehicle Trips - Construction only run (zeroed out operational only parameters)

Area Coating - SJVAPCD Rule 4601 Architectural Coatings

Water And Wastewater - Construction only run

Solid Waste - Construction only run

Construction Off-road Equipment Mitigation - Compliance with SJVAPCD Regulation VIII
Mitigation: Tier 4 equipment for off-road equipment >75 HP (Tier 4 Interim applied)

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

Landscape Equipment - Construction only run

Energy Use - Construction only run

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	300.00	255.00
tblEnergyUse	LightingElect	6.17	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	3.71	0.00
tblEnergyUse	NT24E	16.25	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	T24E	5.85	0.00
tblEnergyUse	T24E	1.91	0.00
tblEnergyUse	T24NG	35.36	0.00
tblEnergyUse	T24NG	8.53	0.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialImported	0.00	2,000.00
tblLandscapeEquipment	NumberSummerDays	180	1
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.20
tblOffRoadEquipment	UsageHours	8.00	7.10
tblOffRoadEquipment	UsageHours	8.00	4.70
tblOffRoadEquipment	UsageHours	7.00	8.20
tblOffRoadEquipment	UsageHours	8.00	4.70
tblSolidWaste	SolidWasteGenerationRate	158.39	0.00
tblSolidWaste	SolidWasteGenerationRate	82.23	0.00
tblTripsAndVMT	HaulingTripNumber	3.00	15.00
tblTripsAndVMT	HaulingTripNumber	0.00	14.00
tblTripsAndVMT	HaulingTripNumber	500.00	516.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	616.12	0.00
tblVehicleTrips	ST_TR	46.12	0.00

tblVehicleTrips	SU_TR	472.58	0.00
tblVehicleTrips	SU_TR	21.10	0.00
tblVehicleTrips	WD_TR	470.95	0.00
tblVehicleTrips	WD_TR	37.75	0.00
tblWater	IndoorWaterUseRate	4,173,588.55	0.00
tblWater	IndoorWaterUseRate	5,800,619.16	0.00
tblWater	OutdoorWaterUseRate	266,399.27	0.00
tblWater	OutdoorWaterUseRate	3,555,218.19	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2059	1.7476	1.8097	4.2500e-003	0.3333	0.0723	0.4056	0.1316	0.0673	0.1989	0.0000	380.3226	380.3226	0.0713	0.0140	386.2830
2024	0.5181	1.7576	2.2295	5.4500e-003	0.1923	0.0665	0.2588	0.0522	0.0626	0.1148	0.0000	489.7211	489.7211	0.0607	0.0241	498.4277
Maximum	**0.5181**	**1.7576**	**2.2295**	**5.4500e-003**	**0.3333**	**0.0723**	**0.4056**	**0.1316**	**0.0673**	**0.1989**	**0.0000**	**489.7211**	**489.7211**	**0.0713**	**0.0241**	**498.4277**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1071	1.2265	2.1006	4.2500e-003	0.2030	8.5400e-003	0.2115	0.0736	8.4500e-003	0.0821	0.0000	380.3223	380.3223	0.0713	0.0140	386.2827
2024	0.4402	1.4671	2.4220	5.4500e-003	0.1923	0.0116	0.2040	0.0522	0.0115	0.0637	0.0000	489.7208	489.7208	0.0607	0.0241	498.4274
Maximum	**0.4402**	**1.4671**	**2.4220**	**5.4500e-003**	**0.2030**	**0.0116**	**0.2115**	**0.0736**	**0.0115**	**0.0821**	**0.0000**	**489.7208**	**489.7208**	**0.0713**	**0.0241**	**498.4274**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**24.42**	**23.16**	**-11.97**	**0.00**	**24.79**	**85.48**	**37.47**	**31.54**	**84.68**	**53.54**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-1-2023**	**9-30-2023**	1.1605	0.7138
2	**10-1-2023**	**12-31-2023**	0.8129	0.6358
3	**1-1-2024**	**3-31-2024**	0.7329	0.5970
4	**4-1-2024**	**6-30-2024**	0.7255	0.5897
5	**7-1-2024**	**9-30-2024**	0.7984	0.7032
		Highest	1.1605	0.7138

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3861	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3861**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3861	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3861**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2023	7/14/2023	5	10	
2	Site Preparation	Site Preparation	7/15/2023	7/28/2023	5	10	
3	Grading	Grading	7/29/2023	9/8/2023	5	30	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Building Construction	Building Construction	9/9/2023	8/31/2024	5	255	
5	Paving	Paving	9/9/2023	10/6/2023	5	20	
6	Architectural Coating	Architectural Coating	8/5/2024	8/31/2024	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 9.42

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 138,090; Non-Residential Outdoor: 46,030; Striped Parking Area: 24,620 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.20	231	0.29
Building Construction	Forklifts	4	7.10	89	0.20
Building Construction	Generator Sets	2	4.70	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.20	97	0.37
Building Construction	Welders	2	4.70	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	15.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	14.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	516.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	203.00	82.00	24.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	12.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	41.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.5000e-004	0.0000	3.5000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.1074	0.0982	1.9000e-004		4.9900e-003	4.9900e-003		4.6400e-003	4.6400e-003	0.0000	16.9960	16.9960	4.7600e-003	0.0000	17.1150
Total	**0.0114**	**0.1074**	**0.0982**	**1.9000e-004**	**3.5000e-004**	**4.9900e-003**	**5.3400e-003**	**5.0000e-005**	**4.6400e-003**	**4.6900e-003**	**0.0000**	**16.9960**	**16.9960**	**4.7600e-003**	**0.0000**	**17.1150**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	9.5000e-004	2.0000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4267	0.4267	0.0000	7.0000e-005	0.4468
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.8000e-004	2.0400e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4745	0.4745	2.0000e-005	2.0000e-005	0.4795
Total	**2.8000e-004**	**1.1300e-003**	**2.2400e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.9012**	**0.9012**	**2.0000e-005**	**9.0000e-005**	**0.9262**

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-004	0.0000	1.6000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9200e-003	0.0678	0.1234	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	16.9960	16.9960	4.7600e-003	0.0000	17.1150
Total	**2.9200e-003**	**0.0678**	**0.1234**	**1.9000e-004**	**1.6000e-004**	**3.1000e-004**	**4.7000e-004**	**2.0000e-005**	**3.1000e-004**	**3.3000e-004**	**0.0000**	**16.9960**	**16.9960**	**4.7600e-003**	**0.0000**	**17.1150**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	9.5000e-004	2.0000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4267	0.4267	0.0000	7.0000e-005	0.4468
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.8000e-004	2.0400e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4745	0.4745	2.0000e-005	2.0000e-005	0.4795
Total	**2.8000e-004**	**1.1300e-003**	**2.2400e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.9012**	**0.9012**	**2.0000e-005**	**9.0000e-005**	**0.9262**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0983**	**6.3300e-003**	**0.1046**	**0.0505**	**5.8200e-003**	**0.0563**	**0.0000**	**16.7254**	**16.7254**	**5.4100e-003**	**0.0000**	**16.8606**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.9000e-004	1.9000e-004	0.0000	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3983	0.3983	0.0000	6.0000e-005	0.4170
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.4500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5694	0.5694	2.0000e-005	2.0000e-005	0.5753
Total	**3.3000e-004**	**1.1100e-003**	**2.6400e-003**	**1.0000e-005**	**8.4000e-004**	**1.0000e-005**	**8.5000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.9677**	**0.9677**	**2.0000e-005**	**8.0000e-005**	**0.9924**

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0442	0.0000	0.0442	0.0227	0.0000	0.0227	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4800e-003	0.0608	0.1148	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	**3.4800e-003**	**0.0608**	**0.1148**	**1.9000e-004**	**0.0442**	**3.1000e-004**	**0.0445**	**0.0227**	**3.1000e-004**	**0.0230**	**0.0000**	**16.7253**	**16.7253**	**5.4100e-003**	**0.0000**	**16.8606**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.9000e-004	1.9000e-004	0.0000	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3983	0.3983	0.0000	6.0000e-005	0.4170
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.4500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5694	0.5694	2.0000e-005	2.0000e-005	0.5753
Total	**3.3000e-004**	**1.1100e-003**	**2.6400e-003**	**1.0000e-005**	**8.4000e-004**	**1.0000e-005**	**8.5000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.9677**	**0.9677**	**2.0000e-005**	**8.0000e-005**	**0.9924**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1383	0.0000	0.1383	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	**0.0498**	**0.5177**	**0.4208**	**9.3000e-004**	**0.1383**	**0.0214**	**0.1597**	**0.0548**	**0.0197**	**0.0745**	**0.0000**	**81.8028**	**81.8028**	**0.0265**	**0.0000**	**82.4642**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.5000e-004	0.0328	6.8400e-003	1.5000e-004	4.4000e-003	3.1000e-004	4.7100e-003	1.2100e-003	2.9000e-004	1.5100e-003	0.0000	14.6798	14.6798	7.0000e-005	2.3100e-003	15.3697
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	7.4000e-004	8.1600e-003	2.0000e-005	2.3900e-003	1.0000e-005	2.4000e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8979	1.8979	7.0000e-005	6.0000e-005	1.9178
Total	**1.6000e-003**	**0.0335**	**0.0150**	**1.7000e-004**	**6.7900e-003**	**3.2000e-004**	**7.1100e-003**	**1.8500e-003**	**3.0000e-004**	**2.1600e-003**	**0.0000**	**16.5777**	**16.5777**	**1.4000e-004**	**2.3700e-003**	**17.2875**

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0622	0.0000	0.0622	0.0247	0.0000	0.0247	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.2891	0.5508	9.3000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	**0.0152**	**0.2891**	**0.5508**	**9.3000e-004**	**0.0622**	**1.5200e-003**	**0.0638**	**0.0247**	**1.5200e-003**	**0.0262**	**0.0000**	**81.8027**	**81.8027**	**0.0265**	**0.0000**	**82.4641**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.5000e-004	0.0328	6.8400e-003	1.5000e-004	4.4000e-003	3.1000e-004	4.7100e-003	1.2100e-003	2.9000e-004	1.5100e-003	0.0000	14.6798	14.6798	7.0000e-005	2.3100e-003	15.3697
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	7.4000e-004	8.1600e-003	2.0000e-005	2.3900e-003	1.0000e-005	2.4000e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8979	1.8979	7.0000e-005	6.0000e-005	1.9178
Total	**1.6000e-003**	**0.0335**	**0.0150**	**1.7000e-004**	**6.7900e-003**	**3.2000e-004**	**7.1100e-003**	**1.8500e-003**	**3.0000e-004**	**2.1600e-003**	**0.0000**	**16.5777**	**16.5777**	**1.4000e-004**	**2.3700e-003**	**17.2875**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0739	0.6760	0.7636	1.2700e-003		0.0329	0.0329		0.0310	0.0310	0.0000	108.9166	108.9166	0.0259	0.0000	109.5642
Total	**0.0739**	**0.6760**	**0.7636**	**1.2700e-003**		**0.0329**	**0.0329**		**0.0310**	**0.0310**	**0.0000**	**108.9166**	**108.9166**	**0.0259**	**0.0000**	**109.5642**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	4.8000e-004	1.0000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2142	0.2142	0.0000	3.0000e-005	0.2243
Vendor	3.7000e-003	0.1478	0.0446	6.6000e-004	0.0217	9.4000e-004	0.0226	6.2700e-003	9.0000e-004	7.1700e-003	0.0000	63.7576	63.7576	2.9000e-004	9.5900e-003	66.6225
Worker	0.0284	0.0199	0.2208	5.6000e-004	0.0647	3.4000e-004	0.0650	0.0172	3.1000e-004	0.0175	0.0000	51.3689	51.3689	1.7600e-003	1.6600e-003	51.9085
Total	**0.0321**	**0.1681**	**0.2655**	**1.2200e-003**	**0.0864**	**1.2800e-003**	**0.0877**	**0.0235**	**1.2100e-003**	**0.0247**	**0.0000**	**115.3406**	**115.3406**	**2.0500e-003**	**0.0113**	**118.7553**

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0350	0.5015	0.8485	1.2700e-003		4.3700e-003	4.3700e-003		4.3700e-003	4.3700e-003	0.0000	108.9164	108.9164	0.0259	0.0000	109.5641
Total	**0.0350**	**0.5015**	**0.8485**	**1.2700e-003**		**4.3700e-003**	**4.3700e-003**		**4.3700e-003**	**4.3700e-003**	**0.0000**	**108.9164**	**108.9164**	**0.0259**	**0.0000**	**109.5641**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	4.8000e-004	1.0000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2142	0.2142	0.0000	3.0000e-005	0.2243
Vendor	3.7000e-003	0.1478	0.0446	6.6000e-004	0.0217	9.4000e-004	0.0226	6.2700e-003	9.0000e-004	7.1700e-003	0.0000	63.7576	63.7576	2.9000e-004	9.5900e-003	66.6225
Worker	0.0284	0.0199	0.2208	5.6000e-004	0.0647	3.4000e-004	0.0650	0.0172	3.1000e-004	0.0175	0.0000	51.3689	51.3689	1.7600e-003	1.6600e-003	51.9085
Total	**0.0321**	**0.1681**	**0.2655**	**1.2200e-003**	**0.0864**	**1.2800e-003**	**0.0877**	**0.0235**	**1.2100e-003**	**0.0247**	**0.0000**	**115.3406**	**115.3406**	**2.0500e-003**	**0.0113**	**118.7553**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1513	1.3820	1.6623	2.7700e-003		0.0631	0.0631		0.0593	0.0593	0.0000	238.3004	238.3004	0.0564	0.0000	239.7091
Total	**0.1513**	**1.3820**	**1.6623**	**2.7700e-003**		**0.0631**	**0.0631**		**0.0593**	**0.0593**	**0.0000**	**238.3004**	**238.3004**	**0.0564**	**0.0000**	**239.7091**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	1.0400e-003	2.2000e-004	0.0000	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4599	0.4599	0.0000	7.0000e-005	0.4815
Vendor	7.8600e-003	0.3232	0.0952	1.4300e-003	0.0474	2.0800e-003	0.0495	0.0137	1.9900e-003	0.0157	0.0000	137.3187	137.3187	6.2000e-004	0.0206	143.4817
Worker	0.0569	0.0382	0.4434	1.1800e-003	0.1415	6.9000e-004	0.1422	0.0376	6.4000e-004	0.0383	0.0000	108.5279	108.5279	3.4600e-003	3.3400e-003	109.6100
Total	**0.0648**	**0.3624**	**0.5388**	**2.6100e-003**	**0.1891**	**2.7800e-003**	**0.1919**	**0.0514**	**2.6400e-003**	**0.0540**	**0.0000**	**246.3065**	**246.3065**	**4.0800e-003**	**0.0240**	**253.5733**

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0746	1.0930	1.8546	2.7700e-003		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	238.3002	238.3002	0.0564	0.0000	239.7088
Total	**0.0746**	**1.0930**	**1.8546**	**2.7700e-003**		**8.7700e-003**	**8.7700e-003**		**8.7700e-003**	**8.7700e-003**	**0.0000**	**238.3002**	**238.3002**	**0.0564**	**0.0000**	**239.7088**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	1.0400e-003	2.2000e-004	0.0000	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4599	0.4599	0.0000	7.0000e-005	0.4815
Vendor	7.8600e-003	0.3232	0.0952	1.4300e-003	0.0474	2.0800e-003	0.0495	0.0137	1.9900e-003	0.0157	0.0000	137.3187	137.3187	6.2000e-004	0.0206	143.4817
Worker	0.0569	0.0382	0.4434	1.1800e-003	0.1415	6.9000e-004	0.1422	0.0376	6.4000e-004	0.0383	0.0000	108.5279	108.5279	3.4600e-003	3.3400e-003	109.6100
Total	**0.0648**	**0.3624**	**0.5388**	**2.6100e-003**	**0.1891**	**2.7800e-003**	**0.1919**	**0.0514**	**2.6400e-003**	**0.0540**	**0.0000**	**246.3065**	**246.3065**	**4.0800e-003**	**0.0240**	**253.5733**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	0.0123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0227**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0269**	**20.0269**	**6.4800e-003**	**0.0000**	**20.1888**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	7.6000e-004	1.6000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3414	0.3414	0.0000	5.0000e-005	0.3574
Vendor	5.0000e-005	1.8000e-003	5.4000e-004	1.0000e-005	2.6000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7775	0.7775	0.0000	1.2000e-004	0.8125
Worker	5.2000e-004	3.7000e-004	4.0800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9489	0.9489	3.0000e-005	3.0000e-005	0.9589
Total	**5.8000e-004**	**2.9300e-003**	**4.7800e-003**	**2.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5900e-003**	**4.3000e-004**	**3.0000e-005**	**4.5000e-004**	**0.0000**	**2.0679**	**2.0679**	**3.0000e-005**	**2.0000e-004**	**2.1288**

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.3400e-003	0.1004	0.1730	2.3000e-004		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	0.0123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0157**	**0.1004**	**0.1730**	**2.3000e-004**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**	**0.0000**	**20.0268**	**20.0268**	**6.4800e-003**	**0.0000**	**20.1888**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	7.6000e-004	1.6000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3414	0.3414	0.0000	5.0000e-005	0.3574
Vendor	5.0000e-005	1.8000e-003	5.4000e-004	1.0000e-005	2.6000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7775	0.7775	0.0000	1.2000e-004	0.8125
Worker	5.2000e-004	3.7000e-004	4.0800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9489	0.9489	3.0000e-005	3.0000e-005	0.9589
Total	**5.8000e-004**	**2.9300e-003**	**4.7800e-003**	**2.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5900e-003**	**4.3000e-004**	**3.0000e-005**	**4.5000e-004**	**0.0000**	**2.0679**	**2.0679**	**3.0000e-005**	**2.0000e-004**	**2.1288**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2989					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	**0.3007**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5569**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.3000e-004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0559	0.0559	0.0000	1.0000e-005	0.0585
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3100e-003	8.8000e-004	0.0102	3.0000e-005	3.2700e-003	2.0000e-005	3.2800e-003	8.7000e-004	1.0000e-005	8.8000e-004	0.0000	2.5051	2.5051	8.0000e-005	8.0000e-005	2.5301
Total	**1.3100e-003**	**1.0100e-003**	**0.0103**	**3.0000e-005**	**3.2900e-003**	**2.0000e-005**	**3.3000e-003**	**8.7000e-004**	**1.0000e-005**	**8.9000e-004**	**0.0000**	**2.5609**	**2.5609**	**8.0000e-005**	**9.0000e-005**	**2.5885**

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2989					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4000e-004	0.0106	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	**0.2995**	**0.0106**	**0.0183**	**3.0000e-005**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5568**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.3000e-004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0559	0.0559	0.0000	1.0000e-005	0.0585
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3100e-003	8.8000e-004	0.0102	3.0000e-005	3.2700e-003	2.0000e-005	3.2800e-003	8.7000e-004	1.0000e-005	8.8000e-004	0.0000	2.5051	2.5051	8.0000e-005	8.0000e-005	2.5301
Total	**1.3100e-003**	**1.0100e-003**	**0.0103**	**3.0000e-005**	**3.2900e-003**	**2.0000e-005**	**3.3000e-003**	**8.7000e-004**	**1.0000e-005**	**8.9000e-004**	**0.0000**	**2.5609**	**2.5609**	**8.0000e-005**	**9.0000e-005**	**2.5885**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Other Asphalt Surfaces	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Parking Lot	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Regional Shopping Center	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3861	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	0.3861	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3861					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**0.3861**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3861					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**0.3861**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Henderson Ave & SR 65 Commercial - Mitigated Construction

Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.00	43,560.00	0
Parking Lot	8.42	Acre	8.42	366,775.20	0
Fast Food Restaurant with Drive Thru	13.75	1000sqft	0.32	13,750.00	0
Regional Shopping Center	78.31	1000sqft	1.80	78,310.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	3			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Henderson Ave & SR 65 Commercial - Mitigated Construction (Level 3 Filters Scenario)

Land Use - Based on project description, site plan, and project-specific traffic analysis
Shopping Center increased from 77,585 to 78,310 to account total up to 92,060 total building sq ft
10.54 acres site + 1 acre for off-site improvements

Construction Phase - No building demolition - There will be minor removal, replacement, and relocation of sidewalk and driveway approaches on West Henderson Ave.
Earliest construction schedule: 07/01/2023 - 08/31/2024

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction HP hours.

Trips and VMT - Additional haul trips for mobilization/demobilization of on-site equipment. Vendor trips added to the paving phase for delivery of materials.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition - No building demolition
There will be minor removal, replacement, and relocation of sidewalk and driveway approaches on West Henderson Ave (see supporting calculations for tons of debris estimate).

Grading - The site is expected to balance with no import or export required. Included 2,000 cubic yards export and import to provide a conservative estimate of emissions and to account for small amounts might need to be imported or exported.

Architectural Coating - SJVAPCD Rule 4601 Architectural Coatings

Vehicle Trips - Construction only run (zeroed out operational only parameters)

Area Coating - SJVAPCD Rule 4601 Architectural Coatings

Landscape Equipment - Construction only run

Energy Use - Construction only run

Water And Wastewater - Construction only run

Solid Waste - Construction only run

Construction Off-road Equipment Mitigation - Compliance with SJVAPCD Regulation VIII
Mitigation: Level 3 Filters equipment for off-road equipment >75 HP (Level 3 Filters)

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	300.00	255.00
tblEnergyUse	LightingElect	6.17	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	3.71	0.00
tblEnergyUse	NT24E	16.25	0.00

tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	T24E	5.85	0.00
tblEnergyUse	T24E	1.91	0.00
tblEnergyUse	T24NG	35.36	0.00
tblEnergyUse	T24NG	8.53	0.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialImported	0.00	2,000.00
tblLandscapeEquipment	NumberSummerDays	180	1
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.20
tblOffRoadEquipment	UsageHours	8.00	7.10
tblOffRoadEquipment	UsageHours	8.00	4.70
tblOffRoadEquipment	UsageHours	7.00	8.20
tblOffRoadEquipment	UsageHours	8.00	4.70
tblSolidWaste	SolidWasteGenerationRate	158.39	0.00
tblSolidWaste	SolidWasteGenerationRate	82.23	0.00
tblTripsAndVMT	HaulingTripNumber	3.00	15.00
tblTripsAndVMT	HaulingTripNumber	0.00	14.00
tblTripsAndVMT	HaulingTripNumber	500.00	516.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	616.12	0.00
tblVehicleTrips	ST_TR	46.12	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	SU_TR	472.58	0.00
tblVehicleTrips	SU_TR	21.10	0.00
tblVehicleTrips	WD_TR	470.95	0.00
tblVehicleTrips	WD_TR	37.75	0.00
tblWater	IndoorWaterUseRate	4,173,588.55	0.00
tblWater	IndoorWaterUseRate	5,800,619.16	0.00
tblWater	OutdoorWaterUseRate	266,399.27	0.00
tblWater	OutdoorWaterUseRate	3,555,218.19	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2059	1.7476	1.8097	4.2500e-003	0.3333	0.0723	0.4056	0.1316	0.0673	0.1989	0.0000	380.3226	380.3226	0.0713	0.0140	386.2830
2024	0.5181	1.7576	2.2295	5.4500e-003	0.1923	0.0665	0.2588	0.0522	0.0626	0.1148	0.0000	489.7211	489.7211	0.0607	0.0241	498.4277
Maximum	**0.5181**	**1.7576**	**2.2295**	**5.4500e-003**	**0.3333**	**0.0723**	**0.4056**	**0.1316**	**0.0673**	**0.1989**	**0.0000**	**489.7211**	**489.7211**	**0.0713**	**0.0241**	**498.4277**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2059	1.7476	1.8097	4.2500e-003	0.2030	0.0145	0.2174	0.0736	0.0136	0.0872	0.0000	380.3223	380.3223	0.0713	0.0140	386.2827
2024	0.5181	1.7576	2.2295	5.4500e-003	0.1923	0.0165	0.2088	0.0522	0.0158	0.0680	0.0000	489.7208	489.7208	0.0607	0.0241	498.4274
Maximum	**0.5181**	**1.7576**	**2.2295**	**5.4500e-003**	**0.2030**	**0.0165**	**0.2174**	**0.0736**	**0.0158**	**0.0872**	**0.0000**	**489.7208**	**489.7208**	**0.0713**	**0.0241**	**498.4274**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**24.79**	**77.70**	**35.85**	**31.54**	**77.35**	**50.51**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-1-2023**	**9-30-2023**	1.1605	1.1605
2	**10-1-2023**	**12-31-2023**	0.8129	0.8129
3	**1-1-2024**	**3-31-2024**	0.7329	0.7329
4	**4-1-2024**	**6-30-2024**	0.7255	0.7255
5	**7-1-2024**	**9-30-2024**	0.7984	0.7984
		Highest	1.1605	1.1605

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3861	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3861**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3861	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3861**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2023	7/14/2023	5	10	
2	Site Preparation	Site Preparation	7/15/2023	7/28/2023	5	10	
3	Grading	Grading	7/29/2023	9/8/2023	5	30	

4	Building Construction	Building Construction	9/9/2023	8/31/2024	5	255	
5	Paving	Paving	9/9/2023	10/6/2023	5	20	
6	Architectural Coating	Architectural Coating	8/5/2024	8/31/2024	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 9.42

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 138,090; Non-Residential Outdoor: 46,030; Striped Parking Area: 24,620 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.20	231	0.29
Building Construction	Forklifts	4	7.10	89	0.20
Building Construction	Generator Sets	2	4.70	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.20	97	0.37
Building Construction	Welders	2	4.70	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	15.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	14.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	516.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	203.00	82.00	24.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	12.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	41.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use DPF for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.5000e-004	0.0000	3.5000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.1074	0.0982	1.9000e-004		4.9900e-003	4.9900e-003		4.6400e-003	4.6400e-003	0.0000	16.9960	16.9960	4.7600e-003	0.0000	17.1150
Total	**0.0114**	**0.1074**	**0.0982**	**1.9000e-004**	**3.5000e-004**	**4.9900e-003**	**5.3400e-003**	**5.0000e-005**	**4.6400e-003**	**4.6900e-003**	**0.0000**	**16.9960**	**16.9960**	**4.7600e-003**	**0.0000**	**17.1150**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	9.5000e-004	2.0000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4267	0.4267	0.0000	7.0000e-005	0.4468
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.8000e-004	2.0400e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4745	0.4745	2.0000e-005	2.0000e-005	0.4795
Total	**2.8000e-004**	**1.1300e-003**	**2.2400e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.9012**	**0.9012**	**2.0000e-005**	**9.0000e-005**	**0.9262**

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-004	0.0000	1.6000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.1074	0.0982	1.9000e-004		7.5000e-004	7.5000e-004		7.0000e-004	7.0000e-004	0.0000	16.9960	16.9960	4.7600e-003	0.0000	17.1150
Total	**0.0114**	**0.1074**	**0.0982**	**1.9000e-004**	**1.6000e-004**	**7.5000e-004**	**9.1000e-004**	**2.0000e-005**	**7.0000e-004**	**7.2000e-004**	**0.0000**	**16.9960**	**16.9960**	**4.7600e-003**	**0.0000**	**17.1150**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	9.5000e-004	2.0000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4267	0.4267	0.0000	7.0000e-005	0.4468
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.8000e-004	2.0400e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4745	0.4745	2.0000e-005	2.0000e-005	0.4795
Total	**2.8000e-004**	**1.1300e-003**	**2.2400e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.9012**	**0.9012**	**2.0000e-005**	**9.0000e-005**	**0.9262**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0983**	**6.3300e-003**	**0.1046**	**0.0505**	**5.8200e-003**	**0.0563**	**0.0000**	**16.7254**	**16.7254**	**5.4100e-003**	**0.0000**	**16.8606**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.9000e-004	1.9000e-004	0.0000	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3983	0.3983	0.0000	6.0000e-005	0.4170
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.4500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5694	0.5694	2.0000e-005	2.0000e-005	0.5753
Total	**3.3000e-004**	**1.1100e-003**	**2.6400e-003**	**1.0000e-005**	**8.4000e-004**	**1.0000e-005**	**8.5000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.9677**	**0.9677**	**2.0000e-005**	**8.0000e-005**	**0.9924**

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0442	0.0000	0.0442	0.0227	0.0000	0.0227	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		9.5000e-004	9.5000e-004		8.7000e-004	8.7000e-004	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0442**	**9.5000e-004**	**0.0452**	**0.0227**	**8.7000e-004**	**0.0236**	**0.0000**	**16.7253**	**16.7253**	**5.4100e-003**	**0.0000**	**16.8606**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.9000e-004	1.9000e-004	0.0000	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3983	0.3983	0.0000	6.0000e-005	0.4170
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.4500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5694	0.5694	2.0000e-005	2.0000e-005	0.5753
Total	**3.3000e-004**	**1.1100e-003**	**2.6400e-003**	**1.0000e-005**	**8.4000e-004**	**1.0000e-005**	**8.5000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.9677**	**0.9677**	**2.0000e-005**	**8.0000e-005**	**0.9924**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1383	0.0000	0.1383	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	**0.0498**	**0.5177**	**0.4208**	**9.3000e-004**	**0.1383**	**0.0214**	**0.1597**	**0.0548**	**0.0197**	**0.0745**	**0.0000**	**81.8028**	**81.8028**	**0.0265**	**0.0000**	**82.4642**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.5000e-004	0.0328	6.8400e-003	1.5000e-004	4.4000e-003	3.1000e-004	4.7100e-003	1.2100e-003	2.9000e-004	1.5100e-003	0.0000	14.6798	14.6798	7.0000e-005	2.3100e-003	15.3697
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	7.4000e-004	8.1600e-003	2.0000e-005	2.3900e-003	1.0000e-005	2.4000e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8979	1.8979	7.0000e-005	6.0000e-005	1.9178
Total	**1.6000e-003**	**0.0335**	**0.0150**	**1.7000e-004**	**6.7900e-003**	**3.2000e-004**	**7.1100e-003**	**1.8500e-003**	**3.0000e-004**	**2.1600e-003**	**0.0000**	**16.5777**	**16.5777**	**1.4000e-004**	**2.3700e-003**	**17.2875**

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0622	0.0000	0.0622	0.0247	0.0000	0.0247	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		3.2100e-003	3.2100e-003		2.9500e-003	2.9500e-003	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	**0.0498**	**0.5177**	**0.4208**	**9.3000e-004**	**0.0622**	**3.2100e-003**	**0.0654**	**0.0247**	**2.9500e-003**	**0.0276**	**0.0000**	**81.8027**	**81.8027**	**0.0265**	**0.0000**	**82.4641**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.5000e-004	0.0328	6.8400e-003	1.5000e-004	4.4000e-003	3.1000e-004	4.7100e-003	1.2100e-003	2.9000e-004	1.5100e-003	0.0000	14.6798	14.6798	7.0000e-005	2.3100e-003	15.3697
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	7.4000e-004	8.1600e-003	2.0000e-005	2.3900e-003	1.0000e-005	2.4000e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8979	1.8979	7.0000e-005	6.0000e-005	1.9178
Total	**1.6000e-003**	**0.0335**	**0.0150**	**1.7000e-004**	**6.7900e-003**	**3.2000e-004**	**7.1100e-003**	**1.8500e-003**	**3.0000e-004**	**2.1600e-003**	**0.0000**	**16.5777**	**16.5777**	**1.4000e-004**	**2.3700e-003**	**17.2875**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0739	0.6760	0.7636	1.2700e-003		0.0329	0.0329		0.0310	0.0310	0.0000	108.9166	108.9166	0.0259	0.0000	109.5642
Total	**0.0739**	**0.6760**	**0.7636**	**1.2700e-003**		**0.0329**	**0.0329**		**0.0310**	**0.0310**	**0.0000**	**108.9166**	**108.9166**	**0.0259**	**0.0000**	**109.5642**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	4.8000e-004	1.0000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2142	0.2142	0.0000	3.0000e-005	0.2243
Vendor	3.7000e-003	0.1478	0.0446	6.6000e-004	0.0217	9.4000e-004	0.0226	6.2700e-003	9.0000e-004	7.1700e-003	0.0000	63.7576	63.7576	2.9000e-004	9.5900e-003	66.6225
Worker	0.0284	0.0199	0.2208	5.6000e-004	0.0647	3.4000e-004	0.0650	0.0172	3.1000e-004	0.0175	0.0000	51.3689	51.3689	1.7600e-003	1.6600e-003	51.9085
Total	**0.0321**	**0.1681**	**0.2655**	**1.2200e-003**	**0.0864**	**1.2800e-003**	**0.0877**	**0.0235**	**1.2100e-003**	**0.0247**	**0.0000**	**115.3406**	**115.3406**	**2.0500e-003**	**0.0113**	**118.7553**

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0739	0.6760	0.7636	1.2700e-003		7.1400e-003	7.1400e-003		6.8500e-003	6.8500e-003	0.0000	108.9164	108.9164	0.0259	0.0000	109.5641
Total	**0.0739**	**0.6760**	**0.7636**	**1.2700e-003**		**7.1400e-003**	**7.1400e-003**		**6.8500e-003**	**6.8500e-003**	**0.0000**	**108.9164**	**108.9164**	**0.0259**	**0.0000**	**109.5641**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	4.8000e-004	1.0000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2142	0.2142	0.0000	3.0000e-005	0.2243
Vendor	3.7000e-003	0.1478	0.0446	6.6000e-004	0.0217	9.4000e-004	0.0226	6.2700e-003	9.0000e-004	7.1700e-003	0.0000	63.7576	63.7576	2.9000e-004	9.5900e-003	66.6225
Worker	0.0284	0.0199	0.2208	5.6000e-004	0.0647	3.4000e-004	0.0650	0.0172	3.1000e-004	0.0175	0.0000	51.3689	51.3689	1.7600e-003	1.6600e-003	51.9085
Total	**0.0321**	**0.1681**	**0.2655**	**1.2200e-003**	**0.0864**	**1.2800e-003**	**0.0877**	**0.0235**	**1.2100e-003**	**0.0247**	**0.0000**	**115.3406**	**115.3406**	**2.0500e-003**	**0.0113**	**118.7553**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1513	1.3820	1.6623	2.7700e-003		0.0631	0.0631		0.0593	0.0593	0.0000	238.3004	238.3004	0.0564	0.0000	239.7091
Total	**0.1513**	**1.3820**	**1.6623**	**2.7700e-003**		**0.0631**	**0.0631**		**0.0593**	**0.0593**	**0.0000**	**238.3004**	**238.3004**	**0.0564**	**0.0000**	**239.7091**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	1.0400e-003	2.2000e-004	0.0000	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4599	0.4599	0.0000	7.0000e-005	0.4815
Vendor	7.8600e-003	0.3232	0.0952	1.4300e-003	0.0474	2.0800e-003	0.0495	0.0137	1.9900e-003	0.0157	0.0000	137.3187	137.3187	6.2000e-004	0.0206	143.4817
Worker	0.0569	0.0382	0.4434	1.1800e-003	0.1415	6.9000e-004	0.1422	0.0376	6.4000e-004	0.0383	0.0000	108.5279	108.5279	3.4600e-003	3.3400e-003	109.6100
Total	**0.0648**	**0.3624**	**0.5388**	**2.6100e-003**	**0.1891**	**2.7800e-003**	**0.1919**	**0.0514**	**2.6400e-003**	**0.0540**	**0.0000**	**246.3065**	**246.3065**	**4.0800e-003**	**0.0240**	**253.5733**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1513	1.3820	1.6623	2.7700e-003		0.0136	0.0136		0.0131	0.0131	0.0000	238.3002	238.3002	0.0564	0.0000	239.7088
Total	**0.1513**	**1.3820**	**1.6623**	**2.7700e-003**		**0.0136**	**0.0136**		**0.0131**	**0.0131**	**0.0000**	**238.3002**	**238.3002**	**0.0564**	**0.0000**	**239.7088**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	1.0400e-003	2.2000e-004	0.0000	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4599	0.4599	0.0000	7.0000e-005	0.4815
Vendor	7.8600e-003	0.3232	0.0952	1.4300e-003	0.0474	2.0800e-003	0.0495	0.0137	1.9900e-003	0.0157	0.0000	137.3187	137.3187	6.2000e-004	0.0206	143.4817
Worker	0.0569	0.0382	0.4434	1.1800e-003	0.1415	6.9000e-004	0.1422	0.0376	6.4000e-004	0.0383	0.0000	108.5279	108.5279	3.4600e-003	3.3400e-003	109.6100
Total	**0.0648**	**0.3624**	**0.5388**	**2.6100e-003**	**0.1891**	**2.7800e-003**	**0.1919**	**0.0514**	**2.6400e-003**	**0.0540**	**0.0000**	**246.3065**	**246.3065**	**4.0800e-003**	**0.0240**	**253.5733**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	0.0123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0227**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0269**	**20.0269**	**6.4800e-003**	**0.0000**	**20.1888**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	7.6000e-004	1.6000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3414	0.3414	0.0000	5.0000e-005	0.3574
Vendor	5.0000e-005	1.8000e-003	5.4000e-004	1.0000e-005	2.6000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7775	0.7775	0.0000	1.2000e-004	0.8125
Worker	5.2000e-004	3.7000e-004	4.0800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9489	0.9489	3.0000e-005	3.0000e-005	0.9589
Total	**5.8000e-004**	**2.9300e-003**	**4.7800e-003**	**2.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5900e-003**	**4.3000e-004**	**3.0000e-005**	**4.5000e-004**	**0.0000**	**2.0679**	**2.0679**	**3.0000e-005**	**2.0000e-004**	**2.1288**

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		7.7000e-004	7.7000e-004		7.0000e-004	7.0000e-004	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	0.0123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0227**	**0.1019**	**0.1458**	**2.3000e-004**		**7.7000e-004**	**7.7000e-004**		**7.0000e-004**	**7.0000e-004**	**0.0000**	**20.0268**	**20.0268**	**6.4800e-003**	**0.0000**	**20.1888**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	7.6000e-004	1.6000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3414	0.3414	0.0000	5.0000e-005	0.3574
Vendor	5.0000e-005	1.8000e-003	5.4000e-004	1.0000e-005	2.6000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7775	0.7775	0.0000	1.2000e-004	0.8125
Worker	5.2000e-004	3.7000e-004	4.0800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9489	0.9489	3.0000e-005	3.0000e-005	0.9589
Total	**5.8000e-004**	**2.9300e-003**	**4.7800e-003**	**2.0000e-005**	**1.5500e-003**	**3.0000e-005**	**1.5900e-003**	**4.3000e-004**	**3.0000e-005**	**4.5000e-004**	**0.0000**	**2.0679**	**2.0679**	**3.0000e-005**	**2.0000e-004**	**2.1288**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2989					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	**0.3007**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5569**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.3000e-004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0559	0.0559	0.0000	1.0000e-005	0.0585
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3100e-003	8.8000e-004	0.0102	3.0000e-005	3.2700e-003	2.0000e-005	3.2800e-003	8.7000e-004	1.0000e-005	8.8000e-004	0.0000	2.5051	2.5051	8.0000e-005	8.0000e-005	2.5301
Total	**1.3100e-003**	**1.0100e-003**	**0.0103**	**3.0000e-005**	**3.2900e-003**	**2.0000e-005**	**3.3000e-003**	**8.7000e-004**	**1.0000e-005**	**8.9000e-004**	**0.0000**	**2.5609**	**2.5609**	**8.0000e-005**	**9.0000e-005**	**2.5885**

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2989					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	**0.3007**	**0.0122**	**0.0181**	**3.0000e-005**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5568**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.3000e-004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0559	0.0559	0.0000	1.0000e-005	0.0585
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3100e-003	8.8000e-004	0.0102	3.0000e-005	3.2700e-003	2.0000e-005	3.2800e-003	8.7000e-004	1.0000e-005	8.8000e-004	0.0000	2.5051	2.5051	8.0000e-005	8.0000e-005	2.5301
Total	**1.3100e-003**	**1.0100e-003**	**0.0103**	**3.0000e-005**	**3.2900e-003**	**2.0000e-005**	**3.3000e-003**	**8.7000e-004**	**1.0000e-005**	**8.9000e-004**	**0.0000**	**2.5609**	**2.5609**	**8.0000e-005**	**9.0000e-005**	**2.5885**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Other Asphalt Surfaces	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Parking Lot	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Regional Shopping Center	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3861	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	0.3861	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3861					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**0.3861**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3861					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**0.3861**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction & Operations - Localized Assessment

Tulare County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.00	43,560.00	0
Parking Lot	8.42	Acre	8.42	366,775.20	0
Fast Food Restaurant with Drive Thru	13.75	1000sqft	0.32	13,750.00	0
Regional Shopping Center	78.31	1000sqft	1.80	78,310.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	3			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Localized Screening Analysis - On-site Emissions
Henderson Ave & SR 65 Commercial - Unmitigated Construction & Operations
Full buildout in anticipated earliest year of operations (2024)

Land Use - Based on project description, site plan, and project-specific traffic analysis
Shopping Center increased from 77,585 to 78,310 to account total up to 92,060 total building sq ft
10.54 acres site + 1 acre for off-site improvements

Construction Phase - No building demolition - There will be minor removal, replacement, and relocation of sidewalk and driveway approaches on West Henderson Ave.
Earliest construction schedule: 07/01/2023 - 08/31/2024

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction HP hours.

Trips and VMT - Trip lengths for construction trips updated to 0.25 mile to account for on-site emissions from mobile sources.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition - No building demolition
There will be minor removal, replacement, and relocation of sidewalk and driveway approaches on West Henderson Ave (see supporting calculations for tons of debris estimate).

Grading - The site is expected to balance with no import or export required. Included 2,000 cubic yards export and import to provide a conservative estimate of emissions and to account for small amounts might need to be imported or exported.

Architectural Coating - SJVAPCD Rule 4601 Architectural Coatings

Vehicle Trips - Trip rates based on traffic study (includes 5% internal capture, consistent with traffic study)
Trip lengths for construction trips updated to 0.25 mile to account for on-site and localized emissions from mobile sources.

Area Coating - SJVAPCD Rule 4601 Architectural Coatings

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - SJVAPCD Rule 4601 Architectural Coatings

Mobile Land Use Mitigation - Walkability: project to connect within project site and to adjacent land uses

Area Mitigation -

Energy Mitigation - On-site renewable energy: solar to be included on buildings

Water Mitigation - Calgreen Code and MWELO water conservation compliance

Waste Mitigation - CalRecycle 75% recycling mandate (25% reduction from default baseline)

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	300.00	255.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialImported	0.00	2,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.20
tblOffRoadEquipment	UsageHours	8.00	7.10
tblOffRoadEquipment	UsageHours	8.00	4.70
tblOffRoadEquipment	UsageHours	7.00	8.20
tblOffRoadEquipment	UsageHours	8.00	4.70
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripNumber	3.00	15.00
tblTripsAndVMT	HaulingTripNumber	0.00	14.00
tblTripsAndVMT	HaulingTripNumber	500.00	516.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripLength	10.80	0.25
tblTripsAndVMT	WorkerTripLength	10.80	0.25
tblTripsAndVMT	WorkerTripLength	10.80	0.25
tblTripsAndVMT	WorkerTripLength	10.80	0.25

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	WorkerTripLength	10.80	0.25
tblTripsAndVMT	WorkerTripLength	10.80	0.25
tblVehicleTrips	CC_TL	7.30	0.25
tblVehicleTrips	CC_TL	7.30	0.25
tblVehicleTrips	CC_TL	7.30	0.25
tblVehicleTrips	CC_TL	7.30	0.25
tblVehicleTrips	CNW_TL	7.30	0.25
tblVehicleTrips	CNW_TL	7.30	0.25
tblVehicleTrips	CNW_TL	7.30	0.25
tblVehicleTrips	CNW_TL	7.30	0.25
tblVehicleTrips	CW_TL	9.50	0.25
tblVehicleTrips	CW_TL	9.50	0.25
tblVehicleTrips	CW_TL	9.50	0.25
tblVehicleTrips	CW_TL	9.50	0.25
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	29.00	100.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	ST_TR	616.12	585.31
tblVehicleTrips	ST_TR	46.12	95.70
tblVehicleTrips	SU_TR	472.58	448.95
tblVehicleTrips	SU_TR	21.10	95.70
tblVehicleTrips	WD_TR	470.95	444.11
tblVehicleTrips	WD_TR	37.75	95.70

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.6493	34.8699	35.6634	0.0628	19.6610	1.4251	20.9271	10.1035	1.3111	11.2684	0.0000	6,083.2102	6,083.2102	1.9478	0.0469	6,135.3128
2024	32.3444	18.2148	22.8198	0.0373	0.0699	0.7845	0.8544	0.0196	0.7415	0.7611	0.0000	3,564.5744	3,564.5744	0.7570	0.0455	3,597.0406
Maximum	**32.3444**	**34.8699**	**35.6634**	**0.0628**	**19.6610**	**1.4251**	**20.9271**	**10.1035**	**1.3111**	**11.2684**	**0.0000**	**6,083.2102**	**6,083.2102**	**1.9478**	**0.0469**	**6,135.3128**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.6493	34.8699	35.6634	0.0628	8.8496	1.4251	10.1157	4.5472	1.3111	5.7120	0.0000	6,083.2102	6,083.2102	1.9478	0.0469	6,135.3128
2024	32.3444	18.2148	22.8198	0.0373	0.0699	0.7845	0.8544	0.0196	0.7415	0.7611	0.0000	3,564.5744	3,564.5744	0.7570	0.0455	3,597.0405
Maximum	**32.3444**	**34.8699**	**35.6634**	**0.0628**	**8.8496**	**1.4251**	**10.1157**	**4.5472**	**1.3111**	**5.7120**	**0.0000**	**6,083.2102**	**6,083.2102**	**1.9478**	**0.0469**	**6,135.3128**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.79	0.00	49.64	54.89	0.00	46.19	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2802	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0222	0.0222	6.0000e-005		0.0237
Energy	0.1099	0.9990	0.8391	5.9900e-003		0.0759	0.0759		0.0759	0.0759		1,198.7733	1,198.7733	0.0230	0.0220	1,205.8970
Mobile	35.4890	14.9279	86.7631	0.0566	2.9912	0.0862	3.0774	0.7986	0.0799	0.8785		5,770.7309	5,770.7309	1.8768	1.1163	6,150.2952
Total	**37.8791**	**15.9270**	**87.6126**	**0.0626**	**2.9912**	**0.1621**	**3.1533**	**0.7986**	**0.1559**	**0.9544**		**6,969.5263**	**6,969.5263**	**1.8999**	**1.1382**	**7,356.2159**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2802	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0222	0.0222	6.0000e-005		0.0237
Energy	0.1099	0.9990	0.8391	5.9900e-003		0.0759	0.0759		0.0759	0.0759		1,198.7733	1,198.7733	0.0230	0.0220	1,205.8970
Mobile	35.4774	14.8928	86.5287	0.0560	2.9314	0.0857	3.0171	0.7826	0.0795	0.8620		5,708.5026	5,708.5026	1.8748	1.1137	6,087.2641
Total	**37.8675**	**15.8919**	**87.3782**	**0.0619**	**2.9314**	**0.1617**	**3.0930**	**0.7826**	**0.1554**	**0.9380**		**6,907.2981**	**6,907.2981**	**1.8978**	**1.1357**	**7,293.1848**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.03	0.22	0.27	0.98	2.00	0.30	1.91	2.00	0.29	1.72	0.00	0.89	0.89	0.11	0.22	0.86

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2023	7/14/2023	5	10	
2	Site Preparation	Site Preparation	7/15/2023	7/28/2023	5	10	
3	Grading	Grading	7/29/2023	9/8/2023	5	30	
4	Building Construction	Building Construction	9/9/2023	8/31/2024	5	255	
5	Paving	Paving	9/9/2023	10/6/2023	5	20	
6	Architectural Coating	Architectural Coating	8/5/2024	8/31/2024	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 9.42

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 138,090; Non-Residential Outdoor: 46,030; Striped Parking Area: 24,620 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.20	231	0.29
Building Construction	Forklifts	4	7.10	89	0.20
Building Construction	Generator Sets	2	4.70	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.20	97	0.37
Building Construction	Welders	2	4.70	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	15.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	14.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	516.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Building Construction	12	203.00	82.00	24.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	12.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	41.00	0.00	2.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0706	0.0000	0.0706	0.0107	0.0000	0.0107			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**0.0706**	**0.9975**	**1.0682**	**0.0107**	**0.9280**	**0.9387**		**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8200e-003	0.0299	0.0248	5.0000e-005	3.6000e-004	4.0000e-005	4.0000e-004	1.0000e-004	4.0000e-005	1.4000e-004		5.6097	5.6097	9.0000e-005	8.8000e-004	5.8749
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0325	8.5700e-003	0.0791	5.0000e-005	3.0000e-003	9.0000e-005	3.0800e-003	8.1000e-004	8.0000e-005	8.9000e-004		5.5560	5.5560	1.8800e-003	9.9000e-004	5.8982
Total	**0.0343**	**0.0385**	**0.1038**	**1.0000e-004**	**3.3600e-003**	**1.3000e-004**	**3.4800e-003**	**9.1000e-004**	**1.2000e-004**	**1.0300e-003**		**11.1657**	**11.1657**	**1.9700e-003**	**1.8700e-003**	**11.7730**

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0318	0.0000	0.0318	4.8100e-003	0.0000	4.8100e-003			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**0.0318**	**0.9975**	**1.0293**	**4.8100e-003**	**0.9280**	**0.9328**	**0.0000**	**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8200e-003	0.0299	0.0248	5.0000e-005	3.6000e-004	4.0000e-005	4.0000e-004	1.0000e-004	4.0000e-005	1.4000e-004		5.6097	5.6097	9.0000e-005	8.8000e-004	5.8749
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0325	8.5700e-003	0.0791	5.0000e-005	3.0000e-003	9.0000e-005	3.0800e-003	8.1000e-004	8.0000e-005	8.9000e-004		5.5560	5.5560	1.8800e-003	9.9000e-004	5.8982
Total	**0.0343**	**0.0385**	**0.1038**	**1.0000e-004**	**3.3600e-003**	**1.3000e-004**	**3.4800e-003**	**9.1000e-004**	**1.2000e-004**	**1.0300e-003**		**11.1657**	**11.1657**	**1.9700e-003**	**1.8700e-003**	**11.7730**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7000e-003	0.0279	0.0231	5.0000e-005	3.4000e-004	4.0000e-005	3.7000e-004	9.0000e-005	3.0000e-005	1.3000e-004		5.2357	5.2357	9.0000e-005	8.2000e-004	5.4832
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0390	0.0103	0.0949	7.0000e-005	3.6000e-003	1.1000e-004	3.7000e-003	9.8000e-004	1.0000e-004	1.0700e-003		6.6672	6.6672	2.2500e-003	1.1900e-003	7.0778
Total	**0.0407**	**0.0382**	**0.1180**	**1.2000e-004**	**3.9400e-003**	**1.5000e-004**	**4.0700e-003**	**1.0700e-003**	**1.3000e-004**	**1.2000e-003**		**11.9029**	**11.9029**	**2.3400e-003**	**2.0100e-003**	**12.5610**

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**8.8457**	**1.2660**	**10.1117**	**4.5461**	**1.1647**	**5.7108**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7000e-003	0.0279	0.0231	5.0000e-005	3.4000e-004	4.0000e-005	3.7000e-004	9.0000e-005	3.0000e-005	1.3000e-004		5.2357	5.2357	9.0000e-005	8.2000e-004	5.4832
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0390	0.0103	0.0949	7.0000e-005	3.6000e-003	1.1000e-004	3.7000e-003	9.8000e-004	1.0000e-004	1.0700e-003		6.6672	6.6672	2.2500e-003	1.1900e-003	7.0778
Total	**0.0407**	**0.0382**	**0.1180**	**1.2000e-004**	**3.9400e-003**	**1.5000e-004**	**4.0700e-003**	**1.0700e-003**	**1.3000e-004**	**1.2000e-003**		**11.9029**	**11.9029**	**2.3400e-003**	**2.0100e-003**	**12.5610**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2187	0.0000	9.2187	3.6560	0.0000	3.6560			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**9.2187**	**1.4245**	**10.6432**	**3.6560**	**1.3105**	**4.9666**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0208	0.3428	0.2841	6.1000e-004	4.1300e-003	4.5000e-004	4.5800e-003	1.1700e-003	4.3000e-004	1.5900e-003		64.3245	64.3245	1.0500e-003	0.0101	67.3650
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0434	0.0114	0.1054	7.0000e-005	4.0000e-003	1.2000e-004	4.1100e-003	1.0900e-003	1.1000e-004	1.1900e-003		7.4080	7.4080	2.5000e-003	1.3200e-003	7.8643
Total	**0.0642**	**0.3543**	**0.3896**	**6.8000e-004**	**8.1300e-003**	**5.7000e-004**	**8.6900e-003**	**2.2600e-003**	**5.4000e-004**	**2.7800e-003**		**71.7325**	**71.7325**	**3.5500e-003**	**0.0114**	**75.2292**

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1484	0.0000	4.1484	1.6452	0.0000	1.6452			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**4.1484**	**1.4245**	**5.5729**	**1.6452**	**1.3105**	**2.9558**	**0.0000**	**6,011.477 7**	**6,011.477 7**	**1.9442**		**6,060.083 6**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0208	0.3428	0.2841	6.1000e-004	4.1300e-003	4.5000e-004	4.5800e-003	1.1700e-003	4.3000e-004	1.5900e-003		64.3245	64.3245	1.0500e-003	0.0101	67.3650
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0434	0.0114	0.1054	7.0000e-005	4.0000e-003	1.2000e-004	4.1100e-003	1.0900e-003	1.1000e-004	1.1900e-003		7.4080	7.4080	2.5000e-003	1.3200e-003	7.8643
Total	**0.0642**	**0.3543**	**0.3896**	**6.8000e-004**	**8.1300e-003**	**5.7000e-004**	**8.6900e-003**	**2.2600e-003**	**5.4000e-004**	**2.7800e-003**		**71.7325**	**71.7325**	**3.5500e-003**	**0.0114**	**75.2292**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8480	16.8999	19.0887	0.0317		0.8225	0.8225		0.7739	0.7739		3,001.498 8	3,001.498 8	0.7139		3,019.347 2
Total	**1.8480**	**16.8999**	**19.0887**	**0.0317**		**0.8225**	**0.8225**		**0.7739**	**0.7739**		**3,001.498 8**	**3,001.498 8**	**0.7139**		**3,019.347 2**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1000e-004	1.8800e-003	1.5500e-003	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005		0.3520	0.3520	1.0000e-005	6.0000e-005	0.3686
Vendor	0.0582	1.0751	0.7914	1.8600e-003	0.0211	1.3600e-003	0.0225	6.3000e-003	1.3000e-003	7.6100e-003		196.4134	196.4134	3.4100e-003	0.0306	205.6112
Worker	0.4402	0.1159	1.0700	7.4000e-004	0.0406	1.1800e-003	0.0417	0.0110	1.0900e-003	0.0121		75.1915	75.1915	0.0254	0.0134	79.8222
Total	**0.4985**	**1.1929**	**1.8629**	**2.6000e-003**	**0.0617**	**2.5400e-003**	**0.0643**	**0.0173**	**2.3900e-003**	**0.0197**		**271.9569**	**271.9569**	**0.0288**	**0.0441**	**285.8021**

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8480	16.8999	19.0887	0.0317		0.8225	0.8225		0.7739	0.7739	0.0000	3,001.4988	3,001.4988	0.7139		3,019.3472
Total	**1.8480**	**16.8999**	**19.0887**	**0.0317**		**0.8225**	**0.8225**		**0.7739**	**0.7739**	**0.0000**	**3,001.4988**	**3,001.4988**	**0.7139**		**3,019.3472**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1000e-004	1.8800e-003	1.5500e-003	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005		0.3520	0.3520	1.0000e-005	6.0000e-005	0.3686
Vendor	0.0582	1.0751	0.7914	1.8600e-003	0.0211	1.3600e-003	0.0225	6.3000e-003	1.3000e-003	7.6100e-003		196.4134	196.4134	3.4100e-003	0.0306	205.6112
Worker	0.4402	0.1159	1.0700	7.4000e-004	0.0406	1.1800e-003	0.0417	0.0110	1.0900e-003	0.0121		75.1915	75.1915	0.0254	0.0134	79.8222
Total	**0.4985**	**1.1929**	**1.8629**	**2.6000e-003**	**0.0617**	**2.5400e-003**	**0.0643**	**0.0173**	**2.3900e-003**	**0.0197**		**271.9569**	**271.9569**	**0.0288**	**0.0441**	**285.8021**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7291	15.7940	18.9980	0.0317		0.7208	0.7208		0.6780	0.6780		3,002.0716	3,002.0716	0.7098		3,019.8174
Total	**1.7291**	**15.7940**	**18.9980**	**0.0317**		**0.7208**	**0.7208**		**0.6780**	**0.6780**		**3,002.0716**	**3,002.0716**	**0.7098**		**3,019.8174**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1000e-004	1.8600e-003	1.5500e-003	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005		0.3453	0.3453	1.0000e-005	5.0000e-005	0.3616
Vendor	0.0573	1.0706	0.7815	1.8200e-003	0.0211	1.3600e-003	0.0225	6.3000e-003	1.3000e-003	7.6100e-003		193.0290	193.0290	3.3500e-003	0.0301	202.0665
Worker	0.4024	0.1061	1.0208	7.2000e-004	0.0406	1.1200e-003	0.0417	0.0110	1.0300e-003	0.0120		72.6421	72.6421	0.0232	0.0127	77.0125
Total	**0.4597**	**1.1786**	**1.8039**	**2.5400e-003**	**0.0617**	**2.4800e-003**	**0.0642**	**0.0173**	**2.3300e-003**	**0.0197**		**266.0163**	**266.0163**	**0.0266**	**0.0428**	**279.4405**

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7291	15.7940	18.9980	0.0317		0.7208	0.7208		0.6780	0.6780	0.0000	3,002.0716	3,002.0716	0.7098		3,019.8174
Total	**1.7291**	**15.7940**	**18.9980**	**0.0317**		**0.7208**	**0.7208**		**0.6780**	**0.6780**	**0.0000**	**3,002.0716**	**3,002.0716**	**0.7098**		**3,019.8174**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1000e-004	1.8600e-003	1.5500e-003	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005		0.3453	0.3453	1.0000e-005	5.0000e-005	0.3616
Vendor	0.0573	1.0706	0.7815	1.8200e-003	0.0211	1.3600e-003	0.0225	6.3000e-003	1.3000e-003	7.6100e-003		193.0290	193.0290	3.3500e-003	0.0301	202.0665
Worker	0.4024	0.1061	1.0208	7.2000e-004	0.0406	1.1200e-003	0.0417	0.0110	1.0300e-003	0.0120		72.6421	72.6421	0.0232	0.0127	77.0125
Total	**0.4597**	**1.1786**	**1.8039**	**2.5400e-003**	**0.0617**	**2.4800e-003**	**0.0642**	**0.0173**	**2.3300e-003**	**0.0197**		**266.0163**	**266.0163**	**0.0266**	**0.0428**	**279.4405**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	1.2340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2668**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.3000e-004	0.0120	9.9100e-003	2.0000e-005	1.4000e-004	2.0000e-005	1.6000e-004	4.0000e-005	1.0000e-005	6.0000e-005		2.2439	2.2439	4.0000e-005	3.5000e-004	2.3499
Vendor	2.8400e-003	0.0524	0.0386	9.0000e-005	1.0300e-003	7.0000e-005	1.1000e-003	3.1000e-004	6.0000e-005	3.7000e-004		9.5811	9.5811	1.7000e-004	1.4900e-003	10.0298
Worker	0.0325	8.5700e-003	0.0791	5.0000e-005	3.0000e-003	9.0000e-005	3.0800e-003	8.1000e-004	8.0000e-005	8.9000e-004		5.5560	5.5560	1.8800e-003	9.9000e-004	5.8982
Total	**0.0361**	**0.0730**	**0.1276**	**1.6000e-004**	**4.1700e-003**	**1.8000e-004**	**4.3400e-003**	**1.1600e-003**	**1.5000e-004**	**1.3200e-003**		**17.3811**	**17.3811**	**2.0900e-003**	**2.8300e-003**	**18.2780**

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	1.2340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2668**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.3000e-004	0.0120	9.9100e-003	2.0000e-005	1.4000e-004	2.0000e-005	1.6000e-004	4.0000e-005	1.0000e-005	6.0000e-005		2.2439	2.2439	4.0000e-005	3.5000e-004	2.3499
Vendor	2.8400e-003	0.0524	0.0386	9.0000e-005	1.0300e-003	7.0000e-005	1.1000e-003	3.1000e-004	6.0000e-005	3.7000e-004		9.5811	9.5811	1.7000e-004	1.4900e-003	10.0298
Worker	0.0325	8.5700e-003	0.0791	5.0000e-005	3.0000e-003	9.0000e-005	3.0800e-003	8.1000e-004	8.0000e-005	8.9000e-004		5.5560	5.5560	1.8800e-003	9.9000e-004	5.8982
Total	**0.0361**	**0.0730**	**0.1276**	**1.6000e-004**	**4.1700e-003**	**1.8000e-004**	**4.3400e-003**	**1.1600e-003**	**1.5000e-004**	**1.3200e-003**		**17.3811**	**17.3811**	**2.0900e-003**	**2.8300e-003**	**18.2780**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.8934					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**30.0742**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2000e-004	1.9800e-003	1.6400e-003	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005		0.3668	0.3668	1.0000e-005	6.0000e-005	0.3842
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0813	0.0214	0.2062	1.5000e-004	8.1900e-003	2.3000e-004	8.4200e-003	2.2200e-003	2.1000e-004	2.4300e-003		14.6716	14.6716	4.6900e-003	2.5700e-003	15.5542
Total	**0.0814**	**0.0234**	**0.2078**	**1.5000e-004**	**8.2100e-003**	**2.3000e-004**	**8.4500e-003**	**2.2300e-003**	**2.1000e-004**	**2.4400e-003**		**15.0384**	**15.0384**	**4.7000e-003**	**2.6300e-003**	**15.9384**

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.8934					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**30.0742**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2000e-004	1.9800e-003	1.6400e-003	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005		0.3668	0.3668	1.0000e-005	6.0000e-005	0.3842
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0813	0.0214	0.2062	1.5000e-004	8.1900e-003	2.3000e-004	8.4200e-003	2.2200e-003	2.1000e-004	2.4300e-003		14.6716	14.6716	4.6900e-003	2.5700e-003	15.5542
Total	**0.0814**	**0.0234**	**0.2078**	**1.5000e-004**	**8.2100e-003**	**2.3000e-004**	**8.4500e-003**	**2.2300e-003**	**2.1000e-004**	**2.4400e-003**		**15.0384**	**15.0384**	**4.7000e-003**	**2.6300e-003**	**15.9384**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	35.4774	14.8928	86.5287	0.0560	2.9314	0.0857	3.0171	0.7826	0.0795	0.8620		5,708.502 6	5,708.502 6	1.8748	1.1137	6,087.264 1
Unmitigated	35.4890	14.9279	86.7631	0.0566	2.9912	0.0862	3.0774	0.7986	0.0799	0.8785		5,770.730 9	5,770.730 9	1.8768	1.1163	6,150.295 2

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	6,106.51	8,048.01	6173.06	581,797	570,161
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	7,494.27	7,494.27	7494.27	681,978	668,339
Total	13,600.78	15,542.28	13,667.33	1,263,776	1,238,500

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	0.25	0.25	0.25	2.20	78.80	19.00	100	0	0
Other Asphalt Surfaces	0.25	0.25	0.25	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	0.25	0.25	0.25	0.00	0.00	0.00	0	0	0
Regional Shopping Center	0.25	0.25	0.25	16.30	64.70	19.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Other Asphalt Surfaces	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Parking Lot	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Regional Shopping Center	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1099	0.9990	0.8391	5.9900e-003		0.0759	0.0759		0.0759	0.0759		1,198.7733	1,198.7733	0.0230	0.0220	1,205.8970
NaturalGas Unmitigated	0.1099	0.9990	0.8391	5.9900e-003		0.0759	0.0759		0.0759	0.0759		1,198.7733	1,198.7733	0.0230	0.0220	1,205.8970

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	7913.22	0.0853	0.7758	0.6517	4.6500e-003		0.0590	0.0590		0.0590	0.0590		930.9670	930.9670	0.0178	0.0171	936.4992
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2276.35	0.0246	0.2232	0.1875	1.3400e-003		0.0170	0.0170		0.0170	0.0170		267.8063	267.8063	5.1300e-003	4.9100e-003	269.3978
Total		**0.1099**	**0.9990**	**0.8391**	**5.9900e-003**		**0.0759**	**0.0759**		**0.0759**	**0.0759**		**1,198.7733**	**1,198.7733**	**0.0230**	**0.0220**	**1,205.8970**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	7.91322	0.0853	0.7758	0.6517	4.6500e-003		0.0590	0.0590		0.0590	0.0590		930.9670	930.9670	0.0178	0.0171	936.4992
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.27635	0.0246	0.2232	0.1875	1.3400e-003		0.0170	0.0170		0.0170	0.0170		267.8063	267.8063	5.1300e-003	4.9100e-003	269.3978
Total		**0.1099**	**0.9990**	**0.8391**	**5.9900e-003**		**0.0759**	**0.0759**		**0.0759**	**0.0759**		**1,198.7733**	**1,198.7733**	**0.0230**	**0.0220**	**1,205.8970**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2802	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0222	0.0222	6.0000e-005		0.0237
Unmitigated	2.2802	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0222	0.0222	6.0000e-005		0.0237

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.6000e-004	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0222	0.0222	6.0000e-005		0.0237
Total	**2.2802**	**9.0000e-005**	**0.0103**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0222**	**0.0222**	**6.0000e-005**		**0.0237**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.6000e-004	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0222	0.0222	6.0000e-005		0.0237
Total	**2.2802**	**9.0000e-005**	**0.0103**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0222**	**0.0222**	**6.0000e-005**		**0.0237**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction & Operations - Localized Assessment

Tulare County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.00	43,560.00	0
Parking Lot	8.42	Acre	8.42	366,775.20	0
Fast Food Restaurant with Drive Thru	13.75	1000sqft	0.32	13,750.00	0
Regional Shopping Center	78.31	1000sqft	1.80	78,310.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	3			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Localized Screening Analysis - On-site Emissions
Henderson Ave & SR 65 Commercial - Unmitigated Construction & Operations
Full buildout in anticipated earliest year of operations (2024)

Land Use - Based on project description, site plan, and project-specific traffic analysis
Shopping Center increased from 77,585 to 78,310 to account total up to 92,060 total building sq ft
10.54 acres site + 1 acre for off-site improvements

Construction Phase - No building demolition - There will be minor removal, replacement, and relocation of sidewalk and driveway approaches on West Henderson Ave.
Earliest construction schedule: 07/01/2023 - 08/31/2024

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction HP hours.

Trips and VMT - Trip lengths for construction trips updated to 0.25 mile to account for on-site emissions from mobile sources.

Demolition - No building demolition
There will be minor removal, replacement, and relocation of sidewalk and driveway approaches on West Henderson Ave (see supporting calculations for tons of debris estimate).

Grading - The site is expected to balance with no import or export required. Included 2,000 cubic yards export and import to provide a conservative estimate of emissions and to account for small amounts might need to be imported or exported.

Architectural Coating - SJVAPCD Rule 4601 Architectural Coatings

Vehicle Trips - Trip rates based on traffic study (includes 5% internal capture, consistent with traffic study)
Trip lengths for construction trips updated to 0.25 mile to account for on-site and localized emissions from mobile sources.

Area Coating - SJVAPCD Rule 4601 Architectural Coatings

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - SJVAPCD Rule 4601 Architectural Coatings

Mobile Land Use Mitigation - Walkability: project to connect within project site and to adjacent land uses

Area Mitigation -

Energy Mitigation - On-site renewable energy: solar to be included on buildings

Water Mitigation - Calgreen Code and MWELO water conservation compliance

Waste Mitigation - CalRecycle 75% recycling mandate (25% reduction from default baseline)

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	300.00	255.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialImported	0.00	2,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.20
tblOffRoadEquipment	UsageHours	8.00	7.10
tblOffRoadEquipment	UsageHours	8.00	4.70
tblOffRoadEquipment	UsageHours	7.00	8.20
tblOffRoadEquipment	UsageHours	8.00	4.70
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripNumber	3.00	15.00
tblTripsAndVMT	HaulingTripNumber	0.00	14.00
tblTripsAndVMT	HaulingTripNumber	500.00	516.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripLength	7.30	0.25
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripLength	10.80	0.25
tblTripsAndVMT	WorkerTripLength	10.80	0.25
tblTripsAndVMT	WorkerTripLength	10.80	0.25
tblTripsAndVMT	WorkerTripLength	10.80	0.25

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	WorkerTripLength	10.80	0.25
tblTripsAndVMT	WorkerTripLength	10.80	0.25
tblVehicleTrips	CC_TL	7.30	0.25
tblVehicleTrips	CC_TL	7.30	0.25
tblVehicleTrips	CC_TL	7.30	0.25
tblVehicleTrips	CC_TL	7.30	0.25
tblVehicleTrips	CNW_TL	7.30	0.25
tblVehicleTrips	CNW_TL	7.30	0.25
tblVehicleTrips	CNW_TL	7.30	0.25
tblVehicleTrips	CNW_TL	7.30	0.25
tblVehicleTrips	CW_TL	9.50	0.25
tblVehicleTrips	CW_TL	9.50	0.25
tblVehicleTrips	CW_TL	9.50	0.25
tblVehicleTrips	CW_TL	9.50	0.25
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	29.00	100.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	ST_TR	616.12	585.31
tblVehicleTrips	ST_TR	46.12	95.70
tblVehicleTrips	SU_TR	472.58	448.95
tblVehicleTrips	SU_TR	21.10	95.70
tblVehicleTrips	WD_TR	470.95	444.11
tblVehicleTrips	WD_TR	37.75	95.70

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.4804	34.9003	36.0935	0.0628	19.6610	1.4251	20.9271	10.1035	1.3111	11.2684	0.0000	6,084.1003	6,084.1003	1.9486	0.0492	6,136.3324
2024	32.1709	18.3116	23.2762	0.0373	0.0699	0.7845	0.8545	0.0196	0.7416	0.7611	0.0000	3,562.2430	3,562.2430	0.7668	0.0478	3,595.6542
Maximum	**32.1709**	**34.9003**	**36.0935**	**0.0628**	**19.6610**	**1.4251**	**20.9271**	**10.1035**	**1.3111**	**11.2684**	**0.0000**	**6,084.1003**	**6,084.1003**	**1.9486**	**0.0492**	**6,136.3324**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.4804	34.9003	36.0935	0.0628	8.8496	1.4251	10.1158	4.5472	1.3111	5.7120	0.0000	6,084.1003	6,084.1003	1.9486	0.0492	6,136.3323
2024	32.1709	18.3116	23.2762	0.0373	0.0699	0.7845	0.8545	0.0196	0.7416	0.7611	0.0000	3,562.2430	3,562.2430	0.7668	0.0478	3,595.6542
Maximum	**32.1709**	**34.9003**	**36.0935**	**0.0628**	**8.8496**	**1.4251**	**10.1158**	**4.5472**	**1.3111**	**5.7120**	**0.0000**	**6,084.1003**	**6,084.1003**	**1.9486**	**0.0492**	**6,136.3323**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.79	0.00	49.64	54.89	0.00	46.19	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2802	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0222	0.0222	6.0000e-005		0.0237
Energy	0.1099	0.9990	0.8391	5.9900e-003		0.0759	0.0759		0.0759	0.0759		1,198.7733	1,198.7733	0.0230	0.0220	1,205.8970
Mobile	23.3146	16.7719	115.5884	0.0546	2.9912	0.0867	3.0779	0.7986	0.0804	0.8790		5,576.9493	5,576.9493	2.5152	1.2280	6,005.7655
Total	**25.7047**	**17.7710**	**116.4379**	**0.0606**	**2.9912**	**0.1627**	**3.1539**	**0.7986**	**0.1564**	**0.9549**		**6,775.7448**	**6,775.7448**	**2.5382**	**1.2500**	**7,211.6861**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2802	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0222	0.0222	6.0000e-005		0.0237
Energy	0.1099	0.9990	0.8391	5.9900e-003		0.0759	0.0759		0.0759	0.0759		1,198.7733	1,198.7733	0.0230	0.0220	1,205.8970
Mobile	23.3028	16.7326	115.3884	0.0541	2.9314	0.0862	3.0176	0.7826	0.0800	0.8626		5,520.1610	5,520.1610	2.5132	1.2253	5,948.1336
Total	**25.6929**	**17.7317**	**116.2379**	**0.0601**	**2.9314**	**0.1622**	**3.0936**	**0.7826**	**0.1559**	**0.9385**		**6,718.9565**	**6,718.9565**	**2.5363**	**1.2473**	**7,154.0542**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.05	0.22	0.17	0.91	2.00	0.29	1.91	2.00	0.29	1.72	0.00	0.84	0.84	0.08	0.21	0.80

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2023	7/14/2023	5	10	
2	Site Preparation	Site Preparation	7/15/2023	7/28/2023	5	10	
3	Grading	Grading	7/29/2023	9/8/2023	5	30	
4	Building Construction	Building Construction	9/9/2023	8/31/2024	5	255	
5	Paving	Paving	9/9/2023	10/6/2023	5	20	
6	Architectural Coating	Architectural Coating	8/5/2024	8/31/2024	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 9.42

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 138,090; Non-Residential Outdoor: 46,030; Striped Parking Area: 24,620 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.20	231	0.29
Building Construction	Forklifts	4	7.10	89	0.20
Building Construction	Generator Sets	2	4.70	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.20	97	0.37
Building Construction	Welders	2	4.70	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	15.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	14.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	516.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Building Construction	12	203.00	82.00	24.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	12.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	41.00	0.00	2.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0706	0.0000	0.0706	0.0107	0.0000	0.0107			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**0.0706**	**0.9975**	**1.0682**	**0.0107**	**0.9280**	**0.9387**		**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5800e-003	0.0324	0.0256	5.0000e-005	3.6000e-004	4.0000e-005	4.0000e-004	1.0000e-004	4.0000e-005	1.4000e-004		5.7292	5.7292	8.0000e-005	9.0000e-004	5.9997
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0214	0.0100	0.1055	5.0000e-005	3.0000e-003	9.0000e-005	3.0800e-003	8.1000e-004	8.0000e-005	8.9000e-004		5.1958	5.1958	2.5500e-003	1.1100e-003	5.5894
Total	**0.0230**	**0.0424**	**0.1311**	**1.0000e-004**	**3.3600e-003**	**1.3000e-004**	**3.4800e-003**	**9.1000e-004**	**1.2000e-004**	**1.0300e-003**		**10.9250**	**10.9250**	**2.6300e-003**	**2.0100e-003**	**11.5890**

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0318	0.0000	0.0318	4.8100e-003	0.0000	4.8100e-003			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**0.0318**	**0.9975**	**1.0293**	**4.8100e-003**	**0.9280**	**0.9328**	**0.0000**	**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5800e-003	0.0324	0.0256	5.0000e-005	3.6000e-004	4.0000e-005	4.0000e-004	1.0000e-004	4.0000e-005	1.4000e-004		5.7292	5.7292	8.0000e-005	9.0000e-004	5.9997
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0214	0.0100	0.1055	5.0000e-005	3.0000e-003	9.0000e-005	3.0800e-003	8.1000e-004	8.0000e-005	8.9000e-004		5.1958	5.1958	2.5500e-003	1.1100e-003	5.5894
Total	**0.0230**	**0.0424**	**0.1311**	**1.0000e-004**	**3.3600e-003**	**1.3000e-004**	**3.4800e-003**	**9.1000e-004**	**1.2000e-004**	**1.0300e-003**		**10.9250**	**10.9250**	**2.6300e-003**	**2.0100e-003**	**11.5890**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4800e-003	0.0302	0.0239	5.0000e-005	3.4000e-004	4.0000e-005	3.8000e-004	9.0000e-005	4.0000e-005	1.3000e-004		5.3473	5.3473	7.0000e-005	8.4000e-004	5.5997
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0257	0.0120	0.1266	6.0000e-005	3.6000e-003	1.1000e-004	3.7000e-003	9.8000e-004	1.0000e-004	1.0700e-003		6.2350	6.2350	3.0600e-003	1.3300e-003	6.7072
Total	**0.0271**	**0.0423**	**0.1505**	**1.1000e-004**	**3.9400e-003**	**1.5000e-004**	**4.0800e-003**	**1.0700e-003**	**1.4000e-004**	**1.2000e-003**		**11.5823**	**11.5823**	**3.1300e-003**	**2.1700e-003**	**12.3069**

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**8.8457**	**1.2660**	**10.1117**	**4.5461**	**1.1647**	**5.7108**	**0.0000**	**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4800e-003	0.0302	0.0239	5.0000e-005	3.4000e-004	4.0000e-005	3.8000e-004	9.0000e-005	4.0000e-005	1.3000e-004		5.3473	5.3473	7.0000e-005	8.4000e-004	5.5997
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0257	0.0120	0.1266	6.0000e-005	3.6000e-003	1.1000e-004	3.7000e-003	9.8000e-004	1.0000e-004	1.0700e-003		6.2350	6.2350	3.0600e-003	1.3300e-003	6.7072
Total	**0.0271**	**0.0423**	**0.1505**	**1.1000e-004**	**3.9400e-003**	**1.5000e-004**	**4.0800e-003**	**1.0700e-003**	**1.4000e-004**	**1.2000e-003**		**11.5823**	**11.5823**	**3.1300e-003**	**2.1700e-003**	**12.3069**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2187	0.0000	9.2187	3.6560	0.0000	3.6560			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**9.2187**	**1.4245**	**10.6432**	**3.6560**	**1.3105**	**4.9666**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0181	0.3713	0.2933	6.2000e-004	4.1300e-003	4.8000e-004	4.6100e-003	1.1700e-003	4.6000e-004	1.6200e-003		65.6948	65.6948	9.2000e-004	0.0103	68.7963
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0285	0.0134	0.1407	7.0000e-005	4.0000e-003	1.2000e-004	4.1100e-003	1.0900e-003	1.1000e-004	1.1900e-003		6.9278	6.9278	3.4000e-003	1.4800e-003	7.4525
Total	**0.0466**	**0.3847**	**0.4340**	**6.9000e-004**	**8.1300e-003**	**6.0000e-004**	**8.7200e-003**	**2.2600e-003**	**5.7000e-004**	**2.8100e-003**		**72.6226**	**72.6226**	**4.3200e-003**	**0.0118**	**76.2488**

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1484	0.0000	4.1484	1.6452	0.0000	1.6452			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**4.1484**	**1.4245**	**5.5729**	**1.6452**	**1.3105**	**2.9558**	**0.0000**	**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0181	0.3713	0.2933	6.2000e-004	4.1300e-003	4.8000e-004	4.6100e-003	1.1700e-003	4.6000e-004	1.6200e-003		65.6948	65.6948	9.2000e-004	0.0103	68.7963
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0285	0.0134	0.1407	7.0000e-005	4.0000e-003	1.2000e-004	4.1100e-003	1.0900e-003	1.1000e-004	1.1900e-003		6.9278	6.9278	3.4000e-003	1.4800e-003	7.4525
Total	**0.0466**	**0.3847**	**0.4340**	**6.9000e-004**	**8.1300e-003**	**6.0000e-004**	**8.7200e-003**	**2.2600e-003**	**5.7000e-004**	**2.8100e-003**		**72.6226**	**72.6226**	**4.3200e-003**	**0.0118**	**76.2488**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8480	16.8999	19.0887	0.0317		0.8225	0.8225		0.7739	0.7739		3,001.4988	3,001.4988	0.7139		3,019.3472
Total	**1.8480**	**16.8999**	**19.0887**	**0.0317**		**0.8225**	**0.8225**		**0.7739**	**0.7739**		**3,001.4988**	**3,001.4988**	**0.7139**		**3,019.3472**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0000e-004	2.0300e-003	1.6100e-003	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005		0.3595	0.3595	1.0000e-005	6.0000e-005	0.3765
Vendor	0.0516	1.1498	0.8345	1.8900e-003	0.0211	1.4500e-003	0.0226	6.3000e-003	1.3800e-003	7.6900e-003		199.7470	199.7470	3.2000e-003	0.0312	209.1091
Worker	0.2893	0.1358	1.4280	7.0000e-004	0.0406	1.1800e-003	0.0417	0.0110	1.0900e-003	0.0121		70.3170	70.3170	0.0346	0.0150	75.6426
Total	**0.3410**	**1.2876**	**2.2641**	**2.5900e-003**	**0.0617**	**2.6300e-003**	**0.0644**	**0.0173**	**2.4700e-003**	**0.0198**		**270.4234**	**270.4234**	**0.0378**	**0.0462**	**285.1282**

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8480	16.8999	19.0887	0.0317		0.8225	0.8225		0.7739	0.7739	0.0000	3,001.4988	3,001.4988	0.7139		3,019.3472
Total	**1.8480**	**16.8999**	**19.0887**	**0.0317**		**0.8225**	**0.8225**		**0.7739**	**0.7739**	**0.0000**	**3,001.4988**	**3,001.4988**	**0.7139**		**3,019.3472**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0000e-004	2.0300e-003	1.6100e-003	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005		0.3595	0.3595	1.0000e-005	6.0000e-005	0.3765
Vendor	0.0516	1.1498	0.8345	1.8900e-003	0.0211	1.4500e-003	0.0226	6.3000e-003	1.3800e-003	7.6900e-003		199.7470	199.7470	3.2000e-003	0.0312	209.1091
Worker	0.2893	0.1358	1.4280	7.0000e-004	0.0406	1.1800e-003	0.0417	0.0110	1.0900e-003	0.0121		70.3170	70.3170	0.0346	0.0150	75.6426
Total	**0.3410**	**1.2876**	**2.2641**	**2.5900e-003**	**0.0617**	**2.6300e-003**	**0.0644**	**0.0173**	**2.4700e-003**	**0.0198**		**270.4234**	**270.4234**	**0.0378**	**0.0462**	**285.1282**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7291	15.7940	18.9980	0.0317		0.7208	0.7208		0.6780	0.6780		3,002.0716	3,002.0716	0.7098		3,019.8174
Total	**1.7291**	**15.7940**	**18.9980**	**0.0317**		**0.7208**	**0.7208**		**0.6780**	**0.6780**		**3,002.0716**	**3,002.0716**	**0.7098**		**3,019.8174**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0000e-004	2.0200e-003	1.6000e-003	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005		0.3527	0.3527	0.0000	6.0000e-005	0.3693
Vendor	0.0508	1.1453	0.8233	1.8600e-003	0.0211	1.4400e-003	0.0226	6.3000e-003	1.3800e-003	7.6800e-003		196.3392	196.3392	3.1300e-003	0.0306	205.5394
Worker	0.2634	0.1242	1.3656	6.7000e-004	0.0406	1.1200e-003	0.0417	0.0110	1.0300e-003	0.0120		67.9358	67.9358	0.0316	0.0142	72.9565
Total	**0.3143**	**1.2716**	**2.1905**	**2.5300e-003**	**0.0617**	**2.5600e-003**	**0.0643**	**0.0173**	**2.4100e-003**	**0.0197**		**264.6276**	**264.6276**	**0.0347**	**0.0449**	**278.8652**

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7291	15.7940	18.9980	0.0317		0.7208	0.7208		0.6780	0.6780	0.0000	3,002.0716	3,002.0716	0.7098		3,019.8174
Total	**1.7291**	**15.7940**	**18.9980**	**0.0317**		**0.7208**	**0.7208**		**0.6780**	**0.6780**	**0.0000**	**3,002.0716**	**3,002.0716**	**0.7098**		**3,019.8174**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0000e-004	2.0200e-003	1.6000e-003	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005		0.3527	0.3527	0.0000	6.0000e-005	0.3693
Vendor	0.0508	1.1453	0.8233	1.8600e-003	0.0211	1.4400e-003	0.0226	6.3000e-003	1.3800e-003	7.6800e-003		196.3392	196.3392	3.1300e-003	0.0306	205.5394
Worker	0.2634	0.1242	1.3656	6.7000e-004	0.0406	1.1200e-003	0.0417	0.0110	1.0300e-003	0.0120		67.9358	67.9358	0.0316	0.0142	72.9565
Total	**0.3143**	**1.2716**	**2.1905**	**2.5300e-003**	**0.0617**	**2.5600e-003**	**0.0643**	**0.0173**	**2.4100e-003**	**0.0197**		**264.6276**	**264.6276**	**0.0347**	**0.0449**	**278.8652**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	1.2340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2668**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.3000e-004	0.0130	0.0102	2.0000e-005	1.4000e-004	2.0000e-005	1.6000e-004	4.0000e-005	2.0000e-005	6.0000e-005		2.2917	2.2917	3.0000e-005	3.6000e-004	2.3999
Vendor	2.5200e-003	0.0561	0.0407	9.0000e-005	1.0300e-003	7.0000e-005	1.1000e-003	3.1000e-004	7.0000e-005	3.8000e-004		9.7438	9.7438	1.6000e-004	1.5200e-003	10.2004
Worker	0.0214	0.0100	0.1055	5.0000e-005	3.0000e-003	9.0000e-005	3.0800e-003	8.1000e-004	8.0000e-005	8.9000e-004		5.1958	5.1958	2.5500e-003	1.1100e-003	5.5894
Total	**0.0245**	**0.0791**	**0.1565**	**1.6000e-004**	**4.1700e-003**	**1.8000e-004**	**4.3400e-003**	**1.1600e-003**	**1.7000e-004**	**1.3300e-003**		**17.2313**	**17.2313**	**2.7400e-003**	**2.9900e-003**	**18.1897**

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	1.2340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2668**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.3000e-004	0.0130	0.0102	2.0000e-005	1.4000e-004	2.0000e-005	1.6000e-004	4.0000e-005	2.0000e-005	6.0000e-005		2.2917	2.2917	3.0000e-005	3.6000e-004	2.3999
Vendor	2.5200e-003	0.0561	0.0407	9.0000e-005	1.0300e-003	7.0000e-005	1.1000e-003	3.1000e-004	7.0000e-005	3.8000e-004		9.7438	9.7438	1.6000e-004	1.5200e-003	10.2004
Worker	0.0214	0.0100	0.1055	5.0000e-005	3.0000e-003	9.0000e-005	3.0800e-003	8.1000e-004	8.0000e-005	8.9000e-004		5.1958	5.1958	2.5500e-003	1.1100e-003	5.5894
Total	**0.0245**	**0.0791**	**0.1565**	**1.6000e-004**	**4.1700e-003**	**1.8000e-004**	**4.3400e-003**	**1.1600e-003**	**1.7000e-004**	**1.3300e-003**		**17.2313**	**17.2313**	**2.7400e-003**	**2.9900e-003**	**18.1897**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.8934					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**30.0742**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0000e-004	2.1500e-003	1.7000e-003	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005		0.3747	0.3747	1.0000e-005	6.0000e-005	0.3924
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0532	0.0251	0.2758	1.4000e-004	8.1900e-003	2.3000e-004	8.4200e-003	2.2200e-003	2.1000e-004	2.4300e-003		13.7210	13.7210	6.3700e-003	2.8700e-003	14.7351
Total	**0.0533**	**0.0272**	**0.2775**	**1.4000e-004**	**8.2100e-003**	**2.3000e-004**	**8.4500e-003**	**2.2300e-003**	**2.1000e-004**	**2.4400e-003**		**14.0957**	**14.0957**	**6.3800e-003**	**2.9300e-003**	**15.1274**

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.8934					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**30.0742**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0000e-004	2.1500e-003	1.7000e-003	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005		0.3747	0.3747	1.0000e-005	6.0000e-005	0.3924
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0532	0.0251	0.2758	1.4000e-004	8.1900e-003	2.3000e-004	8.4200e-003	2.2200e-003	2.1000e-004	2.4300e-003		13.7210	13.7210	6.3700e-003	2.8700e-003	14.7351
Total	**0.0533**	**0.0272**	**0.2775**	**1.4000e-004**	**8.2100e-003**	**2.3000e-004**	**8.4500e-003**	**2.2300e-003**	**2.1000e-004**	**2.4400e-003**		**14.0957**	**14.0957**	**6.3800e-003**	**2.9300e-003**	**15.1274**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	23.3028	16.7326	115.3884	0.0541	2.9314	0.0862	3.0176	0.7826	0.0800	0.8626		5,520.1610	5,520.1610	2.5132	1.2253	5,948.1336
Unmitigated	23.3146	16.7719	115.5884	0.0546	2.9912	0.0867	3.0779	0.7986	0.0804	0.8790		5,576.9493	5,576.9493	2.5152	1.2280	6,005.7655

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	6,106.51	8,048.01	6173.06	581,797	570,161
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	7,494.27	7,494.27	7494.27	681,978	668,339
Total	13,600.78	15,542.28	13,667.33	1,263,776	1,238,500

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	0.25	0.25	0.25	2.20	78.80	19.00	100	0	0
Other Asphalt Surfaces	0.25	0.25	0.25	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	0.25	0.25	0.25	0.00	0.00	0.00	0	0	0
Regional Shopping Center	0.25	0.25	0.25	16.30	64.70	19.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Other Asphalt Surfaces	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Parking Lot	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Regional Shopping Center	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1099	0.9990	0.8391	5.9900e-003		0.0759	0.0759		0.0759	0.0759		1,198.7733	1,198.7733	0.0230	0.0220	1,205.8970
NaturalGas Unmitigated	0.1099	0.9990	0.8391	5.9900e-003		0.0759	0.0759		0.0759	0.0759		1,198.7733	1,198.7733	0.0230	0.0220	1,205.8970

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	7913.22	0.0853	0.7758	0.6517	4.6500e-003		0.0590	0.0590		0.0590	0.0590		930.9670	930.9670	0.0178	0.0171	936.4992
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2276.35	0.0246	0.2232	0.1875	1.3400e-003		0.0170	0.0170		0.0170	0.0170		267.8063	267.8063	5.1300e-003	4.9100e-003	269.3978
Total		**0.1099**	**0.9990**	**0.8391**	**5.9900e-003**		**0.0759**	**0.0759**		**0.0759**	**0.0759**		**1,198.7733**	**1,198.7733**	**0.0230**	**0.0220**	**1,205.8970**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	7.91322	0.0853	0.7758	0.6517	4.6500e-003		0.0590	0.0590		0.0590	0.0590		930.9670	930.9670	0.0178	0.0171	936.4992
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.27635	0.0246	0.2232	0.1875	1.3400e-003		0.0170	0.0170		0.0170	0.0170		267.8063	267.8063	5.1300e-003	4.9100e-003	269.3978
Total		**0.1099**	**0.9990**	**0.8391**	**5.9900e-003**		**0.0759**	**0.0759**		**0.0759**	**0.0759**		**1,198.7733**	**1,198.7733**	**0.0230**	**0.0220**	**1,205.8970**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2802	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0222	0.0222	6.0000e-005		0.0237
Unmitigated	2.2802	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0222	0.0222	6.0000e-005		0.0237

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.6000e-004	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0222	0.0222	6.0000e-005		0.0237
Total	**2.2802**	**9.0000e-005**	**0.0103**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0222**	**0.0222**	**6.0000e-005**		**0.0237**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.6000e-004	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0222	0.0222	6.0000e-005		0.0237
Total	**2.2802**	**9.0000e-005**	**0.0103**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0222**	**0.0222**	**6.0000e-005**		**0.0237**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

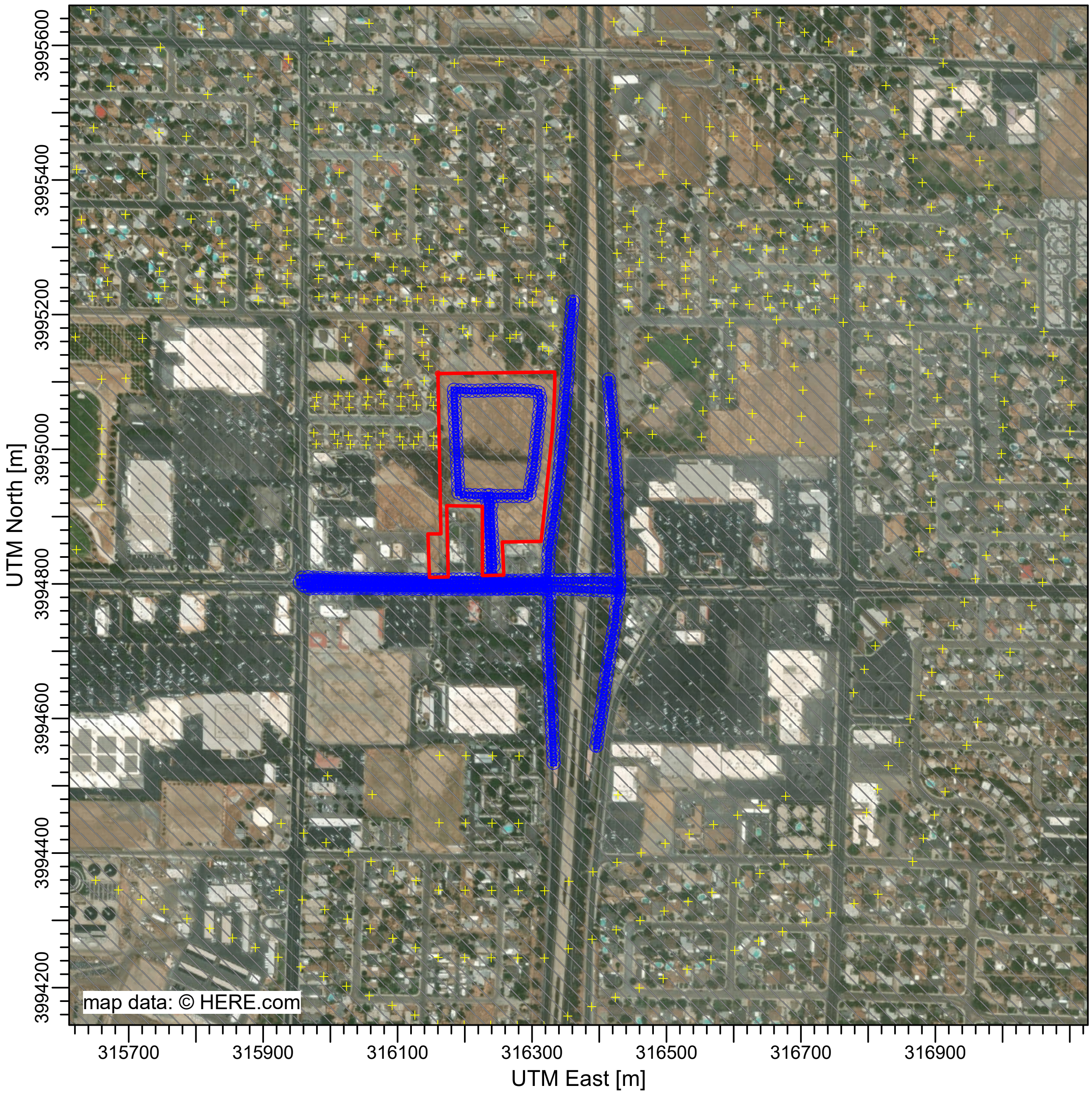
Appendix B: Health Risk Assessments

Health Risk Assessment

General Parameters

PROJECT TITLE:

Graphical Representation of AERMOD Inputs (Construction)



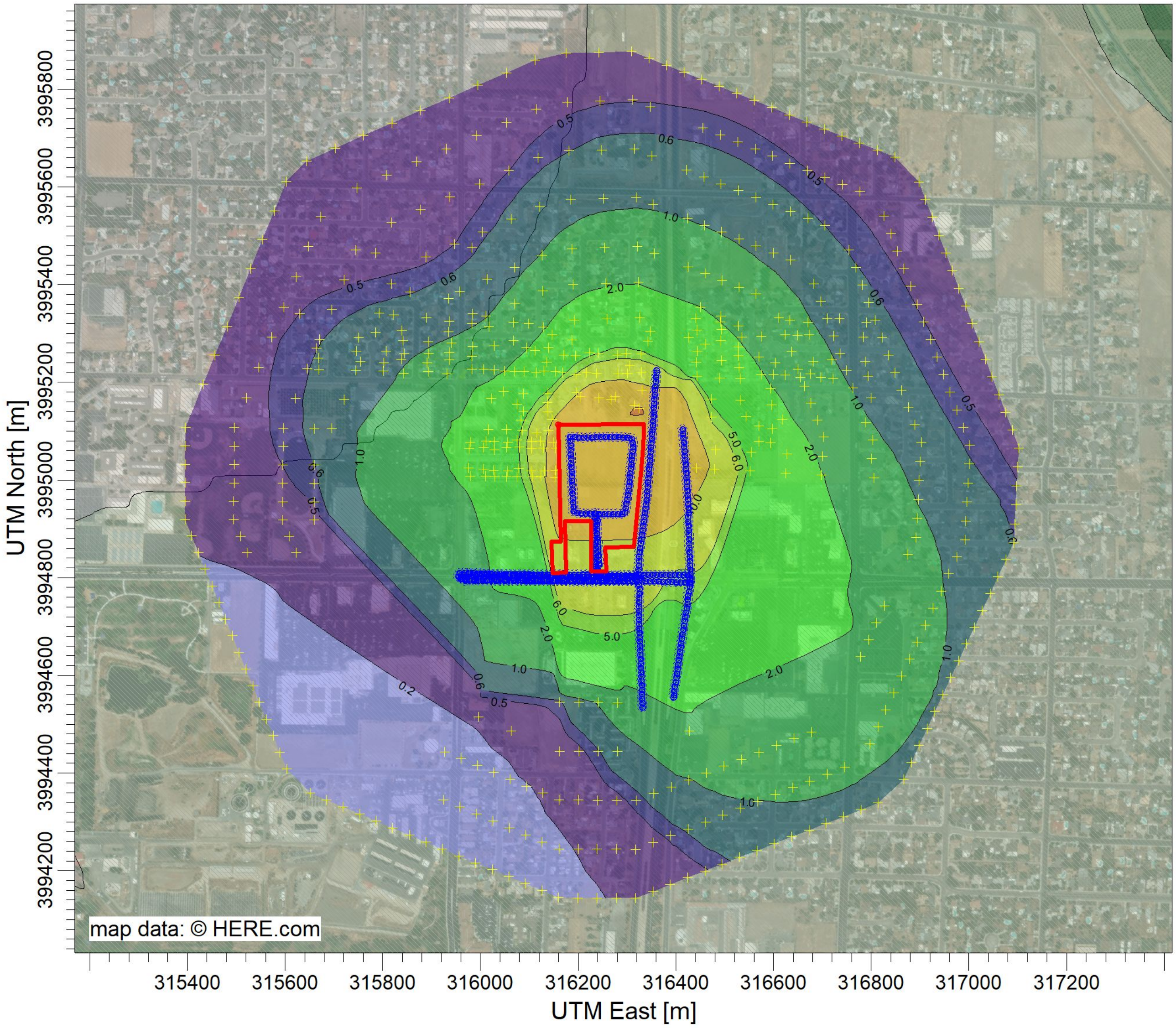
COMMENTS:	SOURCES: **6**	COMPANY NAME:	
	RECEPTORS: **563**	MODELER:	
		SCALE: 1:9,526 (0 — 0.3 km)	
		DATE: **5/22/2023**	PROJECT NO.:

AERMOD View - Lakes Environmental Software

D:\Move\0014-017\01 - Con\01 - Con.isc

PROJECT TITLE:

Air Dispersion Concentration Trend (Unit Emissions - Construction Site)



PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 4 YEARS FOR SOURCE GROUP: AREA ug/m^3

Max: 20.7 [ug/m^3] at (316324.63, 3995146.10)

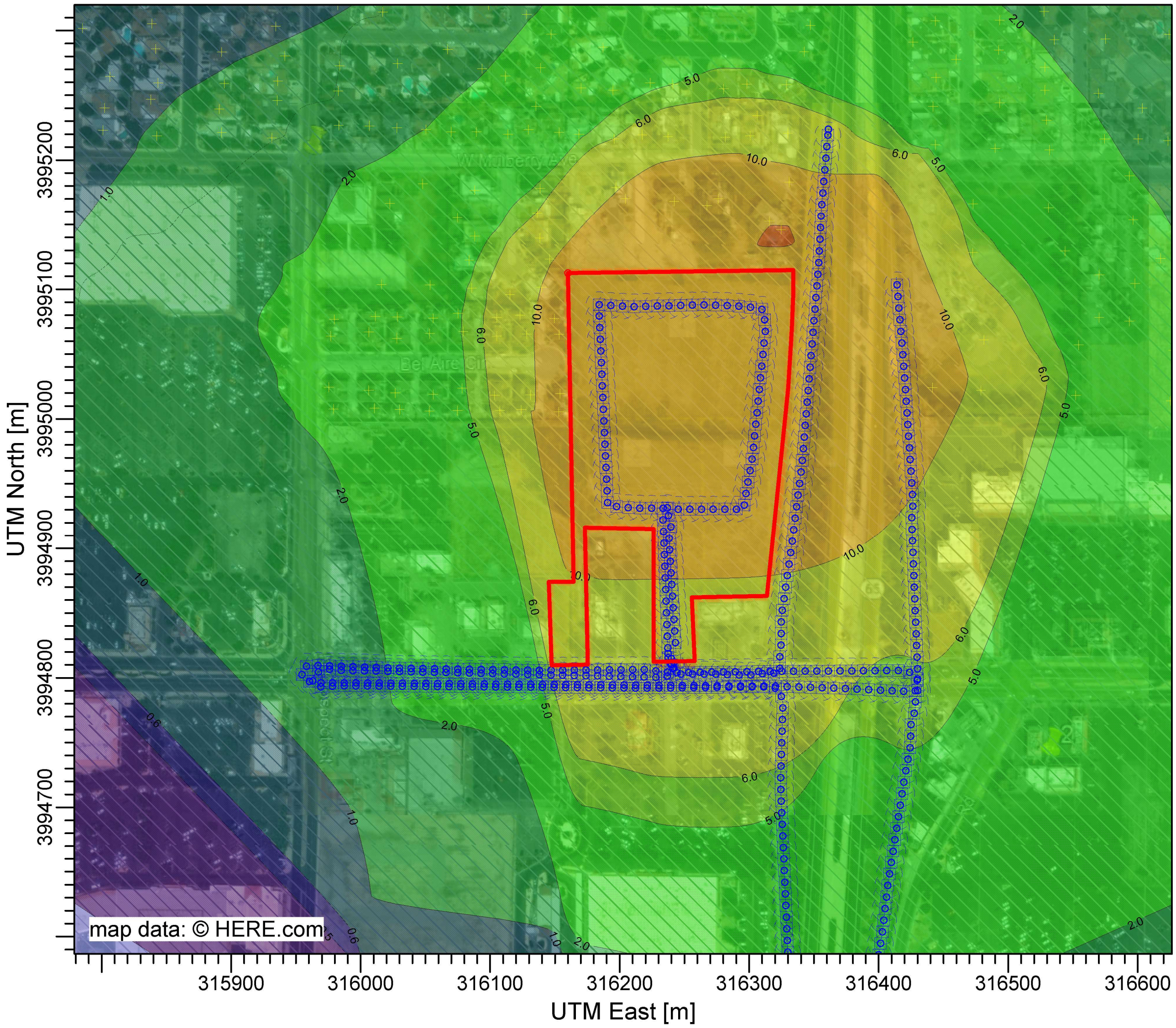
0.0 0.2 0.5 0.6 1.0 2.0 5.0 6.0 10.0 20.0 20.7

COMMENTS:	SOURCES: **6**	COMPANY NAME:
	RECEPTORS: **563**	MODELER:
	OUTPUT TYPE: **Concentration**	SCALE: 1:14,129 (0 — 0.5 km)
	MAX: **20.7 ug/m^3**	DATE: **5/22/2023**
		PROJECT NO.:

AERMOD View - Lakes Environmental Software D:\Move\0014-017\01 - Con\01 - Con.isc

PROJECT TITLE:

Air Dispersion Concentration Trend (Zoomed In Near Project Site)
Unit Emissions - Construction Site



PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 4 YEARS FOR SOURCE GROUP: AREA ug/m^3

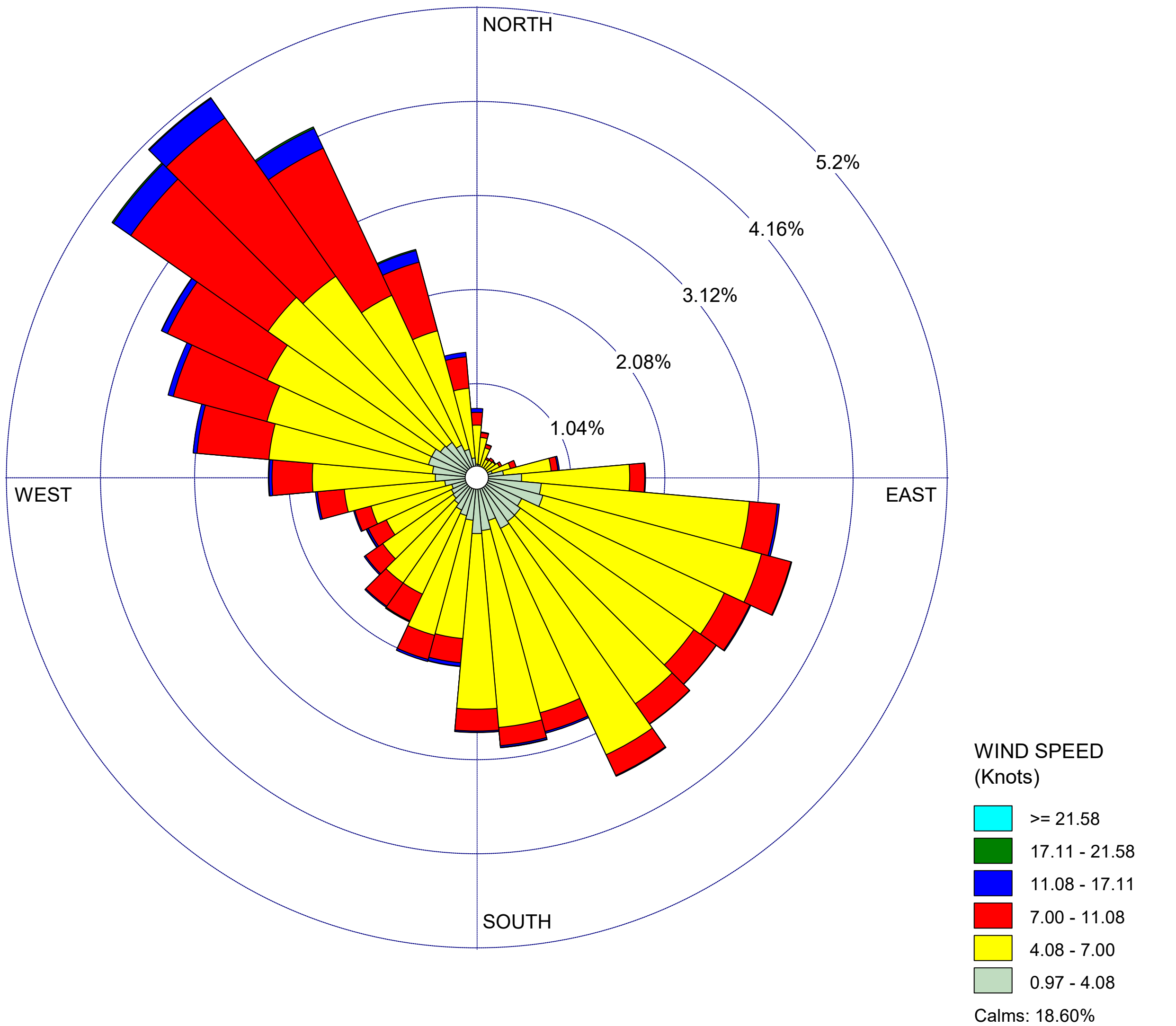
Max: 20.7 [ug/m^3] at (316324.63, 3995146.10)

0.0 0.2 0.5 0.6 1.0 2.0 5.0 6.0 10.0 20.0 20.7

COMMENTS:	SOURCES: **6**	COMPANY NAME:	
	RECEPTORS: **563**	MODELER:	
	OUTPUT TYPE: **Concentration**	SCALE: 1:5,327 — 0 0.1 km	
	MAX: **20.7 ug/m^3**	DATE: **5/22/2023**	PROJECT NO.:

AERMOD View - Lakes Environmental Software D:\Move\0014-017\01 - Con\01 - Con.isc

WIND ROSE PLOT:	DISPLAY:
Wind Rose - Porterville Station (#23149) – Blowing From	**Wind Speed** **Direction (blowing from)**



COMMENTS:

DATA PERIOD:

Start Date: 1/1/2006 - 00:00
End Date: 1/1/2010 - 23:59

COMPANY NAME:

MODELER:

CALM WINDS:

18.60%

TOTAL COUNT:

34602 hrs.

AVG. WIND SPEED:

4.70 Knots

DATE:

5/22/2023

PROJECT NO.:

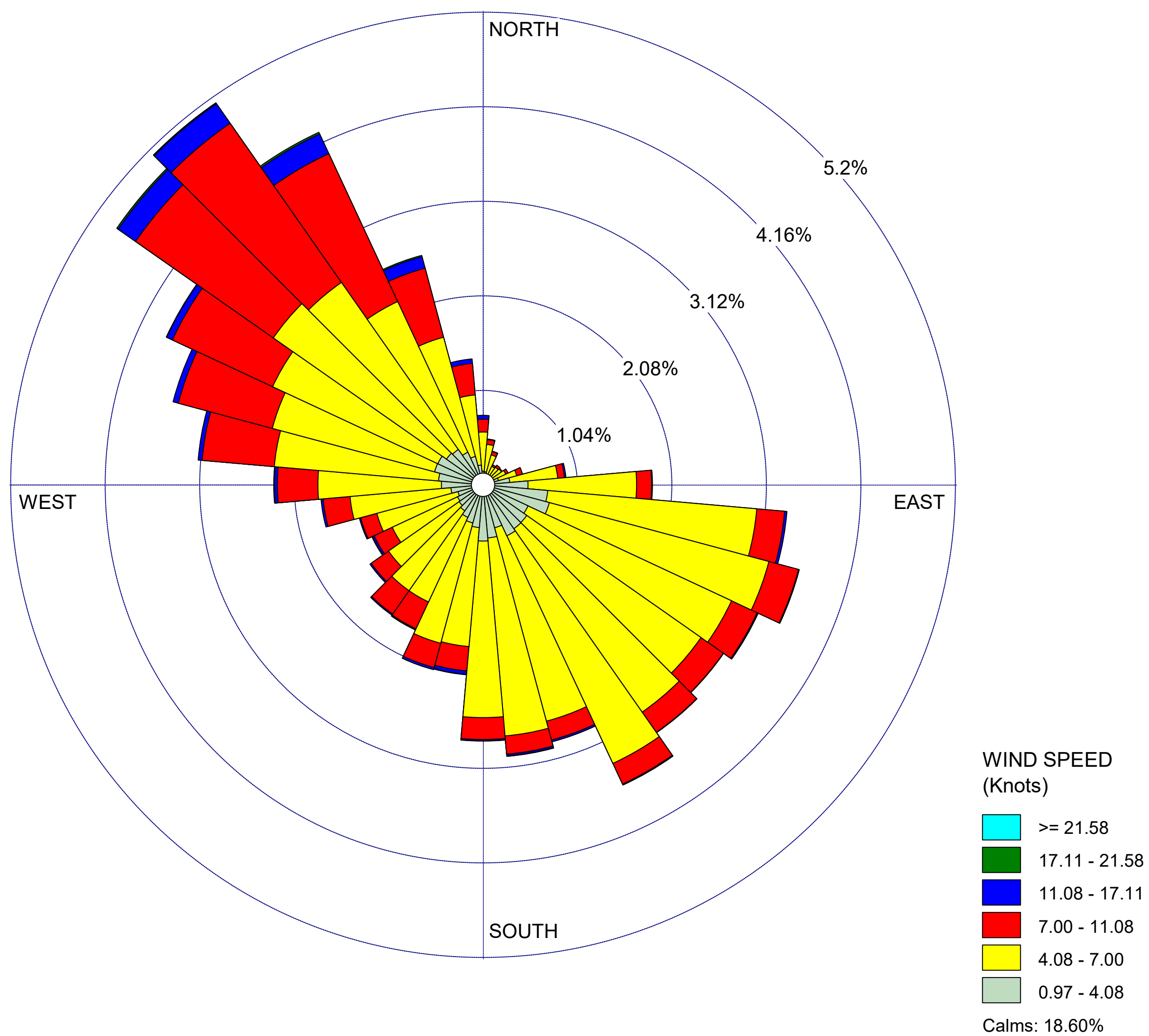
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Rose - Porterville Station (#23149) – Blowing To

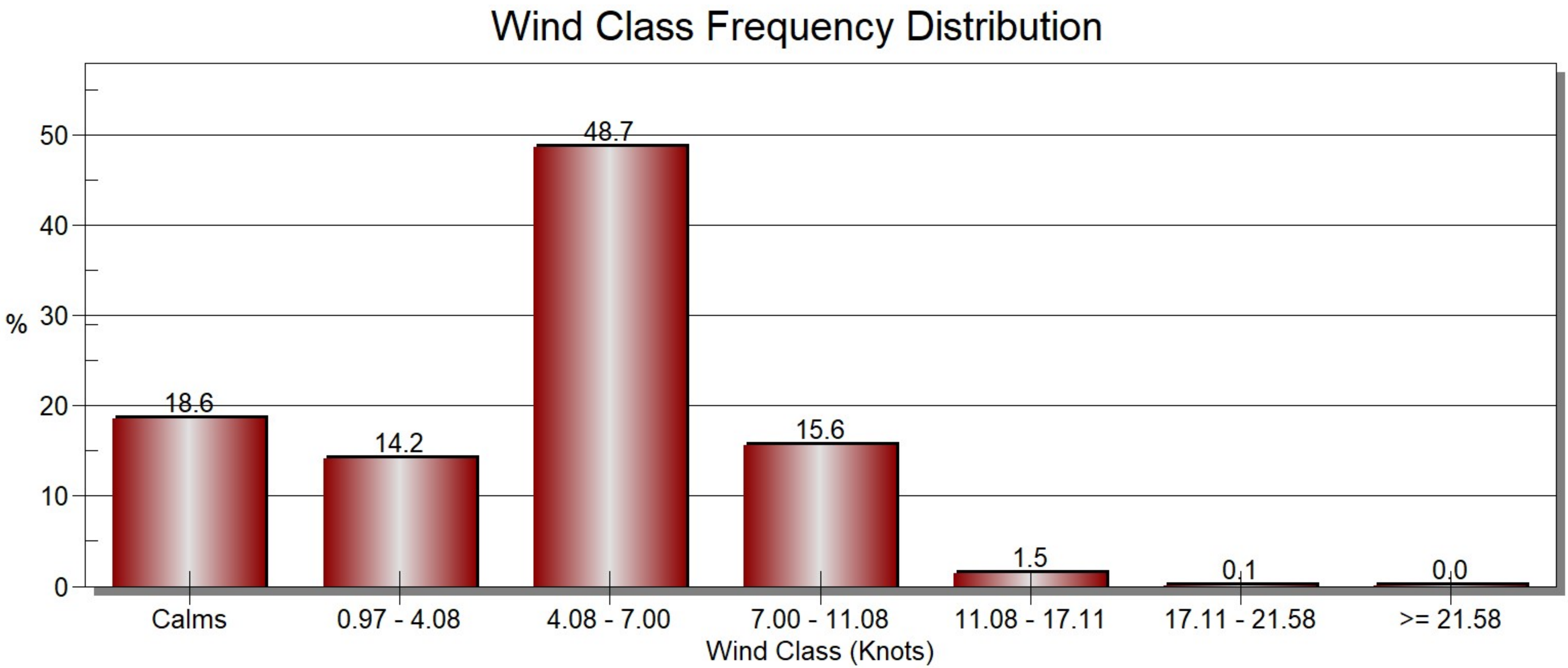
DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **Start Date: 1/1/2006 - 00:00** **End Date: 1/1/2010 - 23:59**	COMPANY NAME:
		MODELER:
	CALM WINDS: **18.60%**	TOTAL COUNT: **34602 hrs.**
	AVG. WIND SPEED: **4.70 Knots**	DATE: **5/22/2023**
		PROJECT NO.:

WRPLOT View - Lakes Environmental Software


Wind Class Frequency Distribution
%
0
10
20
30
40
50
18.6
14.2
48.7
15.6
1.5
0.1
0.0
Calms
0.97 - 4.08
4.08 - 7.00
7.00 - 11.08
11.08 - 17.11
17.11 - 21.58
>= 21.58
Wind Class (Knots)

Health Risk Assessment

Unmitigated Construction

Henderson Ave & SR 65 Commercial Project (Unmitigated Construction—DPM)

Estimation of Annual Onsite Construction Emissions (Project Site)—DPM (Exhaust PM2.5)

Start of Construction	7/1/2023	
End of Construction	8/31/2024	**Total**
Number of Days	427	427
Number of Hours	10,248	10,248

Size of the construction area source (entire site): **41,455.8** **sq-meters**

	On-site Construction Activity	Unmitigated On-site DPM (tons)
2023	On-site Demolition	0.00499
2023	On-site Site Preparation	0.00633
2023	On-site Grading	0.02140
2023	On-site Building Construction 2023	0.03290
2023	On-site Paving 2023	0.00510
2024	On-site Building Construction 2024	0.06310
2024	On-site Architectural Coating	0.00061

Total Unmitigated DPM (On-site) 1.344E-01 tons

Factor in AERMOD to Account for 5 days per week/8 hours per day: 4.2
1 g/s used as the unit emission in AERMOD - converted to g/s/m2 in AERMOD

Average Emission (Emissions Summary for HARP2 Inputs)

1.221E+05	grams
3.309E-03	grams/sec
7.981E-08	grams/m2-sec

Tons/Construction Period	1.344E-01
Pounds/Construction Period	2.689E+02
Pounds/Day	6.296E-01
Pounds/Hour	2.624E-02
Pounds/Year	2.298E+02
Years	1.169863014

Henderson Ave & SR 65 Commercial Project (Unmitigated Construction—DPM)

Estimation of Annual Offsite Construction DPM Emissions (Project Site)

Start of Construction	7/1/2023	
End of Construction	8/31/2024	**Total**
Number of Days	427	427
Number of Hours	10,248	10,248

	2023	2023	2023	2023	2024	2023	2024
Construction Trip Type	Demolition	Site Preparation	Grading	Building Construction	Building Construction	Paving	Architectural Coating
Haul Truck	0.00001	0.00001	0.00031	0.00000	0.00001	0.00001	0.00000
Vendor Truck	0.00000	0.00000	0.00000	0.00094	0.00208	0.00001	0.00000
Worker	0.00000	0.00000	0.00001	0.00034	0.00069	0.00001	0.00002
Total	0.00001	0.00001	0.00032	0.00128	0.00278	0.00003	0.00002

	Haul Truck (tons)	**Vendor Truck (tons)**	**Worker (tons)**	**Total (tons)**
Total DPM	3.500E-04	3.030E-03	1.070E-03	4.450E-03
Average Emissions				
Grams	3.178E+02	2.751E+03	9.716E+02	
Grams/sec	8.614E-06	7.457E-05	2.633E-05	
Default Distance	20	7.3	10.8	Vehicle Travel Distance Assumed in CalEEMod

Vehicle Travel Distances in the Construction HRA (miles)				
Road Segment 1	0.32	0.32	0.32	miles
Road Segment 2	0.68	0.68	0.68	miles
Road Segment 3	0.28	0.28	0.28	miles
Road Segment 4	0.57	0.57	0.57	
On-site	0.48	0.48	0.48	

Trip Distribution (percent)				
Road Segment 1	25.0%	25.0%	25.0%	Off-site Road Segment 1
Road Segment 2	25.0%	25.0%	25.0%	Off-site Road Segment 2
Road Segment 3	25.0%	25.0%	25.0%	Off-site Road Segment 3
Road Segment 4	25.0%	25.0%	25.0%	Off-site Road Segment 4
On-site	100.0%	100.0%	100.0%	On-site

Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**	
Road Segment 1	4.9746E-08	1.1799E-06	2.8163E-07	1.5113E-06	Off-site Road Segment 1
Road Segment 2	8.8567E-08	2.1007E-06	5.0141E-07	2.6906E-06	Off-site Road Segment 2
Road Segment 3	3.001E-08	7.119E-07	1.699E-07	9.1182E-07	
Road Segment 4	6.158E-08	1.461E-06	3.486E-07	1.8708E-06	
On-site	2.058E-07	4.882E-06	1.165E-06	6.2528E-06	

Average Emission (Emissions Summary for HARP2 Inputs)

	Grams/sec	Pounds/Hour	Pounds/Day	Pounds/year	Tons/year
Road Segment 1	1.5113E-06	1.1994E-05	2.8787E-04	1.2292E-01	6.1459E-05
Road Segment 2	2.6906E-06	2.1355E-05	5.1251E-04	2.1884E-01	1.0942E-04
Road Segment 3	9.1182E-07	7.2368E-06	1.7368E-04	7.4163E-02	3.7081E-05
Road Segment 4	1.8708E-06	1.4848E-05	3.5635E-04	1.5216E-01	7.6081E-05
On-site	6.2528E-06	4.9627E-05	1.1910E-03	5.0857E-01	2.5429E-04

Health Risk Summary - Unmitigated Construction (Summary of HARP2 Results)

Henderson Ave & SR 65 Commercial Project (Unmitigated Construction—DPM) (Unmitigated Construction)

	RISK_SUM	Cancer Risk/million	MAXHI NonCancer Chronic	MAXHI Acute
Maximum Risk	1.4495E-05	14.495	1.3759E-02	0.00E+00

	X	Y	
MIR UTM	316324.63	3995146.10	0.014

Latitude, Longitude: 36°05'00.9"N 119°02'23.9"W
Receptor # 175

*HARP - HRACalc v22118 5/22/2023 9:56:34 PM - Cancer Risk - Input File: F:\Move\0014-017\HARP\Unmitigated\UNMITIGATED CONSTRUCTION\hra\UNMITIGATED CONSTRUCTIONHRAInput.hra
*HARP - HRACalc v22118 5/22/2023 9:56:34 PM - Chronic Risk - Input File: F:\Move\0014-017\HARP\Unmitigated\UNMITIGATED CONSTRUCTION\hra\UNMITIGATED CONSTRUCTIONHRAInput.hra
*HARP - HRACalc v22118 5/22/2023 9:56:34 PM - Acute Risk - Input File: F:\Move\0014-017\HARP\Unmitigated\UNMITIGATED CONSTRUCTION\hra\UNMITIGATED CONSTRUCTIONHRAInput.hra

REC	GRP	X	Y	RISK_SUM	SCENARIO	MAXHI NonCancerChronic	MAXHI Acute
1	ALL	316280.75	3994544.12	9.414E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.937E-04	0.00E+00
2	ALL	316241.29	3994544.38	7.274E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.905E-04	0.00E+00
3	ALL	316201.82	3994544.65	5.433E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.157E-04	0.00E+00
4	ALL	316162.36	3994544.92	4.041E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.836E-04	0.00E+00
5	ALL	316427.89	3994486.35	1.159E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.101E-03	0.00E+00
6	ALL	316280.07	3994444.12	5.152E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.890E-04	0.00E+00
7	ALL	316240.61	3994444.39	4.115E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.906E-04	0.00E+00
8	ALL	316201.15	3994444.65	3.232E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.068E-04	0.00E+00
9	ALL	316161.68	3994444.92	2.539E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.411E-04	0.00E+00
10	ALL	316354.70	3994357.91	4.738E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.498E-04	0.00E+00
11	ALL	316390.53	3994371.97	5.773E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.480E-04	0.00E+00
12	ALL	316426.37	3994386.03	6.870E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.522E-04	0.00E+00
13	ALL	316462.21	3994400.09	7.945E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.542E-04	0.00E+00
14	ALL	316498.05	3994414.14	8.911E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.459E-04	0.00E+00
15	ALL	316533.89	3994428.20	9.697E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.205E-04	0.00E+00
16	ALL	316569.73	3994442.26	1.026E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.740E-04	0.00E+00
17	ALL	316605.57	3994456.32	1.059E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.005E-03	0.00E+00
18	ALL	316641.41	3994470.38	1.068E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.014E-03	0.00E+00
19	ALL	316677.25	3994484.44	1.058E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.004E-03	0.00E+00
20	ALL	316778.09	3994638.09	1.155E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.097E-03	0.00E+00
21	ALL	316794.34	3994672.99	1.141E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.083E-03	0.00E+00
22	ALL	316810.60	3994707.89	1.110E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.053E-03	0.00E+00
23	ALL	316826.85	3994742.79	1.063E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.009E-03	0.00E+00
24	ALL	316875.60	3994847.49	8.615E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.178E-04	0.00E+00
25	ALL	316318.86	3994343.85	3.823E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.629E-04	0.00E+00
26	ALL	316279.39	3994344.12	3.194E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.032E-04	0.00E+00
27	ALL	316239.93	3994344.39	2.626E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.493E-04	0.00E+00
28	ALL	316200.47	3994344.66	2.138E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.030E-04	0.00E+00
29	ALL	316161.01	3994344.92	1.741E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.653E-04	0.00E+00
30	ALL	316353.82	3994257.84	3.062E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.906E-04	0.00E+00
31	ALL	316389.47	3994271.82	3.679E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.492E-04	0.00E+00
32	ALL	316425.12	3994285.80	4.362E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.141E-04	0.00E+00
33	ALL	316460.76	3994299.78	5.074E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.816E-04	0.00E+00
34	ALL	316496.41	3994313.77	5.768E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.475E-04	0.00E+00
35	ALL	316532.05	3994327.75	6.400E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.075E-04	0.00E+00
36	ALL	316567.70	3994341.73	6.935E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.583E-04	0.00E+00
37	ALL	316603.35	3994355.71	7.349E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.976E-04	0.00E+00
38	ALL	316638.99	3994369.70	7.631E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.244E-04	0.00E+00
39	ALL	316674.64	3994383.68	7.785E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.390E-04	0.00E+00
40	ALL	316710.28	3994397.66	7.818E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.421E-04	0.00E+00
41	ALL	316745.93	3994411.64	7.744E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.351E-04	0.00E+00
42	ALL	316797.74	3994460.34	7.959E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.555E-04	0.00E+00
43	ALL	316813.90	3994495.05	8.258E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.839E-04	0.00E+00
44	ALL	316830.06	3994529.76	8.456E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.026E-04	0.00E+00
45	ALL	316846.23	3994564.47	8.546E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.112E-04	0.00E+00
46	ALL	316862.39	3994599.18	8.530E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.097E-04	0.00E+00
47	ALL	316878.56	3994633.89	8.412E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.985E-04	0.00E+00
48	ALL	316894.72	3994668.61	8.204E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.787E-04	0.00E+00
49	ALL	316910.88	3994703.32	7.907E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.506E-04	0.00E+00
50	ALL	316927.05	3994738.03	7.545E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.162E-04	0.00E+00
51	ALL	316943.21	3994772.74	7.125E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.763E-04	0.00E+00
52	ALL	316959.37	3994807.45	6.658E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.320E-04	0.00E+00
53	ALL	316975.54	3994842.16	6.159E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.846E-04	0.00E+00
54	ALL	316318.18	3994243.86	2.524E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.396E-04	0.00E+00
55	ALL	316278.72	3994244.12	2.147E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.038E-04	0.00E+00
56	ALL	316239.25	3994244.39	1.808E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.716E-04	0.00E+00
57	ALL	316199.79	3994244.66	1.513E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.436E-04	0.00E+00
58	ALL	316160.33	3994244.93	1.266E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.202E-04	0.00E+00
59	ALL	316353.00	3994157.78	2.106E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.999E-04	0.00E+00
60	ALL	316388.51	3994171.71	2.497E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.370E-04	0.00E+00
61	ALL	316424.01	3994185.64	2.934E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.785E-04	0.00E+00
62	ALL	316459.52	3994199.56	3.411E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.237E-04	0.00E+00
63	ALL	316495.02	3994213.49	3.897E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.699E-04	0.00E+00
64	ALL	316530.52	3994227.42	4.371E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.149E-04	0.00E+00
65	ALL	316566.03	3994241.34	4.806E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.562E-04	0.00E+00

66	ALL	316601.53	3994255.27	5.182E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.919E-04	0.00E+00
67	ALL	316637.04	3994269.20	5.487E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.208E-04	0.00E+00
68	ALL	316672.54	3994283.12	5.716E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.426E-04	0.00E+00
69	ALL	316708.04	3994297.05	5.864E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.567E-04	0.00E+00
70	ALL	316743.55	3994310.98	5.942E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.640E-04	0.00E+00
71	ALL	316779.05	3994324.91	5.952E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.650E-04	0.00E+00
72	ALL	316814.56	3994338.83	5.902E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.602E-04	0.00E+00
73	ALL	316866.16	3994387.33	6.061E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.753E-04	0.00E+00
74	ALL	316882.26	3994421.90	6.283E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.965E-04	0.00E+00
75	ALL	316898.36	3994456.48	6.444E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.117E-04	0.00E+00
76	ALL	316914.46	3994491.05	6.539E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.207E-04	0.00E+00
77	ALL	316930.56	3994525.62	6.569E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.236E-04	0.00E+00
78	ALL	316946.65	3994560.20	6.538E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.206E-04	0.00E+00
79	ALL	316962.75	3994594.77	6.448E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.121E-04	0.00E+00
80	ALL	316978.85	3994629.34	6.304E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.984E-04	0.00E+00
81	ALL	316994.95	3994663.92	6.110E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.800E-04	0.00E+00
82	ALL	317011.05	3994698.49	5.871E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.573E-04	0.00E+00
83	ALL	317027.15	3994733.06	5.594E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.310E-04	0.00E+00
84	ALL	317043.25	3994767.64	5.286E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.018E-04	0.00E+00
85	ALL	317059.35	3994802.21	4.955E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.703E-04	0.00E+00
86	ALL	317075.45	3994836.78	4.610E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.376E-04	0.00E+00
87	ALL	316317.50	3994143.86	1.773E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.683E-04	0.00E+00
88	ALL	316278.04	3994144.13	1.532E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.454E-04	0.00E+00
89	ALL	316238.58	3994144.39	1.316E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.249E-04	0.00E+00
90	ALL	316199.11	3994144.66	1.127E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.070E-04	0.00E+00
91	ALL	316159.65	3994144.93	9.629E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.141E-05	0.00E+00
92	ALL	316130.94	3995018.51	6.441E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.114E-03	0.00E+00
93	ALL	316128.23	3995065.46	6.303E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.983E-03	0.00E+00
94	ALL	316139.56	3995101.58	7.043E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.686E-03	0.00E+00
95	ALL	316103.39	3995018.43	4.389E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.166E-03	0.00E+00
96	ALL	316105.07	3995063.92	4.653E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.417E-03	0.00E+00
97	ALL	316085.67	3995100.92	3.603E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.420E-03	0.00E+00
98	ALL	316055.94	3995018.94	2.708E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.571E-03	0.00E+00
99	ALL	316053.23	3995065.89	2.822E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.679E-03	0.00E+00
100	ALL	316053.44	3995103.47	2.692E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.555E-03	0.00E+00
101	ALL	316026.64	3995020.03	2.151E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.042E-03	0.00E+00
102	ALL	316006.36	3995066.98	1.998E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.896E-03	0.00E+00
103	ALL	316015.94	3995103.68	2.056E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.951E-03	0.00E+00
104	ALL	315996.07	3994514.78	1.582E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.502E-04	0.00E+00
105	ALL	316062.32	3994486.84	1.811E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.719E-04	0.00E+00
106	ALL	315695.95	3995105.51	5.010E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.756E-04	0.00E+00
107	ALL	315608.58	3994884.51	2.370E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.250E-04	0.00E+00
108	ALL	315622.28	3994850.86	2.043E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.939E-04	0.00E+00
109	ALL	315926.69	3994443.77	1.065E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.011E-04	0.00E+00
110	ALL	315960.16	3994429.65	1.124E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.067E-04	0.00E+00
111	ALL	315993.63	3994415.53	1.168E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.109E-04	0.00E+00
112	ALL	316027.11	3994401.41	1.214E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.153E-04	0.00E+00
113	ALL	316060.58	3994387.29	1.285E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.220E-04	0.00E+00
114	ALL	316094.06	3994373.17	1.394E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.323E-04	0.00E+00
115	ALL	316127.53	3994359.04	1.544E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.466E-04	0.00E+00
116	ALL	315594.88	3994918.16	2.653E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.519E-04	0.00E+00
117	ALL	315595.09	3994955.74	3.007E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.854E-04	0.00E+00
118	ALL	315595.31	3994993.32	3.299E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.132E-04	0.00E+00
119	ALL	315595.52	3995030.91	3.517E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.338E-04	0.00E+00
120	ALL	315595.74	3995068.49	3.658E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.472E-04	0.00E+00
121	ALL	315595.95	3995106.08	3.730E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.541E-04	0.00E+00
122	ALL	315508.69	3994884.82	1.969E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.869E-04	0.00E+00
123	ALL	315522.49	3994850.92	1.732E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.644E-04	0.00E+00
124	ALL	315924.25	3994344.52	8.391E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.966E-05	0.00E+00
125	ALL	315957.97	3994330.29	8.576E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.140E-05	0.00E+00
126	ALL	315991.70	3994316.06	8.765E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.320E-05	0.00E+00
127	ALL	316025.42	3994301.84	9.051E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.592E-05	0.00E+00
128	ALL	316059.15	3994287.61	9.564E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.078E-05	0.00E+00
129	ALL	316092.88	3994273.38	1.034E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.819E-05	0.00E+00
130	ALL	316126.60	3994259.15	1.139E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.082E-04	0.00E+00
131	ALL	315494.88	3994918.72	2.169E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.059E-04	0.00E+00
132	ALL	315495.09	3994956.31	2.411E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.289E-04	0.00E+00
133	ALL	315495.31	3994993.89	2.606E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.473E-04	0.00E+00
134	ALL	315495.52	3995031.48	2.749E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.610E-04	0.00E+00
135	ALL	315495.74	3995069.06	2.842E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.698E-04	0.00E+00
136	ALL	315495.95	3995106.64	2.893E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.747E-04	0.00E+00
137	ALL	315408.77	3994885.20	1.672E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.587E-04	0.00E+00
138	ALL	315422.65	3994851.11	1.497E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.421E-04	0.00E+00
139	ALL	315436.53	3994817.02	1.303E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.237E-04	0.00E+00
140	ALL	315450.42	3994782.93	1.101E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.046E-04	0.00E+00
141	ALL	315464.30	3994748.84	9.055E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.595E-05	0.00E+00
142	ALL	315478.18	3994714.75	7.282E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.912E-05	0.00E+00
143	ALL	315492.06	3994680.66	5.776E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.483E-05	0.00E+00
144	ALL	315505.95	3994646.57	4.590E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.357E-05	0.00E+00
145	ALL	315519.83	3994612.48	3.734E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.544E-05	0.00E+00
146	ALL	315533.71	3994578.39	3.177E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.016E-05	0.00E+00
147	ALL	315547.60	3994544.30	2.867E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.721E-05	0.00E+00
148	ALL	315561.48	3994510.21	2.756E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.616E-05	0.00E+00
149	ALL	315575.36	3994476.12	2.783E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.642E-05	0.00E+00

150	ALL	315589.25	3994442.03	2.902E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.755E-05	0.00E+00
151	ALL	315603.13	3994407.93	3.082E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.926E-05	0.00E+00
152	ALL	315650.93	3994359.54	3.755E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.565E-05	0.00E+00
153	ALL	315684.84	3994345.23	4.269E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.052E-05	0.00E+00
154	ALL	315718.76	3994330.92	4.807E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.563E-05	0.00E+00
155	ALL	315752.67	3994316.61	5.331E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.060E-05	0.00E+00
156	ALL	315786.59	3994302.31	5.791E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.497E-05	0.00E+00
157	ALL	315820.50	3994288.00	6.148E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.836E-05	0.00E+00
158	ALL	315854.42	3994273.69	6.384E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.060E-05	0.00E+00
159	ALL	315888.33	3994259.39	6.515E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.184E-05	0.00E+00
160	ALL	315922.25	3994245.08	6.581E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.247E-05	0.00E+00
161	ALL	315956.16	3994230.77	6.644E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.307E-05	0.00E+00
162	ALL	315990.08	3994216.46	6.770E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.426E-05	0.00E+00
163	ALL	316023.99	3994202.16	7.015E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.659E-05	0.00E+00
164	ALL	316057.91	3994187.85	7.420E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.043E-05	0.00E+00
165	ALL	316091.82	3994173.54	7.994E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.588E-05	0.00E+00
166	ALL	316125.74	3994159.23	8.737E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.293E-05	0.00E+00
167	ALL	315394.88	3994919.29	1.816E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.724E-04	0.00E+00
168	ALL	315395.10	3994956.88	1.988E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.887E-04	0.00E+00
169	ALL	315395.31	3994994.46	2.124E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.017E-04	0.00E+00
170	ALL	315395.52	3995032.05	2.222E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.109E-04	0.00E+00
171	ALL	315395.74	3995069.63	2.285E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.169E-04	0.00E+00
172	ALL	315395.95	3995107.21	2.320E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.202E-04	0.00E+00
173	ALL	316146.01	3995123.34	6.809E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.463E-03	0.00E+00
174	ALL	316204.38	3995170.07	8.029E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.621E-03	0.00E+00
175	ALL	316324.63	3995146.10	1.450E-05	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.376E-02	0.00E+00
176	ALL	316136.41	3995158.87	4.236E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.021E-03	0.00E+00
177	ALL	316197.04	3995178.87	6.678E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.339E-03	0.00E+00
178	ALL	316276.24	3995170.32	1.052E-05	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.985E-03	0.00E+00
179	ALL	316331.06	3995183.16	8.019E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.612E-03	0.00E+00
180	ALL	316129.65	3995223.57	2.318E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.201E-03	0.00E+00
181	ALL	316074.71	3995155.37	2.481E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.355E-03	0.00E+00
182	ALL	316195.84	3995216.35	4.221E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.007E-03	0.00E+00
183	ALL	316281.44	3995217.46	5.706E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.417E-03	0.00E+00
184	ALL	316329.86	3995220.64	5.227E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.962E-03	0.00E+00
185	ALL	316135.47	3995241.44	2.141E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.033E-03	0.00E+00
186	ALL	316089.42	3995221.73	1.749E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.660E-03	0.00E+00
187	ALL	316047.85	3995181.54	1.791E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.700E-03	0.00E+00
188	ALL	316194.64	3995253.83	2.953E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.803E-03	0.00E+00
189	ALL	316280.24	3995254.94	3.893E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.695E-03	0.00E+00
190	ALL	316328.65	3995258.12	3.672E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.486E-03	0.00E+00
191	ALL	316128.22	3995312.57	1.345E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.277E-03	0.00E+00
192	ALL	316067.09	3995285.61	1.084E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.029E-03	0.00E+00
193	ALL	315983.04	3995226.87	1.070E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.016E-03	0.00E+00
194	ALL	316192.29	3995327.12	1.733E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.645E-03	0.00E+00
195	ALL	316259.30	3995329.27	2.095E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.989E-03	0.00E+00
196	ALL	316326.30	3995331.42	2.108E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.001E-03	0.00E+00
197	ALL	316127.43	3995386.56	9.532E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.048E-04	0.00E+00
198	ALL	316069.43	3995360.98	7.947E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.544E-04	0.00E+00
199	ALL	316011.42	3995335.40	6.874E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.525E-04	0.00E+00
200	ALL	315941.40	3995280.49	7.389E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.014E-04	0.00E+00
201	ALL	315931.33	3995217.18	9.498E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.016E-04	0.00E+00
202	ALL	316189.94	3995400.42	1.151E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.093E-03	0.00E+00
203	ALL	316256.95	3995402.57	1.335E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.267E-03	0.00E+00
204	ALL	316323.95	3995404.71	1.363E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.293E-03	0.00E+00
205	ALL	316125.95	3995460.23	7.122E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.760E-04	0.00E+00
206	ALL	316069.69	3995435.42	6.175E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.861E-04	0.00E+00
207	ALL	316013.42	3995410.61	5.299E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.030E-04	0.00E+00
208	ALL	315957.15	3995385.80	4.827E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.582E-04	0.00E+00
209	ALL	315889.23	3995332.54	5.329E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.059E-04	0.00E+00
210	ALL	315841.60	3995285.77	5.920E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.619E-04	0.00E+00
211	ALL	315842.59	3995218.74	7.229E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.862E-04	0.00E+00
212	ALL	316187.59	3995473.71	8.249E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.830E-04	0.00E+00
213	ALL	316254.60	3995475.86	9.272E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.802E-04	0.00E+00
214	ALL	316321.61	3995478.01	9.490E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.009E-04	0.00E+00
215	ALL	316121.64	3995559.70	5.082E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.824E-04	0.00E+00
216	ALL	316063.16	3995533.91	4.536E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.306E-04	0.00E+00
217	ALL	316004.69	3995508.12	3.946E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.746E-04	0.00E+00
218	ALL	315946.21	3995482.34	3.485E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.308E-04	0.00E+00
219	ALL	315887.73	3995456.55	3.294E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.127E-04	0.00E+00
220	ALL	315817.13	3995401.19	3.724E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.535E-04	0.00E+00
221	ALL	315792.89	3995342.06	4.505E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.276E-04	0.00E+00
222	ALL	315750.83	3995291.83	4.850E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.604E-04	0.00E+00
223	ALL	315744.42	3995223.78	5.419E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.144E-04	0.00E+00
224	ALL	315720.18	3995164.64	5.344E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.073E-04	0.00E+00
225	ALL	316184.39	3995573.66	5.674E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.386E-04	0.00E+00
226	ALL	316251.39	3995575.81	6.212E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.897E-04	0.00E+00
227	ALL	316318.40	3995577.96	6.336E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.015E-04	0.00E+00
228	ALL	316117.67	3995659.31	3.829E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.634E-04	0.00E+00
229	ALL	316057.66	3995632.84	3.495E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.318E-04	0.00E+00
230	ALL	315997.65	3995606.38	3.107E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.949E-04	0.00E+00
231	ALL	315937.64	3995579.92	2.742E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.603E-04	0.00E+00
232	ALL	315877.63	3995553.46	2.491E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.364E-04	0.00E+00
233	ALL	315817.62	3995527.00	2.422E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.299E-04	0.00E+00

234	ALL	315745.18	3995470.19	2.772E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.631E-04	0.00E+00
235	ALL	315720.31	3995409.51	3.333E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.164E-04	0.00E+00
236	ALL	315695.44	3995348.82	3.836E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.641E-04	0.00E+00
237	ALL	315670.56	3995288.13	4.126E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.917E-04	0.00E+00
238	ALL	315645.69	3995227.45	4.157E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.946E-04	0.00E+00
239	ALL	315620.82	3995166.76	4.001E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.798E-04	0.00E+00
240	ALL	316181.18	3995673.61	4.175E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.963E-04	0.00E+00
241	ALL	316248.19	3995675.76	4.488E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.260E-04	0.00E+00
242	ALL	316315.20	3995677.91	4.557E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.326E-04	0.00E+00
243	ALL	316113.91	3995759.01	3.005E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.853E-04	0.00E+00
244	ALL	316052.77	3995732.05	2.788E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.646E-04	0.00E+00
245	ALL	315991.64	3995705.09	2.525E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.397E-04	0.00E+00
246	ALL	315930.51	3995678.14	2.259E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.145E-04	0.00E+00
247	ALL	315869.38	3995651.18	2.029E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.926E-04	0.00E+00
248	ALL	315808.24	3995624.22	1.889E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.793E-04	0.00E+00
249	ALL	315747.11	3995597.27	1.876E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.780E-04	0.00E+00
250	ALL	315673.31	3995539.40	2.157E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.048E-04	0.00E+00
251	ALL	315647.97	3995477.58	2.574E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.443E-04	0.00E+00
252	ALL	315622.64	3995415.75	2.968E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.817E-04	0.00E+00
253	ALL	315597.30	3995353.93	3.240E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.075E-04	0.00E+00
254	ALL	315571.96	3995292.11	3.329E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.160E-04	0.00E+00
255	ALL	315546.62	3995230.29	3.259E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.093E-04	0.00E+00
256	ALL	315521.29	3995168.47	3.099E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.942E-04	0.00E+00
257	ALL	316177.98	3995773.56	3.230E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.066E-04	0.00E+00
258	ALL	316244.99	3995775.71	3.419E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.246E-04	0.00E+00
259	ALL	316311.99	3995777.86	3.460E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.284E-04	0.00E+00
260	ALL	316112.00	3995859.53	2.440E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.316E-04	0.00E+00
261	ALL	316053.45	3995833.71	2.300E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.183E-04	0.00E+00
262	ALL	315994.90	3995807.89	2.127E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.019E-04	0.00E+00
263	ALL	315936.35	3995782.08	1.945E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.846E-04	0.00E+00
264	ALL	315877.81	3995756.26	1.768E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.678E-04	0.00E+00
265	ALL	315819.26	3995730.44	1.614E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.532E-04	0.00E+00
266	ALL	315760.71	3995704.62	1.514E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.437E-04	0.00E+00
267	ALL	315702.16	3995678.81	1.492E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.417E-04	0.00E+00
268	ALL	315643.62	3995652.99	1.548E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.469E-04	0.00E+00
269	ALL	315602.21	3995610.48	1.729E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.642E-04	0.00E+00
270	ALL	315577.94	3995551.27	2.029E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.926E-04	0.00E+00
271	ALL	315553.68	3995492.06	2.326E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.208E-04	0.00E+00
272	ALL	315529.41	3995432.86	2.566E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.436E-04	0.00E+00
273	ALL	315505.15	3995373.65	2.705E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.568E-04	0.00E+00
274	ALL	315480.88	3995314.44	2.727E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.588E-04	0.00E+00
275	ALL	315456.62	3995255.23	2.653E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.519E-04	0.00E+00
276	ALL	315432.35	3995196.03	2.532E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.403E-04	0.00E+00
277	ALL	316174.77	3995873.51	2.587E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.456E-04	0.00E+00
278	ALL	316241.78	3995875.66	2.711E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.574E-04	0.00E+00
279	ALL	316308.79	3995877.80	2.738E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.599E-04	0.00E+00
280	ALL	316441.49	3995024.25	9.628E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.139E-03	0.00E+00
281	ALL	316472.61	3995128.20	3.969E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.767E-03	0.00E+00
282	ALL	316472.82	3995166.17	3.224E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.061E-03	0.00E+00
283	ALL	316481.08	3995061.05	5.291E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.022E-03	0.00E+00
284	ALL	316478.94	3995022.18	6.397E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.072E-03	0.00E+00
285	ALL	316543.80	3995129.56	2.341E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.222E-03	0.00E+00
286	ALL	316531.15	3995163.24	2.210E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.098E-03	0.00E+00
287	ALL	316531.85	3995207.88	1.853E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.759E-03	0.00E+00
288	ALL	316459.82	3995277.71	1.960E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.861E-03	0.00E+00
289	ALL	316426.44	3995291.14	2.105E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.998E-03	0.00E+00
290	ALL	316554.31	3995057.01	2.928E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.780E-03	0.00E+00
291	ALL	316552.16	3995018.13	3.415E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.242E-03	0.00E+00
292	ALL	316617.67	3995123.79	1.543E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.465E-03	0.00E+00
293	ALL	316593.66	3995187.70	1.429E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.357E-03	0.00E+00
294	ALL	316569.66	3995251.62	1.309E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.242E-03	0.00E+00
295	ALL	316492.21	3995335.53	1.319E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.252E-03	0.00E+00
296	ALL	316450.64	3995353.75	1.400E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.329E-03	0.00E+00
297	ALL	316627.53	3995052.96	1.848E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.754E-03	0.00E+00
298	ALL	316625.38	3995014.09	2.104E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.997E-03	0.00E+00
299	ALL	316689.80	3995122.66	1.082E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.027E-03	0.00E+00
300	ALL	316676.70	3995157.53	1.047E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.934E-04	0.00E+00
301	ALL	316663.60	3995192.41	1.012E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.605E-04	0.00E+00
302	ALL	316650.50	3995227.28	9.798E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.301E-04	0.00E+00
303	ALL	316637.40	3995262.16	9.472E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.991E-04	0.00E+00
304	ALL	316624.30	3995297.03	9.095E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.634E-04	0.00E+00
305	ALL	316611.20	3995331.91	8.665E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.225E-04	0.00E+00
306	ALL	316563.54	3995380.69	8.786E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.340E-04	0.00E+00
307	ALL	316528.98	3995394.59	9.308E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.836E-04	0.00E+00
308	ALL	316494.42	3995408.49	9.761E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.265E-04	0.00E+00
309	ALL	316459.85	3995422.40	1.009E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.576E-04	0.00E+00
310	ALL	316425.29	3995436.30	1.023E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.713E-04	0.00E+00
311	ALL	316356.17	3995464.11	9.945E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.440E-04	0.00E+00
312	ALL	316702.90	3995087.79	1.123E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.066E-03	0.00E+00
313	ALL	316700.75	3995048.91	1.266E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.201E-03	0.00E+00
314	ALL	316698.60	3995010.04	1.420E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.348E-03	0.00E+00
315	ALL	316789.43	3995117.71	7.254E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.885E-04	0.00E+00
316	ALL	316799.87	3995168.32	6.257E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.940E-04	0.00E+00
317	ALL	316762.81	3995188.59	6.850E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.502E-04	0.00E+00

318	ALL	316749.50	3995224.03	6.685E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.345E-04	0.00E+00
319	ALL	316736.18	3995259.47	6.542E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.210E-04	0.00E+00
320	ALL	316722.87	3995294.91	6.378E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.054E-04	0.00E+00
321	ALL	316709.56	3995330.35	6.192E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.878E-04	0.00E+00
322	ALL	316696.25	3995365.79	5.988E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.684E-04	0.00E+00
323	ALL	316682.94	3995401.23	5.766E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.474E-04	0.00E+00
324	ALL	316634.50	3995450.80	5.848E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.551E-04	0.00E+00
325	ALL	316599.38	3995464.93	6.154E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.842E-04	0.00E+00
326	ALL	316564.26	3995479.06	6.425E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.099E-04	0.00E+00
327	ALL	316529.14	3995493.19	6.659E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.321E-04	0.00E+00
328	ALL	316494.01	3995507.31	6.836E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.489E-04	0.00E+00
329	ALL	316458.89	3995521.44	6.921E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.569E-04	0.00E+00
330	ALL	316423.77	3995535.57	6.910E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.559E-04	0.00E+00
331	ALL	316353.52	3995563.83	6.618E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.282E-04	0.00E+00
332	ALL	316802.74	3995082.27	7.484E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.104E-04	0.00E+00
333	ALL	316800.60	3995043.40	8.267E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.847E-04	0.00E+00
334	ALL	316889.14	3995112.57	5.187E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.924E-04	0.00E+00
335	ALL	316875.68	3995148.39	5.047E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.791E-04	0.00E+00
336	ALL	316862.23	3995184.20	4.930E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.680E-04	0.00E+00
337	ALL	316848.78	3995220.02	4.840E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.594E-04	0.00E+00
338	ALL	316835.32	3995255.84	4.757E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.515E-04	0.00E+00
339	ALL	316821.87	3995291.65	4.671E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.434E-04	0.00E+00
340	ALL	316808.42	3995327.47	4.578E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.346E-04	0.00E+00
341	ALL	316794.96	3995363.29	4.482E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.255E-04	0.00E+00
342	ALL	316781.51	3995399.11	4.375E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.153E-04	0.00E+00
343	ALL	316768.06	3995434.92	4.252E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.036E-04	0.00E+00
344	ALL	316754.60	3995470.74	4.116E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.907E-04	0.00E+00
345	ALL	316705.65	3995520.84	4.176E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.964E-04	0.00E+00
346	ALL	316670.16	3995535.12	4.366E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.144E-04	0.00E+00
347	ALL	316634.66	3995549.39	4.548E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.317E-04	0.00E+00
348	ALL	316599.17	3995563.67	4.706E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.467E-04	0.00E+00
349	ALL	316563.67	3995577.95	4.841E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.595E-04	0.00E+00
350	ALL	316528.17	3995592.23	4.950E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.699E-04	0.00E+00
351	ALL	316492.68	3995606.51	5.007E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.753E-04	0.00E+00
352	ALL	316457.18	3995620.79	5.012E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.757E-04	0.00E+00
353	ALL	316421.69	3995635.07	4.965E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.713E-04	0.00E+00
354	ALL	316350.69	3995663.63	4.735E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.495E-04	0.00E+00
355	ALL	316902.59	3995076.75	5.336E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.065E-04	0.00E+00
356	ALL	316900.44	3995037.88	5.811E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.516E-04	0.00E+00
357	ALL	316898.30	3994999.01	6.330E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.009E-04	0.00E+00
358	ALL	316896.15	3994960.13	6.862E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.513E-04	0.00E+00
359	ALL	316894.00	3994921.26	7.375E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.001E-04	0.00E+00
360	ALL	316891.85	3994882.39	7.837E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.440E-04	0.00E+00
361	ALL	316988.88	3995107.32	3.892E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.695E-04	0.00E+00
362	ALL	316975.33	3995143.41	3.796E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.603E-04	0.00E+00
363	ALL	316961.78	3995179.49	3.723E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.534E-04	0.00E+00
364	ALL	316948.22	3995215.58	3.660E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.474E-04	0.00E+00
365	ALL	316934.67	3995251.67	3.608E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.425E-04	0.00E+00
366	ALL	316921.11	3995287.75	3.560E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.379E-04	0.00E+00
367	ALL	316907.56	3995323.84	3.510E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.331E-04	0.00E+00
368	ALL	316894.00	3995359.93	3.456E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.280E-04	0.00E+00
369	ALL	316880.45	3995396.01	3.399E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.226E-04	0.00E+00
370	ALL	316866.89	3995432.10	3.332E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.163E-04	0.00E+00
371	ALL	316853.34	3995468.18	3.261E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.095E-04	0.00E+00
372	ALL	316839.78	3995504.27	3.183E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.022E-04	0.00E+00
373	ALL	316826.23	3995540.36	3.101E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.943E-04	0.00E+00
374	ALL	316776.91	3995590.83	3.144E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.984E-04	0.00E+00
375	ALL	316741.15	3995605.22	3.272E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.106E-04	0.00E+00
376	ALL	316705.39	3995619.60	3.392E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.220E-04	0.00E+00
377	ALL	316669.62	3995633.99	3.504E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.326E-04	0.00E+00
378	ALL	316633.86	3995648.38	3.605E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.422E-04	0.00E+00
379	ALL	316598.10	3995662.76	3.691E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.504E-04	0.00E+00
380	ALL	316562.33	3995677.15	3.760E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.569E-04	0.00E+00
381	ALL	316526.57	3995691.54	3.807E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.613E-04	0.00E+00
382	ALL	316490.81	3995705.92	3.816E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.623E-04	0.00E+00
383	ALL	316455.05	3995720.31	3.794E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.601E-04	0.00E+00
384	ALL	316347.76	3995763.47	3.576E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.395E-04	0.00E+00
385	ALL	317002.44	3995071.23	3.999E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.796E-04	0.00E+00
386	ALL	317000.29	3995032.36	4.317E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.098E-04	0.00E+00
387	ALL	316998.14	3994993.49	4.652E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.415E-04	0.00E+00
388	ALL	316996.00	3994954.62	4.999E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.745E-04	0.00E+00
389	ALL	316993.85	3994915.75	5.338E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.067E-04	0.00E+00
390	ALL	316991.70	3994876.87	5.650E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.363E-04	0.00E+00
391	ALL	317088.66	3995102.00	3.034E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.880E-04	0.00E+00
392	ALL	317075.03	3995138.29	2.963E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.813E-04	0.00E+00
393	ALL	317061.40	3995174.58	2.907E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.760E-04	0.00E+00
394	ALL	317047.77	3995210.87	2.864E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.718E-04	0.00E+00
395	ALL	317034.13	3995247.16	2.830E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.686E-04	0.00E+00
396	ALL	317020.50	3995283.45	2.802E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.660E-04	0.00E+00
397	ALL	317006.87	3995319.74	2.777E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.636E-04	0.00E+00
398	ALL	316993.24	3995356.02	2.749E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.609E-04	0.00E+00
399	ALL	316979.61	3995392.31	2.713E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.575E-04	0.00E+00
400	ALL	316965.98	3995428.60	2.672E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.536E-04	0.00E+00
401	ALL	316952.35	3995464.89	2.628E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.495E-04	0.00E+00

402	ALL	316938.72	3995501.18	2.583E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.452E-04	0.00E+00
403	ALL	316925.09	3995537.47	2.536E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.407E-04	0.00E+00
404	ALL	316911.46	3995573.75	2.487E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.361E-04	0.00E+00
405	ALL	316897.83	3995610.04	2.432E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.309E-04	0.00E+00
406	ALL	316848.24	3995660.80	2.464E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.339E-04	0.00E+00
407	ALL	316812.27	3995675.27	2.556E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.426E-04	0.00E+00
408	ALL	316776.31	3995689.73	2.637E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.504E-04	0.00E+00
409	ALL	316740.35	3995704.20	2.714E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.576E-04	0.00E+00
410	ALL	316704.38	3995718.67	2.788E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.647E-04	0.00E+00
411	ALL	316668.42	3995733.13	2.859E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.714E-04	0.00E+00
412	ALL	316632.46	3995747.60	2.920E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.772E-04	0.00E+00
413	ALL	316596.49	3995762.07	2.969E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.818E-04	0.00E+00
414	ALL	316560.53	3995776.54	3.002E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.849E-04	0.00E+00
415	ALL	316524.57	3995791.00	3.017E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.863E-04	0.00E+00
416	ALL	316488.61	3995805.47	3.007E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.854E-04	0.00E+00
417	ALL	316452.64	3995819.94	2.978E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.826E-04	0.00E+00
418	ALL	316416.68	3995834.40	2.938E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.789E-04	0.00E+00
419	ALL	316380.72	3995848.87	2.881E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.735E-04	0.00E+00
420	ALL	316344.75	3995863.34	2.814E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.671E-04	0.00E+00
421	ALL	317102.29	3995065.72	3.115E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.957E-04	0.00E+00
422	ALL	317100.14	3995026.84	3.334E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.165E-04	0.00E+00
423	ALL	317097.99	3994987.97	3.570E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.389E-04	0.00E+00
424	ALL	317095.84	3994949.10	3.808E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.614E-04	0.00E+00
425	ALL	317093.70	3994910.23	4.042E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.837E-04	0.00E+00
426	ALL	317091.55	3994871.36	4.261E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.045E-04	0.00E+00
427	ALL	316149.49	3995077.44	8.734E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.291E-03	0.00E+00
428	ALL	316153.29	3995065.15	9.512E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.029E-03	0.00E+00
429	ALL	316153.92	3995019.58	9.712E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.219E-03	0.00E+00
430	ALL	316153.00	3995005.45	9.394E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.917E-03	0.00E+00
431	ALL	316083.64	3995122.52	3.232E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.068E-03	0.00E+00
432	ALL	316088.03	3995140.95	3.019E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.866E-03	0.00E+00
433	ALL	316138.37	3995139.49	5.223E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.957E-03	0.00E+00
434	ALL	316079.25	3995067.49	3.548E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.368E-03	0.00E+00
435	ALL	316122.85	3995079.79	5.784E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.490E-03	0.00E+00
436	ALL	316105.00	3995078.32	4.628E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.393E-03	0.00E+00
437	ALL	316075.15	3995081.54	3.388E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.216E-03	0.00E+00
438	ALL	316055.83	3995077.74	2.871E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.726E-03	0.00E+00
439	ALL	316028.32	3995078.61	2.320E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.203E-03	0.00E+00
440	ALL	316011.35	3995079.20	2.061E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.956E-03	0.00E+00
441	ALL	315979.44	3995076.86	1.684E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.599E-03	0.00E+00
442	ALL	315975.45	3995024.42	1.547E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.469E-03	0.00E+00
443	ALL	316006.18	3995022.08	1.871E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.776E-03	0.00E+00
444	ALL	316128.23	3995065.46	6.303E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.983E-03	0.00E+00
445	ALL	315978.96	3995007.74	1.510E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.433E-03	0.00E+00
446	ALL	316010.57	3995008.32	1.854E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.760E-03	0.00E+00
447	ALL	316029.89	3995007.15	2.123E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.015E-03	0.00E+00
448	ALL	316074.67	3995006.56	3.124E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.965E-03	0.00E+00
449	ALL	316107.45	3995006.56	4.524E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.294E-03	0.00E+00
450	ALL	316053.01	3995006.27	2.552E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.423E-03	0.00E+00
451	ALL	316022.45	3995166.47	1.704E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.617E-03	0.00E+00
452	ALL	316088.01	3995176.71	2.353E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.233E-03	0.00E+00
453	ALL	316138.65	3995178.17	3.638E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.453E-03	0.00E+00
454	ALL	316115.23	3995095.93	5.087E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.829E-03	0.00E+00
455	ALL	316241.96	3995168.22	1.009E-05	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.576E-03	0.00E+00
456	ALL	316153.28	3995221.49	2.872E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.726E-03	0.00E+00
457	ALL	316113.77	3995220.03	2.096E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.990E-03	0.00E+00
458	ALL	316069.87	3995221.78	1.564E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.484E-03	0.00E+00
459	ALL	316050.26	3995223.54	1.405E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.334E-03	0.00E+00
460	ALL	316028.01	3995225.00	1.267E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.203E-03	0.00E+00
461	ALL	316006.94	3995226.47	1.162E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.103E-03	0.00E+00
462	ALL	316168.50	3995220.03	3.306E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.138E-03	0.00E+00
463	ALL	316217.38	3995219.44	4.645E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.409E-03	0.00E+00
464	ALL	316237.28	3995217.98	5.149E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.888E-03	0.00E+00
465	ALL	316170.17	3995255.54	2.495E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.368E-03	0.00E+00
466	ALL	316138.83	3995271.38	1.807E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.715E-03	0.00E+00
467	ALL	316111.63	3995264.84	1.563E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.484E-03	0.00E+00
468	ALL	316093.73	3995270.70	1.355E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.286E-03	0.00E+00
469	ALL	316147.10	3995297.21	1.634E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.551E-03	0.00E+00
470	ALL	316187.04	3995286.88	2.199E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.087E-03	0.00E+00
471	ALL	316223.54	3995259.68	3.243E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.079E-03	0.00E+00
472	ALL	316241.10	3995258.64	3.488E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.311E-03	0.00E+00
473	ALL	316298.26	3995258.64	3.777E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.586E-03	0.00E+00
474	ALL	316306.18	3995234.20	4.753E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.512E-03	0.00E+00
475	ALL	316300.67	3995218.70	5.626E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.340E-03	0.00E+00
476	ALL	316342.33	3995283.78	2.897E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.750E-03	0.00E+00
477	ALL	316347.16	3995304.10	2.471E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.346E-03	0.00E+00
478	ALL	316315.73	3995152.57	1.347E-05	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.279E-02	0.00E+00
479	ALL	316267.22	3995165.01	1.130E-05	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.073E-02	0.00E+00
480	ALL	316570.32	3995078.31	2.409E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.286E-03	0.00E+00
481	ALL	316570.32	3995111.19	2.127E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.019E-03	0.00E+00
482	ALL	316596.54	3995153.61	1.568E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.488E-03	0.00E+00
483	ALL	316593.68	3995075.45	2.097E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.991E-03	0.00E+00
484	ALL	316597.97	3995104.52	1.841E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.748E-03	0.00E+00
485	ALL	316443.74	3995211.83	3.050E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.895E-03	0.00E+00

486	ALL	316442.12	3995241.40	2.597E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.465E-03	0.00E+00
487	ALL	316444.15	3995263.68	2.268E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.153E-03	0.00E+00
488	ALL	316443.74	3995307.44	1.803E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.711E-03	0.00E+00
489	ALL	316441.27	3995330.50	1.616E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.534E-03	0.00E+00
490	ALL	316490.09	3995209.12	2.336E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.217E-03	0.00E+00
491	ALL	316493.39	3995244.08	1.957E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.858E-03	0.00E+00
492	ALL	316492.73	3995284.98	1.637E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.554E-03	0.00E+00
493	ALL	316493.39	3995308.07	1.476E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.401E-03	0.00E+00
494	ALL	316529.67	3995230.89	1.716E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.628E-03	0.00E+00
495	ALL	316528.35	3995271.79	1.475E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.401E-03	0.00E+00
496	ALL	316528.35	3995253.98	1.580E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.500E-03	0.00E+00
497	ALL	316535.61	3995292.90	1.320E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.253E-03	0.00E+00
498	ALL	316490.75	3995323.91	1.393E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.322E-03	0.00E+00
499	ALL	316527.69	3995314.67	1.256E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.192E-03	0.00E+00
500	ALL	316574.53	3995216.38	1.435E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.362E-03	0.00E+00
501	ALL	316575.19	3995293.56	1.118E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.061E-03	0.00E+00
502	ALL	316603.56	3995240.13	1.163E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.104E-03	0.00E+00
503	ALL	316600.26	3995216.38	1.267E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.203E-03	0.00E+00
504	ALL	316623.35	3995215.06	1.141E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.083E-03	0.00E+00
505	ALL	316654.35	3995210.44	1.006E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.545E-04	0.00E+00
506	ALL	316680.74	3995242.76	8.336E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.913E-04	0.00E+00
507	ALL	316697.23	3995210.44	8.415E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.988E-04	0.00E+00
508	ALL	316674.80	3995217.04	9.074E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.614E-04	0.00E+00
509	ALL	316719.66	3995246.06	7.139E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.777E-04	0.00E+00
510	ALL	316721.64	3995207.14	7.702E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.311E-04	0.00E+00
511	ALL	316673.48	3995296.86	7.565E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.181E-04	0.00E+00
512	ALL	316649.08	3995296.20	8.299E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.878E-04	0.00E+00
513	ALL	316633.90	3995327.20	8.096E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.685E-04	0.00E+00
514	ALL	316670.19	3995321.93	7.217E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.850E-04	0.00E+00
515	ALL	316735.49	3995330.50	5.694E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.405E-04	0.00E+00
516	ALL	316784.31	3995292.24	5.231E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.966E-04	0.00E+00
517	ALL	316790.25	3995322.59	4.870E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.623E-04	0.00E+00
518	ALL	316787.61	3995242.10	5.663E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.376E-04	0.00E+00
519	ALL	316793.55	3995212.42	5.865E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.567E-04	0.00E+00
520	ALL	316806.08	3995004.62	8.837E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.389E-04	0.00E+00
521	ALL	315890.72	3995239.47	7.784E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.389E-04	0.00E+00
522	ALL	315629.69	3995340.75	3.500E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.322E-04	0.00E+00
523	ALL	315856.33	3995384.99	4.117E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.908E-04	0.00E+00
524	ALL	315982.85	3995475.80	3.965E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.763E-04	0.00E+00
525	ALL	315785.70	3995464.94	2.885E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.739E-04	0.00E+00
526	ALL	316098.50	3995319.79	1.095E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.040E-03	0.00E+00
527	ALL	316067.45	3995322.12	9.192E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.725E-04	0.00E+00
528	ALL	316017.00	3995314.36	7.666E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.276E-04	0.00E+00
529	ALL	315935.50	3995246.05	8.535E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.102E-04	0.00E+00
530	ALL	315892.64	3995221.41	8.319E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.897E-04	0.00E+00
531	ALL	315837.94	3995246.94	6.631E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.295E-04	0.00E+00
532	ALL	315843.61	3995259.50	6.479E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.150E-04	0.00E+00
533	ALL	315802.29	3995240.46	6.148E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.836E-04	0.00E+00
534	ALL	315801.07	3995223.04	6.355E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.032E-04	0.00E+00
535	ALL	315935.99	3995261.12	7.987E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.581E-04	0.00E+00
536	ALL	315982.59	3995253.42	9.338E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.864E-04	0.00E+00
537	ALL	315983.80	3995272.87	8.483E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.053E-04	0.00E+00
538	ALL	316028.37	3995274.49	9.665E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.175E-04	0.00E+00
539	ALL	315982.18	3995319.47	6.744E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.402E-04	0.00E+00
540	ALL	315934.37	3995303.26	6.547E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.215E-04	0.00E+00
541	ALL	315892.64	3995283.41	6.603E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.268E-04	0.00E+00
542	ALL	315894.67	3995259.10	7.309E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.938E-04	0.00E+00
543	ALL	315806.34	3995264.36	5.858E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.561E-04	0.00E+00
544	ALL	315785.27	3995301.64	5.056E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.799E-04	0.00E+00
545	ALL	315838.75	3995305.29	5.497E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.218E-04	0.00E+00
546	ALL	315745.97	3995264.36	5.088E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.830E-04	0.00E+00
547	ALL	315753.67	3995241.67	5.404E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.129E-04	0.00E+00
548	ALL	315669.39	3995225.87	4.424E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.199E-04	0.00E+00
549	ALL	315668.58	3995249.37	4.317E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.097E-04	0.00E+00
550	ALL	315664.53	3995269.63	4.176E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.964E-04	0.00E+00
551	ALL	315983.80	3995340.94	6.169E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.856E-04	0.00E+00
552	ALL	315935.59	3995324.73	5.946E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.645E-04	0.00E+00
553	ALL	315822.95	3995338.10	4.758E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.517E-04	0.00E+00
554	ALL	315934.37	3995371.73	4.850E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.604E-04	0.00E+00
555	ALL	315659.85	3995104.10	4.478E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.251E-04	0.00E+00
556	ALL	315659.53	3994917.54	3.071E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.915E-04	0.00E+00
557	ALL	315659.74	3994955.12	3.533E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.354E-04	0.00E+00
558	ALL	315659.95	3994992.71	3.924E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.725E-04	0.00E+00
559	ALL	315660.17	3995030.29	4.215E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.001E-04	0.00E+00
560	ALL	316123.98	3995007.30	5.698E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.409E-03	0.00E+00
561	ALL	316078.34	3995023.81	3.366E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.195E-03	0.00E+00
562	ALL	315976.75	3995063.92	1.654E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.570E-03	0.00E+00
563	ALL	316027.99	3995062.17	2.320E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.202E-03	0.00E+00

Health Risk Assessment

Mitigated Construction

Henderson Ave & SR 65 Commercial Project (Mitigated Construction - Tier 4)

Estimation of Annual Onsite Construction Emissions (Project Site)—DPM (Exhaust PM10)

Start of Construction	7/1/2023		
End of Construction	8/31/2024		**Total**
Number of Days	427		427
Number of Hours	10,248		10,248
Size of the construction area source (entire site):	**41,455.8**	**sq-meters**	

	On-site Construction Activity	Tier 4 Mitigated On-site DPM (tons)
2023	On-site Demolition	0.00031
2023	On-site Site Preparation	0.00031
2023	On-site Grading	0.00152
2023	On-site Building Construction 2023	0.00437
2024	On-site Building Construction 2024	0.00877
2024	On-site Paving 2023	0.00037
2024	On-site Architectural Coating	0.00004

Total Unmitigated DPM (On-site) 1.569E-02 tons

Factor in AERMOD to Account for 5 days per week/8 hours per day: 4.2
1 g/s used as the unit emission in AERMOD - converted to g/s/m2 in AERMOD

Average Emission (Emissions Summary for HARP2 Inputs)

1.425E+04	grams
3.862E-04	grams/sec
9.315E-09	grams/m2-sec

Tons/Construction Period	1.569E-02
Pounds/Construction Period	3.138E+01
Pounds/Day	7.349E-02
Pounds/Hour	3.062E-03
Pounds/Year	2.682E+01
Years	1.169863014

Henderson Ave & SR 65 Commercial Project (Mitigated Construction - Tier 4)

Estimation of Annual Offsite Construction DPM Emissions (No Change Compared to Unmitigated Scenario)

Start of Construction	7/1/2023	
End of Construction	8/31/2024	**Total**
Number of Days	427	427
Number of Hours	10,248	10,248

	2023	2023	2023	2023	2024	2023	2024
Construction Trip Type	Demolition	Site Preparation	Grading	Building Construction	Building Construction	Paving	Architectural Coating
Haul Truck	0.00001	0.00001	0.00031	0.00000	0.00001	0.00001	0.00000
Vendor Truck	0.00000	0.00000	0.00000	0.00094	0.00208	0.00001	0.00000
Worker	0.00000	0.00000	0.00001	0.00034	0.00069	0.00001	0.00002
Total	0.00001	0.00001	0.00032	0.00128	0.00278	0.00003	0.00002

	Haul Truck (tons)	**Vendor Truck (tons)**	**Worker (tons)**	**Total (tons)**
Total DPM	3.500E-04	3.030E-03	1.070E-03	4.450E-03
Average Emissions				
Grams	3.178E+02	2.751E+03	9.716E+02	
Grams/sec	8.614E-06	7.457E-05	2.633E-05	
Default Distance	20	7.3	10.8	Vehicle Travel Distance Assumed in CalEEMod

Vehicle Travel Distances in the Construction HRA (miles)

Road Segment 1	0.32	0.32	0.32	miles
Road Segment 2	0.68	0.68	0.68	miles
Road Segment 3	0.28	0.28	0.28	miles
Road Segment 4	0.57	0.57	0.57	
On-site	0.48	0.48	0.48	

Trip Distribution (percent)

Road Segment 1	25.0%	25.0%	25.0%	Off-site Road Segment 1
Road Segment 2	25.0%	25.0%	25.0%	Off-site Road Segment 2
Road Segment 3	25.0%	25.0%	25.0%	Off-site Road Segment 3
Road Segment 4	25.0%	25.0%	25.0%	Off-site Road Segment 4
On-site	100.0%	100.0%	100.0%	On-site

Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)

				Total	
Road Segment 1	4.9746E-08	1.1799E-06	2.8163E-07	1.5113E-06	Off-site Road Segment 1
Road Segment 2	8.8567E-08	2.1007E-06	5.0141E-07	2.6906E-06	Off-site Road Segment 2
Road Segment 3	3.001E-08	7.119E-07	1.699E-07	9.1182E-07	
Road Segment 4	6.158E-08	1.461E-06	3.486E-07	1.8708E-06	
On-site	2.058E-07	4.882E-06	1.165E-06	6.2528E-06	

Average Emission (Emissions Summary for HARP2 Inputs)

	Grams/sec	Pounds/Hour	Pounds/Day	Pounds/year	Tons/year
Road Segment 1	1.5113E-06	1.1994E-05	2.8787E-04	1.2292E-01	6.1459E-05
Road Segment 2	2.6906E-06	2.1355E-05	5.1251E-04	2.1884E-01	1.0942E-04
Road Segment 3	9.1182E-07	7.2368E-06	1.7368E-04	7.4163E-02	3.7081E-05
Road Segment 4	1.8708E-06	1.4848E-05	3.5635E-04	1.5216E-01	7.6081E-05
On-site	6.2528E-06	4.9627E-05	1.1910E-03	5.0857E-01	2.5429E-04

Health Risk Summary - Tier 4 Mitigated Construction (Summary of HARP2 Results)

Henderson Ave & SR 65 Commercial Project (Mitigated Construction - Tier 4)

	RISK_SUM	Cancer Risk/million	MAXHI NonCancer Chronic	MAXHI Acute
Maximum Risk	1.7297E-06	1.730	1.6419E-03	0.00E+00

	X	Y	
MIR UTM	316324.63	3995146.10	0.0016419

Latitude, Longitude: 36°05'00.9"N 119°02'23.9"W
Receptor # 175

*HARP - HRACalc v22118 5/22/2023 11:47:28 PM - Cancer Risk - Input File: F:\Move\0014-017\HARP\Mitigated\Mitigated Construction\hra\T4 Mitigated CONSTRUCTIONHRAInput.hra
*HARP - HRACalc v22118 5/22/2023 11:47:28 PM - Chronic Risk - Input File: F:\Move\0014-017\HARP\Mitigated\Mitigated Construction\hra\T4 Mitigated CONSTRUCTIONHRAInput.hra
*HARP - HRACalc v22118 5/22/2023 11:47:28 PM - Acute Risk - Input File: F:\Move\0014-017\HARP\Mitigated\Mitigated Construction\hra\T4 Mitigated CONSTRUCTIONHRAInput.hra

REC	GRP	X	Y	RISK_SUM	SCENARIO	MAXHI NonCancerChronic	MAXHI Acute
1	ALL	316280.75	3994544.12	1.186E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.126E-04	0.00E+00
2	ALL	316241.29	3994544.38	9.162E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.697E-05	0.00E+00
3	ALL	316201.82	3994544.65	6.897E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.547E-05	0.00E+00
4	ALL	316162.36	3994544.92	5.186E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.923E-05	0.00E+00
5	ALL	316427.89	3994486.35	1.455E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.381E-04	0.00E+00
6	ALL	316280.07	3994444.12	6.401E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.076E-05	0.00E+00
7	ALL	316240.61	3994444.39	5.136E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.876E-05	0.00E+00
8	ALL	316201.15	3994444.65	4.056E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.850E-05	0.00E+00
9	ALL	316161.68	3994444.92	3.206E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.043E-05	0.00E+00
10	ALL	316354.70	3994357.91	5.836E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.540E-05	0.00E+00
11	ALL	316390.53	3994371.97	7.118E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.757E-05	0.00E+00
12	ALL	316426.37	3994386.03	8.480E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.049E-05	0.00E+00
13	ALL	316462.21	3994400.09	9.809E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.311E-05	0.00E+00
14	ALL	316498.05	3994414.14	1.099E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.044E-04	0.00E+00
15	ALL	316533.89	3994428.20	1.194E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.134E-04	0.00E+00
16	ALL	316569.73	3994442.26	1.261E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.197E-04	0.00E+00
17	ALL	316605.57	3994456.32	1.298E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.232E-04	0.00E+00
18	ALL	316641.41	3994470.38	1.306E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.240E-04	0.00E+00
19	ALL	316677.25	3994484.44	1.290E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.224E-04	0.00E+00
20	ALL	316778.09	3994638.09	1.398E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.327E-04	0.00E+00
21	ALL	316794.34	3994672.99	1.380E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.310E-04	0.00E+00
22	ALL	316810.60	3994707.89	1.340E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.272E-04	0.00E+00
23	ALL	316826.85	3994742.79	1.283E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.218E-04	0.00E+00
24	ALL	316875.60	3994847.49	1.037E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.844E-05	0.00E+00
25	ALL	316318.86	3994343.85	4.712E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.473E-05	0.00E+00
26	ALL	316279.39	3994344.12	3.948E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.747E-05	0.00E+00
27	ALL	316239.93	3994344.39	3.258E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.093E-05	0.00E+00
28	ALL	316200.47	3994344.66	2.664E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.529E-05	0.00E+00
29	ALL	316161.01	3994344.92	2.179E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.068E-05	0.00E+00
30	ALL	316353.82	3994257.84	3.758E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.567E-05	0.00E+00
31	ALL	316389.47	3994271.82	4.514E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.285E-05	0.00E+00
32	ALL	316425.12	3994285.80	5.353E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.081E-05	0.00E+00
33	ALL	316460.76	3994299.78	6.227E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.910E-05	0.00E+00
34	ALL	316496.41	3994313.77	7.078E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.719E-05	0.00E+00
35	ALL	316532.05	3994327.75	7.851E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.452E-05	0.00E+00
36	ALL	316567.70	3994341.73	8.500E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.068E-05	0.00E+00
37	ALL	316603.35	3994355.71	8.997E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.540E-05	0.00E+00
38	ALL	316638.99	3994369.70	9.329E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.856E-05	0.00E+00
39	ALL	316674.64	3994383.68	9.504E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.021E-05	0.00E+00
40	ALL	316710.28	3994397.66	9.531E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.047E-05	0.00E+00
41	ALL	316745.93	3994411.64	9.427E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.948E-05	0.00E+00
42	ALL	316797.74	3994460.34	9.666E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.175E-05	0.00E+00
43	ALL	316813.90	3994495.05	1.002E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.510E-05	0.00E+00
44	ALL	316830.06	3994529.76	1.025E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.727E-05	0.00E+00
45	ALL	316846.23	3994564.47	1.035E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.820E-05	0.00E+00
46	ALL	316862.39	3994599.18	1.032E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.793E-05	0.00E+00
47	ALL	316878.56	3994633.89	1.016E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.648E-05	0.00E+00
48	ALL	316894.72	3994668.61	9.903E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.401E-05	0.00E+00
49	ALL	316910.88	3994703.32	9.538E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.054E-05	0.00E+00
50	ALL	316927.05	3994738.03	9.094E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.632E-05	0.00E+00
51	ALL	316943.21	3994772.74	8.583E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.147E-05	0.00E+00
52	ALL	316959.37	3994807.45	8.017E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.610E-05	0.00E+00
53	ALL	316975.54	3994842.16	7.413E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.037E-05	0.00E+00
54	ALL	316318.18	3994243.86	3.101E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.944E-05	0.00E+00
55	ALL	316278.72	3994244.12	2.645E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.511E-05	0.00E+00
56	ALL	316239.25	3994244.39	2.234E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.120E-05	0.00E+00
57	ALL	316199.79	3994244.66	1.875E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.780E-05	0.00E+00
58	ALL	316160.33	3994244.93	1.574E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.494E-05	0.00E+00
59	ALL	316353.00	3994157.78	2.580E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.449E-05	0.00E+00
60	ALL	316388.51	3994171.71	3.056E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.901E-05	0.00E+00
61	ALL	316424.01	3994185.64	3.590E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.408E-05	0.00E+00

62	ALL	316459.52	3994199.56	4.173E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.961E-05	0.00E+00
63	ALL	316495.02	3994213.49	4.767E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.525E-05	0.00E+00
64	ALL	316530.52	3994227.42	5.346E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.075E-05	0.00E+00
65	ALL	316566.03	3994241.34	5.877E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.578E-05	0.00E+00
66	ALL	316601.53	3994255.27	6.334E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.012E-05	0.00E+00
67	ALL	316637.04	3994269.20	6.701E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.361E-05	0.00E+00
68	ALL	316672.54	3994283.12	6.974E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.620E-05	0.00E+00
69	ALL	316708.04	3994297.05	7.149E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.786E-05	0.00E+00
70	ALL	316743.55	3994310.98	7.237E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.870E-05	0.00E+00
71	ALL	316779.05	3994324.91	7.243E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.875E-05	0.00E+00
72	ALL	316814.56	3994338.83	7.174E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.810E-05	0.00E+00
73	ALL	316866.16	3994387.33	7.355E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.982E-05	0.00E+00
74	ALL	316882.26	3994421.90	7.619E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.232E-05	0.00E+00
75	ALL	316898.36	3994456.48	7.808E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.411E-05	0.00E+00
76	ALL	316914.46	3994491.05	7.916E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.514E-05	0.00E+00
77	ALL	316930.56	3994525.62	7.946E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.542E-05	0.00E+00
78	ALL	316946.65	3994560.20	7.902E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.501E-05	0.00E+00
79	ALL	316962.75	3994594.77	7.788E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.393E-05	0.00E+00
80	ALL	316978.85	3994629.34	7.610E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.223E-05	0.00E+00
81	ALL	316994.95	3994663.92	7.370E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.996E-05	0.00E+00
82	ALL	317011.05	3994698.49	7.078E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.718E-05	0.00E+00
83	ALL	317027.15	3994733.06	6.740E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.398E-05	0.00E+00
84	ALL	317043.25	3994767.64	6.367E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.043E-05	0.00E+00
85	ALL	317059.35	3994802.21	5.966E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.663E-05	0.00E+00
86	ALL	317075.45	3994836.78	5.548E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.267E-05	0.00E+00
87	ALL	316317.50	3994143.86	2.175E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.065E-05	0.00E+00
88	ALL	316278.04	3994144.13	1.883E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.788E-05	0.00E+00
89	ALL	316238.58	3994144.39	1.621E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.539E-05	0.00E+00
90	ALL	316199.11	3994144.66	1.392E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.321E-05	0.00E+00
91	ALL	316159.65	3994144.93	1.192E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.132E-05	0.00E+00
92	ALL	316130.94	3995018.51	7.769E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.375E-04	0.00E+00
93	ALL	316128.23	3995065.46	7.581E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.196E-04	0.00E+00
94	ALL	316139.56	3995101.58	8.459E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.029E-04	0.00E+00
95	ALL	316103.39	3995018.43	5.297E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.028E-04	0.00E+00
96	ALL	316105.07	3995063.92	5.593E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.309E-04	0.00E+00
97	ALL	316085.67	3995100.92	4.323E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.104E-04	0.00E+00
98	ALL	316055.94	3995018.94	3.276E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.110E-04	0.00E+00
99	ALL	316053.23	3995065.89	3.397E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.225E-04	0.00E+00
100	ALL	316053.44	3995103.47	3.231E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.067E-04	0.00E+00
101	ALL	316026.64	3995020.03	2.606E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.474E-04	0.00E+00
102	ALL	316006.36	3995066.98	2.408E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.286E-04	0.00E+00
103	ALL	316015.94	3995103.68	2.471E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.345E-04	0.00E+00
104	ALL	315996.07	3994514.78	2.025E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.923E-05	0.00E+00
105	ALL	316062.32	3994486.84	2.320E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.202E-05	0.00E+00
106	ALL	315695.95	3995105.51	6.048E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.741E-05	0.00E+00
107	ALL	315608.58	3994884.51	2.916E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.768E-05	0.00E+00
108	ALL	315622.28	3994850.86	2.532E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.404E-05	0.00E+00
109	ALL	315926.69	3994443.77	1.344E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.276E-05	0.00E+00
110	ALL	315960.16	3994429.65	1.419E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.347E-05	0.00E+00
111	ALL	315993.63	3994415.53	1.476E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.401E-05	0.00E+00
112	ALL	316027.11	3994401.41	1.535E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.457E-05	0.00E+00
113	ALL	316060.58	3994387.29	1.624E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.541E-05	0.00E+00
114	ALL	316094.06	3994373.17	1.757E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.668E-05	0.00E+00
115	ALL	316127.53	3994359.04	1.940E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.842E-05	0.00E+00
116	ALL	315594.88	3994918.16	3.247E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.082E-05	0.00E+00
117	ALL	315595.09	3994955.74	3.665E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.479E-05	0.00E+00
118	ALL	315595.31	3994993.32	4.009E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.806E-05	0.00E+00
119	ALL	315595.52	3995030.91	4.264E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.048E-05	0.00E+00
120	ALL	315595.74	3995068.49	4.426E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.202E-05	0.00E+00
121	ALL	315595.95	3995106.08	4.507E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.278E-05	0.00E+00
122	ALL	315508.69	3994884.82	2.412E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.289E-05	0.00E+00
123	ALL	315522.49	3994850.92	2.133E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.025E-05	0.00E+00
124	ALL	315924.25	3994344.52	1.052E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.983E-06	0.00E+00
125	ALL	315957.97	3994330.29	1.076E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.021E-05	0.00E+00
126	ALL	315991.70	3994316.06	1.101E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.045E-05	0.00E+00
127	ALL	316025.42	3994301.84	1.137E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.079E-05	0.00E+00
128	ALL	316059.15	3994287.61	1.200E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.139E-05	0.00E+00
129	ALL	316092.88	3994273.38	1.294E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.229E-05	0.00E+00
130	ALL	316126.60	3994259.15	1.421E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.349E-05	0.00E+00
131	ALL	315494.88	3994918.72	2.646E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.511E-05	0.00E+00
132	ALL	315495.09	3994956.31	2.932E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.783E-05	0.00E+00
133	ALL	315495.31	3994993.89	3.162E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.002E-05	0.00E+00
134	ALL	315495.52	3995031.48	3.331E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.162E-05	0.00E+00
135	ALL	315495.74	3995069.06	3.439E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.264E-05	0.00E+00
136	ALL	315495.95	3995106.64	3.497E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.320E-05	0.00E+00
137	ALL	315408.77	3994885.20	2.041E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.938E-05	0.00E+00
138	ALL	315422.65	3994851.11	1.836E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.743E-05	0.00E+00
139	ALL	315436.53	3994817.02	1.606E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.524E-05	0.00E+00
140	ALL	315450.42	3994782.93	1.366E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.297E-05	0.00E+00
141	ALL	315464.30	3994748.84	1.131E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.074E-05	0.00E+00
142	ALL	315478.18	3994714.75	9.172E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.707E-06	0.00E+00

143	ALL	315492.06	3994680.66	7.339E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.967E-06	0.00E+00
144	ALL	315505.95	3994646.57	5.885E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.586E-06	0.00E+00
145	ALL	315519.83	3994612.48	4.826E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.581E-06	0.00E+00
146	ALL	315533.71	3994578.39	4.131E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.921E-06	0.00E+00
147	ALL	315547.60	3994544.30	3.735E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.545E-06	0.00E+00
148	ALL	315561.48	3994510.21	3.584E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.402E-06	0.00E+00
149	ALL	315575.36	3994476.12	3.600E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.417E-06	0.00E+00
150	ALL	315589.25	3994442.03	3.728E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.538E-06	0.00E+00
151	ALL	315603.13	3994407.93	3.932E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.732E-06	0.00E+00
152	ALL	315650.93	3994359.54	4.740E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.499E-06	0.00E+00
153	ALL	315684.84	3994345.23	5.367E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.095E-06	0.00E+00
154	ALL	315718.76	3994330.92	6.024E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.718E-06	0.00E+00
155	ALL	315752.67	3994316.61	6.663E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.325E-06	0.00E+00
156	ALL	315786.59	3994302.31	7.228E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.861E-06	0.00E+00
157	ALL	315820.50	3994288.00	7.669E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.280E-06	0.00E+00
158	ALL	315854.42	3994273.69	7.965E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.560E-06	0.00E+00
159	ALL	315888.33	3994259.39	8.133E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.720E-06	0.00E+00
160	ALL	315922.25	3994245.08	8.224E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.807E-06	0.00E+00
161	ALL	315956.16	3994230.77	8.312E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.890E-06	0.00E+00
162	ALL	315990.08	3994216.46	8.472E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.042E-06	0.00E+00
163	ALL	316023.99	3994202.16	8.771E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.325E-06	0.00E+00
164	ALL	316057.91	3994187.85	9.259E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.789E-06	0.00E+00
165	ALL	316091.82	3994173.54	9.950E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.445E-06	0.00E+00
166	ALL	316125.74	3994159.23	1.085E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.030E-05	0.00E+00
167	ALL	315394.88	3994919.29	2.210E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.098E-05	0.00E+00
168	ALL	315395.10	3994956.88	2.414E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.291E-05	0.00E+00
169	ALL	315395.31	3994994.46	2.575E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.445E-05	0.00E+00
170	ALL	315395.52	3995032.05	2.690E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.553E-05	0.00E+00
171	ALL	315395.74	3995069.63	2.763E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.623E-05	0.00E+00
172	ALL	315395.95	3995107.21	2.804E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.662E-05	0.00E+00
173	ALL	316146.01	3995123.34	8.153E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.739E-04	0.00E+00
174	ALL	316204.38	3995170.07	9.569E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.083E-04	0.00E+00
175	ALL	316324.63	3995146.10	1.730E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.642E-03	0.00E+00
176	ALL	316136.41	3995158.87	5.070E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.813E-04	0.00E+00
177	ALL	316197.04	3995178.87	7.963E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.559E-04	0.00E+00
178	ALL	316276.24	3995170.32	1.253E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.189E-03	0.00E+00
179	ALL	316331.06	3995183.16	9.631E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.142E-04	0.00E+00
180	ALL	316129.65	3995223.57	2.777E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.636E-04	0.00E+00
181	ALL	316074.71	3995155.37	2.976E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.824E-04	0.00E+00
182	ALL	316195.84	3995216.35	5.039E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.784E-04	0.00E+00
183	ALL	316281.44	3995217.46	6.813E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.467E-04	0.00E+00
184	ALL	316329.86	3995220.64	6.287E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.968E-04	0.00E+00
185	ALL	316135.47	3995241.44	2.565E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.435E-04	0.00E+00
186	ALL	316089.42	3995221.73	2.099E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.993E-04	0.00E+00
187	ALL	316047.85	3995181.54	2.151E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.041E-04	0.00E+00
188	ALL	316194.64	3995253.83	3.529E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.350E-04	0.00E+00
189	ALL	316280.24	3995254.94	4.652E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.415E-04	0.00E+00
190	ALL	316328.65	3995258.12	4.405E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.181E-04	0.00E+00
191	ALL	316128.22	3995312.57	1.613E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.531E-04	0.00E+00
192	ALL	316067.09	3995285.61	1.303E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.237E-04	0.00E+00
193	ALL	315983.04	3995226.87	1.286E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.221E-04	0.00E+00
194	ALL	316192.29	3995327.12	2.074E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.969E-04	0.00E+00
195	ALL	316259.30	3995329.27	2.505E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.378E-04	0.00E+00
196	ALL	316326.30	3995331.42	2.526E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.398E-04	0.00E+00
197	ALL	316127.43	3995386.56	1.144E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.086E-04	0.00E+00
198	ALL	316069.43	3995360.98	9.556E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.071E-05	0.00E+00
199	ALL	316011.42	3995335.40	8.278E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.857E-05	0.00E+00
200	ALL	315941.40	3995280.49	8.884E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.433E-05	0.00E+00
201	ALL	315931.33	3995217.18	1.141E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.083E-04	0.00E+00
202	ALL	316189.94	3995400.42	1.379E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.309E-04	0.00E+00
203	ALL	316256.95	3995402.57	1.598E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.517E-04	0.00E+00
204	ALL	316323.95	3995404.71	1.633E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.550E-04	0.00E+00
205	ALL	316125.95	3995460.23	8.547E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.113E-05	0.00E+00
206	ALL	316069.69	3995435.42	7.424E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.047E-05	0.00E+00
207	ALL	316013.42	3995410.61	6.383E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.059E-05	0.00E+00
208	ALL	315957.15	3995385.80	5.817E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.522E-05	0.00E+00
209	ALL	315889.23	3995332.54	6.410E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.085E-05	0.00E+00
210	ALL	315841.60	3995285.77	7.112E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.751E-05	0.00E+00
211	ALL	315842.59	3995218.74	8.687E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.246E-05	0.00E+00
212	ALL	316187.59	3995473.71	9.892E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.390E-05	0.00E+00
213	ALL	316254.60	3995475.86	1.111E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.055E-04	0.00E+00
214	ALL	316321.61	3995478.01	1.138E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.080E-04	0.00E+00
215	ALL	316121.64	3995559.70	6.102E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.793E-05	0.00E+00
216	ALL	316063.16	3995533.91	5.454E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.177E-05	0.00E+00
217	ALL	316004.69	3995508.12	4.754E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.512E-05	0.00E+00
218	ALL	315946.21	3995482.34	4.204E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.990E-05	0.00E+00
219	ALL	315887.73	3995456.55	3.971E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.770E-05	0.00E+00
220	ALL	315817.13	3995401.19	4.481E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.253E-05	0.00E+00
221	ALL	315792.89	3995342.06	5.412E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.138E-05	0.00E+00
222	ALL	315750.83	3995291.83	5.827E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.532E-05	0.00E+00
223	ALL	315744.42	3995223.78	6.514E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.183E-05	0.00E+00

224	ALL	315720.18	3995164.64	6.432E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.106E-05	0.00E+00
225	ALL	316184.39	3995573.66	6.811E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.465E-05	0.00E+00
226	ALL	316251.39	3995575.81	7.453E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.075E-05	0.00E+00
227	ALL	316318.40	3995577.96	7.603E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.217E-05	0.00E+00
228	ALL	316117.67	3995659.31	4.600E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.367E-05	0.00E+00
229	ALL	316057.66	3995632.84	4.203E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.990E-05	0.00E+00
230	ALL	315997.65	3995606.38	3.742E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.552E-05	0.00E+00
231	ALL	315937.64	3995579.92	3.307E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.140E-05	0.00E+00
232	ALL	315877.63	3995553.46	3.006E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.853E-05	0.00E+00
233	ALL	315817.62	3995527.00	2.920E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.772E-05	0.00E+00
234	ALL	315745.18	3995470.19	3.335E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.166E-05	0.00E+00
235	ALL	315720.31	3995409.51	4.005E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.802E-05	0.00E+00
236	ALL	315695.44	3995348.82	4.608E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.374E-05	0.00E+00
237	ALL	315670.56	3995288.13	4.959E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.708E-05	0.00E+00
238	ALL	315645.69	3995227.45	5.000E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.746E-05	0.00E+00
239	ALL	315620.82	3995166.76	4.823E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.578E-05	0.00E+00
240	ALL	316181.18	3995673.61	5.016E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.761E-05	0.00E+00
241	ALL	316248.19	3995675.76	5.390E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.116E-05	0.00E+00
242	ALL	316315.20	3995677.91	5.472E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.194E-05	0.00E+00
243	ALL	316113.91	3995759.01	3.613E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.429E-05	0.00E+00
244	ALL	316052.77	3995732.05	3.352E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.182E-05	0.00E+00
245	ALL	315991.64	3995705.09	3.042E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.887E-05	0.00E+00
246	ALL	315930.51	3995678.14	2.724E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.586E-05	0.00E+00
247	ALL	315869.38	3995651.18	2.450E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.325E-05	0.00E+00
248	ALL	315808.24	3995624.22	2.280E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.164E-05	0.00E+00
249	ALL	315747.11	3995597.27	2.261E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.146E-05	0.00E+00
250	ALL	315673.31	3995539.40	2.596E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.464E-05	0.00E+00
251	ALL	315647.97	3995477.58	3.093E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.936E-05	0.00E+00
252	ALL	315622.64	3995415.75	3.565E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.384E-05	0.00E+00
253	ALL	315597.30	3995353.93	3.894E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.696E-05	0.00E+00
254	ALL	315571.96	3995292.11	4.004E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.801E-05	0.00E+00
255	ALL	315546.62	3995230.29	3.925E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.725E-05	0.00E+00
256	ALL	315521.29	3995168.47	3.740E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.550E-05	0.00E+00
257	ALL	316177.98	3995773.56	3.883E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.686E-05	0.00E+00
258	ALL	316244.99	3995775.71	4.109E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.901E-05	0.00E+00
259	ALL	316311.99	3995777.86	4.156E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.945E-05	0.00E+00
260	ALL	316112.00	3995859.53	2.934E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.785E-05	0.00E+00
261	ALL	316053.45	3995833.71	2.766E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.626E-05	0.00E+00
262	ALL	315994.90	3995807.89	2.561E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.431E-05	0.00E+00
263	ALL	315936.35	3995782.08	2.345E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.226E-05	0.00E+00
264	ALL	315877.81	3995756.26	2.133E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.025E-05	0.00E+00
265	ALL	315819.26	3995730.44	1.948E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.850E-05	0.00E+00
266	ALL	315760.71	3995704.62	1.827E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.735E-05	0.00E+00
267	ALL	315702.16	3995678.81	1.800E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.709E-05	0.00E+00
268	ALL	315643.62	3995652.99	1.864E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.770E-05	0.00E+00
269	ALL	315602.21	3995610.48	2.081E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.975E-05	0.00E+00
270	ALL	315577.94	3995551.27	2.439E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.315E-05	0.00E+00
271	ALL	315553.68	3995492.06	2.795E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.653E-05	0.00E+00
272	ALL	315529.41	3995432.86	3.083E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.927E-05	0.00E+00
273	ALL	315505.15	3995373.65	3.252E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.087E-05	0.00E+00
274	ALL	315480.88	3995314.44	3.281E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.115E-05	0.00E+00
275	ALL	315456.62	3995255.23	3.197E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.035E-05	0.00E+00
276	ALL	315432.35	3995196.03	3.055E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.900E-05	0.00E+00
277	ALL	316174.77	3995873.51	3.112E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.954E-05	0.00E+00
278	ALL	316241.78	3995875.66	3.261E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.095E-05	0.00E+00
279	ALL	316308.79	3995877.80	3.291E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.124E-05	0.00E+00
280	ALL	316441.49	3995024.25	1.178E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.118E-03	0.00E+00
281	ALL	316472.61	3995128.20	4.802E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.558E-04	0.00E+00
282	ALL	316472.82	3995166.17	3.896E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.699E-04	0.00E+00
283	ALL	316481.08	3995061.05	6.412E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.087E-04	0.00E+00
284	ALL	316478.94	3995022.18	7.754E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.361E-04	0.00E+00
285	ALL	316543.80	3995129.56	2.823E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.679E-04	0.00E+00
286	ALL	316531.15	3995163.24	2.665E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.530E-04	0.00E+00
287	ALL	316531.85	3995207.88	2.232E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.119E-04	0.00E+00
288	ALL	316459.82	3995277.71	2.360E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.240E-04	0.00E+00
289	ALL	316426.44	3995291.14	2.534E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.405E-04	0.00E+00
290	ALL	316554.31	3995057.01	3.532E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.353E-04	0.00E+00
291	ALL	316552.16	3995018.13	4.119E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.910E-04	0.00E+00
292	ALL	316617.67	3995123.79	1.860E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.765E-04	0.00E+00
293	ALL	316593.66	3995187.70	1.722E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.634E-04	0.00E+00
294	ALL	316569.66	3995251.62	1.576E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.496E-04	0.00E+00
295	ALL	316492.21	3995335.53	1.586E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.506E-04	0.00E+00
296	ALL	316450.64	3995353.75	1.683E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.598E-04	0.00E+00
297	ALL	316627.53	3995052.96	2.226E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.113E-04	0.00E+00
298	ALL	316625.38	3995014.09	2.534E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.405E-04	0.00E+00
299	ALL	316689.80	3995122.66	1.304E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.237E-04	0.00E+00
300	ALL	316676.70	3995157.53	1.260E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.196E-04	0.00E+00
301	ALL	316663.60	3995192.41	1.219E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.157E-04	0.00E+00
302	ALL	316650.50	3995227.28	1.180E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.120E-04	0.00E+00
303	ALL	316637.40	3995262.16	1.141E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.083E-04	0.00E+00
304	ALL	316624.30	3995297.03	1.095E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.039E-04	0.00E+00

305	ALL	316611.20	3995331.91	1.043E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.899E-05	0.00E+00
306	ALL	316563.54	3995380.69	1.057E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.003E-04	0.00E+00
307	ALL	316528.98	3995394.59	1.119E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.062E-04	0.00E+00
308	ALL	316494.42	3995408.49	1.173E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.114E-04	0.00E+00
309	ALL	316459.85	3995422.40	1.212E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.151E-04	0.00E+00
310	ALL	316425.29	3995436.30	1.229E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.167E-04	0.00E+00
311	ALL	316356.17	3995464.11	1.193E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.132E-04	0.00E+00
312	ALL	316702.90	3995087.79	1.353E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.284E-04	0.00E+00
313	ALL	316700.75	3995048.91	1.524E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.446E-04	0.00E+00
314	ALL	316698.60	3995010.04	1.709E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.622E-04	0.00E+00
315	ALL	316789.43	3995117.71	8.735E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.292E-05	0.00E+00
316	ALL	316799.87	3995168.32	7.536E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.154E-05	0.00E+00
317	ALL	316762.81	3995188.59	8.250E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.831E-05	0.00E+00
318	ALL	316749.50	3995224.03	8.052E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.644E-05	0.00E+00
319	ALL	316736.18	3995259.47	7.880E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.480E-05	0.00E+00
320	ALL	316722.87	3995294.91	7.681E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.291E-05	0.00E+00
321	ALL	316709.56	3995330.35	7.455E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.077E-05	0.00E+00
322	ALL	316696.25	3995365.79	7.208E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.842E-05	0.00E+00
323	ALL	316682.94	3995401.23	6.941E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.589E-05	0.00E+00
324	ALL	316634.50	3995450.80	7.037E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.680E-05	0.00E+00
325	ALL	316599.38	3995464.93	7.402E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.027E-05	0.00E+00
326	ALL	316564.26	3995479.06	7.727E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.335E-05	0.00E+00
327	ALL	316529.14	3995493.19	8.007E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.600E-05	0.00E+00
328	ALL	316494.01	3995507.31	8.217E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.800E-05	0.00E+00
329	ALL	316458.89	3995521.44	8.315E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.893E-05	0.00E+00
330	ALL	316423.77	3995535.57	8.300E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.879E-05	0.00E+00
331	ALL	316353.52	3995563.83	7.942E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.539E-05	0.00E+00
332	ALL	316802.74	3995082.27	9.010E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.553E-05	0.00E+00
333	ALL	316800.60	3995043.40	9.949E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.444E-05	0.00E+00
334	ALL	316889.14	3995112.57	6.245E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.928E-05	0.00E+00
335	ALL	316875.68	3995148.39	6.079E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.770E-05	0.00E+00
336	ALL	316862.23	3995184.20	5.938E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.637E-05	0.00E+00
337	ALL	316848.78	3995220.02	5.830E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.534E-05	0.00E+00
338	ALL	316835.32	3995255.84	5.731E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.440E-05	0.00E+00
339	ALL	316821.87	3995291.65	5.628E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.342E-05	0.00E+00
340	ALL	316808.42	3995327.47	5.516E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.236E-05	0.00E+00
341	ALL	316794.96	3995363.29	5.398E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.124E-05	0.00E+00
342	ALL	316781.51	3995399.11	5.268E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.001E-05	0.00E+00
343	ALL	316768.06	3995434.92	5.120E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.860E-05	0.00E+00
344	ALL	316754.60	3995470.74	4.956E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.704E-05	0.00E+00
345	ALL	316705.65	3995520.84	5.027E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.772E-05	0.00E+00
346	ALL	316670.16	3995535.12	5.254E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.987E-05	0.00E+00
347	ALL	316634.66	3995549.39	5.471E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.194E-05	0.00E+00
348	ALL	316599.17	3995563.67	5.660E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.373E-05	0.00E+00
349	ALL	316563.67	3995577.95	5.823E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.527E-05	0.00E+00
350	ALL	316528.17	3995592.23	5.953E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.651E-05	0.00E+00
351	ALL	316492.68	3995606.51	6.019E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.713E-05	0.00E+00
352	ALL	316457.18	3995620.79	6.023E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.718E-05	0.00E+00
353	ALL	316421.69	3995635.07	5.966E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.663E-05	0.00E+00
354	ALL	316350.69	3995663.63	5.686E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.397E-05	0.00E+00
355	ALL	316902.59	3995076.75	6.423E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.097E-05	0.00E+00
356	ALL	316900.44	3995037.88	6.993E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.638E-05	0.00E+00
357	ALL	316898.30	3994999.01	7.615E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.229E-05	0.00E+00
358	ALL	316896.15	3994960.13	8.254E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.835E-05	0.00E+00
359	ALL	316894.00	3994921.26	8.873E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.422E-05	0.00E+00
360	ALL	316891.85	3994882.39	9.431E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.952E-05	0.00E+00
361	ALL	316988.88	3995107.32	4.686E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.448E-05	0.00E+00
362	ALL	316975.33	3995143.41	4.571E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.339E-05	0.00E+00
363	ALL	316961.78	3995179.49	4.485E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.257E-05	0.00E+00
364	ALL	316948.22	3995215.58	4.409E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.185E-05	0.00E+00
365	ALL	316934.67	3995251.67	4.347E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.126E-05	0.00E+00
366	ALL	316921.11	3995287.75	4.290E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.072E-05	0.00E+00
367	ALL	316907.56	3995323.84	4.230E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.015E-05	0.00E+00
368	ALL	316894.00	3995359.93	4.164E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.953E-05	0.00E+00
369	ALL	316880.45	3995396.01	4.095E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.887E-05	0.00E+00
370	ALL	316866.89	3995432.10	4.014E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.810E-05	0.00E+00
371	ALL	316853.34	3995468.18	3.927E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.728E-05	0.00E+00
372	ALL	316839.78	3995504.27	3.834E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.639E-05	0.00E+00
373	ALL	316826.23	3995540.36	3.734E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.545E-05	0.00E+00
374	ALL	316776.91	3995590.83	3.786E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.594E-05	0.00E+00
375	ALL	316741.15	3995605.22	3.939E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.739E-05	0.00E+00
376	ALL	316705.39	3995619.60	4.083E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.876E-05	0.00E+00
377	ALL	316669.62	3995633.99	4.217E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.003E-05	0.00E+00
378	ALL	316633.86	3995648.38	4.337E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.117E-05	0.00E+00
379	ALL	316598.10	3995662.76	4.441E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.216E-05	0.00E+00
380	ALL	316562.33	3995677.15	4.523E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.293E-05	0.00E+00
381	ALL	316526.57	3995691.54	4.578E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.345E-05	0.00E+00
382	ALL	316490.81	3995705.92	4.589E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.356E-05	0.00E+00
383	ALL	316455.05	3995720.31	4.561E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.330E-05	0.00E+00
384	ALL	316347.76	3995763.47	4.296E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.078E-05	0.00E+00
385	ALL	317002.44	3995071.23	4.813E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.568E-05	0.00E+00

386	ALL	317000.29	3995032.36	5.194E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.931E-05	0.00E+00
387	ALL	316998.14	3994993.49	5.596E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.312E-05	0.00E+00
388	ALL	316996.00	3994954.62	6.014E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.709E-05	0.00E+00
389	ALL	316993.85	3994915.75	6.422E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.096E-05	0.00E+00
390	ALL	316991.70	3994876.87	6.799E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.454E-05	0.00E+00
391	ALL	317088.66	3995102.00	3.653E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.468E-05	0.00E+00
392	ALL	317075.03	3995138.29	3.568E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.387E-05	0.00E+00
393	ALL	317061.40	3995174.58	3.502E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.324E-05	0.00E+00
394	ALL	317047.77	3995210.87	3.450E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.275E-05	0.00E+00
395	ALL	317034.13	3995247.16	3.410E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.237E-05	0.00E+00
396	ALL	317020.50	3995283.45	3.377E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.205E-05	0.00E+00
397	ALL	317006.87	3995319.74	3.347E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.177E-05	0.00E+00
398	ALL	316993.24	3995356.02	3.314E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.145E-05	0.00E+00
399	ALL	316979.61	3995392.31	3.270E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.104E-05	0.00E+00
400	ALL	316965.98	3995428.60	3.220E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.057E-05	0.00E+00
401	ALL	316952.35	3995464.89	3.167E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.007E-05	0.00E+00
402	ALL	316938.72	3995501.18	3.112E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.954E-05	0.00E+00
403	ALL	316925.09	3995537.47	3.055E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.900E-05	0.00E+00
404	ALL	316911.46	3995573.75	2.996E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.844E-05	0.00E+00
405	ALL	316897.83	3995610.04	2.930E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.781E-05	0.00E+00
406	ALL	316848.24	3995660.80	2.968E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.817E-05	0.00E+00
407	ALL	316812.27	3995675.27	3.078E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.922E-05	0.00E+00
408	ALL	316776.31	3995689.73	3.176E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.015E-05	0.00E+00
409	ALL	316740.35	3995704.20	3.268E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.102E-05	0.00E+00
410	ALL	316704.38	3995718.67	3.356E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.186E-05	0.00E+00
411	ALL	316668.42	3995733.13	3.441E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.266E-05	0.00E+00
412	ALL	316632.46	3995747.60	3.515E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.336E-05	0.00E+00
413	ALL	316596.49	3995762.07	3.572E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.391E-05	0.00E+00
414	ALL	316560.53	3995776.54	3.611E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.428E-05	0.00E+00
415	ALL	316524.57	3995791.00	3.629E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.445E-05	0.00E+00
416	ALL	316488.61	3995805.47	3.617E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.433E-05	0.00E+00
417	ALL	316452.64	3995819.94	3.581E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.399E-05	0.00E+00
418	ALL	316416.68	3995834.40	3.532E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.353E-05	0.00E+00
419	ALL	316380.72	3995848.87	3.463E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.287E-05	0.00E+00
420	ALL	316344.75	3995863.34	3.382E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.210E-05	0.00E+00
421	ALL	317102.29	3995065.72	3.749E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.558E-05	0.00E+00
422	ALL	317100.14	3995026.84	4.012E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.808E-05	0.00E+00
423	ALL	317097.99	3994987.97	4.295E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.077E-05	0.00E+00
424	ALL	317095.84	3994949.10	4.581E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.349E-05	0.00E+00
425	ALL	317093.70	3994910.23	4.863E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.616E-05	0.00E+00
426	ALL	317091.55	3994871.36	5.127E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.867E-05	0.00E+00
427	ALL	316149.49	3995077.44	1.055E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.001E-03	0.00E+00
428	ALL	316153.29	3995065.15	1.150E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.092E-03	0.00E+00
429	ALL	316153.92	3995019.58	1.175E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.115E-03	0.00E+00
430	ALL	316153.00	3995005.45	1.137E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.079E-03	0.00E+00
431	ALL	316083.64	3995122.52	3.876E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.679E-04	0.00E+00
432	ALL	316088.03	3995140.95	3.620E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.436E-04	0.00E+00
433	ALL	316138.37	3995139.49	6.251E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.934E-04	0.00E+00
434	ALL	316079.25	3995067.49	4.266E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.050E-04	0.00E+00
435	ALL	316122.85	3995079.79	6.952E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.599E-04	0.00E+00
436	ALL	316105.00	3995078.32	5.560E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.278E-04	0.00E+00
437	ALL	316075.15	3995081.54	4.071E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.864E-04	0.00E+00
438	ALL	316055.83	3995077.74	3.453E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.278E-04	0.00E+00
439	ALL	316028.32	3995078.61	2.793E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.651E-04	0.00E+00
440	ALL	316011.35	3995079.20	2.481E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.355E-04	0.00E+00
441	ALL	315979.44	3995076.86	2.030E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.927E-04	0.00E+00
442	ALL	315975.45	3995024.42	1.876E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.780E-04	0.00E+00
443	ALL	316006.18	3995022.08	2.268E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.152E-04	0.00E+00
444	ALL	316128.23	3995065.46	7.581E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.196E-04	0.00E+00
445	ALL	315978.96	3995007.74	1.835E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.742E-04	0.00E+00
446	ALL	316010.57	3995008.32	2.253E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.138E-04	0.00E+00
447	ALL	316029.89	3995007.15	2.577E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.447E-04	0.00E+00
448	ALL	316074.67	3995006.56	3.783E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.591E-04	0.00E+00
449	ALL	316107.45	3995006.56	5.468E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.191E-04	0.00E+00
450	ALL	316053.01	3995006.27	3.096E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.939E-04	0.00E+00
451	ALL	316022.45	3995166.47	2.045E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.941E-04	0.00E+00
452	ALL	316088.01	3995176.71	2.822E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.679E-04	0.00E+00
453	ALL	316138.65	3995178.17	4.354E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.133E-04	0.00E+00
454	ALL	316115.23	3995095.93	6.106E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.796E-04	0.00E+00
455	ALL	316241.96	3995168.22	1.201E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.140E-03	0.00E+00
456	ALL	316153.28	3995221.49	3.436E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.262E-04	0.00E+00
457	ALL	316113.77	3995220.03	2.513E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.385E-04	0.00E+00
458	ALL	316069.87	3995221.78	1.878E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.783E-04	0.00E+00
459	ALL	316050.26	3995223.54	1.688E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.602E-04	0.00E+00
460	ALL	316028.01	3995225.00	1.523E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.446E-04	0.00E+00
461	ALL	316006.94	3995226.47	1.397E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.326E-04	0.00E+00
462	ALL	316168.50	3995220.03	3.952E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.751E-04	0.00E+00
463	ALL	316217.38	3995219.44	5.542E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.261E-04	0.00E+00
464	ALL	316237.28	3995217.98	6.143E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.831E-04	0.00E+00
465	ALL	316170.17	3995255.54	2.984E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.833E-04	0.00E+00
466	ALL	316138.83	3995271.38	2.164E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.055E-04	0.00E+00

467	ALL	316111.63	3995264.84	1.876E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.780E-04	0.00E+00
468	ALL	316093.73	3995270.70	1.627E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.544E-04	0.00E+00
469	ALL	316147.10	3995297.21	1.958E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.858E-04	0.00E+00
470	ALL	316187.04	3995286.88	2.631E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.497E-04	0.00E+00
471	ALL	316223.54	3995259.68	3.874E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.677E-04	0.00E+00
472	ALL	316241.10	3995258.64	4.166E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.955E-04	0.00E+00
473	ALL	316298.26	3995258.64	4.518E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.289E-04	0.00E+00
474	ALL	316306.18	3995234.20	5.688E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.399E-04	0.00E+00
475	ALL	316300.67	3995218.70	6.726E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.385E-04	0.00E+00
476	ALL	316342.33	3995283.78	3.478E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.301E-04	0.00E+00
477	ALL	316347.16	3995304.10	2.965E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.815E-04	0.00E+00
478	ALL	316315.73	3995152.57	1.607E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.525E-03	0.00E+00
479	ALL	316267.22	3995165.01	1.345E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.277E-03	0.00E+00
480	ALL	316570.32	3995078.31	2.904E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.757E-04	0.00E+00
481	ALL	316570.32	3995111.19	2.565E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.434E-04	0.00E+00
482	ALL	316596.54	3995153.61	1.889E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.793E-04	0.00E+00
483	ALL	316593.68	3995075.45	2.527E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.399E-04	0.00E+00
484	ALL	316597.97	3995104.52	2.219E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.106E-04	0.00E+00
485	ALL	316443.74	3995211.83	3.684E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.497E-04	0.00E+00
486	ALL	316442.12	3995241.40	3.131E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.972E-04	0.00E+00
487	ALL	316444.15	3995263.68	2.732E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.593E-04	0.00E+00
488	ALL	316443.74	3995307.44	2.169E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.059E-04	0.00E+00
489	ALL	316441.27	3995330.50	1.943E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.845E-04	0.00E+00
490	ALL	316490.09	3995209.12	2.816E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.673E-04	0.00E+00
491	ALL	316493.39	3995244.08	2.357E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.237E-04	0.00E+00
492	ALL	316492.73	3995284.98	1.970E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.870E-04	0.00E+00
493	ALL	316493.39	3995308.07	1.776E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.686E-04	0.00E+00
494	ALL	316529.67	3995230.89	2.066E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.961E-04	0.00E+00
495	ALL	316528.35	3995271.79	1.776E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.686E-04	0.00E+00
496	ALL	316528.35	3995253.98	1.902E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.806E-04	0.00E+00
497	ALL	316535.61	3995292.90	1.589E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.508E-04	0.00E+00
498	ALL	316490.75	3995323.91	1.676E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.591E-04	0.00E+00
499	ALL	316527.69	3995314.67	1.511E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.434E-04	0.00E+00
500	ALL	316574.53	3995216.38	1.728E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.640E-04	0.00E+00
501	ALL	316575.19	3995293.56	1.346E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.277E-04	0.00E+00
502	ALL	316603.56	3995240.13	1.401E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.330E-04	0.00E+00
503	ALL	316600.26	3995216.38	1.526E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.449E-04	0.00E+00
504	ALL	316623.35	3995215.06	1.374E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.304E-04	0.00E+00
505	ALL	316654.35	3995210.44	1.211E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.150E-04	0.00E+00
506	ALL	316680.74	3995242.76	1.004E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.530E-05	0.00E+00
507	ALL	316697.23	3995210.44	1.014E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.621E-05	0.00E+00
508	ALL	316674.80	3995217.04	1.093E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.038E-04	0.00E+00
509	ALL	316719.66	3995246.06	8.599E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.163E-05	0.00E+00
510	ALL	316721.64	3995207.14	9.278E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.807E-05	0.00E+00
511	ALL	316673.48	3995296.86	9.108E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.645E-05	0.00E+00
512	ALL	316649.08	3995296.20	9.991E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.484E-05	0.00E+00
513	ALL	316633.90	3995327.20	9.745E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.251E-05	0.00E+00
514	ALL	316670.19	3995321.93	8.688E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.247E-05	0.00E+00
515	ALL	316735.49	3995330.50	6.857E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.509E-05	0.00E+00
516	ALL	316784.31	3995292.24	6.302E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.983E-05	0.00E+00
517	ALL	316790.25	3995322.59	5.867E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.569E-05	0.00E+00
518	ALL	316787.61	3995242.10	6.822E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.476E-05	0.00E+00
519	ALL	316793.55	3995212.42	7.065E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.706E-05	0.00E+00
520	ALL	316806.08	3995004.62	1.063E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.009E-04	0.00E+00
521	ALL	315890.72	3995239.47	9.352E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.877E-05	0.00E+00
522	ALL	315629.69	3995340.75	4.206E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.993E-05	0.00E+00
523	ALL	315856.33	3995384.99	4.956E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.704E-05	0.00E+00
524	ALL	315982.85	3995475.80	4.779E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.537E-05	0.00E+00
525	ALL	315785.70	3995464.94	3.474E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.297E-05	0.00E+00
526	ALL	316098.50	3995319.79	1.315E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.249E-04	0.00E+00
527	ALL	316067.45	3995322.12	1.105E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.049E-04	0.00E+00
528	ALL	316017.00	3995314.36	9.228E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.760E-05	0.00E+00
529	ALL	315935.50	3995246.05	1.026E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.735E-05	0.00E+00
530	ALL	315892.64	3995221.41	9.995E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.488E-05	0.00E+00
531	ALL	315837.94	3995246.94	7.968E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.563E-05	0.00E+00
532	ALL	315843.61	3995259.50	7.784E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.389E-05	0.00E+00
533	ALL	315802.29	3995240.46	7.388E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.013E-05	0.00E+00
534	ALL	315801.07	3995223.04	7.637E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.249E-05	0.00E+00
535	ALL	315935.99	3995261.12	9.599E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.112E-05	0.00E+00
536	ALL	315982.59	3995253.42	1.123E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.066E-04	0.00E+00
537	ALL	315983.80	3995272.87	1.020E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.685E-05	0.00E+00
538	ALL	316028.37	3995274.49	1.163E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.104E-04	0.00E+00
539	ALL	315982.18	3995319.47	8.120E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.708E-05	0.00E+00
540	ALL	315934.37	3995303.26	7.875E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.475E-05	0.00E+00
541	ALL	315892.64	3995283.41	7.935E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.532E-05	0.00E+00
542	ALL	315894.67	3995259.10	8.782E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.336E-05	0.00E+00
543	ALL	315806.34	3995264.36	7.038E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.681E-05	0.00E+00
544	ALL	315785.27	3995301.64	6.074E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.766E-05	0.00E+00
545	ALL	315838.75	3995305.29	6.604E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.269E-05	0.00E+00
546	ALL	315745.97	3995264.36	6.115E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.805E-05	0.00E+00
547	ALL	315753.67	3995241.67	6.494E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.165E-05	0.00E+00

548	ALL	315669.39	3995225.87	5.320E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.050E-05	0.00E+00
549	ALL	315668.58	3995249.37	5.190E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.926E-05	0.00E+00
550	ALL	315664.53	3995269.63	5.020E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.765E-05	0.00E+00
551	ALL	315983.80	3995340.94	7.430E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.053E-05	0.00E+00
552	ALL	315935.59	3995324.73	7.156E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.793E-05	0.00E+00
553	ALL	315822.95	3995338.10	5.718E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.428E-05	0.00E+00
554	ALL	315934.37	3995371.73	5.842E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.546E-05	0.00E+00
555	ALL	315659.85	3995104.10	5.409E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.134E-05	0.00E+00
556	ALL	315659.53	3994917.54	3.769E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.578E-05	0.00E+00
557	ALL	315659.74	3994955.12	4.315E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.096E-05	0.00E+00
558	ALL	315659.95	3994992.71	4.772E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.530E-05	0.00E+00
559	ALL	315660.17	3995030.29	5.112E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.852E-05	0.00E+00
560	ALL	316123.98	3995007.30	6.882E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.532E-04	0.00E+00
561	ALL	316078.34	3995023.81	4.064E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.858E-04	0.00E+00
562	ALL	315976.75	3995063.92	1.996E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.894E-04	0.00E+00
563	ALL	316027.99	3995062.17	2.796E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.654E-04	0.00E+00

Henderson Ave & SR 65 Commercial Project (Mitigated Construction - Level 3 Filters)

Estimation of Annual Onsite Construction Emissions (Project Site)—DPM (Exhaust PM10)

Start of Construction	7/1/2023		
End of Construction	8/31/2024		**Total**
Number of Days	427		427
Number of Hours	10,248		10,248

Size of the construction area source (entire site): **41,455.8** **sq-meters**

	On-site Construction Activity	Level 3 Filters Mitigated On-site DPM (tons)
2023	On-site Demolition	0.00075
2023	On-site Site Preparation	0.00095
2023	On-site Grading	0.00321
2023	On-site Building Construction 2023	0.00714
2024	On-site Building Construction 2024	0.01360
2024	On-site Paving 2023	0.00077
2024	On-site Architectural Coating	0.00009

Total Unmitigated DPM (On-site) 2.651E-02 tons

Factor in AERMOD to Account for 5 days per week/8 hours per day: 4.2
1 g/s used as the unit emission in AERMOD - converted to g/s/m2 in AERMOD

Average Emission (Emissions Summary for HARP2 Inputs)

2.407E+04	grams
6.525E-04	grams/sec
1.574E-08	grams/m2-sec

Tons/Construction Period	2.651E-02
Pounds/Construction Period	5.302E+01
Pounds/Day	1.242E-01
Pounds/Hour	5.174E-03
Pounds/Year	4.532E+01
Years	1.169863014

Henderson Ave & SR 65 Commercial Project (Mitigated Construction - Level 3 Filters)

Estimation of Annual Offsite Construction DPM Emissions (No Change Compared to Unmitigated Scenario)

Start of Construction	7/1/2023	
End of Construction	8/31/2024	**Total**
Number of Days	427	427
Number of Hours	10,248	10,248

	2023	2023	2023	2023	2024	2023	2024
Construction Trip Type	Demolition	Site Preparation	Grading	Building Construction	Building Construction	Paving	Architectural Coating
Haul Truck	0.00001	0.00001	0.00031	0.00000	0.00001	0.00001	0.00000
Vendor Truck	0.00000	0.00000	0.00000	0.00094	0.00208	0.00001	0.00000
Worker	0.00000	0.00000	0.00001	0.00034	0.00069	0.00001	0.00002
Total	0.00001	0.00001	0.00032	0.00128	0.00278	0.00003	0.00002

	Haul Truck (tons)	**Vendor Truck (tons)**	**Worker (tons)**	**Total (tons)**
Total DPM	3.500E-04	3.030E-03	1.070E-03	4.450E-03
Average Emissions				
Grams	3.178E+02	2.751E+03	9.716E+02	
Grams/sec	8.614E-06	7.457E-05	2.633E-05	
Default Distance	20	7.3	10.8	Vehicle Travel Distance Assumed in CalEEMod
Vehicle Travel Distances in the Construction HRA (miles)				
Road Segment 1	0.32	0.32	0.32	miles
Road Segment 2	0.68	0.68	0.68	miles
Road Segment 3	0.28	0.28	0.28	miles
Road Segment 4	0.57	0.57	0.57	miles
On-site	0.48	0.48	0.48	miles
Trip Distribution (percent)				
Road Segment 1	25.0%	25.0%	25.0%	Off-site Road Segment 1
Road Segment 2	25.0%	25.0%	25.0%	Off-site Road Segment 2
Road Segment 3	25.0%	25.0%	25.0%	Off-site Road Segment 3
Road Segment 4	25.0%	25.0%	25.0%	Off-site Road Segment 4
On-site	100.0%	100.0%	100.0%	On-site

Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**	
Road Segment 1	4.9746E-08	1.1799E-06	2.8163E-07	1.5113E-06	Off-site Road Segment 1
Road Segment 2	8.8567E-08	2.1007E-06	5.0141E-07	2.6906E-06	Off-site Road Segment 2
Road Segment 3	3.001E-08	7.119E-07	1.699E-07	9.1182E-07	Off-site Road Segment 3
Road Segment 4	6.158E-08	1.461E-06	3.486E-07	1.8708E-06	Off-site Road Segment 4
On-site	2.058E-07	4.882E-06	1.165E-06	6.2528E-06	On-site

Average Emission (Emissions Summary for HARP2 Inputs)

	Grams/sec	Pounds/Hour	Pounds/Day	Pounds/year	Tons/year
Road Segment 1	1.5113E-06	1.1994E-05	2.8787E-04	1.2292E-01	6.1459E-05
Road Segment 2	2.6906E-06	2.1355E-05	5.1251E-04	2.1884E-01	1.0942E-04
Road Segment 3	9.1182E-07	7.2368E-06	1.7368E-04	7.4163E-02	3.7081E-05
Road Segment 4	1.8708E-06	1.4848E-05	3.5635E-04	1.5216E-01	7.6081E-05
On-site	6.2528E-06	4.9627E-05	1.1910E-03	5.0857E-01	2.5429E-04

Health Risk Summary - Level 3 Filters Mitigated Construction (Summary of HARP2 Results)

Henderson Ave & SR 65 Commercial Project (Mitigated Construction - Level 3 Filters)

	RISK_SUM	Cancer Risk/million	MAXHI NonCancer Chronic	MAXHI Acute
Maximum Risk	2.8929E-06	2.893	2.7460E-03	0.00E+00

	X	Y
MIR UTM	316324.63	3995146.10

Latitude, Longitude: 36°05'00.9"N 119°02'23.9"W
Receptor # 175

*HARP - HRACalc v22118 5/23/2023 10:56:09 AM - Cancer Risk - Input File: F:\Move\0014-017\HARP\Mitigated\Level 3 Filters\hra\Level 3 Mitigated CONSTRUCTIONHRAInput.hra
*HARP - HRACalc v22118 5/23/2023 10:56:09 AM - Chronic Risk - Input File: F:\Move\0014-017\HARP\Mitigated\Level 3 Filters\hra\Level 3 Mitigated CONSTRUCTIONHRAInput.hra
*HARP - HRACalc v22118 5/23/2023 10:56:09 AM - Acute Risk - Input File: F:\Move\0014-017\HARP\Mitigated\Level 3 Filters\hra\Level 3 Mitigated CONSTRUCTIONHRAInput.hra

REC	GRP	X	Y	RISK_SUM	SCENARIO	MAXHI NonCancerChronic	MAXHI Acute
1	ALL	316280.75	3994544.12	1.936E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.838E-04	0.00E+00
2	ALL	316241.29	3994544.38	1.496E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.420E-04	0.00E+00
3	ALL	316201.82	3994544.65	1.122E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.065E-04	0.00E+00
4	ALL	316162.36	3994544.92	8.396E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.970E-05	0.00E+00
5	ALL	316427.89	3994486.35	2.378E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.258E-04	0.00E+00
6	ALL	316280.07	3994444.12	1.051E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.978E-05	0.00E+00
7	ALL	316240.61	3994444.39	8.418E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.991E-05	0.00E+00
8	ALL	316201.15	3994444.65	6.632E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.295E-05	0.00E+00
9	ALL	316161.68	3994444.92	5.228E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.963E-05	0.00E+00
10	ALL	316354.70	3994357.91	9.622E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.134E-05	0.00E+00
11	ALL	316390.53	3994371.97	1.173E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.114E-04	0.00E+00
12	ALL	316426.37	3994386.03	1.397E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.326E-04	0.00E+00
13	ALL	316462.21	3994400.09	1.616E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.534E-04	0.00E+00
14	ALL	316498.05	3994414.14	1.811E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.719E-04	0.00E+00
15	ALL	316533.89	3994428.20	1.969E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.869E-04	0.00E+00
16	ALL	316569.73	3994442.26	2.081E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.975E-04	0.00E+00
17	ALL	316605.57	3994456.32	2.144E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.035E-04	0.00E+00
18	ALL	316641.41	3994470.38	2.161E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.051E-04	0.00E+00
19	ALL	316677.25	3994484.44	2.136E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.028E-04	0.00E+00
20	ALL	316778.09	3994638.09	2.324E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.206E-04	0.00E+00
21	ALL	316794.34	3994672.99	2.294E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.177E-04	0.00E+00
22	ALL	316810.60	3994707.89	2.229E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.116E-04	0.00E+00
23	ALL	316826.85	3994742.79	2.135E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.026E-04	0.00E+00
24	ALL	316875.60	3994847.49	1.728E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.640E-04	0.00E+00
25	ALL	316318.86	3994343.85	7.766E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.372E-05	0.00E+00
26	ALL	316279.39	3994344.12	6.499E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.169E-05	0.00E+00
27	ALL	316239.93	3994344.39	5.355E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.083E-05	0.00E+00
28	ALL	316200.47	3994344.66	4.370E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.148E-05	0.00E+00
29	ALL	316161.01	3994344.92	3.567E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.386E-05	0.00E+00
30	ALL	316353.82	3994257.84	6.205E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.890E-05	0.00E+00
31	ALL	316389.47	3994271.82	7.455E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.077E-05	0.00E+00
32	ALL	316425.12	3994285.80	8.840E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.391E-05	0.00E+00
33	ALL	316460.76	3994299.78	1.028E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.760E-05	0.00E+00
34	ALL	316496.41	3994313.77	1.169E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.110E-04	0.00E+00
35	ALL	316532.05	3994327.75	1.297E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.231E-04	0.00E+00
36	ALL	316567.70	3994341.73	1.404E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.333E-04	0.00E+00
37	ALL	316603.35	3994355.71	1.487E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.412E-04	0.00E+00
38	ALL	316638.99	3994369.70	1.543E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.465E-04	0.00E+00
39	ALL	316674.64	3994383.68	1.573E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.493E-04	0.00E+00
40	ALL	316710.28	3994397.66	1.579E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.499E-04	0.00E+00
41	ALL	316745.93	3994411.64	1.562E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.483E-04	0.00E+00
42	ALL	316797.74	3994460.34	1.604E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.522E-04	0.00E+00
43	ALL	316813.90	3994495.05	1.663E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.579E-04	0.00E+00
44	ALL	316830.06	3994529.76	1.702E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.615E-04	0.00E+00
45	ALL	316846.23	3994564.47	1.719E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.632E-04	0.00E+00
46	ALL	316862.39	3994599.18	1.715E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.628E-04	0.00E+00
47	ALL	316878.56	3994633.89	1.690E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.605E-04	0.00E+00
48	ALL	316894.72	3994668.61	1.648E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.564E-04	0.00E+00
49	ALL	316910.88	3994703.32	1.587E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.507E-04	0.00E+00
50	ALL	316927.05	3994738.03	1.514E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.437E-04	0.00E+00
51	ALL	316943.21	3994772.74	1.429E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.357E-04	0.00E+00
52	ALL	316959.37	3994807.45	1.335E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.268E-04	0.00E+00
53	ALL	316975.54	3994842.16	1.235E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.172E-04	0.00E+00
54	ALL	316318.18	3994243.86	5.118E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.858E-05	0.00E+00
55	ALL	316278.72	3994244.12	4.360E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.139E-05	0.00E+00
56	ALL	316239.25	3994244.39	3.678E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.491E-05	0.00E+00
57	ALL	316199.79	3994244.66	3.083E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.927E-05	0.00E+00
58	ALL	316160.33	3994244.93	2.584E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.453E-05	0.00E+00

59	ALL	316353.00	3994157.78	4.264E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.047E-05	0.00E+00
60	ALL	316388.51	3994171.71	5.053E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.797E-05	0.00E+00
61	ALL	316424.01	3994185.64	5.936E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.635E-05	0.00E+00
62	ALL	316459.52	3994199.56	6.900E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.550E-05	0.00E+00
63	ALL	316495.02	3994213.49	7.884E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.483E-05	0.00E+00
64	ALL	316530.52	3994227.42	8.842E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.393E-05	0.00E+00
65	ALL	316566.03	3994241.34	9.720E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.227E-05	0.00E+00
66	ALL	316601.53	3994255.27	1.048E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.947E-05	0.00E+00
67	ALL	316637.04	3994269.20	1.109E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.053E-04	0.00E+00
68	ALL	316672.54	3994283.12	1.155E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.096E-04	0.00E+00
69	ALL	316708.04	3994297.05	1.184E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.124E-04	0.00E+00
70	ALL	316743.55	3994310.98	1.199E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.138E-04	0.00E+00
71	ALL	316779.05	3994324.91	1.201E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.140E-04	0.00E+00
72	ALL	316814.56	3994338.83	1.190E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.130E-04	0.00E+00
73	ALL	316866.16	3994387.33	1.221E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.159E-04	0.00E+00
74	ALL	316882.26	3994421.90	1.265E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.201E-04	0.00E+00
75	ALL	316898.36	3994456.48	1.297E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.231E-04	0.00E+00
76	ALL	316914.46	3994491.05	1.315E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.249E-04	0.00E+00
77	ALL	316930.56	3994525.62	1.321E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.254E-04	0.00E+00
78	ALL	316946.65	3994560.20	1.314E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.247E-04	0.00E+00
79	ALL	316962.75	3994594.77	1.295E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.230E-04	0.00E+00
80	ALL	316978.85	3994629.34	1.266E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.202E-04	0.00E+00
81	ALL	316994.95	3994663.92	1.227E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.164E-04	0.00E+00
82	ALL	317011.05	3994698.49	1.178E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.119E-04	0.00E+00
83	ALL	317027.15	3994733.06	1.122E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.065E-04	0.00E+00
84	ALL	317043.25	3994767.64	1.060E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.007E-04	0.00E+00
85	ALL	317059.35	3994802.21	9.937E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.432E-05	0.00E+00
86	ALL	317075.45	3994836.78	9.243E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.774E-05	0.00E+00
87	ALL	316317.50	3994143.86	3.593E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.411E-05	0.00E+00
88	ALL	316278.04	3994144.13	3.108E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.950E-05	0.00E+00
89	ALL	316238.58	3994144.39	2.672E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.537E-05	0.00E+00
90	ALL	316199.11	3994144.66	2.293E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.176E-05	0.00E+00
91	ALL	316159.65	3994144.93	1.961E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.861E-05	0.00E+00
92	ALL	316130.94	3995018.51	1.293E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.227E-03	0.00E+00
93	ALL	316128.23	3995065.46	1.263E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.199E-03	0.00E+00
94	ALL	316139.56	3995101.58	1.411E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.339E-03	0.00E+00
95	ALL	316103.39	3995018.43	8.814E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.366E-04	0.00E+00
96	ALL	316105.07	3995063.92	9.324E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.850E-04	0.00E+00
97	ALL	316085.67	3995100.92	7.213E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.846E-04	0.00E+00
98	ALL	316055.94	3995018.94	5.445E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.169E-04	0.00E+00
99	ALL	316053.23	3995065.89	5.659E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.372E-04	0.00E+00
100	ALL	316053.44	3995103.47	5.389E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.116E-04	0.00E+00
101	ALL	316026.64	3995020.03	4.329E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.109E-04	0.00E+00
102	ALL	316006.36	3995066.98	4.009E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.805E-04	0.00E+00
103	ALL	316015.94	3995103.68	4.119E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.909E-04	0.00E+00
104	ALL	315996.07	3994514.78	3.282E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.116E-05	0.00E+00
105	ALL	316062.32	3994486.84	3.759E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.568E-05	0.00E+00
106	ALL	315695.95	3995105.51	1.006E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.552E-05	0.00E+00
107	ALL	315608.58	3994884.51	4.810E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.565E-05	0.00E+00
108	ALL	315622.28	3994850.86	4.163E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.952E-05	0.00E+00
109	ALL	315926.69	3994443.77	2.192E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.081E-05	0.00E+00
110	ALL	315960.16	3994429.65	2.314E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.197E-05	0.00E+00
111	ALL	315993.63	3994415.53	2.406E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.284E-05	0.00E+00
112	ALL	316027.11	3994401.41	2.502E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.375E-05	0.00E+00
113	ALL	316060.58	3994387.29	2.647E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.512E-05	0.00E+00
114	ALL	316094.06	3994373.17	2.867E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.722E-05	0.00E+00
115	ALL	316127.53	3994359.04	3.171E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.010E-05	0.00E+00
116	ALL	315594.88	3994918.16	5.369E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.096E-05	0.00E+00
117	ALL	315595.09	3994955.74	6.071E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.762E-05	0.00E+00
118	ALL	315595.31	3994993.32	6.650E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.313E-05	0.00E+00
119	ALL	315595.52	3995030.91	7.080E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.721E-05	0.00E+00
120	ALL	315595.74	3995068.49	7.356E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.983E-05	0.00E+00
121	ALL	315595.95	3995106.08	7.495E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.115E-05	0.00E+00
122	ALL	315508.69	3994884.82	3.986E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.784E-05	0.00E+00
123	ALL	315522.49	3994850.92	3.517E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.338E-05	0.00E+00
124	ALL	315924.25	3994344.52	1.721E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.633E-05	0.00E+00
125	ALL	315957.97	3994330.29	1.759E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.670E-05	0.00E+00
126	ALL	315991.70	3994316.06	1.799E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.708E-05	0.00E+00
127	ALL	316025.42	3994301.84	1.858E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.764E-05	0.00E+00
128	ALL	316059.15	3994287.61	1.962E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.862E-05	0.00E+00
129	ALL	316092.88	3994273.38	2.119E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.011E-05	0.00E+00
130	ALL	316126.60	3994259.15	2.330E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.212E-05	0.00E+00
131	ALL	315494.88	3994918.72	4.381E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.159E-05	0.00E+00
132	ALL	315495.09	3994956.31	4.862E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.615E-05	0.00E+00
133	ALL	315495.31	3994993.89	5.248E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.982E-05	0.00E+00
134	ALL	315495.52	3995031.48	5.533E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.252E-05	0.00E+00
135	ALL	315495.74	3995069.06	5.715E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.425E-05	0.00E+00

136	ALL	315495.95	3995106.64	5.815E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.520E-05	0.00E+00
137	ALL	315408.77	3994885.20	3.379E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.207E-05	0.00E+00
138	ALL	315422.65	3994851.11	3.033E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.879E-05	0.00E+00
139	ALL	315436.53	3994817.02	2.647E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.512E-05	0.00E+00
140	ALL	315450.42	3994782.93	2.245E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.131E-05	0.00E+00
141	ALL	315464.30	3994748.84	1.853E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.759E-05	0.00E+00
142	ALL	315478.18	3994714.75	1.497E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.421E-05	0.00E+00
143	ALL	315492.06	3994680.66	1.193E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.133E-05	0.00E+00
144	ALL	315505.95	3994646.57	9.531E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.047E-06	0.00E+00
145	ALL	315519.83	3994612.48	7.789E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.393E-06	0.00E+00
146	ALL	315533.71	3994578.39	6.649E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.312E-06	0.00E+00
147	ALL	315547.60	3994544.30	6.007E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.702E-06	0.00E+00
148	ALL	315561.48	3994510.21	5.769E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.476E-06	0.00E+00
149	ALL	315575.36	3994476.12	5.808E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.513E-06	0.00E+00
150	ALL	315589.25	3994442.03	6.032E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.726E-06	0.00E+00
151	ALL	315603.13	3994407.93	6.382E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.058E-06	0.00E+00
152	ALL	315650.93	3994359.54	7.730E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.338E-06	0.00E+00
153	ALL	315684.84	3994345.23	8.768E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.323E-06	0.00E+00
154	ALL	315718.76	3994330.92	9.856E-09	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.355E-06	0.00E+00
155	ALL	315752.67	3994316.61	1.091E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.036E-05	0.00E+00
156	ALL	315786.59	3994302.31	1.185E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.125E-05	0.00E+00
157	ALL	315820.50	3994288.00	1.257E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.194E-05	0.00E+00
158	ALL	315854.42	3994273.69	1.306E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.239E-05	0.00E+00
159	ALL	315888.33	3994259.39	1.333E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.265E-05	0.00E+00
160	ALL	315922.25	3994245.08	1.347E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.279E-05	0.00E+00
161	ALL	315956.16	3994230.77	1.361E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.292E-05	0.00E+00
162	ALL	315990.08	3994216.46	1.387E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.316E-05	0.00E+00
163	ALL	316023.99	3994202.16	1.436E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.363E-05	0.00E+00
164	ALL	316057.91	3994187.85	1.518E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.441E-05	0.00E+00
165	ALL	316091.82	3994173.54	1.633E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.550E-05	0.00E+00
166	ALL	316125.74	3994159.23	1.782E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.691E-05	0.00E+00
167	ALL	315394.88	3994919.29	3.664E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.478E-05	0.00E+00
168	ALL	315395.10	3994956.88	4.005E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.802E-05	0.00E+00
169	ALL	315395.31	3994994.46	4.277E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.059E-05	0.00E+00
170	ALL	315395.52	3995032.05	4.469E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.243E-05	0.00E+00
171	ALL	315395.74	3995069.63	4.593E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.360E-05	0.00E+00
172	ALL	315395.95	3995107.21	4.663E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.426E-05	0.00E+00
173	ALL	316146.01	3995123.34	1.361E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.292E-03	0.00E+00
174	ALL	316204.38	3995170.07	1.601E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.520E-03	0.00E+00
175	ALL	316324.63	3995146.10	2.893E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.746E-03	0.00E+00
176	ALL	316136.41	3995158.87	8.468E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.039E-04	0.00E+00
177	ALL	316197.04	3995178.87	1.332E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.265E-03	0.00E+00
178	ALL	316276.24	3995170.32	2.097E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.991E-03	0.00E+00
179	ALL	316331.06	3995183.16	1.606E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.525E-03	0.00E+00
180	ALL	316129.65	3995223.57	4.636E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.401E-04	0.00E+00
181	ALL	316074.71	3995155.37	4.965E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.713E-04	0.00E+00
182	ALL	316195.84	3995216.35	8.426E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.999E-04	0.00E+00
183	ALL	316281.44	3995217.46	1.139E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.081E-03	0.00E+00
184	ALL	316329.86	3995220.64	1.048E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.945E-04	0.00E+00
185	ALL	316135.47	3995241.44	4.282E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.065E-04	0.00E+00
186	ALL	316089.42	3995221.73	3.502E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.324E-04	0.00E+00
187	ALL	316047.85	3995181.54	3.587E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.405E-04	0.00E+00
188	ALL	316194.64	3995253.83	5.898E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.599E-04	0.00E+00
189	ALL	316280.24	3995254.94	7.775E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.380E-04	0.00E+00
190	ALL	316328.65	3995258.12	7.350E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.977E-04	0.00E+00
191	ALL	316128.22	3995312.57	2.692E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.555E-04	0.00E+00
192	ALL	316067.09	3995285.61	2.171E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.061E-04	0.00E+00
193	ALL	315983.04	3995226.87	2.144E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.035E-04	0.00E+00
194	ALL	316192.29	3995327.12	3.464E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.288E-04	0.00E+00
195	ALL	316259.30	3995329.27	4.186E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.973E-04	0.00E+00
196	ALL	316326.30	3995331.42	4.217E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.003E-04	0.00E+00
197	ALL	316127.43	3995386.56	1.908E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.811E-04	0.00E+00
198	ALL	316069.43	3995360.98	1.593E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.512E-04	0.00E+00
199	ALL	316011.42	3995335.40	1.379E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.309E-04	0.00E+00
200	ALL	315941.40	3995280.49	1.481E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.406E-04	0.00E+00
201	ALL	315931.33	3995217.18	1.903E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.806E-04	0.00E+00
202	ALL	316189.94	3995400.42	2.302E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.185E-04	0.00E+00
203	ALL	316256.95	3995402.57	2.668E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.533E-04	0.00E+00
204	ALL	316323.95	3995404.71	2.726E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.587E-04	0.00E+00
205	ALL	316125.95	3995460.23	1.426E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.353E-04	0.00E+00
206	ALL	316069.69	3995435.42	1.237E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.175E-04	0.00E+00
207	ALL	316013.42	3995410.61	1.063E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.009E-04	0.00E+00
208	ALL	315957.15	3995385.80	9.686E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.194E-05	0.00E+00
209	ALL	315889.23	3995332.54	1.068E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.014E-04	0.00E+00
210	ALL	315841.60	3995285.77	1.186E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.126E-04	0.00E+00
211	ALL	315842.59	3995218.74	1.448E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.375E-04	0.00E+00
212	ALL	316187.59	3995473.71	1.651E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.567E-04	0.00E+00

213	ALL	316254.60	3995475.86	1.855E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.761E-04	0.00E+00
214	ALL	316321.61	3995478.01	1.899E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.803E-04	0.00E+00
215	ALL	316121.64	3995559.70	1.018E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.660E-05	0.00E+00
216	ALL	316063.16	3995533.91	9.091E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.629E-05	0.00E+00
217	ALL	316004.69	3995508.12	7.917E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.515E-05	0.00E+00
218	ALL	315946.21	3995482.34	6.996E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.641E-05	0.00E+00
219	ALL	315887.73	3995456.55	6.611E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.276E-05	0.00E+00
220	ALL	315817.13	3995401.19	7.466E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.087E-05	0.00E+00
221	ALL	315792.89	3995342.06	9.024E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.566E-05	0.00E+00
222	ALL	315750.83	3995291.83	9.716E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.223E-05	0.00E+00
223	ALL	315744.42	3995223.78	1.086E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.031E-04	0.00E+00
224	ALL	315720.18	3995164.64	1.072E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.017E-04	0.00E+00
225	ALL	316184.39	3995573.66	1.136E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.078E-04	0.00E+00
226	ALL	316251.39	3995575.81	1.244E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.180E-04	0.00E+00
227	ALL	316318.40	3995577.96	1.268E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.204E-04	0.00E+00
228	ALL	316117.67	3995659.31	7.670E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.281E-05	0.00E+00
229	ALL	316057.66	3995632.84	7.005E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.650E-05	0.00E+00
230	ALL	315997.65	3995606.38	6.232E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.915E-05	0.00E+00
231	ALL	315937.64	3995579.92	5.505E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.225E-05	0.00E+00
232	ALL	315877.63	3995553.46	5.002E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.748E-05	0.00E+00
233	ALL	315817.62	3995527.00	4.861E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.614E-05	0.00E+00
234	ALL	315745.18	3995470.19	5.557E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.275E-05	0.00E+00
235	ALL	315720.31	3995409.51	6.678E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.339E-05	0.00E+00
236	ALL	315695.44	3995348.82	7.683E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.293E-05	0.00E+00
237	ALL	315670.56	3995288.13	8.267E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.848E-05	0.00E+00
238	ALL	315645.69	3995227.45	8.332E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.909E-05	0.00E+00
239	ALL	315620.82	3995166.76	8.029E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.621E-05	0.00E+00
240	ALL	316181.18	3995673.61	8.363E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.938E-05	0.00E+00
241	ALL	316248.19	3995675.76	8.988E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.532E-05	0.00E+00
242	ALL	316315.20	3995677.91	9.126E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.663E-05	0.00E+00
243	ALL	316113.91	3995759.01	6.022E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.716E-05	0.00E+00
244	ALL	316052.77	3995732.05	5.587E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.303E-05	0.00E+00
245	ALL	315991.64	3995705.09	5.066E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.809E-05	0.00E+00
246	ALL	315930.51	3995678.14	4.535E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.305E-05	0.00E+00
247	ALL	315869.38	3995651.18	4.075E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.868E-05	0.00E+00
248	ALL	315808.24	3995624.22	3.793E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.600E-05	0.00E+00
249	ALL	315747.11	3995597.27	3.764E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.573E-05	0.00E+00
250	ALL	315673.31	3995539.40	4.325E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.106E-05	0.00E+00
251	ALL	315647.97	3995477.58	5.157E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.895E-05	0.00E+00
252	ALL	315622.64	3995415.75	5.945E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.643E-05	0.00E+00
253	ALL	315597.30	3995353.93	6.491E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.161E-05	0.00E+00
254	ALL	315571.96	3995292.11	6.673E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.335E-05	0.00E+00
255	ALL	315546.62	3995230.29	6.536E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.205E-05	0.00E+00
256	ALL	315521.29	3995168.47	6.223E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.908E-05	0.00E+00
257	ALL	316177.98	3995773.56	6.472E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.144E-05	0.00E+00
258	ALL	316244.99	3995775.71	6.851E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.503E-05	0.00E+00
259	ALL	316311.99	3995777.86	6.930E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.579E-05	0.00E+00
260	ALL	316112.00	3995859.53	4.890E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.642E-05	0.00E+00
261	ALL	316053.45	3995833.71	4.610E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.376E-05	0.00E+00
262	ALL	315994.90	3995807.89	4.266E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.050E-05	0.00E+00
263	ALL	315936.35	3995782.08	3.904E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.706E-05	0.00E+00
264	ALL	315877.81	3995756.26	3.549E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.369E-05	0.00E+00
265	ALL	315819.26	3995730.44	3.241E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.077E-05	0.00E+00
266	ALL	315760.71	3995704.62	3.040E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.886E-05	0.00E+00
267	ALL	315702.16	3995678.81	2.996E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.844E-05	0.00E+00
268	ALL	315643.62	3995652.99	3.105E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.947E-05	0.00E+00
269	ALL	315602.21	3995610.48	3.467E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.291E-05	0.00E+00
270	ALL	315577.94	3995551.27	4.065E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.859E-05	0.00E+00
271	ALL	315553.68	3995492.06	4.660E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.423E-05	0.00E+00
272	ALL	315529.41	3995432.86	5.140E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.879E-05	0.00E+00
273	ALL	315505.15	3995373.65	5.421E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.146E-05	0.00E+00
274	ALL	315480.88	3995314.44	5.467E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.189E-05	0.00E+00
275	ALL	315456.62	3995255.23	5.324E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.053E-05	0.00E+00
276	ALL	315432.35	3995196.03	5.084E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.826E-05	0.00E+00
277	ALL	316174.77	3995873.51	5.186E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.923E-05	0.00E+00
278	ALL	316241.78	3995875.66	5.434E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.158E-05	0.00E+00
279	ALL	316308.79	3995877.80	5.485E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.207E-05	0.00E+00
280	ALL	316441.49	3995024.25	1.948E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.849E-03	0.00E+00
281	ALL	316472.61	3995128.20	7.980E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.575E-04	0.00E+00
282	ALL	316472.82	3995166.17	6.479E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.151E-04	0.00E+00
283	ALL	316481.08	3995061.05	1.065E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.011E-03	0.00E+00
284	ALL	316478.94	3995022.18	1.288E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.222E-03	0.00E+00
285	ALL	316543.80	3995129.56	4.698E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.460E-04	0.00E+00
286	ALL	316531.15	3995163.24	4.437E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.211E-04	0.00E+00
287	ALL	316531.85	3995207.88	3.717E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.529E-04	0.00E+00
288	ALL	316459.82	3995277.71	3.931E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.731E-04	0.00E+00
289	ALL	316426.44	3995291.14	4.220E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.006E-04	0.00E+00

290	ALL	316554.31	3995057.01	5.878E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.580E-04	0.00E+00
291	ALL	316552.16	3995018.13	6.856E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.508E-04	0.00E+00
292	ALL	316617.67	3995123.79	3.097E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.939E-04	0.00E+00
293	ALL	316593.66	3995187.70	2.867E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.721E-04	0.00E+00
294	ALL	316569.66	3995251.62	2.625E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.491E-04	0.00E+00
295	ALL	316492.21	3995335.53	2.643E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.509E-04	0.00E+00
296	ALL	316450.64	3995353.75	2.806E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.663E-04	0.00E+00
297	ALL	316627.53	3995052.96	3.707E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.519E-04	0.00E+00
298	ALL	316625.38	3995014.09	4.220E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.006E-04	0.00E+00
299	ALL	316689.80	3995122.66	2.171E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.061E-04	0.00E+00
300	ALL	316676.70	3995157.53	2.099E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.993E-04	0.00E+00
301	ALL	316663.60	3995192.41	2.030E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.927E-04	0.00E+00
302	ALL	316650.50	3995227.28	1.965E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.866E-04	0.00E+00
303	ALL	316637.40	3995262.16	1.900E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.803E-04	0.00E+00
304	ALL	316624.30	3995297.03	1.824E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.731E-04	0.00E+00
305	ALL	316611.20	3995331.91	1.737E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.649E-04	0.00E+00
306	ALL	316563.54	3995380.69	1.761E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.672E-04	0.00E+00
307	ALL	316528.98	3995394.59	1.866E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.771E-04	0.00E+00
308	ALL	316494.42	3995408.49	1.956E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.857E-04	0.00E+00
309	ALL	316459.85	3995422.40	2.021E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.919E-04	0.00E+00
310	ALL	316425.29	3995436.30	2.049E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.945E-04	0.00E+00
311	ALL	316356.17	3995464.11	1.990E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.889E-04	0.00E+00
312	ALL	316702.90	3995087.79	2.253E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.139E-04	0.00E+00
313	ALL	316700.75	3995048.91	2.538E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.409E-04	0.00E+00
314	ALL	316698.60	3995010.04	2.847E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.702E-04	0.00E+00
315	ALL	316789.43	3995117.71	1.455E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.381E-04	0.00E+00
316	ALL	316799.87	3995168.32	1.255E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.191E-04	0.00E+00
317	ALL	316762.81	3995188.59	1.374E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.304E-04	0.00E+00
318	ALL	316749.50	3995224.03	1.341E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.273E-04	0.00E+00
319	ALL	316736.18	3995259.47	1.312E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.246E-04	0.00E+00
320	ALL	316722.87	3995294.91	1.279E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.214E-04	0.00E+00
321	ALL	316709.56	3995330.35	1.242E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.179E-04	0.00E+00
322	ALL	316696.25	3995365.79	1.201E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.140E-04	0.00E+00
323	ALL	316682.94	3995401.23	1.156E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.098E-04	0.00E+00
324	ALL	316634.50	3995450.80	1.173E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.113E-04	0.00E+00
325	ALL	316599.38	3995464.93	1.234E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.171E-04	0.00E+00
326	ALL	316564.26	3995479.06	1.288E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.222E-04	0.00E+00
327	ALL	316529.14	3995493.19	1.335E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.267E-04	0.00E+00
328	ALL	316494.01	3995507.31	1.370E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.300E-04	0.00E+00
329	ALL	316458.89	3995521.44	1.386E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.316E-04	0.00E+00
330	ALL	316423.77	3995535.57	1.384E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.314E-04	0.00E+00
331	ALL	316353.52	3995563.83	1.325E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.258E-04	0.00E+00
332	ALL	316802.74	3995082.27	1.501E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.425E-04	0.00E+00
333	ALL	316800.60	3995043.40	1.658E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.573E-04	0.00E+00
334	ALL	316889.14	3995112.57	1.040E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.875E-05	0.00E+00
335	ALL	316875.68	3995148.39	1.012E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.610E-05	0.00E+00
336	ALL	316862.23	3995184.20	9.890E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.388E-05	0.00E+00
337	ALL	316848.78	3995220.02	9.709E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.216E-05	0.00E+00
338	ALL	316835.32	3995255.84	9.543E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.059E-05	0.00E+00
339	ALL	316821.87	3995291.65	9.371E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.895E-05	0.00E+00
340	ALL	316808.42	3995327.47	9.185E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.719E-05	0.00E+00
341	ALL	316794.96	3995363.29	8.991E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.534E-05	0.00E+00
342	ALL	316781.51	3995399.11	8.774E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.329E-05	0.00E+00
343	ALL	316768.06	3995434.92	8.528E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.095E-05	0.00E+00
344	ALL	316754.60	3995470.74	8.254E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.835E-05	0.00E+00
345	ALL	316705.65	3995520.84	8.375E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.950E-05	0.00E+00
346	ALL	316670.16	3995535.12	8.754E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.309E-05	0.00E+00
347	ALL	316634.66	3995549.39	9.117E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.654E-05	0.00E+00
348	ALL	316599.17	3995563.67	9.432E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.954E-05	0.00E+00
349	ALL	316563.67	3995577.95	9.704E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.211E-05	0.00E+00
350	ALL	316528.17	3995592.23	9.921E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.417E-05	0.00E+00
351	ALL	316492.68	3995606.51	1.003E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.523E-05	0.00E+00
352	ALL	316457.18	3995620.79	1.004E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.531E-05	0.00E+00
353	ALL	316421.69	3995635.07	9.947E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.442E-05	0.00E+00
354	ALL	316350.69	3995663.63	9.483E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.001E-05	0.00E+00
355	ALL	316902.59	3995076.75	1.070E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.016E-04	0.00E+00
356	ALL	316900.44	3995037.88	1.165E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.106E-04	0.00E+00
357	ALL	316898.30	3994999.01	1.269E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.205E-04	0.00E+00
358	ALL	316896.15	3994960.13	1.376E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.306E-04	0.00E+00
359	ALL	316894.00	3994921.26	1.479E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.403E-04	0.00E+00
360	ALL	316891.85	3994882.39	1.571E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.492E-04	0.00E+00
361	ALL	316988.88	3995107.32	7.806E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.409E-05	0.00E+00
362	ALL	316975.33	3995143.41	7.613E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.227E-05	0.00E+00
363	ALL	316961.78	3995179.49	7.469E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.089E-05	0.00E+00
364	ALL	316948.22	3995215.58	7.342E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.970E-05	0.00E+00
365	ALL	316934.67	3995251.67	7.238E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.871E-05	0.00E+00
366	ALL	316921.11	3995287.75	7.143E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.780E-05	0.00E+00

367	ALL	316907.56	3995323.84	7.042E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.685E-05	0.00E+00
368	ALL	316894.00	3995359.93	6.934E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.582E-05	0.00E+00
369	ALL	316880.45	3995396.01	6.819E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.473E-05	0.00E+00
370	ALL	316866.89	3995432.10	6.685E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.345E-05	0.00E+00
371	ALL	316853.34	3995468.18	6.541E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.209E-05	0.00E+00
372	ALL	316839.78	3995504.27	6.385E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.061E-05	0.00E+00
373	ALL	316826.23	3995540.36	6.220E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.904E-05	0.00E+00
374	ALL	316776.91	3995590.83	6.306E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.986E-05	0.00E+00
375	ALL	316741.15	3995605.22	6.561E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.228E-05	0.00E+00
376	ALL	316705.39	3995619.60	6.802E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.457E-05	0.00E+00
377	ALL	316669.62	3995633.99	7.026E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.669E-05	0.00E+00
378	ALL	316633.86	3995648.38	7.227E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.860E-05	0.00E+00
379	ALL	316598.10	3995662.76	7.400E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.024E-05	0.00E+00
380	ALL	316562.33	3995677.15	7.537E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.154E-05	0.00E+00
381	ALL	316526.57	3995691.54	7.629E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.242E-05	0.00E+00
382	ALL	316490.81	3995705.92	7.649E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.260E-05	0.00E+00
383	ALL	316455.05	3995720.31	7.603E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.217E-05	0.00E+00
384	ALL	316347.76	3995763.47	7.164E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.800E-05	0.00E+00
385	ALL	317002.44	3995071.23	8.018E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.611E-05	0.00E+00
386	ALL	317000.29	3995032.36	8.655E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.215E-05	0.00E+00
387	ALL	316998.14	3994993.49	9.324E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.851E-05	0.00E+00
388	ALL	316996.00	3994954.62	1.002E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.513E-05	0.00E+00
389	ALL	316993.85	3994915.75	1.070E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.016E-04	0.00E+00
390	ALL	316991.70	3994876.87	1.133E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.075E-04	0.00E+00
391	ALL	317088.66	3995102.00	6.085E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.776E-05	0.00E+00
392	ALL	317075.03	3995138.29	5.943E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.642E-05	0.00E+00
393	ALL	317061.40	3995174.58	5.832E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.536E-05	0.00E+00
394	ALL	317047.77	3995210.87	5.745E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.454E-05	0.00E+00
395	ALL	317034.13	3995247.16	5.678E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.389E-05	0.00E+00
396	ALL	317020.50	3995283.45	5.622E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.337E-05	0.00E+00
397	ALL	317006.87	3995319.74	5.573E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.290E-05	0.00E+00
398	ALL	316993.24	3995356.02	5.516E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.236E-05	0.00E+00
399	ALL	316979.61	3995392.31	5.443E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.167E-05	0.00E+00
400	ALL	316965.98	3995428.60	5.361E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.089E-05	0.00E+00
401	ALL	316952.35	3995464.89	5.274E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.006E-05	0.00E+00
402	ALL	316938.72	3995501.18	5.182E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.919E-05	0.00E+00
403	ALL	316925.09	3995537.47	5.087E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.829E-05	0.00E+00
404	ALL	316911.46	3995573.75	4.989E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.735E-05	0.00E+00
405	ALL	316897.83	3995610.04	4.879E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.631E-05	0.00E+00
406	ALL	316848.24	3995660.80	4.943E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.692E-05	0.00E+00
407	ALL	316812.27	3995675.27	5.127E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.866E-05	0.00E+00
408	ALL	316776.31	3995689.73	5.290E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.022E-05	0.00E+00
409	ALL	316740.35	3995704.20	5.443E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.167E-05	0.00E+00
410	ALL	316704.38	3995718.67	5.591E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.308E-05	0.00E+00
411	ALL	316668.42	3995733.13	5.732E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.441E-05	0.00E+00
412	ALL	316632.46	3995747.60	5.856E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.558E-05	0.00E+00
413	ALL	316596.49	3995762.07	5.952E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.650E-05	0.00E+00
414	ALL	316560.53	3995776.54	6.017E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.712E-05	0.00E+00
415	ALL	316524.57	3995791.00	6.047E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.740E-05	0.00E+00
416	ALL	316488.61	3995805.47	6.027E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.721E-05	0.00E+00
417	ALL	316452.64	3995819.94	5.968E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.665E-05	0.00E+00
418	ALL	316416.68	3995834.40	5.887E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.589E-05	0.00E+00
419	ALL	316380.72	3995848.87	5.773E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.480E-05	0.00E+00
420	ALL	316344.75	3995863.34	5.638E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.351E-05	0.00E+00
421	ALL	317102.29	3995065.72	6.245E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.928E-05	0.00E+00
422	ALL	317100.14	3995026.84	6.684E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.345E-05	0.00E+00
423	ALL	317097.99	3994987.97	7.156E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.793E-05	0.00E+00
424	ALL	317095.84	3994949.10	7.633E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.246E-05	0.00E+00
425	ALL	317093.70	3994910.23	8.103E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.692E-05	0.00E+00
426	ALL	317091.55	3994871.36	8.543E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.109E-05	0.00E+00
427	ALL	316149.49	3995077.44	1.754E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.665E-03	0.00E+00
428	ALL	316153.29	3995065.15	1.912E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.815E-03	0.00E+00
429	ALL	316153.92	3995019.58	1.953E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.854E-03	0.00E+00
430	ALL	316153.00	3995005.45	1.889E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.793E-03	0.00E+00
431	ALL	316083.64	3995122.52	6.468E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.139E-04	0.00E+00
432	ALL	316088.03	3995140.95	6.041E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.734E-04	0.00E+00
433	ALL	316138.37	3995139.49	1.044E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.910E-04	0.00E+00
434	ALL	316079.25	3995067.49	7.111E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.750E-04	0.00E+00
435	ALL	316122.85	3995079.79	1.159E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.100E-03	0.00E+00
436	ALL	316105.00	3995078.32	9.271E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.800E-04	0.00E+00
437	ALL	316075.15	3995081.54	6.787E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.443E-04	0.00E+00
438	ALL	316055.83	3995077.74	5.755E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.463E-04	0.00E+00
439	ALL	316028.32	3995078.61	4.652E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.416E-04	0.00E+00
440	ALL	316011.35	3995079.20	4.133E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.923E-04	0.00E+00
441	ALL	315979.44	3995076.86	3.380E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.208E-04	0.00E+00
442	ALL	315975.45	3995024.42	3.114E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.956E-04	0.00E+00
443	ALL	316006.18	3995022.08	3.766E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.575E-04	0.00E+00

444	ALL	316128.23	3995065.46	1.263E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.199E-03	0.00E+00
445	ALL	315978.96	3995007.74	3.044E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.889E-04	0.00E+00
446	ALL	316010.57	3995008.32	3.737E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.547E-04	0.00E+00
447	ALL	316029.89	3995007.15	4.277E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.060E-04	0.00E+00
448	ALL	316074.67	3995006.56	6.285E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.966E-04	0.00E+00
449	ALL	316107.45	3995006.56	9.092E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.631E-04	0.00E+00
450	ALL	316053.01	3995006.27	5.139E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.878E-04	0.00E+00
451	ALL	316022.45	3995166.47	3.411E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.238E-04	0.00E+00
452	ALL	316088.01	3995176.71	4.709E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.470E-04	0.00E+00
453	ALL	316138.65	3995178.17	7.272E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.903E-04	0.00E+00
454	ALL	316115.23	3995095.93	1.019E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.668E-04	0.00E+00
455	ALL	316241.96	3995168.22	2.011E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.909E-03	0.00E+00
456	ALL	316153.28	3995221.49	5.740E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.449E-04	0.00E+00
457	ALL	316113.77	3995220.03	4.194E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.981E-04	0.00E+00
458	ALL	316069.87	3995221.78	3.132E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.973E-04	0.00E+00
459	ALL	316050.26	3995223.54	2.814E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.672E-04	0.00E+00
460	ALL	316028.01	3995225.00	2.539E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.410E-04	0.00E+00
461	ALL	316006.94	3995226.47	2.329E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.210E-04	0.00E+00
462	ALL	316168.50	3995220.03	6.604E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.269E-04	0.00E+00
463	ALL	316217.38	3995219.44	9.270E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.799E-04	0.00E+00
464	ALL	316237.28	3995217.98	1.028E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.754E-04	0.00E+00
465	ALL	316170.17	3995255.54	4.986E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.732E-04	0.00E+00
466	ALL	316138.83	3995271.38	3.613E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.430E-04	0.00E+00
467	ALL	316111.63	3995264.84	3.129E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.970E-04	0.00E+00
468	ALL	316093.73	3995270.70	2.713E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.575E-04	0.00E+00
469	ALL	316147.10	3995297.21	3.268E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.102E-04	0.00E+00
470	ALL	316187.04	3995286.88	4.394E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.171E-04	0.00E+00
471	ALL	316223.54	3995259.68	6.476E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.148E-04	0.00E+00
472	ALL	316241.10	3995258.64	6.965E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.612E-04	0.00E+00
473	ALL	316298.26	3995258.64	7.548E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.165E-04	0.00E+00
474	ALL	316306.18	3995234.20	9.501E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.019E-04	0.00E+00
475	ALL	316300.67	3995218.70	1.124E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.067E-03	0.00E+00
476	ALL	316342.33	3995283.78	5.801E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.506E-04	0.00E+00
477	ALL	316347.16	3995304.10	4.947E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.695E-04	0.00E+00
478	ALL	316315.73	3995152.57	2.688E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.552E-03	0.00E+00
479	ALL	316267.22	3995165.01	2.253E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.138E-03	0.00E+00
480	ALL	316570.32	3995078.31	4.834E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.589E-04	0.00E+00
481	ALL	316570.32	3995111.19	4.269E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.053E-04	0.00E+00
482	ALL	316596.54	3995153.61	3.145E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.985E-04	0.00E+00
483	ALL	316593.68	3995075.45	4.208E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.994E-04	0.00E+00
484	ALL	316597.97	3995104.52	3.694E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.506E-04	0.00E+00
485	ALL	316443.74	3995211.83	6.127E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.816E-04	0.00E+00
486	ALL	316442.12	3995241.40	5.212E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.947E-04	0.00E+00
487	ALL	316444.15	3995263.68	4.549E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.318E-04	0.00E+00
488	ALL	316443.74	3995307.44	3.613E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.430E-04	0.00E+00
489	ALL	316441.27	3995330.50	3.239E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.074E-04	0.00E+00
490	ALL	316490.09	3995209.12	4.688E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.450E-04	0.00E+00
491	ALL	316493.39	3995244.08	3.925E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.726E-04	0.00E+00
492	ALL	316492.73	3995284.98	3.282E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.116E-04	0.00E+00
493	ALL	316493.39	3995308.07	2.960E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.809E-04	0.00E+00
494	ALL	316529.67	3995230.89	3.441E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.266E-04	0.00E+00
495	ALL	316528.35	3995271.79	2.959E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.808E-04	0.00E+00
496	ALL	316528.35	3995253.98	3.169E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.008E-04	0.00E+00
497	ALL	316535.61	3995292.90	2.647E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.513E-04	0.00E+00
498	ALL	316490.75	3995323.91	2.792E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.651E-04	0.00E+00
499	ALL	316527.69	3995314.67	2.518E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.390E-04	0.00E+00
500	ALL	316574.53	3995216.38	2.878E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.732E-04	0.00E+00
501	ALL	316575.19	3995293.56	2.242E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.128E-04	0.00E+00
502	ALL	316603.56	3995240.13	2.334E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.215E-04	0.00E+00
503	ALL	316600.26	3995216.38	2.542E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.413E-04	0.00E+00
504	ALL	316623.35	3995215.06	2.289E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.172E-04	0.00E+00
505	ALL	316654.35	3995210.44	2.017E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.915E-04	0.00E+00
506	ALL	316680.74	3995242.76	1.672E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.587E-04	0.00E+00
507	ALL	316697.23	3995210.44	1.688E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.602E-04	0.00E+00
508	ALL	316674.80	3995217.04	1.820E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.728E-04	0.00E+00
509	ALL	316719.66	3995246.06	1.432E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.359E-04	0.00E+00
510	ALL	316721.64	3995207.14	1.545E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.467E-04	0.00E+00
511	ALL	316673.48	3995296.86	1.517E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.440E-04	0.00E+00
512	ALL	316649.08	3995296.20	1.664E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.580E-04	0.00E+00
513	ALL	316633.90	3995327.20	1.624E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.541E-04	0.00E+00
514	ALL	316670.19	3995321.93	1.447E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.374E-04	0.00E+00
515	ALL	316735.49	3995330.50	1.142E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.084E-04	0.00E+00
516	ALL	316784.31	3995292.24	1.050E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.962E-05	0.00E+00
517	ALL	316790.25	3995322.59	9.770E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.274E-05	0.00E+00
518	ALL	316787.61	3995242.10	1.136E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.078E-04	0.00E+00
519	ALL	316793.55	3995212.42	1.177E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.117E-04	0.00E+00
520	ALL	316806.08	3995004.62	1.772E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.682E-04	0.00E+00

521	ALL	315890.72	3995239.47	1.559E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.480E-04	0.00E+00
522	ALL	315629.69	3995340.75	7.012E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.656E-05	0.00E+00
523	ALL	315856.33	3995384.99	8.256E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.837E-05	0.00E+00
524	ALL	315982.85	3995475.80	7.956E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.553E-05	0.00E+00
525	ALL	315785.70	3995464.94	5.786E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.492E-05	0.00E+00
526	ALL	316098.50	3995319.79	2.194E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	2.082E-04	0.00E+00
527	ALL	316067.45	3995322.12	1.842E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.749E-04	0.00E+00
528	ALL	316017.00	3995314.36	1.537E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.459E-04	0.00E+00
529	ALL	315935.50	3995246.05	1.710E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.623E-04	0.00E+00
530	ALL	315892.64	3995221.41	1.667E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.582E-04	0.00E+00
531	ALL	315837.94	3995246.94	1.328E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.261E-04	0.00E+00
532	ALL	315843.61	3995259.50	1.298E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.232E-04	0.00E+00
533	ALL	315802.29	3995240.46	1.232E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.169E-04	0.00E+00
534	ALL	315801.07	3995223.04	1.273E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.209E-04	0.00E+00
535	ALL	315935.99	3995261.12	1.600E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.519E-04	0.00E+00
536	ALL	315982.59	3995253.42	1.871E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.776E-04	0.00E+00
537	ALL	315983.80	3995272.87	1.700E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.614E-04	0.00E+00
538	ALL	316028.37	3995274.49	1.938E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.839E-04	0.00E+00
539	ALL	315982.18	3995319.47	1.353E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.284E-04	0.00E+00
540	ALL	315934.37	3995303.26	1.312E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.246E-04	0.00E+00
541	ALL	315892.64	3995283.41	1.323E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.256E-04	0.00E+00
542	ALL	315894.67	3995259.10	1.464E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.390E-04	0.00E+00
543	ALL	315806.34	3995264.36	1.174E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.114E-04	0.00E+00
544	ALL	315785.27	3995301.64	1.013E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.613E-05	0.00E+00
545	ALL	315838.75	3995305.29	1.101E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.045E-04	0.00E+00
546	ALL	315745.97	3995264.36	1.019E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.677E-05	0.00E+00
547	ALL	315753.67	3995241.67	1.083E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.028E-04	0.00E+00
548	ALL	315669.39	3995225.87	8.866E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.416E-05	0.00E+00
549	ALL	315668.58	3995249.37	8.650E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.211E-05	0.00E+00
550	ALL	315664.53	3995269.63	8.368E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.943E-05	0.00E+00
551	ALL	315983.80	3995340.94	1.237E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.175E-04	0.00E+00
552	ALL	315935.59	3995324.73	1.192E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.132E-04	0.00E+00
553	ALL	315822.95	3995338.10	9.533E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.049E-05	0.00E+00
554	ALL	315934.37	3995371.73	9.730E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	9.236E-05	0.00E+00
555	ALL	315659.85	3995104.10	8.997E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.540E-05	0.00E+00
556	ALL	315659.53	3994917.54	6.224E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	5.908E-05	0.00E+00
557	ALL	315659.74	3994955.12	7.141E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.779E-05	0.00E+00
558	ALL	315659.95	3994992.71	7.913E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	7.511E-05	0.00E+00
559	ALL	315660.17	3995030.29	8.487E-08	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	8.056E-05	0.00E+00
560	ALL	316123.98	3995007.30	1.145E-06	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	1.087E-03	0.00E+00
561	ALL	316078.34	3995023.81	6.761E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	6.418E-04	0.00E+00
562	ALL	315976.75	3995063.92	3.321E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	3.152E-04	0.00E+00
563	ALL	316027.99	3995062.17	4.655E-07	1.2YrCancerHighEnd_InhSoilDermMMilkCrops	4.419E-04	0.00E+00

Health Risk Screening

Operational Health Risk Assessment

Diesel PM Screening — Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author (Prioritization Calculator)	Matthew Cegielski — *Last Update* October 13, 2016
Date Updated with Project Emissions	May 22, 2023
Facility:	**Henderson Commercial Project (Diesel PM Screening Analysis)**
ID#:	**—**
Project #:	**Truck Run and Idle Emissions**
Unit and Process#	**Mobile Source Diesel (Trucks Visiting the Commercial Project)**

Operating Hours hr/yr 1,206.00 **(operating hours assumed based on idle hours)**

Receptor Proximity and Proximity Factors		Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100	**1.000**	5.38E+01	5.80E-01	0.00E+00	5.38E+01
100≤R<250	**0.250**	1.35E+01	1.45E-01	0.00E+00	1.35E+01
250≤R<500	**0.040**	2.15E+00	2.32E-02	0.00E+00	2.15E+00
500≤R<1000	**0.011**	5.92E-01	6.37E-03	0.00E+00	5.92E-01
1000≤R<1500	**0.003**	1.61E-01	1.74E-03	0.00E+00	1.61E-01
1500≤R<2000	**0.002**	1.08E-01	1.16E-03	0.00E+00	1.08E-01
2000<R	**0.001**	5.38E-02	5.80E-04	0.00E+00	5.38E-02

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

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Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	**9901**	2.33E+01	2.13E-02	1.93E-02	5.38E+01	5.80E-01	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	**5.38E+01**	**5.80E-01**	**0.00E+00**

Operations—Henderson Ave & SR 65 Commercial Project

Diesel Truck Trips

	Trucks Onsite Daily	Average Daily Truck Trips
Heavy Truck Trips	**467.44**	**934.89**

Truck Assumptions

Trucks Onsite per Day	467.44
Trucks Onsite per Year	170,617.1
Idling Events per Truck per day	2
Idling Time per Event (minutes)	15
Idling Minutes/Year	5,118,514
Idling Hours/Year	85,309

	Truck Entering	Trucks Exiting	Total
Average Travel Distance Onsite (ft)	660	660	1,320

(0.25 mile on-site and 0.25 mile off-site assumed for this localized assessment - commercial project)

	Miles/Trip	Truck Trips/Year	Miles/Year
Offsite Miles Estimate	0.25	341,234.3	85,308.6

	Distance Onsite (ft) in and out	Distance to Receptor Meters	Direction to Receptor	Idling Emissions (lbs/year)	Running Emissions (lbs/yr)	Total Truck Emissions (lbs/year)	Grand Total (lbs/yr)	Average Lbs/Day	Max Lbs/Day*	Max lbs/Hr
Emissions	1,320	<100 M	All	0.00	23.30	**23.2962**	23.30	0.06383	0.19148	0.01596

*Max daily assumed to be 3 times the daily average. Max hr based on 12 hrs/day

Running Emission Calculations **EMFAC Rates**

Idling Emission Rate for Diesel g/day	0.00033
g/lb conversion factor	0.00220
HDT Onsite Running Emissions 5 mph g/mile	0.11603
HDT Running Emissions Onroad 5-25 mph	0.06585

EMFAC 2017 PM10 running emissions Aggregated Fleet Age in 2023

EMFAC 2017 Average Running Emissions

	PM10_RUNEX 5-25 MPH	**PM10 RUNEX 5 MPH**
Weighted Averages (Based on Project Fleet)	**0.06585**	**0.11603**

	Distance (Feet)	**Distance (Miles)**	**Miles/Year/ Truck**	**Trucks/Day**	**Emission (g/mi)**	**Emissions g/year**	**Emission lbs/year**	**Emissions lbs/hour**
Onsite Running Emissions	1,320.00	0.25	91.3	467.4	0.11603	4949.09	10.91	0.00249106

	Distance (Feet)	**Miles/ Round Trip**	**Miles/Year/ Truck**	**Trucks/Day**	**Emissions Rate (g/mi)**	**Emissions g/year**	**Emission lbs/year**	**Emissions lbs/hour**
Offsite Running Emissions	2,640.00	0.50	182.50	467.4	0.06585	5617.79	12.39	0.00282765
						Total Running	**23.29595**	**0.00532**

Total Emissions	**Lbs/Year**	**Max Lbs/Hours**
Onsite Running Emissions	10.9109	0.0024911
Offsite Running Emissions	12.3851	0.0028276
Idling Emissions	0.0003	0.0159563
Total	**23.2962097**	**0.0212750**

Health Risk Prioritization Results (Receptor 0-100 M)

	Cancer Score	**Chronic Score**	**Acute Score**
Prioritization Score Truck Run and Idle	53.81424	0.57951	0.00000

<u>Operational Fuel Calculation—Project-generated Operational Trips</u>
Daily Truck Trips
Tulare and Peach Vesting Tentative Tract Map for Tract No. 6432 Project - Buildout Year Operations

	Weekday	Saturday	Sunday
Trips per Day	13,600.78	15542.28	13667.33
			Total Daily Trips
		Total Average Daily Trips	**13,887.64**

By Vehicle Type (Average Fleet Mix for the 2023 Operational Year for Passenger Vehicles)

	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Percentage	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592
Daily Trips	7080.879304	710.200241	2320.708686	2428.240716	438.974548	111.045604	166.735057	218.133229	8.832542	6.541080	327.109574	20.345399	49.884418

Heavy Trucks Only	
LHD1	438.975
LHD2	111.046
MHD	166.735
HHD	218.133
Heavy Trucks Total	934.888

On-site Truck Running and Idling Emissions for the Health Risk Screening Analysis—Henderson Ave & SR 65 Commercial Project

Source: EMFAC2021 (v1.0.2) Emission Rates
Region Type: County
Region: Tulare
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, kWh/mile for Energy Consumption, gallon/mile for Fuel Consumption. PHEV calculated based on total VMT.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
Tulare	2024	HHDT	Aggregate	5	Diesel	468.4285514	21.17597463	0.13586553	0.142008766	3496.905457	0.029539877	0.550938879	0.635985455	0.724021028	1.380148017	0.033113604
Tulare	2024	HHDT	Aggregate	10	Diesel	5372.627085	9.839894229	0.026463682	0.027660253	3094.63276	0.006460053	0.487560652	0.139083171	0.158335603	0.757091629	0.029304322
Tulare	2024	HHDT	Aggregate	15	Diesel	11784.34764	5.974288551	0.011994524	0.012536863	2477.165163	0.002341856	0.39027838	0.050419523	0.057398789	0.405233079	0.023457273
Tulare	2024	HHDT	Aggregate	20	Diesel	23079.04758	4.025631949	0.007690304	0.008038025	2113.893539	0.00137324	0.333044788	0.029565488	0.033658057	0.287954704	0.020017308
Tulare	2024	HHDT	Aggregate	25	Diesel	13956.89518	3.617973968	0.008484829	0.008868475	1919.127622	0.001072103	0.302359338	0.023082091	0.026277204	0.219746656	0.018172991
						Total	44.63376333	0.190498869	0.199112382	13101.72454	0.04078713	2.064182037	0.878135729	0.999690682	3.050174086	0.124065497
Tulare	2024	LHDT1	Aggregate	5	Diesel	5022.777203	2.96296712	0.12024578	0.125682761	1210.968974	0.024931056	0.190788655	0.536750963	0.611055286	1.739976313	0.011474546
Tulare	2024	LHDT1	Aggregate	10	Diesel	16703.02347	2.757634841	0.097919288	0.102346764	1047.701932	0.020267618	0.165065866	0.436349882	0.49675533	1.38163301	0.009927508
Tulare	2024	LHDT1	Aggregate	15	Diesel	36173.96378	2.584276847	0.08030452	0.083935534	872.5912269	0.016689399	0.137477103	0.359312943	0.409053897	1.106713079	0.008268245
Tulare	2024	LHDT1	Aggregate	20	Diesel	39658.34844	2.43547052	0.066068665	0.069055997	753.9126512	0.013845043	0.118779245	0.298075615	0.33933927	0.889090784	0.007143706
Tulare	2024	LHDT1	Aggregate	25	Diesel	42445.01301	2.323073091	0.054460277	0.056922729	655.3377044	0.01153645	0.103248722	0.248372972	0.282756115	0.714233	0.006209658
						Total	13.06342242	0.41899853	0.437943785	4540.512489	0.087269566	0.715359592	1.878862374	2.138959898	5.831646186	0.043023663
Tulare	2024	LHDT2	Aggregate	5	Diesel	1756.511464	2.646751961	0.104340118	0.109057915	1442.816856	0.021570989	0.227316383	0.464410686	0.52870069	1.501488037	0.013671423
Tulare	2024	LHDT2	Aggregate	10	Diesel	5841.201193	2.42415259	0.085704722	0.089579909	1258.319819	0.017797171	0.1982488	0.383162619	0.436205167	1.203555204	0.01192322
Tulare	2024	LHDT2	Aggregate	15	Diesel	12650.36841	2.233734655	0.070778448	0.073978735	1064.201296	0.014841402	0.167665348	0.319526641	0.363759837	0.969501013	0.010083848
Tulare	2024	LHDT2	Aggregate	20	Diesel	13868.88983	2.069044193	0.058567663	0.061215832	920.3463345	0.012446869	0.14500094	0.267973771	0.305070322	0.780504347	0.008720749
Tulare	2024	LHDT2	Aggregate	25	Diesel	14843.4121	1.940159569	0.048512149	0.050705654	799.8306102	0.010468783	0.126013638	0.225386738	0.256587817	0.62609547	0.007578802
						Total	11.31384297	0.3679031	0.384538045	5485.514915	0.077125214	0.864245109	1.660460456	1.890323834	5.081144071	0.051978042
Tulare	2024	MHDT	Aggregate	5	Diesel	394.7048632	9.306292537	0.058611292	0.061261434	2374.719806	0.015375772	0.374138073	0.331036144	0.376859451	0.580617579	0.022487177
Tulare	2024	MHDT	Aggregate	10	Diesel	4527.712292	3.781262882	0.04633684	0.048431986	2000.64768	0.009324524	0.315202857	0.200754437	0.228543645	0.456511155	0.018944937
Tulare	2024	MHDT	Aggregate	15	Diesel	7887.855438	2.369144866	0.030021827	0.031379281	1573.0734	0.004703618	0.247838355	0.101267596	0.11528545	0.295096533	0.014896064
Tulare	2024	MHDT	Aggregate	20	Diesel	10385.323	1.796341551	0.01914673	0.02001246	1338.697471	0.00228569	0.210912332	0.049210287	0.056022166	0.211793953	0.012676665
Tulare	2024	MHDT	Aggregate	25	Diesel	14295.81924	1.503647128	0.014832723	0.015503393	1205.196736	0.001634053	0.189879237	0.035180708	0.040050558	0.16940122	0.011412492
						Total	18.75668897	0.168949412	0.176588555	8492.335094	0.033323656	1.337970852	0.717449173	0.81676127	1.71342044	0.080417335

Running Emissions 5-25 MPH Averaged

	NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
HHDT	**8.9268**	**0.0381**	**0.0398**	**2620.3449**	**0.0082**	**0.4128**	**0.1756**	**0.1999**	**0.6100**	**0.0248**
LHDT1	**2.6127**	**0.0838**	**0.0876**	**908.1025**	**0.0175**	**0.1431**	**0.3758**	**0.4278**	**1.1663**	**0.0086**
LHDT2	**2.2628**	**0.0736**	**0.0769**	**1097.1030**	**0.0154**	**0.1728**	**0.3321**	**0.3781**	**1.0162**	**0.0104**
MHDT	**3.7513**	**0.0338**	**0.0353**	**1698.4670**	**0.0067**	**0.2676**	**0.1435**	**0.1634**	**0.3427**	**0.0161**

HHDT		**LHDT1**		**LHDT2**		**MHDT**	
Localized Miles per Trip	0.50	Miles per Trip	0.50	Miles per Trip	0.50	Miles per Trip	0.50
Daily Trucks	109.07	Daily Trucks	219.49	Daily Trucks	55.52	Daily Trucks	83.37
Daily Trips	218.13	Daily Trips	438.97	Daily Trips	111.05	Daily Trips	166.74

Onsite Truck Max Daily Emissions	**ROG**	**NO_X**	**CO**	**SO2**	**PM10**	**PM2.5**
HHDT (g/day)	19.1551	973.6107	66.5344	2.7063	4.3433	4.1554
LHDT1 (g/day)	82.4773	573.4510	255.9944	1.8886	19.2246	18.3930
LHDT2 (g/day)	18.4387	125.6353	56.4239	0.5772	4.2701	4.0854
MHDT (g/day)	11.9624	312.7398	28.5687	1.3408	2.9444	2.8170
Total Trucks (g/day)	132.0334	1985.4367	407.5215	6.5129	30.7824	29.4508
Running Emissions lbs/day	0.2911	4.3771	0.8984	0.0144	0.0679	0.0649
Idling Emissions Lbs/Day	0.010	0.132	0.145	0.000	0.000	0.000
Total Emissions/Day	**0.301**	**4.509**	**1.043**	**0.0146**	**0.068**	**0.065**
g/lb conversion factor		0.00220				

Idling Minutes/Day Per Truck	15
Max Trucks per Day	467.44
Number Idling Trucks per Day	467.44
Max Trucks per Day—HHDT	109.07
Max Trucks per Day—LHDT1	219.49
Max Trucks per Day—LHDT2	55.52
Max Trucks per Day—MHDT	83.37

Idling Emissions	**Calendar Year**	**Season**	**Region**	**Vehicle Category**	**Fuel**	**Pollutant**	**g/vehicle/day**	**g/day**	**Max lbs/day**
IDLEX	2024	Annual	Tulare	HHDT	DSL	ROG	0.038289145	4.1761	0.009207
IDLEX	2024	Annual	Tulare	LHDT1	DSL	ROG	0.000972182	0.2134	0.000470
IDLEX	2024	Annual	Tulare	LHDT2	DSL	ROG	0.000331354	0.0184	0.000041
IDLEX	2024	Annual	Tulare	MHDT	DSL	ROG	0.001203119	0.1003	0.000221
IDLEX	2024	Annual	Tulare	HHDT	DSL	NOx	0.460404949	50.2148	0.110705
IDLEX	2024	Annual	Tulare	LHDT1	DSL	NOx	0.020202519	4.4342	0.009776
IDLEX	2024	Annual	Tulare	LHDT2	DSL	NOx	0.006744578	0.3745	0.000826
IDLEX	2024	Annual	Tulare	MHDT	DSL	NOx	0.058194263	4.8515	0.010696
IDLEX	2024	Annual	Tulare	HHDT	DSL	CO	0.558647436	60.9298	0.134327
IDLEX	2024	Annual	Tulare	LHDT1	DSL	CO	0.008057948	1.7686	0.003899
IDLEX	2024	Annual	Tulare	LHDT2	DSL	CO	0.002746434	0.1525	0.000336
IDLEX	2024	Annual	Tulare	MHDT	DSL	CO	0.033446171	2.7883	0.006147
IDLEX	2024	Annual	Tulare	HHDT	DSL	SO2	0.000845268	0.0922	0.000203
IDLEX	2024	Annual	Tulare	LHDT1	DSL	SO2	1.1455E-05	0.0025	0.000006
IDLEX	2024	Annual	Tulare	LHDT2	DSL	SO2	6.23699E-06	0.0003	0.000001
IDLEX	2024	Annual	Tulare	MHDT	DSL	SO2	9.37105E-05	0.0078	0.000017
IDLEX	2024	Annual	Tulare	HHDT	DSL	PM10	0.000234283	0.0256	0.000056
IDLEX	2024	Annual	Tulare	LHDT1	DSL	PM10	0.000244568	0.0537	0.000118
IDLEX	2024	Annual	Tulare	LHDT2	DSL	PM10	8.33824E-05	0.0046	0.000010
IDLEX	2024	Annual	Tulare	MHDT	DSL	PM10	0.000172945	0.0144	0.000032
IDLEX	2024	Annual	Tulare	HHDT	DSL	PM2.5	0.000224148	0.0244	0.000054
IDLEX	2024	Annual	Tulare	LHDT1	DSL	PM2.5	0.000233988	0.0514	0.000113
IDLEX	2024	Annual	Tulare	LHDT2	DSL	PM2.5	7.97753E-05	0.0044	0.000010
IDLEX	2024	Annual	Tulare	MHDT	DSL	PM2.5	0.000165464	0.0138	0.000030

For Weighted Average for Project (5-25 MPH)

	NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
Weighted Average Using Project Truck Fleet Percentages										
HHDT	8.926752666	0.038099774	0.039822476	2620.344908	0.008157426	0.412836407	0.175627146	0.199938136	0.610034817	0.024813099
LHDT1	2.612684484	0.083799706	0.087588757	908.1024978	0.017453913	0.143071918	0.375772475	0.42779198	1.166329237	0.008604733
LHDT2	2.262768594	0.07358062	0.076907609	1097.102983	0.015425043	0.172849022	0.332092091	0.378064767	1.016228814	0.010395608
MHDT	3.751337793	0.033789882	0.035317711	1698.467019	0.006664731	0.26759417	0.143489835	0.163352254	0.342684088	0.016083467
HHDT	973.6106908	4.15541333	4.343302682	285792.1477	0.88970284	45.02666926	19.15505818	21.80657563	66.53443217	2.706280738
LHDT1	573.4509955	18.39296906	19.2246175	199316.9419	3.83091183	31.40246536	82.4772762	93.89489549	255.994425	1.888629318
LHDT2	125.6352523	4.085402181	4.270125939	60914.23154	0.856441599	9.597061986	18.43868338	20.99121514	56.42387109	0.577193301
MHDT	312.7397609	2.816978994	2.944350284	141596.9978	0.555622167	22.30866467	11.96239289	13.61827371	28.56872553	1.340838896
Total	1985.436699	29.45076356	30.7823964	687620.3189	6.132678436	108.3348613	132.0334106	150.31096	407.5214538	6.512942252
Weighted Average	4.247430215	0.063003803	0.065852556	1471.021121	0.013119594	0.231759977	0.28245811	0.321559138	0.871807666	0.01393309

Max Trucks per Day—HHDT	109.07
Max Trucks per Day—LHDT1	219.49
Max Trucks per Day—LHDT2	55.52
Max Trucks per Day—MHDT	83.37
Total	467.44

For Weighted Average for Project (5 MPH)

	NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
Weighted Average Using Project Truck Fleet Percentages										
HHDT	21.17597463	0.13586553	0.142008766	3496.905457	0.029539877	0.550938879	0.635985455	0.724021028	1.380148017	0.033113604
LHDT1	2.96296712	0.12024578	0.125682761	1210.968974	0.024931056	0.190788655	0.536750963	0.611055286	1.739976313	0.011474546
LHDT2	2.646751961	0.104340118	0.109057915	1442.816856	0.021570989	0.227316383	0.464410686	0.52870069	1.501488037	0.013671423
MHDT	9.306292537	0.058611292	0.061261434	2374.719806	0.015375772	0.374138073	0.331036144	0.376859451	0.580617579	0.022487177
HHDT	2309.59186	14.81839332	15.48841531	381395.639	3.221814392	60.08903825	69.36478038	78.96652232	150.5280716	3.611588631
LHDT1	650.3335764	26.39241848	27.58576653	265792.2792	5.472049581	41.87568183	117.8100057	134.118859	381.9026581	2.518516922
LHDT2	146.9550847	5.793255712	6.055201028	80109.23439	1.197681731	12.6212425	25.78538251	29.35494366	83.36682274	0.759075708
MHDT	775.8426097	4.886278548	5.107214381	197974.5215	1.281840072	31.19096648	27.59766525	31.41784111	48.40465263	1.874700332
Total	3882.72313	51.89034606	54.23659725	925271.6741	11.17338578	145.7769291	240.5578339	273.8581661	664.2022051	8.763881592
Weighted Average	8.306281204	0.111008638	0.116027956	1979.426927	0.023903142	0.311859518	0.514623615	0.585862772	1.420922921	0.018748508

Max Trucks per Day—HHDT	109.07
Max Trucks per Day—LHDT1	219.49
Max Trucks per Day—LHDT2	55.52
Max Trucks per Day—MHDT	83.37
Total	467.44

For Weighted Average for Project (Idle)

	PM10_IDLEX (g/d)
Weighted Average Using Project Truck Fleet Percentages	
HHDT	0.001045127
LHDT1	5.5051E-05
LHDT2	1.53564E-05
MHDT	0.000300816
HHDT	0.11398843
LHDT1	0.012082988
LHDT2	0.00085263
MHDT	0.025078255
Total	0.152002303
Weighted Average	0.000325177

Health Risk Summary - Operational DPM (Summary of HARP2 Results)

Henderson Ave & SR 65 Commercial Project (Mitigated Construction - Operational DPM)

	RISK_SUM	Cancer Risk/million	MAXHI NonCancer Chronic	MAXHI Acute
Maximum Risk	9.1849E-06	9.185	1.7502E-03	0.00E+00

	X	Y	
MIR UTM	316153.92	3995019.58	0.002
Latitude, Longitude: 36°04'56.7"N 119°02'30.6"W			0.014
Receptor # 429			0.016

*HARP - HRACalc v22118 5/23/2023 11:29:18 AM - Cancer Risk - Input File: F:\Move\0014-017\HARP\Project Operations\hra\Project Operations (DPM)HRAInput.hra
*HARP - HRACalc v22118 5/23/2023 11:29:18 AM - Chronic Risk - Input File: F:\Move\0014-017\HARP\Project Operations\hra\Project Operations (DPM)HRAInput.hra
*HARP - HRACalc v22118 5/23/2023 11:29:18 AM - Acute Risk - Input File: F:\Move\0014-017\HARP\Project Operations\hra\Project Operations (DPM)HRAInput.hra

REC	GRP	X	Y	RISK_SUM	SCENARIO	MAXHI NonCancerChronic	MAXHI Acute
1	ALL	316280.75	3994544.12	4.523E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.619E-05	0.00E+00
2	ALL	316241.29	3994544.38	3.600E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.859E-05	0.00E+00
3	ALL	316201.82	3994544.65	2.842E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.416E-05	0.00E+00
4	ALL	316162.36	3994544.92	2.326E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.432E-05	0.00E+00
5	ALL	316427.89	3994486.35	6.009E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.145E-04	0.00E+00
6	ALL	316280.07	3994444.12	2.500E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.764E-05	0.00E+00
7	ALL	316240.61	3994444.39	2.099E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.000E-05	0.00E+00
8	ALL	316201.15	3994444.65	1.737E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.310E-05	0.00E+00
9	ALL	316161.68	3994444.92	1.453E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.768E-05	0.00E+00
10	ALL	316354.70	3994357.91	2.272E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.328E-05	0.00E+00
11	ALL	316390.53	3994371.97	2.865E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.459E-05	0.00E+00
12	ALL	316426.37	3994386.03	3.501E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.672E-05	0.00E+00
13	ALL	316462.21	3994400.09	4.091E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.796E-05	0.00E+00
14	ALL	316498.05	3994414.14	4.595E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.757E-05	0.00E+00
15	ALL	316533.89	3994428.20	4.974E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.478E-05	0.00E+00
16	ALL	316569.73	3994442.26	5.218E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.943E-05	0.00E+00
17	ALL	316605.57	3994456.32	5.343E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.018E-04	0.00E+00
18	ALL	316641.41	3994470.38	5.350E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.019E-04	0.00E+00
19	ALL	316677.25	3994484.44	5.248E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.000E-04	0.00E+00
20	ALL	316778.09	3994638.09	5.376E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.024E-04	0.00E+00
21	ALL	316794.34	3994672.99	5.269E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.004E-04	0.00E+00
22	ALL	316810.60	3994707.89	5.087E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.693E-05	0.00E+00
23	ALL	316826.85	3994742.79	4.835E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.214E-05	0.00E+00
24	ALL	316875.60	3994847.49	3.889E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.412E-05	0.00E+00
25	ALL	316318.86	3994343.85	1.826E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.480E-05	0.00E+00
26	ALL	316279.39	3994344.12	1.585E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.020E-05	0.00E+00
27	ALL	316239.93	3994344.39	1.373E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.617E-05	0.00E+00
28	ALL	316200.47	3994344.66	1.171E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.232E-05	0.00E+00
29	ALL	316161.01	3994344.92	9.991E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.904E-05	0.00E+00
30	ALL	316353.82	3994257.84	1.452E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.766E-05	0.00E+00
31	ALL	316389.47	3994271.82	1.769E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.371E-05	0.00E+00
32	ALL	316425.12	3994285.80	2.166E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.127E-05	0.00E+00
33	ALL	316460.76	3994299.78	2.578E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.912E-05	0.00E+00
34	ALL	316496.41	3994313.77	2.960E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.641E-05	0.00E+00
35	ALL	316532.05	3994327.75	3.290E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.269E-05	0.00E+00
36	ALL	316567.70	3994341.73	3.546E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.758E-05	0.00E+00
37	ALL	316603.35	3994355.71	3.728E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.103E-05	0.00E+00
38	ALL	316638.99	3994369.70	3.843E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.322E-05	0.00E+00
39	ALL	316674.64	3994383.68	3.899E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.429E-05	0.00E+00
40	ALL	316710.28	3994397.66	3.896E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.424E-05	0.00E+00
41	ALL	316745.93	3994411.64	3.836E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.309E-05	0.00E+00
42	ALL	316797.74	3994460.34	3.879E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.392E-05	0.00E+00
43	ALL	316813.90	3994495.05	3.977E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.579E-05	0.00E+00
44	ALL	316830.06	3994529.76	4.016E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.652E-05	0.00E+00
45	ALL	316846.23	3994564.47	4.006E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.633E-05	0.00E+00
46	ALL	316862.39	3994599.18	3.962E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.550E-05	0.00E+00
47	ALL	316878.56	3994633.89	3.887E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.407E-05	0.00E+00
48	ALL	316894.72	3994668.61	3.770E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.185E-05	0.00E+00
49	ALL	316910.88	3994703.32	3.614E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.887E-05	0.00E+00
50	ALL	316927.05	3994738.03	3.434E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.544E-05	0.00E+00
51	ALL	316943.21	3994772.74	3.239E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.173E-05	0.00E+00
52	ALL	316959.37	3994807.45	3.030E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.774E-05	0.00E+00
53	ALL	316975.54	3994842.16	2.803E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.341E-05	0.00E+00
54	ALL	316318.18	3994243.86	1.224E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.332E-05	0.00E+00

55	ALL	316278.72	3994244.12	1.092E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.081E-05	0.00E+00
56	ALL	316239.25	3994244.39	9.661E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.841E-05	0.00E+00
57	ALL	316199.79	3994244.66	8.424E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.605E-05	0.00E+00
58	ALL	316160.33	3994244.93	7.323E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.396E-05	0.00E+00
59	ALL	316353.00	3994157.78	1.006E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.917E-05	0.00E+00
60	ALL	316388.51	3994171.71	1.181E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.251E-05	0.00E+00
61	ALL	316424.01	3994185.64	1.416E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.699E-05	0.00E+00
62	ALL	316459.52	3994199.56	1.696E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.231E-05	0.00E+00
63	ALL	316495.02	3994213.49	1.978E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.768E-05	0.00E+00
64	ALL	316530.52	3994227.42	2.240E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.268E-05	0.00E+00
65	ALL	316566.03	3994241.34	2.467E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.700E-05	0.00E+00
66	ALL	316601.53	3994255.27	2.646E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.042E-05	0.00E+00
67	ALL	316637.04	3994269.20	2.779E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.295E-05	0.00E+00
68	ALL	316672.54	3994283.12	2.873E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.474E-05	0.00E+00
69	ALL	316708.04	3994297.05	2.931E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.585E-05	0.00E+00
70	ALL	316743.55	3994310.98	2.958E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.637E-05	0.00E+00
71	ALL	316779.05	3994324.91	2.955E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.631E-05	0.00E+00
72	ALL	316814.56	3994338.83	2.919E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.562E-05	0.00E+00
73	ALL	316866.16	3994387.33	2.962E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.644E-05	0.00E+00
74	ALL	316882.26	3994421.90	3.044E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.801E-05	0.00E+00
75	ALL	316898.36	3994456.48	3.086E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.880E-05	0.00E+00
76	ALL	316914.46	3994491.05	3.089E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.887E-05	0.00E+00
77	ALL	316930.56	3994525.62	3.068E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.846E-05	0.00E+00
78	ALL	316946.65	3994560.20	3.032E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.778E-05	0.00E+00
79	ALL	316962.75	3994594.77	2.980E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.678E-05	0.00E+00
80	ALL	316978.85	3994629.34	2.902E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.530E-05	0.00E+00
81	ALL	316994.95	3994663.92	2.802E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.340E-05	0.00E+00
82	ALL	317011.05	3994698.49	2.688E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.122E-05	0.00E+00
83	ALL	317027.15	3994733.06	2.559E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.877E-05	0.00E+00
84	ALL	317043.25	3994767.64	2.419E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.610E-05	0.00E+00
85	ALL	317059.35	3994802.21	2.269E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.324E-05	0.00E+00
86	ALL	317075.45	3994836.78	2.109E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.019E-05	0.00E+00
87	ALL	316317.50	3994143.86	8.790E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.675E-05	0.00E+00
88	ALL	316278.04	3994144.13	7.981E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.521E-05	0.00E+00
89	ALL	316238.58	3994144.39	7.169E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.366E-05	0.00E+00
90	ALL	316199.11	3994144.66	6.370E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.214E-05	0.00E+00
91	ALL	316159.65	3994144.93	5.628E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.073E-05	0.00E+00
92	ALL	316130.94	3995018.51	5.089E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.698E-04	0.00E+00
93	ALL	316128.23	3995065.46	4.716E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.986E-04	0.00E+00
94	ALL	316139.56	3995101.58	5.199E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.906E-04	0.00E+00
95	ALL	316103.39	3995018.43	3.187E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.073E-04	0.00E+00
96	ALL	316105.07	3995063.92	3.166E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.034E-04	0.00E+00
97	ALL	316085.67	3995100.92	2.227E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.244E-04	0.00E+00
98	ALL	316055.94	3995018.94	1.844E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.513E-04	0.00E+00
99	ALL	316053.23	3995065.89	1.784E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.400E-04	0.00E+00
100	ALL	316053.44	3995103.47	1.591E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.032E-04	0.00E+00
101	ALL	316026.64	3995020.03	1.428E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.720E-04	0.00E+00
102	ALL	316006.36	3995066.98	1.233E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.349E-04	0.00E+00
103	ALL	316015.94	3995103.68	1.195E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.278E-04	0.00E+00
104	ALL	315996.07	3994514.78	1.373E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.617E-05	0.00E+00
105	ALL	316062.32	3994486.84	1.383E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.635E-05	0.00E+00
106	ALL	315695.95	3995105.51	2.693E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.132E-05	0.00E+00
107	ALL	315608.58	3994884.51	1.492E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.842E-05	0.00E+00
108	ALL	315622.28	3994850.86	1.344E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.561E-05	0.00E+00
109	ALL	315926.69	3994443.77	9.310E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.774E-05	0.00E+00
110	ALL	315960.16	3994429.65	9.590E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.827E-05	0.00E+00
111	ALL	315993.63	3994415.53	9.559E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.822E-05	0.00E+00
112	ALL	316027.11	3994401.41	9.418E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.795E-05	0.00E+00
113	ALL	316060.58	3994387.29	9.274E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.767E-05	0.00E+00
114	ALL	316094.06	3994373.17	9.192E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.752E-05	0.00E+00
115	ALL	316127.53	3994359.04	9.366E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.785E-05	0.00E+00
116	ALL	315594.88	3994918.16	1.588E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.027E-05	0.00E+00
117	ALL	315595.09	3994955.74	1.711E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.260E-05	0.00E+00
118	ALL	315595.31	3994993.32	1.808E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.445E-05	0.00E+00
119	ALL	315595.52	3995030.91	1.880E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.583E-05	0.00E+00
120	ALL	315595.74	3995068.49	1.921E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.661E-05	0.00E+00
121	ALL	315595.95	3995106.08	1.944E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.704E-05	0.00E+00
122	ALL	315508.69	3994884.82	1.194E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.275E-05	0.00E+00
123	ALL	315522.49	3994850.92	1.087E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.071E-05	0.00E+00
124	ALL	315924.25	3994344.52	7.029E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.340E-05	0.00E+00
125	ALL	315957.97	3994330.29	6.981E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.330E-05	0.00E+00
126	ALL	315991.70	3994316.06	6.880E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.311E-05	0.00E+00
127	ALL	316025.42	3994301.84	6.719E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.280E-05	0.00E+00

128	ALL	316059.15	3994287.61	6.586E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.255E-05	0.00E+00
129	ALL	316092.88	3994273.38	6.591E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.256E-05	0.00E+00
130	ALL	316126.60	3994259.15	6.849E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.305E-05	0.00E+00
131	ALL	315494.88	3994918.72	1.263E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.407E-05	0.00E+00
132	ALL	315495.09	3994956.31	1.350E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.572E-05	0.00E+00
133	ALL	315495.31	3994993.89	1.411E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.689E-05	0.00E+00
134	ALL	315495.52	3995031.48	1.446E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.755E-05	0.00E+00
135	ALL	315495.74	3995069.06	1.455E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.773E-05	0.00E+00
136	ALL	315495.95	3995106.64	1.464E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.790E-05	0.00E+00
137	ALL	315408.77	3994885.20	9.843E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.876E-05	0.00E+00
138	ALL	315422.65	3994851.11	9.072E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.729E-05	0.00E+00
139	ALL	315436.53	3994817.02	8.101E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.544E-05	0.00E+00
140	ALL	315450.42	3994782.93	7.067E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.347E-05	0.00E+00
141	ALL	315464.30	3994748.84	6.084E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.159E-05	0.00E+00
142	ALL	315478.18	3994714.75	5.247E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.998E-06	0.00E+00
143	ALL	315492.06	3994680.66	4.572E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.712E-06	0.00E+00
144	ALL	315505.95	3994646.57	4.072E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.760E-06	0.00E+00
145	ALL	315519.83	3994612.48	3.735E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.118E-06	0.00E+00
146	ALL	315533.71	3994578.39	3.529E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.725E-06	0.00E+00
147	ALL	315547.60	3994544.30	3.409E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.495E-06	0.00E+00
148	ALL	315561.48	3994510.21	3.359E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.401E-06	0.00E+00
149	ALL	315575.36	3994476.12	3.345E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.373E-06	0.00E+00
150	ALL	315589.25	3994442.03	3.347E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.378E-06	0.00E+00
151	ALL	315603.13	3994407.93	3.370E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.421E-06	0.00E+00
152	ALL	315650.93	3994359.54	3.703E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.057E-06	0.00E+00
153	ALL	315684.84	3994345.23	4.024E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.667E-06	0.00E+00
154	ALL	315718.76	3994330.92	4.348E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.285E-06	0.00E+00
155	ALL	315752.67	3994316.61	4.675E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.908E-06	0.00E+00
156	ALL	315786.59	3994302.31	4.995E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.518E-06	0.00E+00
157	ALL	315820.50	3994288.00	5.247E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.998E-06	0.00E+00
158	ALL	315854.42	3994273.69	5.368E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.023E-05	0.00E+00
159	ALL	315888.33	3994259.39	5.377E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.025E-05	0.00E+00
160	ALL	315922.25	3994245.08	5.341E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.018E-05	0.00E+00
161	ALL	315956.16	3994230.77	5.263E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.003E-05	0.00E+00
162	ALL	315990.08	3994216.46	5.136E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.786E-06	0.00E+00
163	ALL	316023.99	3994202.16	4.998E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.524E-06	0.00E+00
164	ALL	316057.91	3994187.85	4.927E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.389E-06	0.00E+00
165	ALL	316091.82	3994173.54	5.008E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.543E-06	0.00E+00
166	ALL	316125.74	3994159.23	5.261E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.003E-05	0.00E+00
167	ALL	315394.88	3994919.29	1.036E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.974E-05	0.00E+00
168	ALL	315395.10	3994956.88	1.100E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.096E-05	0.00E+00
169	ALL	315395.31	3994994.46	1.142E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.177E-05	0.00E+00
170	ALL	315395.52	3995032.05	1.157E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.204E-05	0.00E+00
171	ALL	315395.74	3995069.63	1.151E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.192E-05	0.00E+00
172	ALL	315395.95	3995107.21	1.146E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.184E-05	0.00E+00
173	ALL	316146.01	3995123.34	4.430E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.443E-04	0.00E+00
174	ALL	316204.38	3995170.07	4.188E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.980E-04	0.00E+00
175	ALL	316324.63	3995146.10	6.350E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.210E-03	0.00E+00
176	ALL	316136.41	3995158.87	2.487E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.739E-04	0.00E+00
177	ALL	316197.04	3995178.87	3.490E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.651E-04	0.00E+00
178	ALL	316276.24	3995170.32	4.990E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.508E-04	0.00E+00
179	ALL	316331.06	3995183.16	3.586E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.834E-04	0.00E+00
180	ALL	316129.65	3995223.57	1.271E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.422E-04	0.00E+00
181	ALL	316074.71	3995155.37	1.442E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.747E-04	0.00E+00
182	ALL	316195.84	3995216.35	2.175E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.145E-04	0.00E+00
183	ALL	316281.44	3995217.46	2.717E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.178E-04	0.00E+00
184	ALL	316329.86	3995220.64	2.396E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.567E-04	0.00E+00
185	ALL	316135.47	3995241.44	1.152E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.196E-04	0.00E+00
186	ALL	316089.42	3995221.73	9.858E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.879E-04	0.00E+00
187	ALL	316047.85	3995181.54	1.012E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.929E-04	0.00E+00
188	ALL	316194.64	3995253.83	1.520E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.897E-04	0.00E+00
189	ALL	316280.24	3995254.94	1.873E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.569E-04	0.00E+00
190	ALL	316328.65	3995258.12	1.713E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.264E-04	0.00E+00
191	ALL	316128.22	3995312.57	7.091E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.351E-04	0.00E+00
192	ALL	316067.09	3995285.61	5.946E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.133E-04	0.00E+00
193	ALL	315983.04	3995226.87	5.775E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.101E-04	0.00E+00
194	ALL	316192.29	3995327.12	8.926E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.701E-04	0.00E+00
195	ALL	316259.30	3995329.27	1.024E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.951E-04	0.00E+00
196	ALL	316326.30	3995331.42	1.004E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.913E-04	0.00E+00
197	ALL	316127.43	3995386.56	4.969E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.468E-05	0.00E+00
198	ALL	316069.43	3995360.98	4.265E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.128E-05	0.00E+00
199	ALL	316011.42	3995335.40	3.726E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.101E-05	0.00E+00
200	ALL	315941.40	3995280.49	3.897E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.426E-05	0.00E+00

201	ALL	315931.33	3995217.18	5.089E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.697E-05	0.00E+00
202	ALL	316189.94	3995400.42	5.922E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.129E-04	0.00E+00
203	ALL	316256.95	3995402.57	6.554E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.249E-04	0.00E+00
204	ALL	316323.95	3995404.71	6.544E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.247E-04	0.00E+00
205	ALL	316125.95	3995460.23	3.675E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.003E-05	0.00E+00
206	ALL	316069.69	3995435.42	3.271E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.233E-05	0.00E+00
207	ALL	316013.42	3995410.61	2.858E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.446E-05	0.00E+00
208	ALL	315957.15	3995385.80	2.557E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.872E-05	0.00E+00
209	ALL	315889.23	3995332.54	2.763E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.264E-05	0.00E+00
210	ALL	315841.60	3995285.77	3.070E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.851E-05	0.00E+00
211	ALL	315842.59	3995218.74	3.872E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.378E-05	0.00E+00
212	ALL	316187.59	3995473.71	4.241E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.081E-05	0.00E+00
213	ALL	316254.60	3995475.86	4.576E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.719E-05	0.00E+00
214	ALL	316321.61	3995478.01	4.562E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.694E-05	0.00E+00
215	ALL	316121.64	3995559.70	2.593E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.941E-05	0.00E+00
216	ALL	316063.16	3995533.91	2.362E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.501E-05	0.00E+00
217	ALL	316004.69	3995508.12	2.108E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.018E-05	0.00E+00
218	ALL	315946.21	3995482.34	1.871E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.565E-05	0.00E+00
219	ALL	315887.73	3995456.55	1.690E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.220E-05	0.00E+00
220	ALL	315817.13	3995401.19	1.898E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.617E-05	0.00E+00
221	ALL	315792.89	3995342.06	2.290E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.364E-05	0.00E+00
222	ALL	315750.83	3995291.83	2.548E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.854E-05	0.00E+00
223	ALL	315744.42	3995223.78	2.845E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.421E-05	0.00E+00
224	ALL	315720.18	3995164.64	2.794E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.325E-05	0.00E+00
225	ALL	316184.39	3995573.66	2.913E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.551E-05	0.00E+00
226	ALL	316251.39	3995575.81	3.086E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.880E-05	0.00E+00
227	ALL	316318.40	3995577.96	3.048E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.809E-05	0.00E+00
228	ALL	316117.67	3995659.31	1.943E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.703E-05	0.00E+00
229	ALL	316057.66	3995632.84	1.777E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.386E-05	0.00E+00
230	ALL	315997.65	3995606.38	1.649E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.143E-05	0.00E+00
231	ALL	315937.64	3995579.92	1.468E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.797E-05	0.00E+00
232	ALL	315877.63	3995553.46	1.314E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.504E-05	0.00E+00
233	ALL	315817.62	3995527.00	1.213E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.312E-05	0.00E+00
234	ALL	315745.18	3995470.19	1.392E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.653E-05	0.00E+00
235	ALL	315720.31	3995409.51	1.672E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.186E-05	0.00E+00
236	ALL	315695.44	3995348.82	1.972E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.757E-05	0.00E+00
237	ALL	315670.56	3995288.13	2.162E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.119E-05	0.00E+00
238	ALL	315645.69	3995227.45	2.122E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.044E-05	0.00E+00
239	ALL	315620.82	3995166.76	2.067E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.938E-05	0.00E+00
240	ALL	316181.18	3995673.61	2.144E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.085E-05	0.00E+00
241	ALL	316248.19	3995675.76	2.244E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.276E-05	0.00E+00
242	ALL	316315.20	3995677.91	2.191E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.176E-05	0.00E+00
243	ALL	316113.91	3995759.01	1.521E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.898E-05	0.00E+00
244	ALL	316052.77	3995732.05	1.391E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.650E-05	0.00E+00
245	ALL	315991.64	3995705.09	1.322E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.519E-05	0.00E+00
246	ALL	315930.51	3995678.14	1.201E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.289E-05	0.00E+00
247	ALL	315869.38	3995651.18	1.086E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.070E-05	0.00E+00
248	ALL	315808.24	3995624.22	9.715E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.851E-05	0.00E+00
249	ALL	315747.11	3995597.27	9.265E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.766E-05	0.00E+00
250	ALL	315673.31	3995539.40	1.069E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.038E-05	0.00E+00
251	ALL	315647.97	3995477.58	1.280E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.440E-05	0.00E+00
252	ALL	315622.64	3995415.75	1.501E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.860E-05	0.00E+00
253	ALL	315597.30	3995353.93	1.672E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.186E-05	0.00E+00
254	ALL	315571.96	3995292.11	1.703E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.246E-05	0.00E+00
255	ALL	315546.62	3995230.29	1.639E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.124E-05	0.00E+00
256	ALL	315521.29	3995168.47	1.578E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.007E-05	0.00E+00
257	ALL	316177.98	3995773.56	1.661E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.166E-05	0.00E+00
258	ALL	316244.99	3995775.71	1.720E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.278E-05	0.00E+00
259	ALL	316311.99	3995777.86	1.662E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.166E-05	0.00E+00
260	ALL	316112.00	3995859.53	1.234E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.351E-05	0.00E+00
261	ALL	316053.45	3995833.71	1.134E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.162E-05	0.00E+00
262	ALL	315994.90	3995807.89	1.082E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.061E-05	0.00E+00
263	ALL	315936.35	3995782.08	1.027E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.957E-05	0.00E+00
264	ALL	315877.81	3995756.26	9.391E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.789E-05	0.00E+00
265	ALL	315819.26	3995730.44	8.610E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.641E-05	0.00E+00
266	ALL	315760.71	3995704.62	7.771E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.481E-05	0.00E+00
267	ALL	315702.16	3995678.81	7.353E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.401E-05	0.00E+00
268	ALL	315643.62	3995652.99	7.572E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.443E-05	0.00E+00
269	ALL	315602.21	3995610.48	8.462E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.612E-05	0.00E+00
270	ALL	315577.94	3995551.27	1.002E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.909E-05	0.00E+00
271	ALL	315553.68	3995492.06	1.163E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.217E-05	0.00E+00
272	ALL	315529.41	3995432.86	1.299E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.475E-05	0.00E+00
273	ALL	315505.15	3995373.65	1.379E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.628E-05	0.00E+00

274	ALL	315480.88	3995314.44	1.377E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.625E-05	0.00E+00
275	ALL	315456.62	3995255.23	1.324E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.523E-05	0.00E+00
276	ALL	315432.35	3995196.03	1.267E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.414E-05	0.00E+00
277	ALL	316174.77	3995873.51	1.335E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.544E-05	0.00E+00
278	ALL	316241.78	3995875.66	1.372E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.614E-05	0.00E+00
279	ALL	316308.79	3995877.80	1.315E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.506E-05	0.00E+00
280	ALL	316441.49	3995024.25	3.977E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.578E-04	0.00E+00
281	ALL	316472.61	3995128.20	1.685E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.211E-04	0.00E+00
282	ALL	316472.82	3995166.17	1.421E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.707E-04	0.00E+00
283	ALL	316481.08	3995061.05	2.211E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.214E-04	0.00E+00
284	ALL	316478.94	3995022.18	2.660E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.068E-04	0.00E+00
285	ALL	316543.80	3995129.56	1.006E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.918E-04	0.00E+00
286	ALL	316531.15	3995163.24	9.720E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.852E-04	0.00E+00
287	ALL	316531.85	3995207.88	8.409E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.602E-04	0.00E+00
288	ALL	316459.82	3995277.71	9.099E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.734E-04	0.00E+00
289	ALL	316426.44	3995291.14	9.917E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.890E-04	0.00E+00
290	ALL	316554.31	3995057.01	1.244E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.371E-04	0.00E+00
291	ALL	316552.16	3995018.13	1.437E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.739E-04	0.00E+00
292	ALL	316617.67	3995123.79	6.703E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.277E-04	0.00E+00
293	ALL	316593.66	3995187.70	6.397E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.219E-04	0.00E+00
294	ALL	316569.66	3995251.62	6.045E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.152E-04	0.00E+00
295	ALL	316492.21	3995335.53	6.206E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.183E-04	0.00E+00
296	ALL	316450.64	3995353.75	6.715E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.280E-04	0.00E+00
297	ALL	316627.53	3995052.96	7.934E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.512E-04	0.00E+00
298	ALL	316625.38	3995014.09	8.929E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.701E-04	0.00E+00
299	ALL	316689.80	3995122.66	4.740E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.032E-05	0.00E+00
300	ALL	316676.70	3995157.53	4.608E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.780E-05	0.00E+00
301	ALL	316663.60	3995192.41	4.544E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.659E-05	0.00E+00
302	ALL	316650.50	3995227.28	4.485E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.547E-05	0.00E+00
303	ALL	316637.40	3995262.16	4.380E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.346E-05	0.00E+00
304	ALL	316624.30	3995297.03	4.246E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.090E-05	0.00E+00
305	ALL	316611.20	3995331.91	4.084E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.783E-05	0.00E+00
306	ALL	316563.54	3995380.69	4.156E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.920E-05	0.00E+00
307	ALL	316528.98	3995394.59	4.420E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.423E-05	0.00E+00
308	ALL	316494.42	3995408.49	4.707E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.969E-05	0.00E+00
309	ALL	316459.85	3995422.40	4.897E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.331E-05	0.00E+00
310	ALL	316425.29	3995436.30	4.950E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.433E-05	0.00E+00
311	ALL	316356.17	3995464.11	4.771E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.091E-05	0.00E+00
312	ALL	316702.90	3995087.79	4.913E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.363E-05	0.00E+00
313	ALL	316700.75	3995048.91	5.461E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.041E-04	0.00E+00
314	ALL	316698.60	3995010.04	6.074E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.158E-04	0.00E+00
315	ALL	316789.43	3995117.71	3.201E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.099E-05	0.00E+00
316	ALL	316799.87	3995168.32	2.779E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.295E-05	0.00E+00
317	ALL	316762.81	3995188.59	3.065E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.840E-05	0.00E+00
318	ALL	316749.50	3995224.03	3.057E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.826E-05	0.00E+00
319	ALL	316736.18	3995259.47	3.038E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.788E-05	0.00E+00
320	ALL	316722.87	3995294.91	2.974E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.667E-05	0.00E+00
321	ALL	316709.56	3995330.35	2.898E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.522E-05	0.00E+00
322	ALL	316696.25	3995365.79	2.824E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.382E-05	0.00E+00
323	ALL	316682.94	3995401.23	2.743E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.227E-05	0.00E+00
324	ALL	316634.50	3995450.80	2.802E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.340E-05	0.00E+00
325	ALL	316599.38	3995464.93	2.941E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.605E-05	0.00E+00
326	ALL	316564.26	3995479.06	3.089E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.886E-05	0.00E+00
327	ALL	316529.14	3995493.19	3.246E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.185E-05	0.00E+00
328	ALL	316494.01	3995507.31	3.342E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.367E-05	0.00E+00
329	ALL	316458.89	3995521.44	3.372E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.425E-05	0.00E+00
330	ALL	316423.77	3995535.57	3.373E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.428E-05	0.00E+00
331	ALL	316353.52	3995563.83	3.163E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.028E-05	0.00E+00
332	ALL	316802.74	3995082.27	3.284E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.257E-05	0.00E+00
333	ALL	316800.60	3995043.40	3.586E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.833E-05	0.00E+00
334	ALL	316889.14	3995112.57	2.293E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.369E-05	0.00E+00
335	ALL	316875.68	3995148.39	2.241E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.270E-05	0.00E+00
336	ALL	316862.23	3995184.20	2.204E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.199E-05	0.00E+00
337	ALL	316848.78	3995220.02	2.197E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.187E-05	0.00E+00
338	ALL	316835.32	3995255.84	2.205E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.202E-05	0.00E+00
339	ALL	316821.87	3995291.65	2.195E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.182E-05	0.00E+00
340	ALL	316808.42	3995327.47	2.154E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.104E-05	0.00E+00
341	ALL	316794.96	3995363.29	2.106E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.014E-05	0.00E+00
342	ALL	316781.51	3995399.11	2.062E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.929E-05	0.00E+00
343	ALL	316768.06	3995434.92	2.017E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.843E-05	0.00E+00
344	ALL	316754.60	3995470.74	1.968E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.750E-05	0.00E+00
345	ALL	316705.65	3995520.84	2.021E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.851E-05	0.00E+00
346	ALL	316670.16	3995535.12	2.109E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.018E-05	0.00E+00

347	ALL	316634.66	3995549.39	2.189E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.172E-05	0.00E+00
348	ALL	316599.17	3995563.67	2.279E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.342E-05	0.00E+00
349	ALL	316563.67	3995577.95	2.373E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.522E-05	0.00E+00
350	ALL	316528.17	3995592.23	2.429E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.629E-05	0.00E+00
351	ALL	316492.68	3995606.51	2.450E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.669E-05	0.00E+00
352	ALL	316457.18	3995620.79	2.461E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.690E-05	0.00E+00
353	ALL	316421.69	3995635.07	2.424E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.618E-05	0.00E+00
354	ALL	316350.69	3995663.63	2.257E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.301E-05	0.00E+00
355	ALL	316902.59	3995076.75	2.343E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.464E-05	0.00E+00
356	ALL	316900.44	3995037.88	2.535E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.830E-05	0.00E+00
357	ALL	316898.30	3994999.01	2.769E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.277E-05	0.00E+00
358	ALL	316896.15	3994960.13	3.036E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.786E-05	0.00E+00
359	ALL	316894.00	3994921.26	3.298E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.285E-05	0.00E+00
360	ALL	316891.85	3994882.39	3.532E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.730E-05	0.00E+00
361	ALL	316988.88	3995107.32	1.718E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.274E-05	0.00E+00
362	ALL	316975.33	3995143.41	1.685E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.211E-05	0.00E+00
363	ALL	316961.78	3995179.49	1.665E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.173E-05	0.00E+00
364	ALL	316948.22	3995215.58	1.656E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.155E-05	0.00E+00
365	ALL	316934.67	3995251.67	1.659E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.162E-05	0.00E+00
366	ALL	316921.11	3995287.75	1.669E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.180E-05	0.00E+00
367	ALL	316907.56	3995323.84	1.664E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.171E-05	0.00E+00
368	ALL	316894.00	3995359.93	1.639E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.123E-05	0.00E+00
369	ALL	316880.45	3995396.01	1.607E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.063E-05	0.00E+00
370	ALL	316866.89	3995432.10	1.575E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.001E-05	0.00E+00
371	ALL	316853.34	3995468.18	1.544E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.941E-05	0.00E+00
372	ALL	316839.78	3995504.27	1.514E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.885E-05	0.00E+00
373	ALL	316826.23	3995540.36	1.487E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.834E-05	0.00E+00
374	ALL	316776.91	3995590.83	1.532E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.918E-05	0.00E+00
375	ALL	316741.15	3995605.22	1.596E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.041E-05	0.00E+00
376	ALL	316705.39	3995619.60	1.646E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.136E-05	0.00E+00
377	ALL	316669.62	3995633.99	1.692E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.224E-05	0.00E+00
378	ALL	316633.86	3995648.38	1.752E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.338E-05	0.00E+00
379	ALL	316598.10	3995662.76	1.815E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.458E-05	0.00E+00
380	ALL	316562.33	3995677.15	1.851E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.527E-05	0.00E+00
381	ALL	316526.57	3995691.54	1.869E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.562E-05	0.00E+00
382	ALL	316490.81	3995705.92	1.880E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.583E-05	0.00E+00
383	ALL	316455.05	3995720.31	1.864E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.552E-05	0.00E+00
384	ALL	316347.76	3995763.47	1.700E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.239E-05	0.00E+00
385	ALL	317002.44	3995071.23	1.758E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.350E-05	0.00E+00
386	ALL	317000.29	3995032.36	1.897E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.614E-05	0.00E+00
387	ALL	316998.14	3994993.49	2.060E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.925E-05	0.00E+00
388	ALL	316996.00	3994954.62	2.241E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.270E-05	0.00E+00
389	ALL	316993.85	3994915.75	2.413E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.597E-05	0.00E+00
390	ALL	316991.70	3994876.87	2.566E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.890E-05	0.00E+00
391	ALL	317088.66	3995102.00	1.339E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.551E-05	0.00E+00
392	ALL	317075.03	3995138.29	1.312E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.499E-05	0.00E+00
393	ALL	317061.40	3995174.58	1.297E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.472E-05	0.00E+00
394	ALL	317047.77	3995210.87	1.293E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.464E-05	0.00E+00
395	ALL	317034.13	3995247.16	1.296E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.470E-05	0.00E+00
396	ALL	317020.50	3995283.45	1.304E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.485E-05	0.00E+00
397	ALL	317006.87	3995319.74	1.313E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.503E-05	0.00E+00
398	ALL	316993.24	3995356.02	1.313E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.501E-05	0.00E+00
399	ALL	316979.61	3995392.31	1.295E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.468E-05	0.00E+00
400	ALL	316965.98	3995428.60	1.272E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.424E-05	0.00E+00
401	ALL	316952.35	3995464.89	1.249E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.381E-05	0.00E+00
402	ALL	316938.72	3995501.18	1.226E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.336E-05	0.00E+00
403	ALL	316925.09	3995537.47	1.203E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.292E-05	0.00E+00
404	ALL	316911.46	3995573.75	1.185E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.258E-05	0.00E+00
405	ALL	316897.83	3995610.04	1.169E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.227E-05	0.00E+00
406	ALL	316848.24	3995660.80	1.205E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.297E-05	0.00E+00
407	ALL	316812.27	3995675.27	1.256E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.394E-05	0.00E+00
408	ALL	316776.31	3995689.73	1.292E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.463E-05	0.00E+00
409	ALL	316740.35	3995704.20	1.318E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.511E-05	0.00E+00
410	ALL	316704.38	3995718.67	1.347E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.567E-05	0.00E+00
411	ALL	316668.42	3995733.13	1.392E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.653E-05	0.00E+00
412	ALL	316632.46	3995747.60	1.439E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.742E-05	0.00E+00
413	ALL	316596.49	3995762.07	1.466E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.793E-05	0.00E+00
414	ALL	316560.53	3995776.54	1.478E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.817E-05	0.00E+00
415	ALL	316524.57	3995791.00	1.488E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.836E-05	0.00E+00
416	ALL	316488.61	3995805.47	1.483E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.826E-05	0.00E+00
417	ALL	316452.64	3995819.94	1.454E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.771E-05	0.00E+00
418	ALL	316416.68	3995834.40	1.412E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.690E-05	0.00E+00
419	ALL	316380.72	3995848.87	1.366E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.603E-05	0.00E+00

420	ALL	316344.75	3995863.34	1.333E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.539E-05	0.00E+00
421	ALL	317102.29	3995065.72	1.375E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.621E-05	0.00E+00
422	ALL	317100.14	3995026.84	1.480E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.820E-05	0.00E+00
423	ALL	317097.99	3994987.97	1.600E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.049E-05	0.00E+00
424	ALL	317095.84	3994949.10	1.726E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.290E-05	0.00E+00
425	ALL	317093.70	3994910.23	1.844E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.514E-05	0.00E+00
426	ALL	317091.55	3994871.36	1.947E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.711E-05	0.00E+00
427	ALL	316149.49	3995077.44	8.011E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.527E-03	0.00E+00
428	ALL	316153.29	3995065.15	9.089E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.732E-03	0.00E+00
429	ALL	316153.92	3995019.58	9.185E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.750E-03	0.00E+00
430	ALL	316153.00	3995005.45	8.870E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.690E-03	0.00E+00
431	ALL	316083.64	3995122.52	1.922E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.662E-04	0.00E+00
432	ALL	316088.03	3995140.95	1.789E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.409E-04	0.00E+00
433	ALL	316138.37	3995139.49	3.191E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.081E-04	0.00E+00
434	ALL	316079.25	3995067.49	2.293E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.369E-04	0.00E+00
435	ALL	316122.85	3995079.79	4.207E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.017E-04	0.00E+00
436	ALL	316105.00	3995078.32	3.137E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.977E-04	0.00E+00
437	ALL	316075.15	3995081.54	2.144E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.085E-04	0.00E+00
438	ALL	316055.83	3995077.74	1.790E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.411E-04	0.00E+00
439	ALL	316028.32	3995078.61	1.422E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.709E-04	0.00E+00
440	ALL	316011.35	3995079.20	1.253E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.388E-04	0.00E+00
441	ALL	315979.44	3995076.86	1.016E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.937E-04	0.00E+00
442	ALL	315975.45	3995024.42	9.808E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.869E-04	0.00E+00
443	ALL	316006.18	3995022.08	1.218E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.321E-04	0.00E+00
444	ALL	316128.23	3995065.46	4.716E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.986E-04	0.00E+00
445	ALL	315978.96	3995007.74	9.739E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.856E-04	0.00E+00
446	ALL	316010.57	3995008.32	1.236E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.355E-04	0.00E+00
447	ALL	316029.89	3995007.15	1.446E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.756E-04	0.00E+00
448	ALL	316074.67	3995006.56	2.243E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.274E-04	0.00E+00
449	ALL	316107.45	3995006.56	3.429E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.534E-04	0.00E+00
450	ALL	316053.01	3995006.27	1.786E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.404E-04	0.00E+00
451	ALL	316022.45	3995166.47	9.478E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.806E-04	0.00E+00
452	ALL	316088.01	3995176.71	1.365E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.602E-04	0.00E+00
453	ALL	316138.65	3995178.17	2.070E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.945E-04	0.00E+00
454	ALL	316115.23	3995095.93	3.432E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.539E-04	0.00E+00
455	ALL	316241.96	3995168.22	4.987E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.503E-04	0.00E+00
456	ALL	316153.28	3995221.49	1.542E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.938E-04	0.00E+00
457	ALL	316113.77	3995220.03	1.170E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.229E-04	0.00E+00
458	ALL	316069.87	3995221.78	8.819E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.680E-04	0.00E+00
459	ALL	316050.26	3995223.54	7.863E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.498E-04	0.00E+00
460	ALL	316028.01	3995225.00	6.998E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.334E-04	0.00E+00
461	ALL	316006.94	3995226.47	6.338E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.208E-04	0.00E+00
462	ALL	316168.50	3995220.03	1.757E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.347E-04	0.00E+00
463	ALL	316217.38	3995219.44	2.339E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.457E-04	0.00E+00
464	ALL	316237.28	3995217.98	2.552E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.863E-04	0.00E+00
465	ALL	316170.17	3995255.54	1.312E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.501E-04	0.00E+00
466	ALL	316138.83	3995271.38	9.573E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.824E-04	0.00E+00
467	ALL	316111.63	3995264.84	8.462E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.613E-04	0.00E+00
468	ALL	316093.73	3995270.70	7.404E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.411E-04	0.00E+00
469	ALL	316147.10	3995297.21	8.591E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.637E-04	0.00E+00
470	ALL	316187.04	3995286.88	1.140E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.173E-04	0.00E+00
471	ALL	316223.54	3995259.68	1.621E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.089E-04	0.00E+00
472	ALL	316241.10	3995258.64	1.720E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.277E-04	0.00E+00
473	ALL	316298.26	3995258.64	1.802E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.434E-04	0.00E+00
474	ALL	316306.18	3995234.20	2.236E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.262E-04	0.00E+00
475	ALL	316300.67	3995218.70	2.645E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.039E-04	0.00E+00
476	ALL	316342.33	3995283.78	1.357E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.585E-04	0.00E+00
477	ALL	316347.16	3995304.10	1.163E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.216E-04	0.00E+00
478	ALL	316315.73	3995152.57	6.054E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.154E-03	0.00E+00
479	ALL	316267.22	3995165.01	5.414E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.032E-03	0.00E+00
480	ALL	316570.32	3995078.31	1.033E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.969E-04	0.00E+00
481	ALL	316570.32	3995111.19	9.157E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.745E-04	0.00E+00
482	ALL	316596.54	3995153.61	6.858E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.307E-04	0.00E+00
483	ALL	316593.68	3995075.45	9.026E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.720E-04	0.00E+00
484	ALL	316597.97	3995104.52	7.961E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.517E-04	0.00E+00
485	ALL	316443.74	3995211.83	1.378E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.626E-04	0.00E+00
486	ALL	316442.12	3995241.40	1.190E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.268E-04	0.00E+00
487	ALL	316444.15	3995263.68	1.050E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.001E-04	0.00E+00
488	ALL	316443.74	3995307.44	8.514E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.623E-04	0.00E+00
489	ALL	316441.27	3995330.50	7.707E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.469E-04	0.00E+00
490	ALL	316490.09	3995209.12	1.059E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.018E-04	0.00E+00
491	ALL	316493.39	3995244.08	8.985E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.712E-04	0.00E+00
492	ALL	316492.73	3995284.98	7.593E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.447E-04	0.00E+00

493	ALL	316493.39	3995308.07	6.888E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.313E-04	0.00E+00
494	ALL	316529.67	3995230.89	7.865E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.499E-04	0.00E+00
495	ALL	316528.35	3995271.79	6.847E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.305E-04	0.00E+00
496	ALL	316528.35	3995253.98	7.299E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.391E-04	0.00E+00
497	ALL	316535.61	3995292.90	6.157E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.173E-04	0.00E+00
498	ALL	316490.75	3995323.91	6.533E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.245E-04	0.00E+00
499	ALL	316527.69	3995314.67	5.873E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.119E-04	0.00E+00
500	ALL	316574.53	3995216.38	6.537E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.246E-04	0.00E+00
501	ALL	316575.19	3995293.56	5.226E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.959E-05	0.00E+00
502	ALL	316603.56	3995240.13	5.347E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.019E-04	0.00E+00
503	ALL	316600.26	3995216.38	5.770E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.100E-04	0.00E+00
504	ALL	316623.35	3995215.06	5.192E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.894E-05	0.00E+00
505	ALL	316654.35	3995210.44	4.566E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.701E-05	0.00E+00
506	ALL	316680.74	3995242.76	3.842E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.320E-05	0.00E+00
507	ALL	316697.23	3995210.44	3.821E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.280E-05	0.00E+00
508	ALL	316674.80	3995217.04	4.136E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.881E-05	0.00E+00
509	ALL	316719.66	3995246.06	3.299E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.286E-05	0.00E+00
510	ALL	316721.64	3995207.14	3.489E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.648E-05	0.00E+00
511	ALL	316673.48	3995296.86	3.522E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.712E-05	0.00E+00
512	ALL	316649.08	3995296.20	3.866E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.368E-05	0.00E+00
513	ALL	316633.90	3995327.20	3.807E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.254E-05	0.00E+00
514	ALL	316670.19	3995321.93	3.378E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.437E-05	0.00E+00
515	ALL	316735.49	3995330.50	2.665E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.078E-05	0.00E+00
516	ALL	316784.31	3995292.24	2.452E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.673E-05	0.00E+00
517	ALL	316790.25	3995322.59	2.287E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.358E-05	0.00E+00
518	ALL	316787.61	3995242.10	2.613E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.979E-05	0.00E+00
519	ALL	316793.55	3995212.42	2.658E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.064E-05	0.00E+00
520	ALL	316806.08	3995004.62	3.825E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.290E-05	0.00E+00
521	ALL	315890.72	3995239.47	4.126E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.862E-05	0.00E+00
522	ALL	315629.69	3995340.75	1.815E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.458E-05	0.00E+00
523	ALL	315856.33	3995384.99	2.114E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.028E-05	0.00E+00
524	ALL	315982.85	3995475.80	2.133E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.064E-05	0.00E+00
525	ALL	315785.70	3995464.94	1.456E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.774E-05	0.00E+00
526	ALL	316098.50	3995319.79	5.858E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.116E-04	0.00E+00
527	ALL	316067.45	3995322.12	4.978E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.485E-05	0.00E+00
528	ALL	316017.00	3995314.36	4.173E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.951E-05	0.00E+00
529	ALL	315935.50	3995246.05	4.524E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.620E-05	0.00E+00
530	ALL	315892.64	3995221.41	4.449E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.477E-05	0.00E+00
531	ALL	315837.94	3995246.94	3.522E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.712E-05	0.00E+00
532	ALL	315843.61	3995259.50	3.413E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.504E-05	0.00E+00
533	ALL	315802.29	3995240.46	3.278E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.247E-05	0.00E+00
534	ALL	315801.07	3995223.04	3.387E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.453E-05	0.00E+00
535	ALL	315935.99	3995261.12	4.217E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.035E-05	0.00E+00
536	ALL	315982.59	3995253.42	5.014E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.555E-05	0.00E+00
537	ALL	315983.80	3995272.87	4.553E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.675E-05	0.00E+00
538	ALL	316028.37	3995274.49	5.312E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.012E-04	0.00E+00
539	ALL	315982.18	3995319.47	3.615E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.888E-05	0.00E+00
540	ALL	315934.37	3995303.26	3.440E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.555E-05	0.00E+00
541	ALL	315892.64	3995283.41	3.436E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.548E-05	0.00E+00
542	ALL	315894.67	3995259.10	3.835E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.308E-05	0.00E+00
543	ALL	315806.34	3995264.36	3.097E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.901E-05	0.00E+00
544	ALL	315785.27	3995301.64	2.623E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.997E-05	0.00E+00
545	ALL	315838.75	3995305.29	2.827E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.387E-05	0.00E+00
546	ALL	315745.97	3995264.36	2.696E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.137E-05	0.00E+00
547	ALL	315753.67	3995241.67	2.861E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.452E-05	0.00E+00
548	ALL	315669.39	3995225.87	2.271E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.328E-05	0.00E+00
549	ALL	315668.58	3995249.37	2.235E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.258E-05	0.00E+00
550	ALL	315664.53	3995269.63	2.176E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.146E-05	0.00E+00
551	ALL	315983.80	3995340.94	3.307E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.303E-05	0.00E+00
552	ALL	315935.59	3995324.73	3.121E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.947E-05	0.00E+00
553	ALL	315822.95	3995338.10	2.427E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.625E-05	0.00E+00
554	ALL	315934.37	3995371.73	2.535E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.831E-05	0.00E+00
555	ALL	315659.85	3995104.10	2.382E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.538E-05	0.00E+00
556	ALL	315659.53	3994917.54	1.881E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.584E-05	0.00E+00
557	ALL	315659.74	3994955.12	2.042E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.891E-05	0.00E+00
558	ALL	315659.95	3994992.71	2.177E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.147E-05	0.00E+00
559	ALL	315660.17	3995030.29	2.288E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.360E-05	0.00E+00
560	ALL	316123.98	3995007.30	4.499E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.573E-04	0.00E+00
561	ALL	316078.34	3995023.81	2.318E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.418E-04	0.00E+00
562	ALL	315976.75	3995063.92	1.012E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.929E-04	0.00E+00
563	ALL	316027.99	3995062.17	1.453E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.769E-04	0.00E+00

Appendix C: San Joaquin Valley Air Pollution Control District Amicus Brief on Friant Ranch Supreme Court Decision

CASE NO. S219783

IN THE SUPREME COURT OF CALIFORNIA

SIERRA CLUB, REVIVE THE SAN JOAQUIN, and
LEAGUE OF WOMEN VOTERS OF FRESNO,
Plaintiffs and Appellants

v.

COUNTY OF FRESNO,
Defendant and Respondent

FRIANT RANCH, L.P.,
Real Party in Interest and Respondent

After a Decision by the Court of Appeal, filed May 27, 2014
Fifth Appellate District Case No. F066798

Appeal from the Superior Court of California, County of Fresno
Case No. 11CECG00726

APPLICATION FOR LEAVE TO FILE AMICUS CURIAE BRIEF OF SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT IN SUPPORT OF DEFENDANT AND RESPONDENT, COUNTY OF FRESNO AND REAL PARTY IN INTEREST AND RESPONDENT, FRIANT RANCH, L.P.

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APPLICATION

Pursuant to California Rules of Court 8.520(f)(1), proposed Amicus Curiae San Joaquin Valley Unified Air Pollution Control District hereby requests permission from the Chief Justice to file an amicus brief in support of Defendant and Respondent, County of Fresno, and Defendant and Real Parties in Interest Friant Ranch, L.P. Pursuant to Rule 8.520(f)(5) of the California Rules of Court, the proposed amicus curiae brief is combined with this Application. The brief addresses the following issue certified by this Court for review:

> Is an EIR adequate when it identifies the health impacts of air pollution and quantifies a project's expected emissions, or does CEQA further require the EIR to *correlate* a project's air quality emissions to specific health impacts?

As of the date of this filing, the deadline for the final reply brief on the merits was March 5, 2015. Accordingly, under Rule 8.520(f)(2), this application and brief are timely.

1. Background and Interest of San Joaquin Valley Unified Air Pollution Control District

The San Joaquin Valley Unified Air Pollution Control District ("Air District") regulates air quality in the eight counties comprising the San Joaquin Valley ("Central Valley"): Kern, Tulare, Madera, Fresno, Merced, San Joaquin, Stanislaus, and Kings, and is primarily responsible for attaining air quality standards within its jurisdiction. After billions of dollars of investment by Central Valley businesses, pioneering air quality regulations, and consistent efforts by residents, the Central Valley air basin has made historic improvements in air quality.

The Central Valley's geographical, topographical and meteorological features create exceptionally challenging air quality conditions. For example, it receives air pollution transported from the San Francisco Bay Area and northern Central Valley communities, and the southern portion of the Central Valley includes three mountain ranges (Sierra, Tehachapi, and Coastal) that, under some meteorological conditions, effectively trap air pollution. Central Valley air pollution is only a fraction of what the Bay Area and Los Angeles produce, but these natural conditions result in air quality conditions that are only marginally better than Los Angeles, even though about ten times more pollution is emitted in the Los Angeles region. Bay Area air quality is much better than the Central Valley's, even though the Bay Area produces about six times more pollution. The Central Valley also receives air pollution transported from the Bay Area and northern counties in the Central Valley, including Sacramento, and transboundary anthropogenic ozone from as far away as China.

Notwithstanding these challenges, the Central Valley has reduced emissions at the same or better rate than other areas in California and has achieved unparalleled milestones in protecting public health and the environment:

- In the last decade, the Central Valley became the first air basin classified by the federal government under the Clean Air Act as a "serious nonattainment" area to come into attainment of health-based National Ambient Air Quality Standard ("NAAQS") for coarse particulate matter (PM10), an achievement made even more notable given the Valley's extensive agricultural sector. Unhealthy levels of particulate matter can cause and exacerbate a range of chronic and acute illnesses.
- In 2013, the Central Valley became the first air basin in the country to improve from a federal designation of "extreme" nonattainment to

actually attain (and quality for an attainment designation) of the 1-hour ozone NAAQS; ozone creates "smog" and, like PM10, causes adverse health impacts.

- The Central Valley also is in full attainment of federal standards for lead, nitrogen dioxide, sulfur dioxide, and carbon monoxide.
- The Central Valley continues to make progress toward compliance with its last two attainment standards, with the number of exceedences for the 8-hour ozone NAAQS reduced by 74% (for the 1997 standard) and 38% (for the 2008 standard) since 1991, and for the small particulate matter (PM2.5) NAAQS reduced by 85% (for the 1997 standard) and 61% (for the 2006 standard).

Sustained improvement in Central Valley air quality requires a rigorous and comprehensive regulatory framework that includes prohibitions (e.g., on wood-burning fireplaces in new residences), mandates (e.g., requiring the installation of best available pollution reduction technologies on new and modified equipment and industrial operations), innovations (e.g., fees assessed against residential development to fund pollution reduction actions to "offset" vehicular emissions associated with new residences), incentive programs (e.g., funding replacements of older, more polluting heavy duty trucks and school buses)[1], ongoing planning for continued air quality improvements, and enforcement of Air District permits and regulations.

The Air District is also an expert air quality agency for the eight counties and cities in the San Joaquin Valley. In that capacity, the Air District has developed air quality emission guidelines for use by the Central

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[1] San Joaquin's incentive program has been so successful that through 2012, it has awarded over $ 432 million in incentive funds and has achieved 93,349 tons of lifetime emissions reductions. *See* SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 2012 PM2.5 PLAN, 6-6 (2012) *available at* http://www.valleyair.org/Workshops/postings/2012/12-20-12PM25/FinalVersion/06%20Chapter%206%%20Incentives.pdf.

Valley counties and cities that implement the California Environment Quality Act (CEQA).[2] In its guidance, the Air District has distinguished between toxic air contaminants and criteria air pollutants.[3] Recognizing this distinction, the Air District's CEQA Guidance has adopted distinct thresholds of significance for *criteria* pollutants (i.e., ozone, PM2.5 and their respective precursor pollutants) based upon scientific and factual data which demonstrates the level that can be accommodated on a cumulative basis in the San Joaquin Valley without affecting the attainment of the applicable NAAQS.[4] For *toxic air* pollutants, the District has adopted different thresholds of significance which scientific and factual data demonstrates has the potential to expose sensitive receptors (i.e., children, the elderly) to levels which may result in localized health impacts.[5]

The Air District's CEQA Guidance was followed by the County of Fresno in its environment review of the Friant Ranch project, for which the Air District also served as a commenting agency. The Court of Appeal's holding, however, requiring correlation between the project's criteria

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2 *See, e.g.*, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, PLANNING DIVISION, GUIDE FOR ASSESSING AND MITIGATING AIR QUALITY IMPACTS (2015), *available at* http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf ("CEQA Guidance").

3 Toxic air contaminants, also known as hazardous air pollutants, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as birth defects. There are currently 189 toxic air contaminants regulated by the United States Environmental Protection Agency ("EPA") and the states pursuant to the Clean Air Act. 42 U.S.C. § 7412. Common TACs include benzene, perchloroethylene and asbestos. *Id.* at 7412(b).

In contrast, there are only six (6) criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and lead. Although criteria air pollutants can also be harmful to human health, they are distinguishable from toxic air contaminants and are regulated separately. For instance, while criteria pollutants are regulated by numerous sections throughout Title I of the Clean Air Act, the regulation of toxic air contaminants occurs solely under section 112 of the Act. Compare 42 U.S.C. §§ 7407 – 7411 & 7501 – 7515 with 42 U.S.C. § 7411.

4 See, e.g., CEQA Guidance at http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf, pp. 64-66, 80.

5 See, e.g., CEQA Guidance at http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf, pp. 66, 99-101.

pollutants and local health impacts, departs from the Air District's Guidance and approved methodology for assessing criteria pollutants. A close reading of the administrative record that gave rise to this issue demonstrates that the Court's holding is based on a misunderstanding of the distinction between toxic air contaminants (for which a local health risk assessment is feasible and routinely performed) and criteria air pollutants (for which a local health risk assessment is not feasible and would result in speculative results).[6] The Air District has a direct interest in ensuring the lawfulness and consistent application of its CEQA Guidance, and will explain how the Court of Appeal departed from the Air District's long-standing CEQA Guidance in addressing criteria pollutants and toxic air contaminants in this amicus brief.

2. How the Proposed Amicus Curiae Brief Will Assist the Court

As counsel for the proposed amicus curiae, we have reviewed the briefs filed in this action. In addition to serving as a "commentary agency" for CEQA purposes over the Friant Ranch project, the Air District has a strong interest in assuring that CEQA is used for its intended purpose, and believes that this Court would benefit from additional briefing explaining the distinction between criteria pollutants and toxic air contaminants and the different methodologies employed by local air pollution control agencies such as the Air District to analyze these two categories of air pollutants under CEQA. The Air District will also explain how the Court of Appeal's opinion is based upon a fundamental misunderstanding of these two different approaches by requiring the County of Fresno to correlate the project's *criteria* pollution emissions with *local* health impacts. In doing

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6 CEQA does not require speculation. *See, e.g.*, *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.*, 6 Cal. 4th 1112, 1137 (1993) (upholding EIR that failed to evaluate cumulative toxic air emission increases given absence of any acceptable means for doing so).

so, the Air District will provide helpful analysis to support its position that at least insofar as criteria pollutants are concerned, CEQA does not require an EIR to correlate a project's air quality emissions to specific health impacts, because such an analysis is not reasonably feasible.

Rule 8.520 Disclosure

Pursuant to Cal. R. 8.520(f)(4), neither the Plaintiffs nor the Defendant or Real Party In Interest or their respective counsel authored this brief in whole or in part. Neither the Plaintiffs nor the Defendant or Real Party in Interest or their respective counsel made any monetary contribution towards or in support of the preparation of this brief.

CONCLUSION

On behalf of the San Joaquin Valley Unified Air Pollution Control District, we respectfully request that this Court accept the filing of the attached brief.

Dated: April 2, 2015

Annette A. Ballatore-Williamson
District Counsel
Attorney for Proposed Amicus Curiae

SAN JOAQUIN VALLEY UNIFIED
AIR POLLUTION CONTROL
DISTRICT

CASE NO. S219783

IN THE SUPREME COURT OF CALIFORNIA

SIERRA CLUB, REVIVE THE SAN JOAQUIN, and
LEAGUE OF WOMEN VOTERS OF FRESNO,
Plaintiffs and Appellants

v.

COUNTY OF FRESNO,
Defendant and Respondent

FRIANT RANCH, L.P.,
Real Party in Interest and Respondent

After a Decision by the Court of Appeal, filed May 27, 2014
Fifth Appellate District Case No. F066798

Appeal from the Superior Court of California, County of Fresno
Case No. 11CECG00726

AMICUS CURIAE BRIEF OF SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT IN SUPPORT OF DEFENDANT AND RESPONDENT, COUNTY OF FRESNO AND REAL PARTY IN INTEREST AND RESPONDENT, FRIANT RANCH, L.P.

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I. INTRODUCTION.

The San Joaquin Valley Unified Air Pollution Control District ("Air District") respectfully submits that the Court of Appeal erred when it held that the air quality analysis contained in the Environmental Impact Report ("EIR") for the Friant Ranch development project was inadequate under the California Environmental Quality Act ("CEQA") because it did not include an analysis of the correlation between the project's criteria air pollutants and the potential adverse human health impacts. A close reading of the portion of the administrative record that gave rise to this issue demonstrates that the Court's holding is based on a misunderstanding of the distinction between toxic air contaminants and criteria air pollutants.

Toxic air contaminants, also known as hazardous air pollutants, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as birth defects. There are currently 189 toxic air contaminants (hereinafter referred to as "TACs") regulated by the United States Environmental Protection Agency ("EPA") and the states pursuant to the Clean Air Act. 42 U.S.C. § 7412. Common TACs include benzene, perchloroethylene and asbestos. *Id.* at 7412(b).

In contrast, there are only six (6) criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and lead. Although criteria air pollutants can also be harmful to human health, they are distinguishable from TACs and are regulated separately. For instance, while criteria pollutants are regulated by numerous sections throughout Title I of the Clean Air Act, the regulation of TACs occurs solely under section 112 of the Act. *Compare* 42 U.S.C. §§ 7407 – 7411 & 7501 – 7515 *with* 42 U.S.C. § 7411.

The most relevant difference between criteria pollutants and TACs for purposes of this case is the manner in which human health impacts are accounted for. While it is common practice to analyze the correlation between an individual facility's TAC emissions and the expected localized human health impacts, such is not the case for criteria pollutants. Instead, the human health impacts associated with criteria air pollutants are analyzed and taken into consideration when EPA sets the national ambient air quality standard ("NAAQS") for each criteria pollutant. 42 U.S.C. § 7409(b)(1). The health impact of a particular criteria pollutant is analyzed on a regional and not a facility level based on how close the area is to complying with (attaining) the NAAQS. Accordingly, while the type of individual facility / health impact analysis that the Court of Appeal has required is a customary practice for TACs, it is not feasible to conduct a similar analysis for criteria air pollutants because currently available computer modeling tools are not equipped for this task.

It is clear from a reading of both the administrative record and the Court of Appeal's decision that the Court did not have the expertise to fully appreciate the difference between TACs and criteria air pollutants. As a result, the Court has ordered the County of Fresno to conduct an analysis that is not practicable and not likely yield valid information. The Air District respectfully requests that this portion of the Court of Appeal's decision be reversed.

II. THE COURT OF APPEAL ERRED IN FINDING THE FRIANT RANCH EIR INADEQUATE FOR FAILING TO ANALYZE THE SPECIFIC HUMAN HEALTH IMPACTS ASSOCIATED CRITERIA AIR POLLUTANTS.

Although the Air District does not take lightly the amount of air emissions at issue in this case, it submits that the Court of Appeal got it wrong when it required Fresno County to revise the Friant Ranch EIR to include an analysis correlating the criteria air pollutant emissions associated with the project with specific, localized health-impacts. The type of analysis the Court of Appeal has required will not yield reliable information because currently available modeling tools are not well suited for this task. Further, in reviewing this issue de novo, the Court of Appeal failed to appreciate that it lacked the scientific expertise to appreciate the significant differences between a health risk assessment commonly performed for toxic air contaminants and a similar type of analysis it felt should have been conducted for criteria air pollutants.

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A. Currently Available Modeling Tools are not Equipped to Provide a Meaningful Analysis of the Correlation between an Individual Development Project's Air Emissions and Specific Human Health Impacts.

In order to appreciate the problematic nature of the Court of Appeals' decision requiring a health risk type analysis for criteria air pollutants, it is important to understand how the relevant criteria pollutants (ozone and particulate matter) are formed, dispersed and regulated.

Ground level ozone (smog) is not directly emitted into the air, but is formed when precursor pollutants such as oxides of nitrogen (NOx) and volatile organic compounds (VOCs) are emitted into the atmosphere and undergo complex chemical reactions in the process of sunlight.[1] Once formed, ozone can be transported long distances by wind.[2] Because of the complexity of ozone formation, a specific tonnage amount of NOx or VOCs emitted in a particular area does not equate to a particular concentration of ozone in that area. In fact, even rural areas that have relatively low tonnages of emissions of NOx or VOCs can have high levels of ozone concentration simply due to wind transport.[3] Conversely, the San Francisco Bay Area has six times more NOx and VOC emissions per square mile than the San Joaquin Valley, but experiences lower

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[1] *See* United States Environmental Protection Agency, *Ground-level Ozone: Basic Information*, available at: http://www.epa.gov/airquality/ozonepollution/basic.html (visited March 10, 2015).
[2] *Id.*
[3] *Id.*

concentrations of ozone (and better air quality) simply because sea breezes disperse the emissions.[4]

Particulate matter ("PM") can be divided into two categories: directly emitted PM and secondary PM.[5] While directly emitted PM can have a localized impact, the tonnage emitted does not always equate to the local PM concentration because it can be transported long distances by wind.[6] Secondary PM, like ozone, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as sulfur dioxides (SOx) and NOx.[7] Because of the complexity of secondary PM formation, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area.

The disconnect between the *tonnage* of precursor pollutants (NOx, SOx and VOCs) and the *concentration* of ozone or PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting ozone or PM. Indeed, the national ambient air quality standards ("NAAQS"), which are statutorily required to be set by the United States Environmental Protection

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[4] *San Joaquin Valley Air Pollution Control District 2007 Ozone Plan*, Executive Summary p. ES-6, available at: http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Ozone_2007_Adopted/03%20Executive%20Summary.pdf (visited March 10, 2015).
[5] United States Environmental Protection Agency, *Particulate Matter: Basic Information*, available at: http://www.epa.gov/airquality/particlepollution/basic.html (visited March 10, 2015).
[6] *Id.*
[7] *Id.*

Agency ("EPA") at levels that are "requisite to protect the public health," 42 U.S.C. § 7409(b)(1), are established as concentrations of ozone or particulate matter and not as tonnages of their precursor pollutants.[8]

Attainment of a particular NAAQS occurs when the concentration of the relevant pollutant remains below a set threshold on a consistent basis throughout a particular region. For example, the San Joaquin Valley attained the 1-hour ozone NAAQS when ozone concentrations remained at or below 0.124 parts per million Valley-wide on 3 or fewer days over a 3-year period.[9] Because the NAAQS are focused on achieving a particular concentration of pollution region-wide, the Air District's tools and plans for attaining the NAAQS are regional in nature.

For instance, the computer models used to simulate and predict an attainment date for the ozone or particulate matter NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NOx, SOx and VOCs) and the atmospheric chemistry and meteorology of the Valley.[10] At a very basic level, the models simulate future ozone or PM levels based on predicted changes in precursor

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[8] See, e.g., United States Environmental Protection Agency, *Table of National Ambient Air Quality Standards*, available at: http://www.epa.gov/air/criteria.html#3 (visited March 10, 2015).
[9] *San Joaquin Valley Unified Air Pollution Control District 2013 Plan for the Revoked 1-Hour Ozone Standard*, Ch. 2 p. 2-16, available at: http://www.valleyair.org/Air_Quality_Plans/OzoneOneHourPlan2013/02Chapter2ScienceTrendsModeling.pdf (visited March 10, 2015).
[10] *Id.* at Ch. 2 p. 2-19 (visited March 12, 2015); *San Joaquin Valley Unified Air Pollution Control District 2008 PM2.5 Plan*, Appendix F, pp. F-2 – F-5, available at: http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Final_Adopted_PM2.5/20%20Appendix%20F.pdf
(visited March 19, 2015).

emissions Valley wide.[11] Because the NAAQS are set levels necessary to protect human health, the closer a region is to attaining a particular NAAQS, the lower the human health impact is from that pollutant.

The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the Valley attains the NAAQS. Rather, the Air District's modeling and planning strategy is regional in nature and based on the extent to which *all* of the emission-generating sources in the Valley (current and future) must be controlled in order to reach attainment.[12]

Accordingly, the Air District has based its thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the Valley can accommodate without affecting the attainment date for the NAAQS.[13] The Air District has tied its CEQA significance thresholds to the level at which stationary pollution sources permitted by the Air District must "offset" their emissions.[14] This "offset"

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[11] *Id.*

[12] Although the Air District does have a dispersion modeling tool used during its air permitting process that is used to predict whether a particular project's directly emitted PM will either cause an exceedance of the PM NAAQS or contribute to an existing exceedance, this model bases the prediction on a worst case scenario of emissions and meteorology and has no provision for predicting any associated human health impacts. Further, this analysis is only performed for stationary sources (factories, oil refineries, etc.) that are required to obtain a New Source Review permit from the Air District and not for development projects such as Friant Ranch over which the Air District has no preconstruction permitting authority. *See* San Joaquin Valley Unified Air Pollution Control District Rule 2201 §§ 2.0; 3.3.9; 4.14.1, available at: http://www.valleyair.org/rules/currntrules/Rule2201041l.pdf (visited March 19, 2015).

[13] *San Joaquin Valley Unified Air Pollution Control District Guide to Assessing and Mitigating Air Quality Impacts*, (March 19, 2015) p. 22, available at: http://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI%20Jan%202002%20Rev.pdf (visited March 30, 2015).

[14] *Id.* at pp. 22, 25.

level allows for growth while keeping the cumulative effects of all new sources at a level that will not impede attainment of the NAAQS.[15] In the Valley, these thresholds are 15 tons per year of PM, and 10 tons of NOx or VOC per year. *Sierra Club*, *supra*, 172 Cal.Rptr.3d at 303; AR 4554. Thus, the CEQA air quality analysis for criteria pollutants is not really a localized, project-level impact analysis but one of regional, "cumulative impacts."

Accordingly, the significance thresholds applied in the Friant Ranch EIR (15 tons per year of PM and 10 tons of NOx or VOCs) are not intended to be indicative of any localized human health impact that the project may have. While the health effects of air pollution are of primary concern to the Air District (indeed, the NAAQS are established to protect human health), the Air District is simply not equipped to analyze whether and to what extent the criteria pollutant emissions of an individual CEQA project directly impact human health in a particular area. This is true even for projects with relatively high levels of emissions of criteria pollutant precursor emissions.

For instance, according to the EIR, the Friant Ranch project is estimated to emit 109.52 tons per year of ROG (VOC), 102.19 tons per year of NOx, and 117.38 tons per year of PM. Although these levels well

[15] [15] *San Joaquin Valley Unified Air Pollution Control District Environmental Review Guidelines* (Aug. 2000) p. 4-11, available at: http://www.valleyair.org/transportation/CEQA%20Rules/ERG%20Adopted%20_August%202000_.pdf (visited March 12, 2015).

exceed the Air District's CEQA significance thresholds, this does not mean that one can easily determine the concentration of ozone or PM that will be created at or near the Friant Ranch site on a particular day or month of the year, or what specific health impacts will occur. Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of ozone or PM. This is especially true for a project like Friant Ranch where most of the criteria pollutant emissions derive not from a single "point source," but from area wide sources (consumer products, paint, etc.) or mobile sources (cars and trucks) driving to, from and around the site.

In addition, it would be extremely difficult to model the impact on NAAQS attainment that the emissions from the Friant Ranch project may have. As discussed above, the currently available modeling tools are equipped to model the impact of *all* emission sources in the Valley on attainment. According to the most recent EPA-approved emission inventory, the NOx inventory for the Valley is for the year 2014 is 458.2 tons per day, or 167,243 tons per year and the VOC (or ROG) inventory is 361.7 tons per day, or 132,020.5 tons per year.[16] Running the photochemical grid model used for predicting ozone attainment with the

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[16] *San Joaquin Valley Unified Air Pollution Control District 2007 Ozone Plan*, Appendix B pp. B-6, B-9,
available at:
http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Ozone_2007_Adopted/19%20Appendix%20B%20April%202007.pdf (visited March 12, 2015).

emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NOx and VOC in the Valley) is not likely to yield valid information given the relative scale involved.

Finally, even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like ozone and some particulates, it remains impossible, using today's models, to correlate that increase in concentration to a specific health impact. The reason is the same: such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level.

For these reasons, it is not the norm for CEQA practitioners, including the Air District, to conduct an analysis of the localized health impacts associated with a project's criteria air pollutant emissions as part of the EIR process. When the accepted scientific method precludes a certain type of analysis, "the court cannot impose a legal standard to the contrary." *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 717 n. 8. However, that is exactly what the Court of Appeal has done in this case. Its decision upends the way CEQA air quality analysis of criteria pollutants occurs and should be reversed.

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B. The Court of Appeal Improperly Extrapolated a Request for a Health Risk Assessment for Toxic Air Contaminants into a Requirement that the EIR contain an Analysis of Localized Health Impacts Associated with Criteria Air Pollutants.

The Court of Appeal's error in requiring the new health impact analysis for criteria air pollutants clearly stems from a misunderstanding of terms of art commonly used in the air pollution field. More specifically, the Court of Appeal (and Appellants Sierra Club et al.) appear to have confused the health risk analysis ("HRA") performed to determine the health impacts associated with a project's toxic air contaminants ("TACs"), with an analysis correlating a project's criteria air pollutants (ozone, PM and the like) with specific localized health impacts.

The first type of analysis, the HRA, is commonly performed during the Air District's stationary source permitting process for projects that emit TACs and is, thus, incorporated into the CEQA review process. An HRA is a comprehensive analysis to evaluate and predict the dispersion of TACs emitted by a project and the potential for exposure of human populations. It also assesses and quantifies both the individual and population-wide health risks associated with those levels of exposure. There is no similar analysis conducted for criteria air pollutants. Thus, the second type of analysis (required by the Court of Appeal), is not currently part of the Air District's process because, as outlined above, the health risks associated with exposure to criteria pollutants are evaluated on a regional level based on the region's attainment of the NAAQS.

The root of this confusion between the types of analyses conducted for TACs versus criteria air pollutants appears to stem from a comment that was presented to Fresno County by the City of Fresno during the administrative process.

In its comments on the draft EIR, the City of Fresno (the only party to raise this issue) stated:

> [t]he EIR must disclose the human health related effects of the Project's air pollution impacts. (CEQA Guidelines section 15126.2(a).) The EIR fails completely in this area. The EIR should be revised to disclose and determine the significance of TAC impacts, and of human health risks due to exposure to Project-related air emissions.

(AR 4602.)

In determining that the issue regarding the correlation between the Friant Ranch project's criteria air pollutants and adverse health impacts was adequately exhausted at the administrative level, the Court of Appeal improperly read the first two sentences of the City of Fresno's comment in isolation rather than in the context of the entire comment. *See Sierra Club v. County of Fresno* (2014) 172 Cal.Rptr.3d 271, 306. Although the comment first speaks generally in terms of "human health related effects" and "air pollution," it requests only that the EIR be revised to disclose "the significance of TACs" and the "human health risks due to exposure."

The language of this request in the third sentence of the comment is significant because, to an air pollution practitioner, the language would only have indicated only that a HRA for TACs was requested, and not a separate analysis of the health impacts associated with the project's criteria air pollutants. Fresno County clearly read the comment as a request to perform an HRA for TACs and limited its response accordingly. (AR 4602.)[17] The Air District submits that it would have read the City's comment in the same manner as the County because the City's use of the terms "human health risks" and "TACs" signal that an HRA for TACs is being requested. Indeed, the Air District was also concerned that an HRA be conducted, but understood that it was not possible to conduct such an analysis until the project entered the phase where detailed site specific information, such as the types of emission sources and the proximity of the sources to sensitive receptors became available. (AR 4553.)[18] The City of Fresno was apparently satisfied with the County's discussion of human health risks, as it did not raise the issue again when it commented on the final EIR. (AR 8944 – 8960.)

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[17] Appellants do not challenge the manner in which the County addressed TACs in the EIR. (Appellants' Answer Brief p. 28 fn. 7.)

[18] Appellants rely on the testimony of Air District employee, Dan Barber, as support for their position that the County should have conducted an analysis correlating the project's criteria air pollutant emissions with localized health impacts. (Appellants Answer Brief pp. 10-11; 28.) However, Mr. Barber's testimony simply reinforces the Air District's concern that a risk assessment (HRA) be conducted once the actual details of the project become available. (AR 8863.) As to criteria air pollutants, Mr. Barber's comments are aimed at the Air District's concern about the amount of emissions and the fact that the emissions will make it "more difficult for Fresno County and the Valley to reach attainment which means that the health of Valley residents maybe [sic] adversely impacted." Mr. Barber says nothing about conducting a separate analysis of the localized health impacts the project's emissions may have.

The Court of Appeal's holding, which incorrectly extrapolates a request for an HRA for TACs into a new analysis of the localized health impacts of the project's criteria air pollutants, highlights two additional errors in the Court's decision.

First, the Court of Appeal's holding illustrates why the Court should have applied the deferential substantial evidence standard of review to the issue of whether the EIR's air quality analysis was sufficient. The regulation of air pollution is a technical and complex field and the Court of Appeal lacked the expertise to fully appreciate the difference between TACs and criteria air pollutants and tools available for analyzing each type of pollutant.

Second, it illustrates that the Court likely got it wrong when it held that the issue regarding the criteria pollutant / localized health impact analysis was properly exhausted during the administrative process. In order to preserve an issue for the court, '[t]he "exact issue" must have been presented to the administrative agency....' [Citation.] *Citizens for Responsible Equitable Environmental Development v. City of San Diego*, (2011) 196 Cal.App.4th 515, 527 129 Cal.Rptr.3d 512, 521; *Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523, 535, 78 Cal.Rptr.3d 1, 13. "'[T]he objections must be sufficiently specific so that the agency has the opportunity to evaluate and respond to them.' [Citation.]" *Sierra Club v. City of Orange*,163 Cal.App.4th at 536.[19]

As discussed above, the City's comment, while specific enough to request a commonly performed HRA for TACs, provided the County with no notice that it should perform a new type of analysis correlating criteria pollutant tonnages to specific human health effects. Although the parties have not directly addressed the issue of failure to exhaust administrative remedies in their briefs, the Air District submits that the Court should consider how it affects the issues briefed by the parties since "[e]xhaustion of administrative remedies is a jurisdictional prerequisite to maintenance of a CEQA action." *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1199, 22 Cal.Rptr.3d 203.

III. CONCLUSION

For all of the foregoing reasons, the Air District respectfully requests that the portion of the Court of Appeal's decision requiring an analysis correlating the localized human health impacts associated with an individual project's criteria air pollutant emissions be reversed.

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[19] *Sierra Club v. City of Orange*, is illustrative here. In that case, the plaintiffs challenged an EIR approved for a large planned community on the basis that the EIR improperly broke up the various environmental impacts by separate project components or "piecemealed" the analysis in violation of CEQA. In evaluating the defense that the plaintiffs had failed to adequately raise the issue at the administrative level, the Court held that comments such as *"the use of a single document for both a project-level and a program-level EIR [is] 'confusing',"* and *"[t]he lead agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project,"* were too vague to fairly raise the argument of piecemealing before the agency. *Sierra Club v. City of Orange*, 163 Cal.App.4th at 537.

correlating the localized human health impacts associated with an individual project's criteria air pollutant emissions be reversed.

Respectfully submitted,

Dated: April 2, 2015

Catherine T. Redmond
Attorney for Proposed Amicus Curiae

SAN JOAQUIN VALLEY UNIFIED
AIR POLLUTION CONTROL DISTRICT

CERTIFICATE OF WORD COUNT

Pursuant to Rule 8.204 of the California Rules of Court, I hereby certify that this document, based on the Word County feature of the Microsoft Word software program used to compose and print this document, contains, exclusive of caption, tables, certificate of word count, signature block and certificate of service, 3806 words.

Dated: April 2, 2015

Annette A. Ballatore-Williamson
District Counsel (SBN 192176)

Sierra Club et al, v. County of Fresno, et al
Supreme Court of California Case No.: S219783
Fifth District Court of Appeal Case No.: F066798
Fresno County Superior Court Case No.: 11CECG00726

PROOF OF SERVICE

I am over the age of 18 years and not a p[arty to the above-captioned action; that my business address is San Joaquin Valley Unified Air Pollution Control District located at 1990 E. Gettysburg Avenue, Fresno, California 93726.

On April 2, 2015, I served the document described below:

APPLICATION FOR LEAVE TO FILE AMICUS CURIAE BRIEF OF SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT IN SUPPORT OF DEFENDANT AND RESPONDENT, COUNTY OF FRESNO

On all parties to this action at the following addresses and in the following manner:

PLEASE SEE ATTACHED SERVICE LIST

(XX) **(BY MAIL)** I caused a true copy of each document(s) to be laced in a sealed envelope with first-class postage affixed and placed the envelope for collection. Mail is collected daily at my office and placed in a United State Postal Service collection box for pick-up and delivery that same day.

( ) **(BY ELECTRONIC MAIL)** I caused a true and correct scanned image (.PDF file) copy to be transmitted via electronic mail transfer system in place at the San Joaquin Valley Unified Air Pollution Control District ("District"), originating from the undersigned at 1990 E. Gettysburg Avenue, Fresno, CA, to the address(es) indicated below.

( ) **(BY OVERNIGHT MAIL)** I caused a true and correct copy to be delivered via Federal Express to the following person(s) or their representative at the address(es) listed below.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that I executed this document on April 2, 2015, at Fresno, California.

Esthela Soto

SERVICE LIST

Sierra Club et al, v. County of Fresno, et al
Supreme Court of California Case No.: S219783
Fifth District Court of Appeal Case No.: F066798
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Appendix D: Energy Calculations

Henderson Ave & SR 65 Commercial Project Construction Vehicle Fuel Calculations (Page 1 of 2)

California Air Resource Board (CARB). EMFAC2017 Web Database (v1.0.2). Website: https://arb.ca.gov/emfac/2017/.

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: TULARE
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day.

VMT = Vehicle Miles Traveled
FE = Fuel Economy

Given									*Calculations*	
Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Consumption (1000 gallons/day)	FE (mi/gallon)	VMT*FE
TULARE	2023	HHDT	Aggregated	Aggregated	GAS	0.766672758	109.5717547	0.023757256	4.612138469	505.3601
TULARE	2023	HHDT	Aggregated	Aggregated	DSL	6112.223904	828308.3513	118.4032266	6.995656921	5794561
TULARE	2023	LDA	Aggregated	Aggregated	GAS	194341.66	7781539.194	240.9441471	32.29602913	2.51E+08
TULARE	2023	LDA	Aggregated	Aggregated	DSL	1677.563241	70546.38003	1.308911222	53.89699383	3802238
TULARE	2023	LDT1	Aggregated	Aggregated	GAS	20202.36518	711822.785	26.13139601	27.24013615	19390150
TULARE	2023	LDT1	Aggregated	Aggregated	DSL	14.43955166	273.5075047	0.010409698	26.2742977	7186.218
TULARE	2023	LDT2	Aggregated	Aggregated	GAS	65445.33966	2395055.727	94.1461708	25.43975721	60929636
TULARE	2023	LDT2	Aggregated	Aggregated	DSL	352.5825374	15283.42659	0.382579426	39.94837557	610548.1
TULARE	2023	LHDT1	Aggregated	Aggregated	GAS	5687.416542	184533.638	21.98073253	8.395245141	1549205
TULARE	2023	LHDT1	Aggregated	Aggregated	DSL	7483.050739	243966.9911	13.73314965	17.76482433	4334031
TULARE	2023	LHDT2	Aggregated	Aggregated	GAS	927.9673629	30040.97044	4.111810876	7.306019499	219479.9
TULARE	2023	LHDT2	Aggregated	Aggregated	DSL	2358.470311	79248.01235	4.981192208	15.90944678	1260792
TULARE	2023	MDV	Aggregated	Aggregated	GAS	70473.73301	2352077.882	118.165127	19.90500871	46818131
TULARE	2023	MDV	Aggregated	Aggregated	DSL	1489.467522	58900.64565	2.09426604	28.12471984	1656564
TULARE	2023	MHDT	Aggregated	Aggregated	GAS	422.7940169	21441.19841	4.385754432	4.888827851	104822.3
TULARE	2023	MHDT	Aggregated	Aggregated	DSL	4292.248509	268428.9437	27.85011863	9.638341122	2587210

Worker
Weighted Average Fuel Economy 28.72715

Vendor
Weighted Average Fuel Economy 9.571173

Haul
Weighted Average Fuel Economy 6.995342

Henderson Ave & SR 65 Commercial Project Construction Vehicle Fuel Calculations (Page 2 of 2)

Construction
Schedule
Source: CalEEMod Output

CalEEMod Run	Phase Name	Start Date	End Date	Num Days Week	Num Days
Henderson Ave & SR 65 Commercial	Demolition	7/1/2023	7/14/2023	5	10
Henderson Ave & SR 65 Commercial	Site Preparation	7/15/2023	7/28/2023	5	10
Henderson Ave & SR 65 Commercial	Grading	7/29/2023	9/8/2023	5	30
Henderson Ave & SR 65 Commercial	Building Construction	9/9/2023	8/31/2024	5	255
Henderson Ave & SR 65 Commercial	Paving	9/9/2023	10/6/2023	5	20
Henderson Ave & SR 65 Commercial	Architectural Coating	8/5/2024	8/31/2024	5	20

Construction Trips and VMT

		Trips per Day		Total Trips	Construction Trip Length in Miles				Trips per Phase			VMT per Phase			Fuel Consumption (gallons)		
CalEEMod Run	Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Number of Days per Phase	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
Henderson Ave & SR 65 Commercial	Demolition	15	0	15	10.8	7.3	20	10	150	0	15	1,620	0	300	56.39	0.00	42.89
Henderson Ave & SR 65 Commercial	Site Preparation	18	0	14	10.8	7.3	20	10	180	0	14	1,944	0	280	67.67	0.00	40.03
Henderson Ave & SR 65 Commercial	Grading	20	0	516	10.8	7.3	20	30	600	0	516	6,480	0	10,320	225.57	0.00	1,475.27
Henderson Ave & SR 65 Commercial	Building Construction	203	82	24	10.8	7.3	20	255	51,765	20,910	24	559,062	152,643	480	19,461.10	15,948.20	68.62
Henderson Ave & SR 65 Commercial	Paving	15	4	12	10.8	7.3	20	20	300	80	12	3,240	584	240	112.79	61.02	34.31
Henderson Ave & SR 65 Commercial	Architectural Coating	41	0	2	10.8	7.3	20	20	820	0	2	8,856	0	40	308.28	0.00	5.72

Total Phase 2 Project Construction VMT (miles)
746,089

Total Phase 2 Project Fuel Consumption (gallons)
37,908

Construction Equipment Fuel Calculation—Henderson Ave & SR 65 Commercial Project

Source: CalEEMod Output

Construction Area	Phase Type	Start Date	End Date	Num Days Week	Num Days
Henderson Ave & SR 65 Commercial	Demolition	7/1/2023	7/14/2023	5	10
Henderson Ave & SR 65 Commercial	Site Preparation	7/15/2023	7/28/2023	5	10
Henderson Ave & SR 65 Commercial	Grading	7/29/2023	9/8/2023	5	30
Henderson Ave & SR 65 Commercial	Building Construction	9/9/2023	8/31/2024	5	255
Henderson Ave & SR 65 Commercial	Paving	9/9/2023	10/6/2023	5	20
Henderson Ave & SR 65 Commercial	Architectural Coating	8/5/2024	8/31/2024	5	20

Construction Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Fuel (gallons/HP-	Diesel Fuel Usage
Demolition	Concrete/Industrial Saws	1	8	81	0.73	10	4,730.40	0.021	97.04
Demolition	Excavators	3	8	158	0.38	10	14,409.60	0.019	274.17
Demolition	Rubber Tired Dozers	2	8	247	0.40	10	15,808.00	0.020	312.32
Site Preparation	Rubber Tired Dozers	3	8	247	0.40	10	23,712.00	0.021	503.04
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37	10	11,484.80	0.021	235.59
Grading	Excavators	2	8	158	0.38	30	28,819.20	0.025	717.22
Grading	Graders	1	8	187	0.41	30	18,400.80	0.019	350.10
Grading	Rubber Tired Dozers	1	8	247	0.40	30	23,712.00	0.015	352.95
Grading	Scrapers	2	8	367	0.48	30	84,556.80	0.021	1,759.18
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37	30	17,227.20	0.042	729.70
Building Construction	Cranes	1	8.2	231	0.29	255	140,076.09	0.019	2,665.17
Building Construction	Forklifts	4	7.1	89	0.20	255	128,907.60	0.026	3,331.73
Building Construction	Generator Sets	2	4.7	84	0.74	255	148,997.52	0.022	3,207.50
Building Construction	Tractors/Loaders/Backhoes	3	8.2	97	0.37	255	225,137.97	0.018	4,127.36
Building Construction	Welders	2	4.7	46	0.45	255	49,617.90	0.019	962.80
Paving	Pavers	2	8	130	0.42	20	17,472.00	0.028	481.43
Paving	Paving Equipment	2	8	132	0.36	20	15,206.40	0.021	311.93
Paving	Rollers	2	8	80	0.38	20	9,728.00	0.019	185.09
Architectural Coating	Air Compressors	1	6	78	0.48	20	4,492.80	0.020	88.77
			Total Project Construction Equipment Fuel Consumption (gallons)						**20,693.08**

Notes:
Equipment assumptions are provided in the CalEEMod output files.
Source of usage estimates: California Air Resource Board (CARB). 2023. OFFROAD2017 (v1.0.1) Emissions Inventory for Tulare County
Website: https://www.arb.ca.gov/orion/.

Construction Equipment Fuel Calculation

OFFROAD2017 (v1.0.1) Emissions Inventory
Region Type: County
Region: Tulare
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2017 Equipment Types
Units: Emissions: tons/day, Fuel Consumption: gallons/year, Activity: hours/year, HP-Hours: HP-hours/year

Region	Vehicle Class	Model Year	HP_Bin	Fuel	Fuel (gallons/year)	Horsepower Hours (HP-hours/year)	Fuel (gallons/HP-hour)
Tulare	Construction and Mining - Cranes	Aggregated	300	Diesel	52657.01958	3537623.546	0.014884857
Tulare	Construction and Mining - Excavators	Aggregated	175	Diesel	156561.5672	7924249.896	0.019757273
Tulare	Construction and Mining - Graders	Aggregated	175	Diesel	95622.48553	4507357.533	0.021214755
Tulare	Construction and Mining - Misc - Cement And Mortar Mixers	Aggregated	25	Diesel	518.3	16275.35	0.031845705
Tulare	Construction and Mining - Misc - Concrete/Industrial Saws	Aggregated	50	Diesel	266.45	6383.85	0.041738136
Tulare	Construction and Mining - Pavers	Aggregated	175	Diesel	20697.09983	961439.2328	0.021527205
Tulare	Construction and Mining - Paving Equipment	Aggregated	175	Diesel	8797.729977	479896.0688	0.018332574
Tulare	Construction and Mining - Rollers	Aggregated	100	Diesel	49945.71939	2573962.798	0.019404212
Tulare	Construction and Mining - Rough Terrain Forklifts	Aggregated	100	Diesel	128035.0445	6154134.122	0.020804721
Tulare	Construction and Mining - Rubber Tired Dozers	Aggregated	300	Diesel	6934.526078	338050.6038	0.020513278
Tulare	Construction and Mining - Scrapers	Aggregated	300	Diesel	57538.0011	2311993.759	0.024886746
Tulare	Construction and Mining - Tractors/Loaders/Backhoes	Aggregated	300	Diesel	84418.89908	4436891.503	0.019026586
Tulare	Light Commercial - Misc - Air Compressors	Aggregated	50	Diesel	8584.8	311560.35	0.027554212
Tulare	Light Commercial - Misc - Generator Sets	Aggregated	50	Diesel	23662.95	558647.1	0.042357599
Tulare	Light Commercial - Misc - Welders	Aggregated	50	Diesel	39441.9	1526043.1	0.025845862

Operational Fuel Calculation—Project-generated Phase 1 Operational Trips
California Air Resource Board (CARB). EMFAC2017 Web Database (v1.0.2). Website: https://arb.ca.gov/emfac/2017/.

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: TULARE
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day.

VMT = Vehicle Miles Traveled
FE = Fuel Economy

				Given					*Calculations*	
Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	VMT	Fuel Consumption	FE	VMT*FE
TULARE	2024	LDA	Aggregated	Aggregated	GAS	200091.6846	7948734.092	239.1322005	33.23991531	264215248
TULARE	2024	LDA	Aggregated	Aggregated	DSL	1810.35844	75763.13804	1.36718972	55.41523386	4198432.012
									Weighted Average Fuel Economy	**33.44928316**
TULARE	2024	LDT1	Aggregated	Aggregated	GAS	20488.93803	722692.4059	25.74238503	28.07402675	20288885.93
TULARE	2024	LDT1	Aggregated	Aggregated	DSL	13.23692085	250.8640441	0.0094275	26.60981668	6675.446225
TULARE	2024	LDT2	Aggregated	Aggregated	GAS	66393.26811	2416747.22	91.611379	26.38042617	63754821.62
TULARE	2024	LDT2	Aggregated	Aggregated	DSL	389.7745793	16615.97335	0.403370826	41.19279894	684458.4493
TULARE	2024	MDV	Aggregated	Aggregated	GAS	68671.60082	2268444.35	110.7232681	20.4875126	46474782.21
TULARE	2024	MDV	Aggregated	Aggregated	DSL	1548.204988	59869.73818	2.07427453	28.86297706	1728018.88
									Weighted Average Fuel Economy	**24.23825701**
TULARE	2024	LHDT1	Aggregated	Aggregated	GAS	5501.778399	178434.998	21.00934343	8.493125858	1515470.895
TULARE	2024	LHDT1	Aggregated	Aggregated	DSL	7281.999596	233593.306	13.01713437	17.94506375	4191846.767
TULARE	2024	LHDT2	Aggregated	Aggregated	GAS	904.5065134	29016.25369	3.931789602	7.379910073	214137.3429
TULARE	2024	LHDT2	Aggregated	Aggregated	DSL	2329.309164	76981.39716	4.785693072	16.08573638	1238302.461
TULARE	2024	MHDT	Aggregated	Aggregated	GAS	422.5089333	21789.92018	4.371477934	4.984565978	108613.2948
TULARE	2024	MHDT	Aggregated	Aggregated	DSL	4433.183324	267883.1613	27.49937598	9.741426913	2609564.237
TULARE	2024	HHDT	Aggregated	Aggregated	GAS	0.862408169	124.8688936	0.02657245	4.699186305	586.7821946
TULARE	2024	HHDT	Aggregated	Aggregated	DSL	6329.263049	845760.5033	118.792027	7.119673978	6021539.047
									Weighted Average Fuel Economy	**9.615512063**
TULARE	2024	MCY	Aggregated	Aggregated	GAS	9526.022125	64209.76551	1.696535377	37.84758419	2430184.506
									Weighted Average Fuel Economy	**37.84758419**
TULARE	2024	MH	Aggregated	Aggregated	GAS	920.456244	8046.620171	1.642127819	4.900118054	39429.38877
TULARE	2024	MH	Aggregated	Aggregated	DSL	532.2699813	4307.384326	0.438299798	9.827484177	42330.75131
TULARE	2024	OBUS	Aggregated	Aggregated	GAS	141.0723618	6105.664976	1.256606333	4.858852624	29666.52629
TULARE	2024	OBUS	Aggregated	Aggregated	DSL	116.0424236	8826.770702	1.092540604	8.079123716	71312.57251
TULARE	2024	SBUS	Aggregated	Aggregated	GAS	83.93123145	4049.068487	0.440521583	9.191532589	37217.14495
TULARE	2024	SBUS	Aggregated	Aggregated	DSL	508.5736574	15810.98292	1.945828199	8.125580116	128473.4085
TULARE	2024	UBUS	Aggregated	Aggregated	GAS	75.71909004	6827.011037	1.479097952	4.615658502	31511.15154
TULARE	2024	UBUS	Aggregated	Aggregated	DSL	22.03429153	2084.75395	0.208996869	9.975048728	20795.52224
									Weighted Average Fuel Economy	**7.148571693**

Total Operational VMT (Project)

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	6,106.51	8,048.01	6173.06	14,570,857	14,279,440
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	7,494.27	7,494.27	7494.27	13,139,734	12,876,940
Total	13,600.78	15,542.28	13,667.33	27,710,592	27,156,380

	Annual VMT (miles)
Total VMT from Project Land Uses	**27,156,380**

By Vehicle Type

	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Project Land Uses (2024)	0.509869	0.051139	0.167106	0.174849	0.031609	0.007996	0.012006	0.015707	0.000636	0.000471	0.023554	0.001465	0.003592

Phase 1 Residential Land Uses

	Fraction of 1	Percent of Vehicle Trips	Annual VMT	Average Fuel Economy (miles/gallon)	Average Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	0.5099	51.0	13,846,196	33.45	1134.1	413,946
Light Trucks and Medium Vehicles (LDT1, LDT2, and MDV)	0.3931	39.3	10,675,010	24.24	1206.6	440,420
Light-Heavy to Heavy-Heavy Diesel Trucks	0.0673	6.7	1,828,113	9.62	520.9	190,121
Motorcycles	0.0236	2.4	639,641	37.85	46.3	16,900
Other	0.0062	0.6	167,392	7.15	64.2	23,416
Total	**—**	**100.0**	**27,156,380**	**—**	**—**	**1,084,804**

Project Operations Natural Gas Use
Source: CalEEMod Output

kBTU/yr = kilo-British Thermal Units/year

Project	Natural Gas Use (kBTU/yr)	
Fast Food Restaurant with Drive Thru	2,888,330	
Other Asphalt Surfaces	0	
Parking Lot	0	
Regional Shopping Center	830,869	
Project Total	**3,719,199**	**kBTU/yr**

Project Operations Electricity Use

Source: CalEEMod Output

kWh/yr = kilowatt hours per year

Project	Electricity Use (kWh/yr)	
Fast Food Restaurant with Drive Thru	388,713	
Other Asphalt Surfaces	0	
Parking Lot	128,371	
Regional Shopping Center	620,215	
Project Total	**1,137,299**	**kWh/yr**

California
Historical
Resources
Information
System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford Bowen Planning, Inc.
113 N. Church Street, Suite 302
Visalia, CA 93291

Record Search 20-216

Date: June 8, 2020

Re: City of Porterville Henderson Commercial Development

County: Tulare

Map(s): Porterville 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there have been no previous cultural resource studies conducted within the project area. There have been six cultural resource studies conducted within the one-half mile radius, TU-00212, 00376, 00447, 01097, 01664, and 01761.

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

There are no recorded resources within the project area or within the one-half mile radius, and it is not known if any exist there.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand this project consists of construction and operation of a new commercial development including approximately 92,060 square feet of retail and restaurant buildings on approximately 10.24 acres of vacant land. Because a cultural resources study has not been conducted on this property, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file in order to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Celeste M. Thomson, Coordinator **Date**: June 8, 2020

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Project No: 524-28

TRAFFIC STUDY

PROPOSED COMMERCIAL DEVELOPMENT
HENDERSON AVENUE & STATE ROUTE 65
CITY OF PORTERVILLE

Prepared for:

Crawford & Bowen Planning, Inc.

May 2023

Prepared by:

RUETTGERS & SCHULER
CIVIL ENGINEERS

1800 30th Street, Suite 260
Bakersfield, California 93301

Ian J. Parks, RCE 58155

REGISTERED PROFESSIONAL ENGINEER
IAN JEFFREY PARKS
No. C58155
Exp. 6-30-22
CIVIL
STATE OF CALIFORNIA

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INTRODUCTION

The purpose of this study is to evaluate the potential traffic impacts of a proposed commercial development located on the northwest corner of Henderson Avenue and State Route 65 in the City of Porterville, California. A vicinity map is presented in Figure 1 and a location map is presented in Figure 2.

The study methodology is consistent with the California Department of Transportation (Caltrans) "Guide for the Preparation of Traffic Impact Studies," dated December 2002, and County of Tulare "SB 743 Guidelines," dated June 8, 2020. The scope of the study includes seven intersections (all signalized) and was developed in coordination with staff from the City of Porterville.

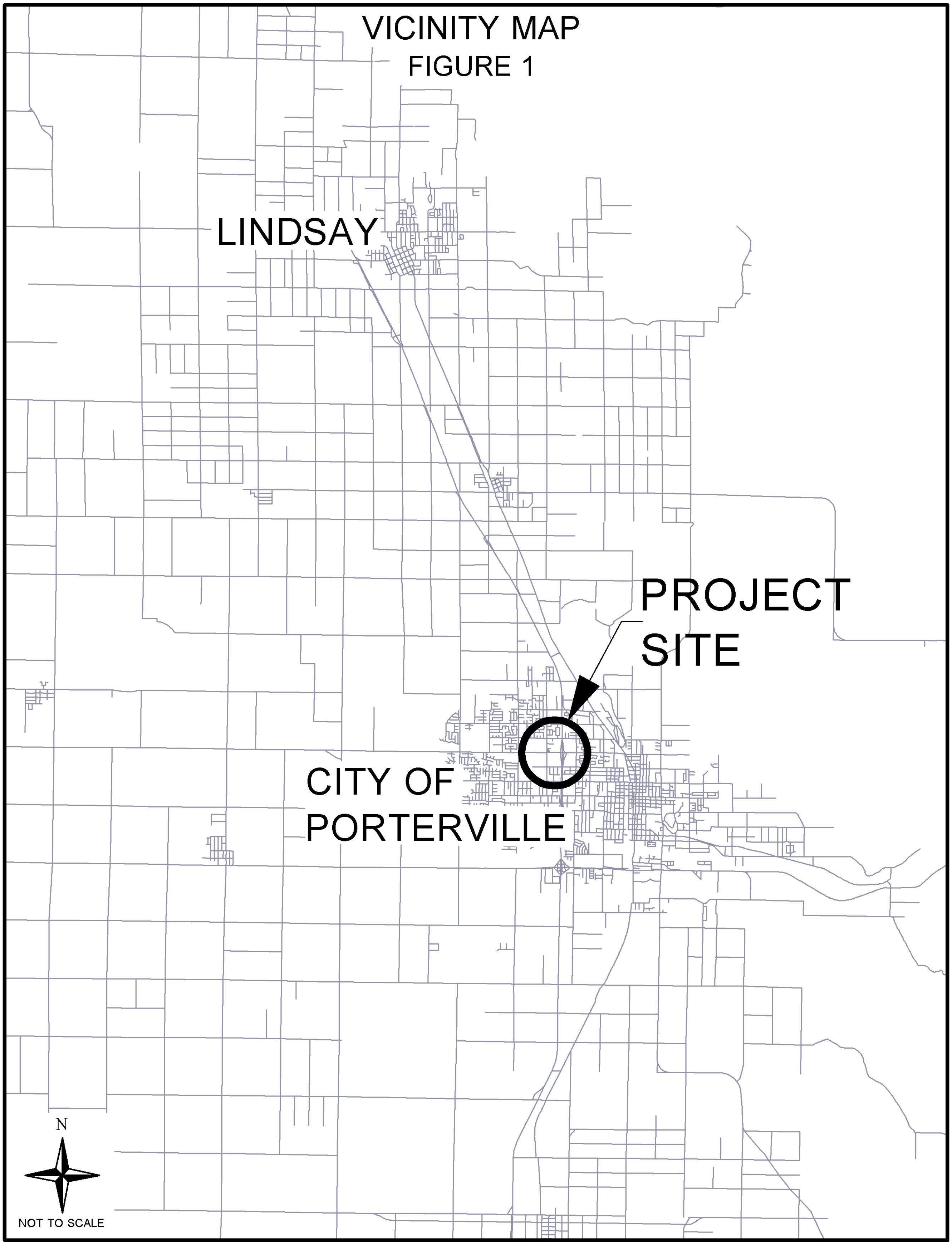
A. Project Land Use and Site Access

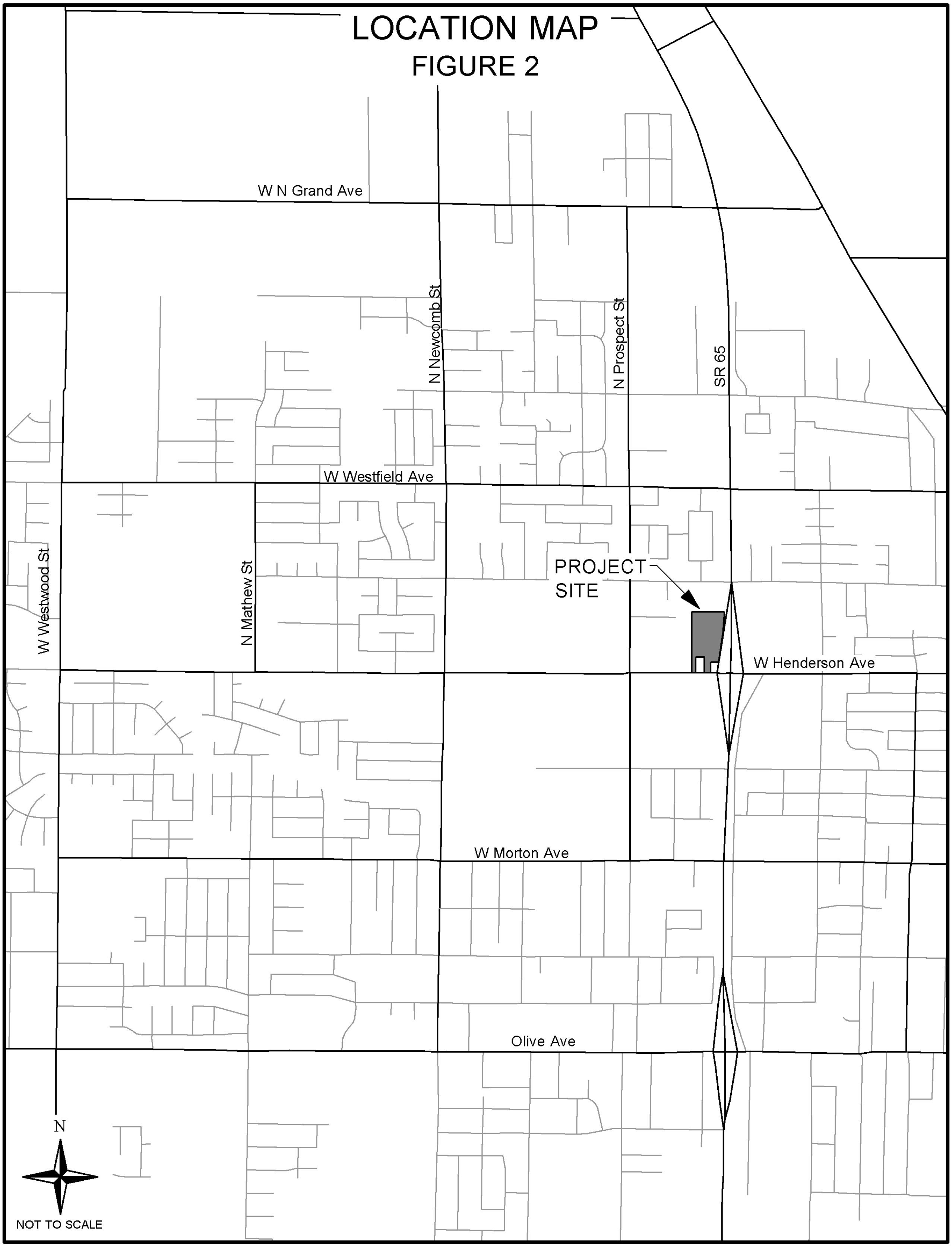
The project site is situated on approximately 10.54 acres of undeveloped vacant land. The property is zoned CR (Retail Centers) and has a General Plan Land Use designation of Retail Centers. The proposed development would include approximately 92.060 square feet of retail building space, including a grocery store, pharmacy and three drive-through fast-food restaurants. A site plan is provided in Figure 3.

Access to the project site would be provided by the two driveways that are shown on Figure 3. The easterly driveway would accommodate right-in and right-out turning movements. The westerly driveway would allow for right-in, right-out and eastbound left turns in to the site.

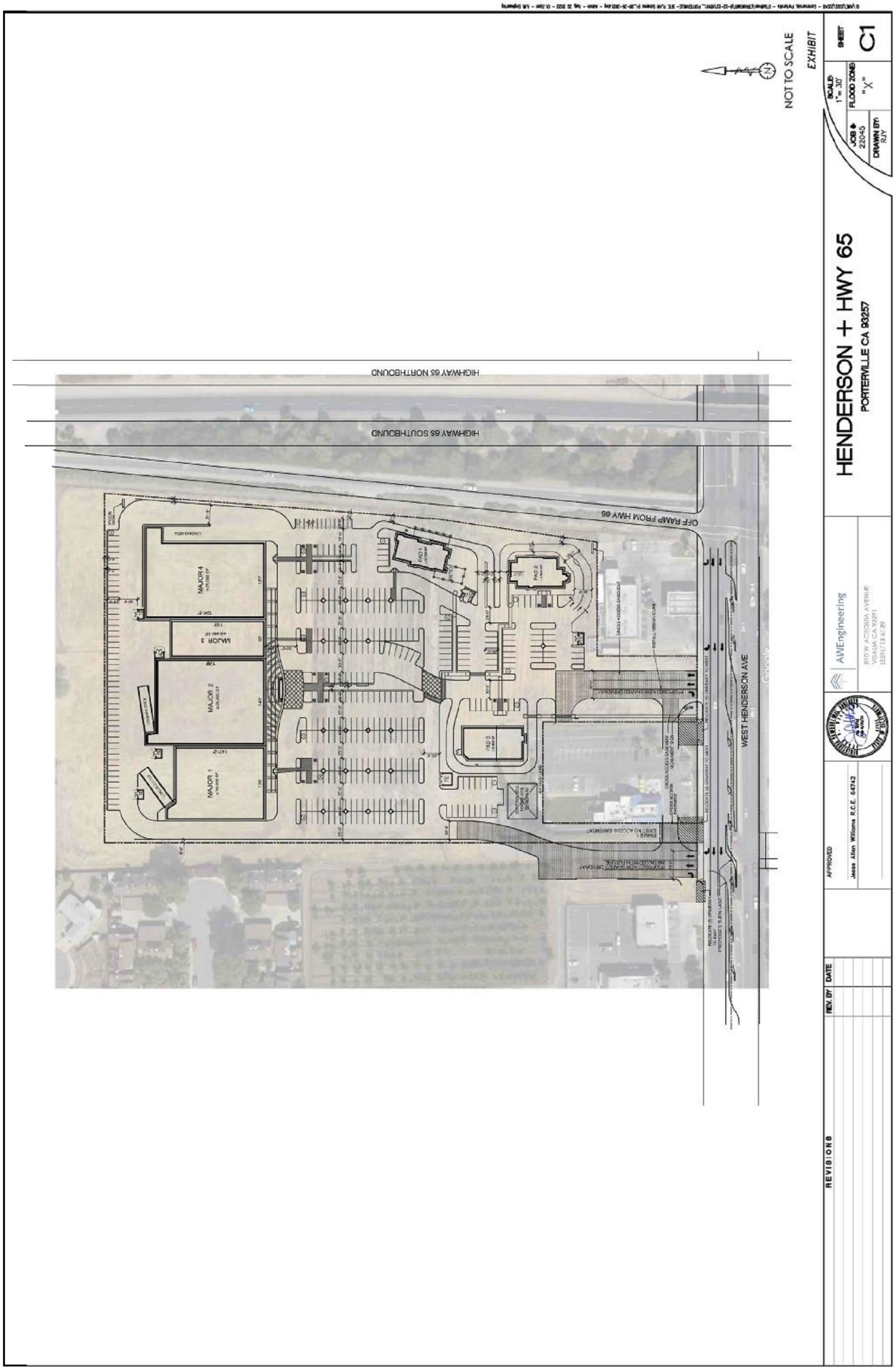
B. Existing Land Uses in Project Vicinity

Commercial land uses are located immediately to the south, east and west of the project site. Residential developments lie further to the south, east and west and directly to the north. Mananche High School is located approximately 0.5 miles to the west of the project, and park space lies approximately 0.20 and 0.60 miles to the northeast and southwest, respectively.


VICINITY MAP
FIGURE 1
LINDSAY
PROJECT SITE
CITY OF PORTERVILLE
N
NOT TO SCALE


LOCATION MAP
FIGURE 2
W N Grand Ave
N Newcomb St
N Prospect St
SR 65
W Westfield Ave
W Westwood St
N Mathew St
PROJECT SITE
W Henderson Ave
W Morton Ave
Olive Ave
N
NOT TO SCALE

SITE PLAN
FIGURE 3



C. Roadway Descriptions

Henderson Avenue is a major (four-lane) east-west arterial that provides access to State Route 65 and residential and commercial land uses.

Newcomb Street is a major (four-lane) north-south arterial located approximately 0.75 miles west of State Route 65. Within the study area, it provides access to residential land uses and Monache High School.

Porter Road is a north-south collector that runs parallel to and directly east of State Route 65 from Olive Avenue to Henderson Avenue. It provides access primarily to residential and commercial land uses within the study area.

Prospect Street is a north-south roadway located approximately 0.25 miles west of State Route 65. It is designated as a major (four-lane) arterial between Morton Avenue and Westfield Avenue and provides access to residential and commercial land uses within the study area.

State Route 65 is a north-south state highway that begins at State Route 99 north of Bakersfield and terminates at State Route 198 north of Exeter. It exists as a four-lane freeway through Porterville with an interchange connection at Henderson Avenue.

Westfield Street is a minor (two-lane) east-west arterial that provides access to residential land uses and Westfield Elementary School.

PROJECT TRIP GENERATION

The project trip generation and design hour volumes shown in Table 1 were estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. Trip rates, equations and directional splits for ITE Land Use Codes 820 and 934 were used to estimate project trips for weekday peak hour of adjacent street traffic based on the information on the site plan. The AM and PM peak hours of adjacent street traffic were determined to be between 7:30 AM and 8:30 AM, and between 4:30 PM and 5:30 PM.

Table 1
Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
934	Fast-Food Restaurant w/Drive-Thru	13.75 1000 sq ft GFA	467.48	6428	44.61	51% 313	49% 301	33.03	52% 236	48% 218
820	Shopping Center	78.31 1000 sq ft GLA	eq	7908	eq	62% 111	38% 69	eq	48% 227	52% 246
sub-total				14,336		424	370		463	464
Adjustments										
Capture		5%		717		21	19		23	23
Pass-by		15%		2,150		64	56		69	70
Total				11,469		339	295		371	371

A capture rate of five percent was applied to account for internal trips generated by the project. These trips neither enter or leave the project site, and therefore, have no impact on adjacent street traffic. A pass-by rate of 15 percent was applied to account for project trips that are made as intermediate stops between trip origin and primary destination. Pass-by trips are drawn from traffic passing the site, and therefore, do not add trips to the adjacent street system.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of project peak hour trips is shown in Table 2 and represents the movement of traffic accessing the project site by direction. The project trip distribution was developed based on site location and travel patterns anticipated for the proposed land uses.

Table 2
Project Trip Distribution

Direction	Percent
North	20
East	30
South	20
West	30

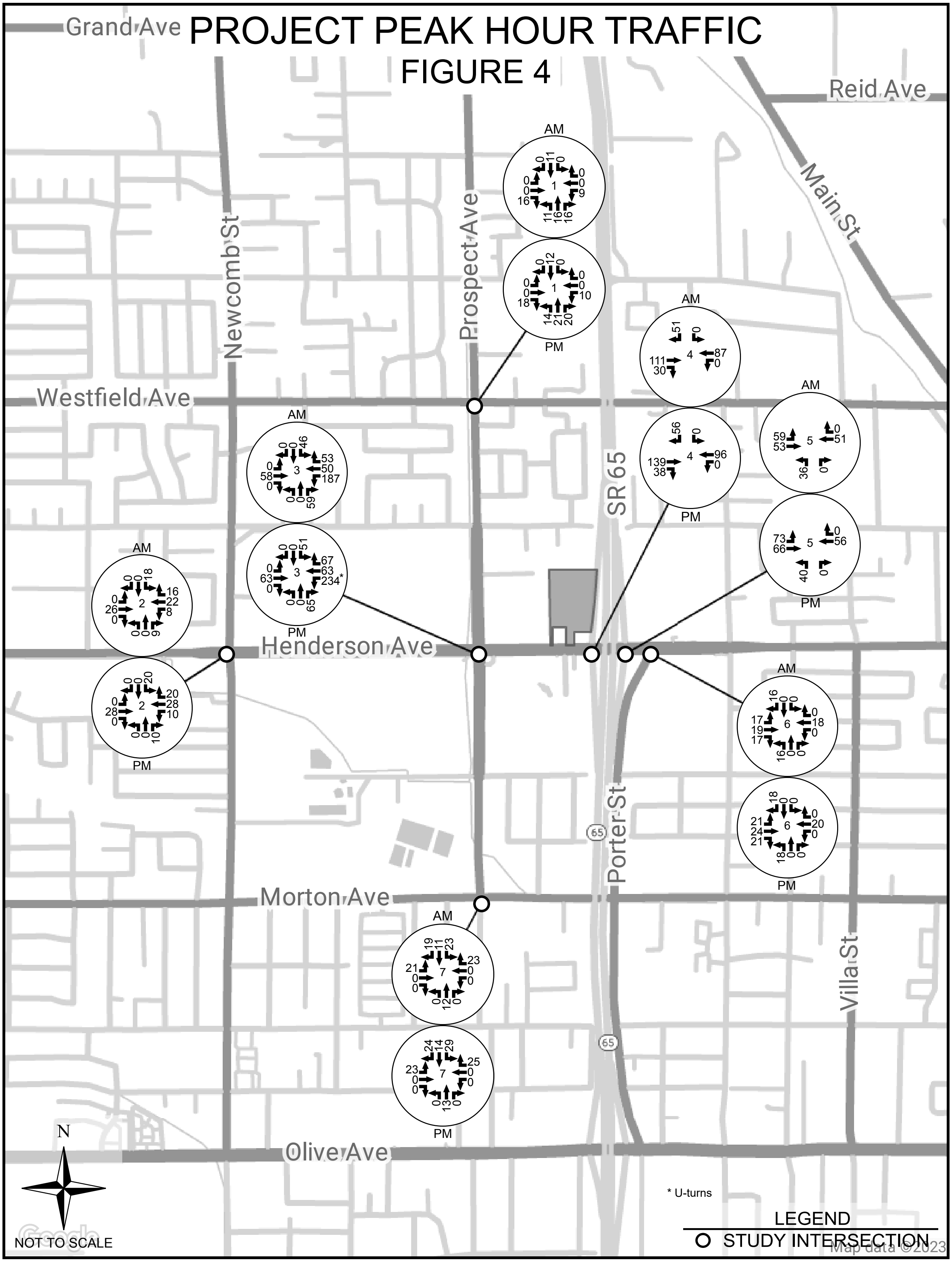
Project peak hour trips were assigned to the study intersections as shown in Figure 4. Project trip assignment was developed based on trip generation, trip distribution and likely travel routes for traffic accessing the project site.

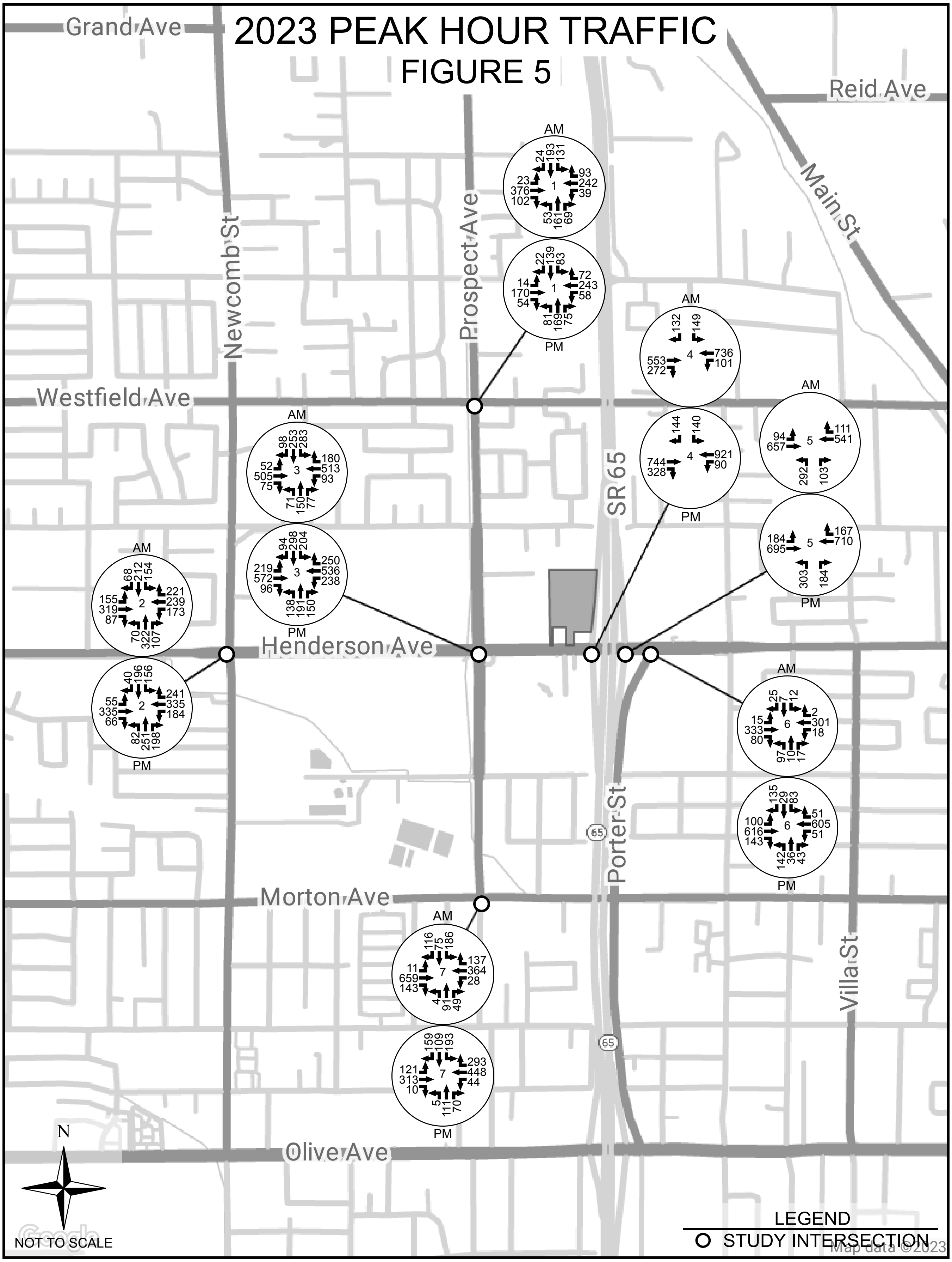
EXISTING AND FUTURE TRAFFIC

Existing peak hour turning movement counts were obtained in October 2022 and compared to pre-COVID turning movement volumes. It was determined that no adjustment factor was necessary due to traffic being generally similar to historical count data with applicable growth rates.

Average annual growth rates ranging between 0.4 and 4.13 percent were applied to the 2023 peak hour volumes to estimate peak hour volumes for the year 2043. These growth rates were developed based on a review of historical count data and output from TCAG's regional travel demand model. Cumulative volumes were estimated based on information provided by the City of Porterville regarding build year, land use, size and location for each pending development.

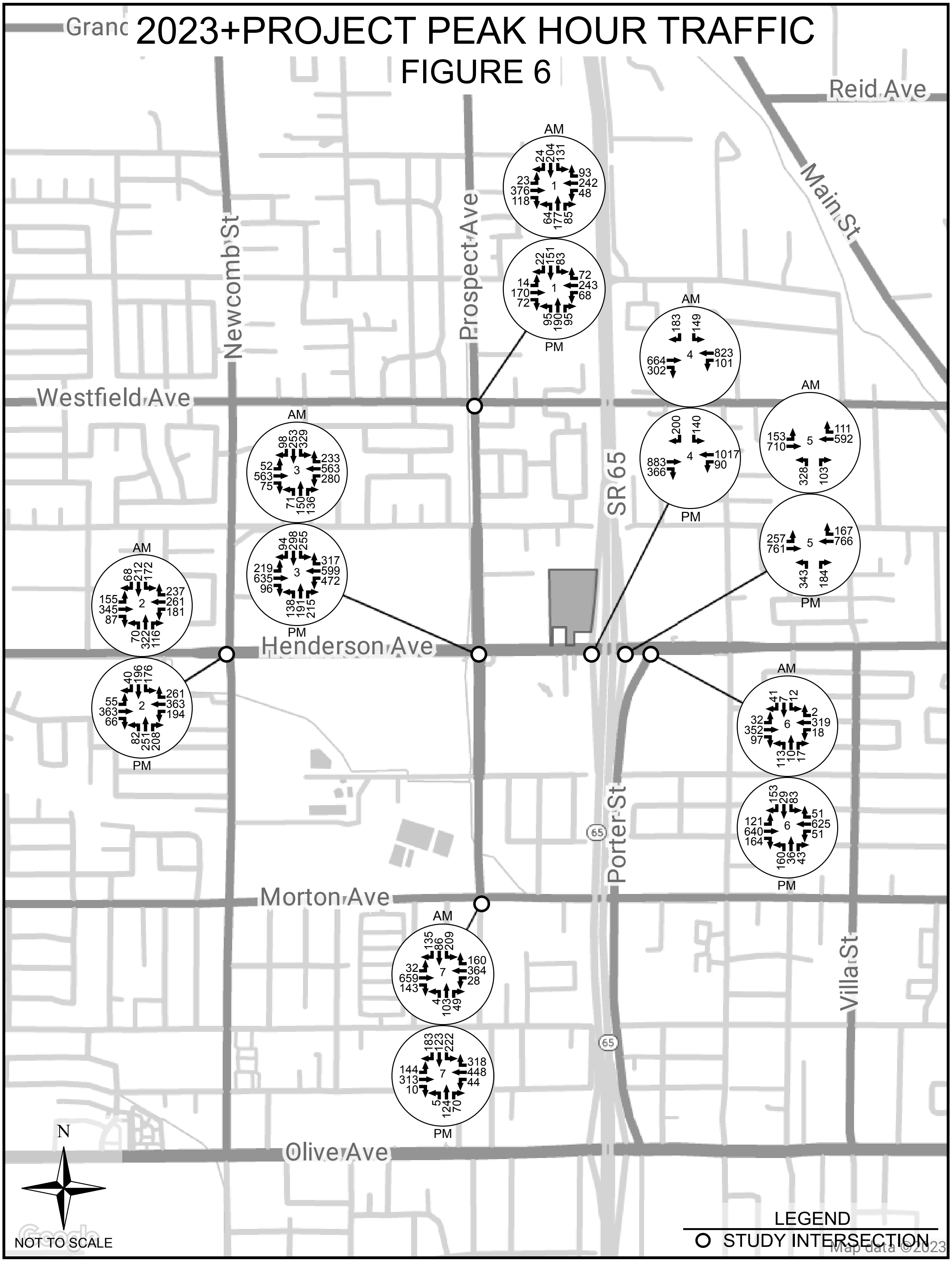
Existing peak hour volumes are shown in Figure 5, and existing plus project peak hour volumes are shown in Figure 6. Peak hour volumes for the year 2025, both without and with project traffic, are shown in Figures 7 and 8, respectively. The same for the year 2043 is shown in Figures 9 and 10, respectively.


PROJECT PEAK HOUR TRAFFIC
FIGURE 4
Grand Ave
Reid Ave
Main St
Newcomb St
Prospect Ave
SR 65
Westfield Ave
Henderson Ave
Porter St
Morton Ave
Villa St
Olive Ave
AM
PM
* U-turns
N
NOT TO SCALE
LEGEND
STUDY INTERSECTION
Map data ©2023

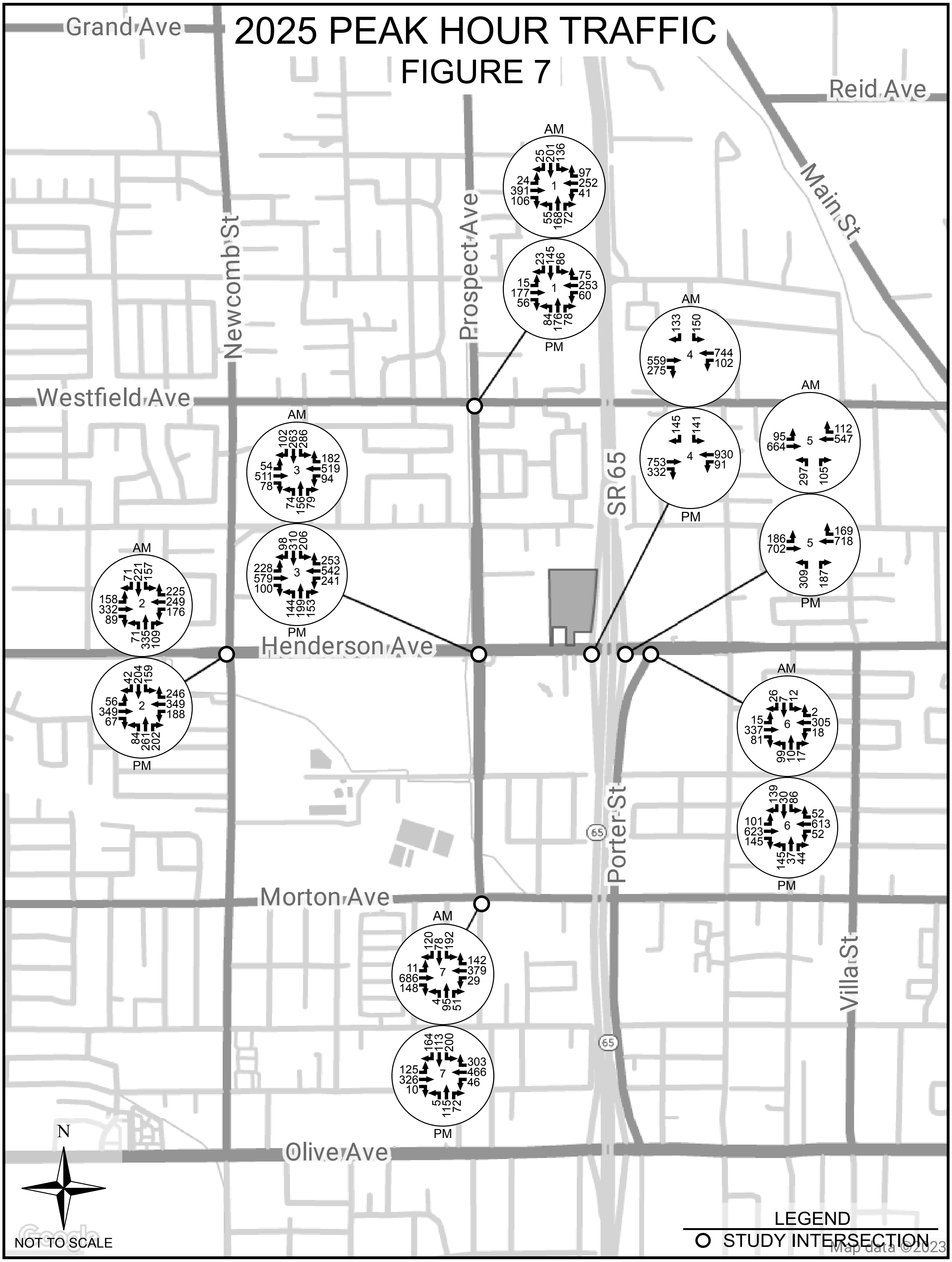


RUETTGERS & SCHULER CIVIL ENGINEERS

2023+PROJECT PEAK HOUR TRAFFIC
FIGURE 6

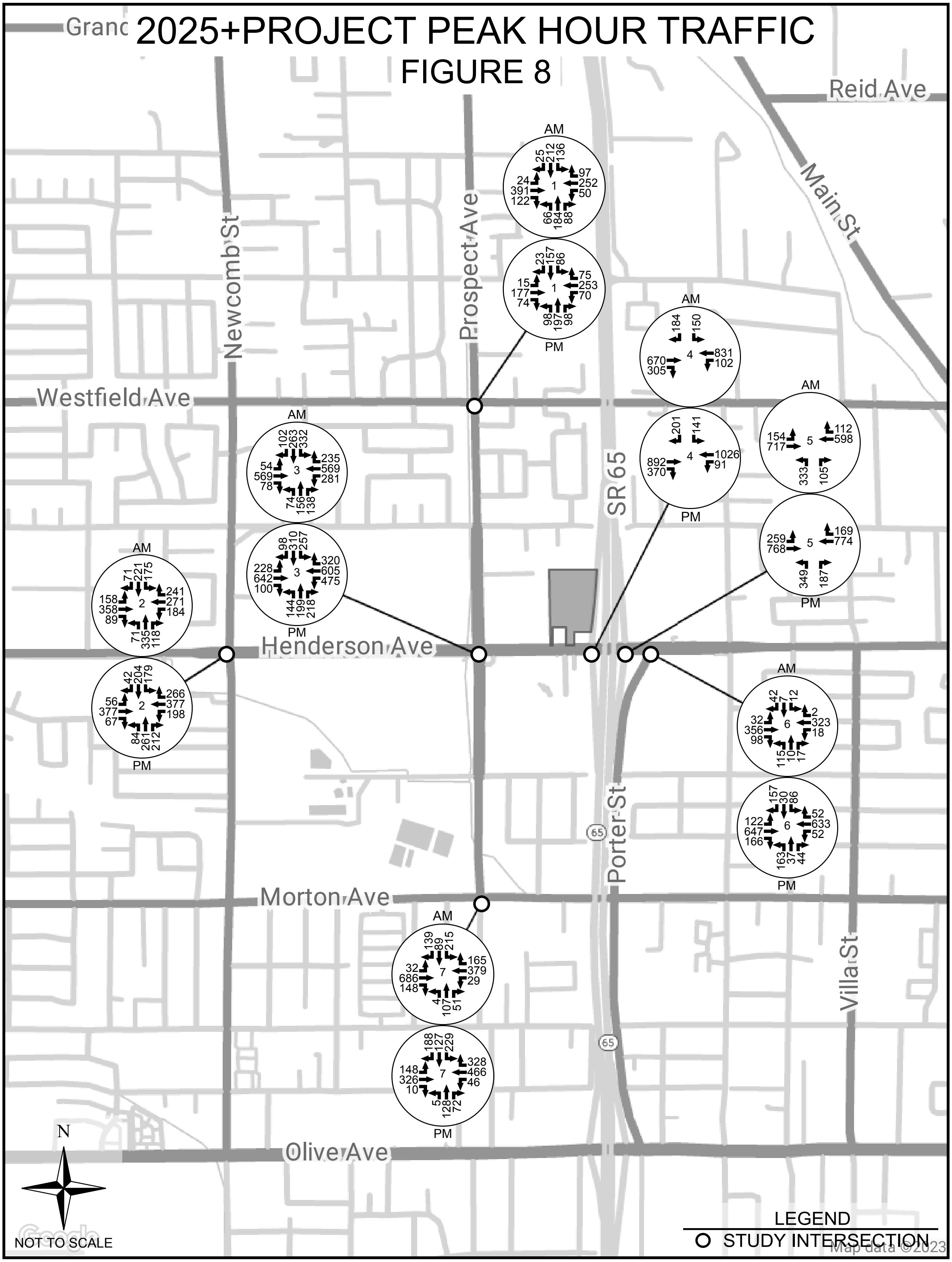


Ruettgers & Schuler Civil Engineers



RUETTGERS & SCHULER CIVIL ENGINEERS

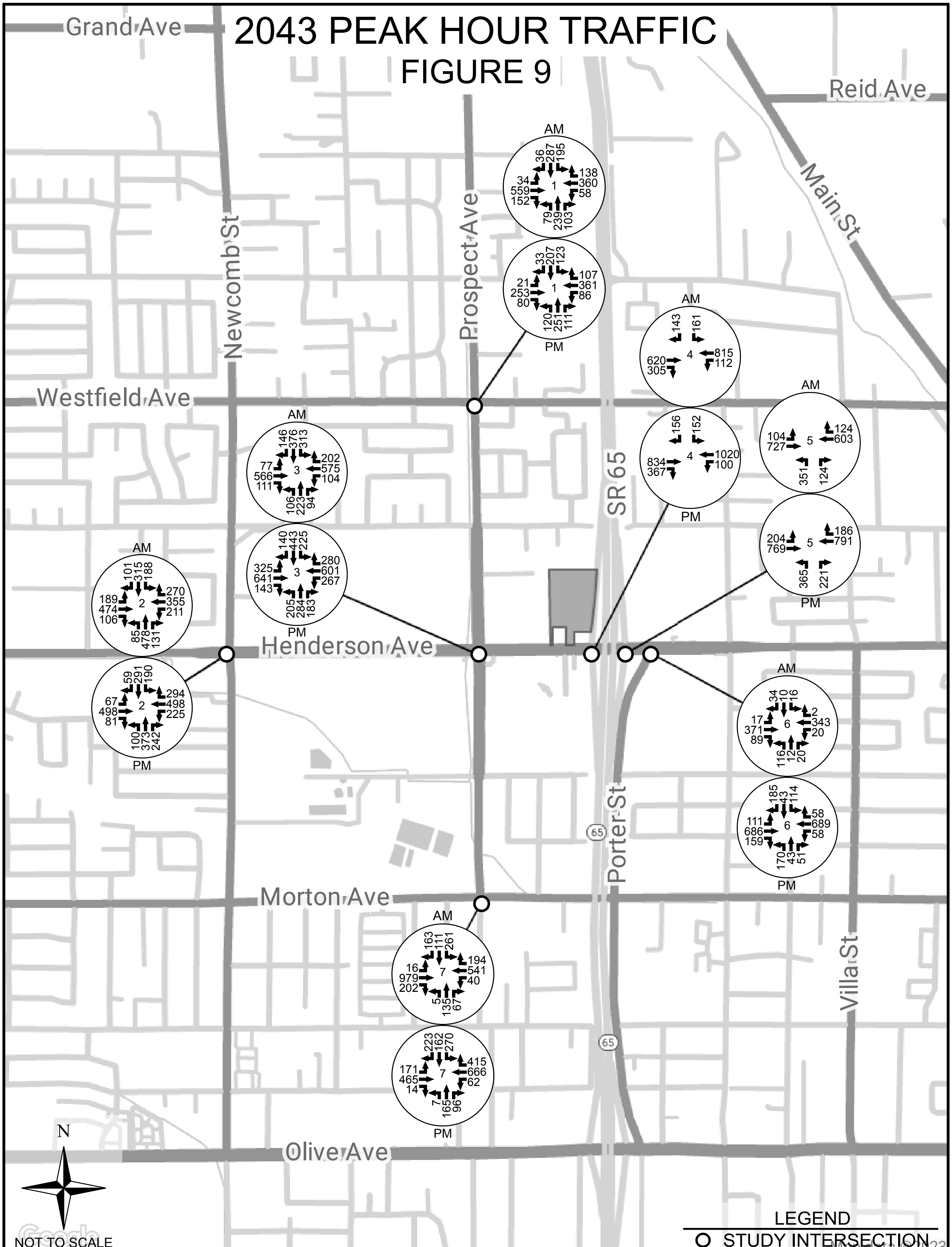
2025+PROJECT PEAK HOUR TRAFFIC
FIGURE 8



RUETTGERS & SCHULER CIVIL ENGINEERS

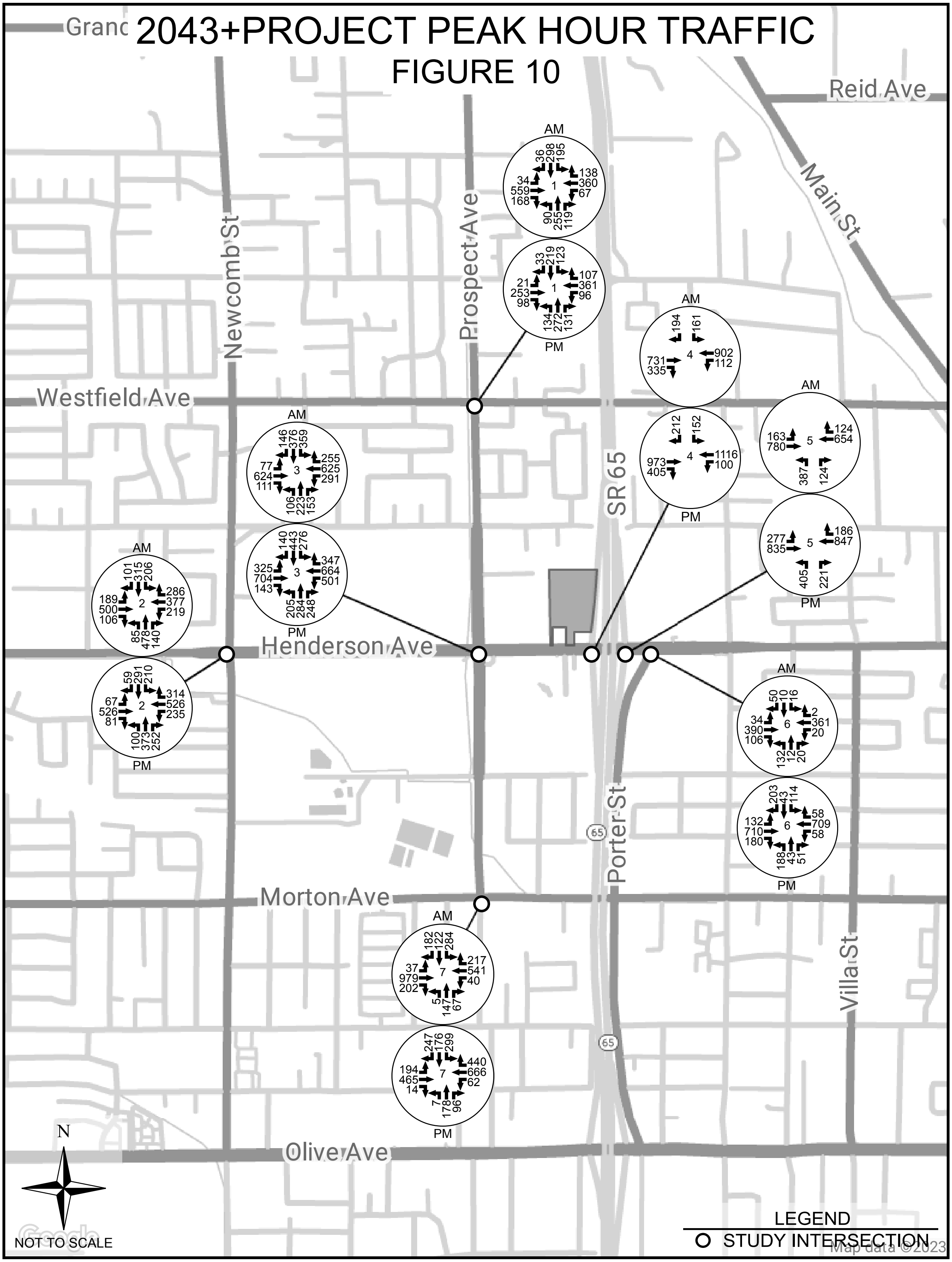
2043 PEAK HOUR TRAFFIC

FIGURE 9



Ruettgers & Schuler Civil Engineers

2043+PROJECT PEAK HOUR TRAFFIC
FIGURE 10



INTERSECTION ANALYSIS

A capacity analysis of the study intersections was conducted using Synchro 9 software from Trafficware. This software utilizes the capacity analysis methodology in the Transportation Research Board's Highway Capacity Manual 2010 (HCM 2010). The analysis was performed for each of the following traffic scenarios.

- Existing (2023)
- Existing (2023) + Project
- Build (2025)
- Build (2025) + Project
- Future (2043)
- Future (2043) + Project

Level of service (LOS) criteria for unsignalized and signalized intersections, as defined in HCM 2010, are presented in the tables below. The City of Porterville and Tulare County Regional Transportation Plan designate LOS D as the minimum acceptable intersection peak hour level of service.

LEVEL OF SERVICE CRITERIA
UNSIGNALIZED INTERSECTION

Level of Service	Average Control Delay (sec/veh)	Expected Delay to Minor Street Traffic
A	≤ 10	Little or no delay
B	> 10 and ≤ 15	Short delays
C	> 15 and ≤ 25	Average delays
D	> 25 and ≤ 35	Long delays
E	> 35 and ≤ 50	Very long delays
F	> 50	Extreme delays

LEVEL OF SERVICE CRITERIA
SIGNALIZED INTERSECTIONS

Level of Service	Average Control Delay (sec/veh)	Volume-to-Capacity Ratio
A	≤ 10	< 0.60
B	> 10 and ≤ 20	0.61 - 0.70
C	> 20 and ≤ 35	0.71 - 0.80
D	> 35 and ≤ 55	0.81 - 0.90
E	> 55 and ≤ 80	0.91 - 1.00
F	> 80	> 1.00

Peak hour level of service for the study intersections is presented in Tables 3a and 3b. Intersection delay in seconds per vehicle is shown within parentheses for intersections operating at or below LOS D.

Table 3a
Intersection Level of Service
Weekday PM Peak Hour

#	Intersection	Control Type	2023	2023+ Project	2025	2025+ Project	2043	2043+ Project	2043+ Project w/Mitigation[1]
1	N Prospect St & W Westfield Ave	Signal	C	C	C	C	C	C	-
2	N Newcomb St & W Henderson Ave	Signal	D (37.9)	D (40.3)	D (38.3)	D (41.2)	D (46.4)	D (50.0)	D (49.4)
3	N Prospect St & W Henderson Ave	Signal	D (48.1)	E (59.5)	D (49.6)	E (61.5)	E (74.7)	F (91.7)	E (77.7)
4	SR 65 SB Onramp & W Henderson Ave	Signal	B	B	B	B	B	B	-
5	SR 65 NB Offramp & W Henderson Ave	Signal	B	B	B	B	B	B	-
6	Porter Rd & W Henderson Ave	Signal	D (39.5)	D (39.2)	D (39.7)	D (39.4)	D (41.3)	D (41.6)	-
7	N Prospect St & Morton Ave	Signal	C	C	C	C	D (37.5)	D (45.8)	-

[1]See Table 6 for mitigation measures

Table 3b
Intersection Level of Service
Weekday AM Peak Hour

#	Intersection	Control Type	2023	2023+ Project	2025	2025+ Project	2043	2043+ Project	2043+ Project w/Mitigation[1]
1	N Prospect St & W Westfield Ave	Signal	C	C	C	C	D (37.4)	D (41.7)	-
2	N Newcomb St & W Henderson Ave	Signal	E (75.7)	E (75.7)	E (77.3)	E (77.5)	F (91.7)	F (93.2)	D (54.1)
3	N Prospect St & W Henderson Ave	Signal	D (41.0)	D (42.8)	D (41.6)	D (43.3)	D (54.4)	E (56.3)	E (58.0)
4	SR 65 SB Onramp & W Henderson Ave	Signal	B	B	B	B	B	B	-
5	SR 65 NB Offramp & W Henderson Ave	Signal	B	B	B	B	B	B	-
6	Porter Rd & W Henderson Ave	Signal	D (39.5)	D (39.7)	D (39.4)	D (39.6)	D (38.8)	D (39.0)	-
7	N Prospect St & Morton Ave	Signal	B	B	B	B	C	C	-

[1]See Table 6 for mitigation measures
[2]Mitigation necessary due to PM Peak Hour

ROADWAY ANALYSIS

A capacity analysis of the study roadways was conducted using Table 4 in the State of Florida Department of Transportation *Quality/Level of Service Handbook* dated June 2020 (see Appendix). The City of Porterville Circulation Element states that the peak hour level of service for roadways shall be no lower than LOS "D" for urban areas. The analysis was performed for the following AM and PM traffic scenarios:

- Existing (2023)
- Existing (2023) + Project
- Build (2025)
- Build (2025) + Project
- Future Cumulative (2043)
- Future Cumulative (2043) + Project

Table 5a
PM ROADWAY LEVEL OF SERVICE

Street	2023 Two-Way LOS		2023+Project Two-Way LOS		2025 Two-Way LOS		2025+Project Two-Way LOS		2043 Two-Way LOS		2043+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS
Prospect St: Westfield Ave - Henderson Ave	1256	C	1374	C	1294	C	1412	C	1697	C	1815	C
Prospect St: Henderson Ave - Morton Ave	1111	C	1410	C	1147	C	1446	C	1525	C	1824	C
Henderson Ave: Newcomb St - Prospect St	1655	C	1781	C	1691	C	1817	C	2055	C	2181	C
Henderson Ave: Prospect St - SR 65 SB Ramps	2137	C	2466	C	2160	C	2489	C	2377	C	2706	C
Henderson Ave: SR 65 SB Ramps - SR 65 NB Ramps	1895	C	2130	C	1915	C	2150	C	2129	C	2364	C

Table 5b
AM ROADWAY LEVEL OF SERVICE

Street	2023 Two-Way LOS		2023+Project Two-Way LOS		2025 Two-Way LOS		2025+Project Two-Way LOS		2043 Two-Way LOS		2043+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS
Prospect St: Westfield Ave - Henderson Ave	1016	C	1115	C	1043	C	1142	C	1337	C	1436	C
Prospect St: Henderson Ave - Morton Ave	719	C	965	C	744	C	990	C	1014	C	1260	C
Henderson Ave: Newcomb St - Prospect St	1314	C	1422	C	1338	C	1446	C	1581	C	1689	C
Henderson Ave: Prospect St - SR 65 SB Ramps	1693	C	1972	C	1711	C	1990	C	1883	C	2162	C
Henderson Ave: SR 65 SB Ramps - SR 65 NB Ramps	1584	C	1783	C	1603	C	1802	C	1785	C	1984	C

MITIGATION

Intersection improvements needed by the year 2043 to maintain or improve the operational level of service of the street system in the vicinity of the project are presented in Table 6. Shown also is the project's percent share of the cost for these improvements.

Table 6
Future Intersection Improvements and Local Mitigation

#	Intersection	Mitigation Required by 2025 (Opening Day)	Mitigation Required by 2043	Percent Share
2	N Newcomb St & W Henderson Ave	-	Add one westbound through lane, modify northbound through/right lane to northbound right turn lane	12.96%
3	N Prospect St & W Henderson Ave	Modify eastbound right turn lane to eastbound through/right lane, Modify westbound right turn lane to westbound through/right lane	-	41.96%

Project percent share is calculated using the following formula:

$$\% \text{ Share} = \frac{\text{Project Traffic}}{\text{(Future+Project Traffic) - Existing Traffic}} \times 100\%$$

VMT ANALYSIS

An evaluation of vehicle miles traveled (VMT) for project traffic was conducted in accordance with California Environmental Quality Act (CEQA) requirements. The City of Porterville has adopted the "County of Tulare SB 743 Guidelines", dated June 8, 2020, which contains recommendations regarding VMT assessment, significance thresholds and mitigation measures.

The County of Tulare guidelines identify project types that are presumed to have a less than significant impact on VMT, and therefore, a less than significant impact on transportation. These projects are identified by meeting the "screening thresholds" criteria listed in the guidelines. Projects meeting one or more of these screening criteria would not be required to undergo a detailed VMT analysis as they are presumed to have a less than significant traffic impact.

One screening threshold pertains to local-serving retail uses. The guidelines state that *"local-serving retail uses are presumed to have a less than significant impact on VMT since they tend to attract vehicle trips from adjacent areas that would have otherwise been made to more distant retail locations."* There is no defined building size in the guidelines which preclude screening for retail projects. The project meets the definition of locally serving for the following reasons:

- The project offers additional options for shopping locally in Porterville.
- The project is considered an infill project, with residential, retail, school, and other land uses nearby which would allow the opportunity for combining trips, and also reduces the radius of travel distance to the site. Being an infill project, it will attract shoppers which may have travelled further in order to shop at similar establishments.
- Notwithstanding the fact that the guidelines do not state a size restriction for locally serving retail, none of the shops shown on the site plan are over 25,000 square feet in size. Generally, stores that are 25,000 square feet or less would not be a regional draw for customers and would serve a more local customer base.

Therefore, since the project meets the definition of local-serving retail, it is presumed to have a less than significant transportation impact under CEQA.

REFERENCES

1. California Manual on Uniform Traffic Control Devices for Streets and Highways, 2014 Edition, California Department of Transportation (Caltrans)
2. City of Porterville 2030 General Plan
3. County of Tulare SB 743 Guidelines, June 8, 2020
4. Highway Capacity Manual 2010, Transportation Research Board
5. Interactive Traffic Counts Map, Tulare County Association of Governments (TCAG)
6. Trip Generation Manual, 11th Edition, Institute of Transportation Engineers (ITE)

APPENDIX

Intersection 1
N Prospect St & W Westfield Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	170	54	58	243	72	81	169	75	83	139	22
Future Volume (veh/h)	14	170	54	58	243	72	81	169	75	83	139	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	15	185	59	63	264	78	88	184	82	90	151	24
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	597	805	257	682	819	242	122	235	105	124	305	48
Arrive On Green	0.60	0.60	0.60	0.60	0.60	0.60	0.07	0.19	0.19	0.08	0.20	0.19
Sat Flow, veh/h	1033	1349	430	1130	1373	406	1634	1206	538	1634	1560	248
Grp Volume(v), veh/h	15	0	244	63	0	342	88	0	266	90	0	175
Grp Sat Flow(s),veh/h/ln	1033	0	1779	1130	0	1779	1634	0	1744	1634	0	1808
Q Serve(g_s), s	0.7	0.0	5.8	2.5	0.0	8.6	4.7	0.0	13.1	4.8	0.0	7.8
Cycle Q Clear(g_c), s	9.3	0.0	5.8	8.3	0.0	8.6	4.7	0.0	13.1	4.8	0.0	7.8
Prop In Lane	1.00		0.24	1.00		0.23	1.00		0.31	1.00		0.14
Lane Grp Cap(c), veh/h	597	0	1061	682	0	1061	122	0	339	124	0	353
V/C Ratio(X)	0.03	0.00	0.23	0.09	0.00	0.32	0.72	0.00	0.78	0.73	0.00	0.50
Avail Cap(c_a), veh/h	597	0	1061	682	0	1061	301	0	562	218	0	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.4	0.0	8.5	10.4	0.0	9.1	40.7	0.0	34.5	40.7	0.0	32.3
Incr Delay (d2), s/veh	0.1	0.0	0.5	0.3	0.0	0.8	7.8	0.0	4.0	7.9	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.0	0.8	0.0	4.4	2.4	0.0	6.7	2.4	0.0	4.0
LnGrp Delay(d),s/veh	11.5	0.0	9.0	10.7	0.0	9.9	48.5	0.0	38.6	48.6	0.0	33.4
LnGrp LOS	B		A	B		A	D		D	D		C
Approach Vol, veh/h		259			405			354			265	
Approach Delay, s/veh		9.1			10.0			41.0			38.6	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	21.5		57.7	10.7	21.6		57.7
Change Period (Y+Rc), s	4.6	4.6		4.0	4.6	4.6		4.0
Max Green Setting (Gmax), s	11.4	28.4		37.0	16.0	23.8		37.0
Max Q Clear Time (g_c+I1), s	6.8	15.1		11.3	6.7	9.8		10.6
Green Ext Time (p_c), s	0.1	1.5		3.1	0.1	1.5		3.1

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↱		↰	↑↱		↰	↑↱		↰	↑↱	
Traffic Volume (veh/h)	14	170	72	68	243	72	95	190	95	83	151	22
Future Volume (veh/h)	14	170	72	68	243	72	95	190	95	83	151	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	15	185	78	74	264	78	103	207	103	90	164	24
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	568	710	300	634	787	233	140	252	125	124	328	48
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.09	0.22	0.21	0.08	0.21	0.20
Sat Flow, veh/h	1033	1239	522	1111	1373	406	1634	1159	577	1634	1581	231
Grp Volume(v), veh/h	15	0	263	74	0	342	103	0	310	90	0	188
Grp Sat Flow(s),veh/h/ln	1033	0	1761	1111	0	1779	1634	0	1736	1634	0	1812
Q Serve(g_s), s	0.7	0.0	6.7	3.2	0.0	9.1	5.5	0.0	15.3	4.8	0.0	8.3
Cycle Q Clear(g_c), s	9.8	0.0	6.7	10.0	0.0	9.1	5.5	0.0	15.3	4.8	0.0	8.3
Prop In Lane	1.00		0.30	1.00		0.23	1.00		0.33	1.00		0.13
Lane Grp Cap(c), veh/h	568	0	1010	634	0	1020	140	0	378	124	0	376
V/C Ratio(X)	0.03	0.00	0.26	0.12	0.00	0.34	0.73	0.00	0.82	0.73	0.00	0.50
Avail Cap(c_a), veh/h	568	0	1010	634	0	1020	301	0	559	218	0	491
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.7	0.0	9.6	12.1	0.0	10.1	40.1	0.0	33.6	40.7	0.0	31.6
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.4	0.0	0.9	7.2	0.0	6.1	7.9	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.4	1.1	0.0	4.7	2.8	0.0	8.0	2.4	0.0	4.2
LnGrp Delay(d),s/veh	12.8	0.0	10.2	12.5	0.0	11.0	47.4	0.0	39.7	48.6	0.0	32.6
LnGrp LOS	B		B	B		B	D		D	D		C
Approach Vol, veh/h		278			416			413			278	
Approach Delay, s/veh		10.4			11.3			41.7			37.8	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	23.6		55.6	11.7	22.7		55.6
Change Period (Y+Rc), s	4.6	4.6		4.0	4.6	4.6		4.0
Max Green Setting (Gmax), s	11.4	28.4		37.0	16.0	23.8		37.0
Max Q Clear Time (g_c+I1), s	6.8	17.3		11.8	7.5	10.3		12.0
Green Ext Time (p_c), s	0.1	1.6		3.3	0.2	1.7		3.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	177	56	60	253	75	84	176	78	86	145	23
Future Volume (veh/h)	15	177	56	60	253	75	84	176	78	86	145	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	16	192	61	65	275	82	91	191	85	93	158	25
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	575	795	253	664	807	241	126	241	107	127	313	50
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.08	0.20	0.19	0.08	0.20	0.19
Sat Flow, veh/h	1019	1350	429	1121	1370	408	1634	1207	537	1634	1561	247
Grp Volume(v), veh/h	16	0	253	65	0	357	91	0	276	93	0	183
Grp Sat Flow(s),veh/h/ln	1019	0	1779	1121	0	1778	1634	0	1744	1634	0	1808
Q Serve(g_s), s	0.7	0.0	6.1	2.7	0.0	9.3	4.9	0.0	13.5	5.0	0.0	8.1
Cycle Q Clear(g_c), s	10.0	0.0	6.1	8.8	0.0	9.3	4.9	0.0	13.5	5.0	0.0	8.1
Prop In Lane	1.00		0.24	1.00		0.23	1.00		0.31	1.00		0.14
Lane Grp Cap(c), veh/h	575	0	1048	664	0	1048	126	0	348	127	0	363
V/C Ratio(X)	0.03	0.00	0.24	0.10	0.00	0.34	0.72	0.00	0.79	0.73	0.00	0.50
Avail Cap(c_a), veh/h	575	0	1048	664	0	1048	301	0	562	218	0	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.1	0.0	8.9	11.0	0.0	9.5	40.6	0.0	34.3	40.6	0.0	32.0
Incr Delay (d2), s/veh	0.1	0.0	0.5	0.3	0.0	0.9	7.6	0.0	4.1	7.8	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.1	0.9	0.0	4.8	2.5	0.0	6.9	2.5	0.0	4.2
LnGrp Delay(d),s/veh	12.2	0.0	9.4	11.3	0.0	10.4	48.2	0.0	38.4	48.4	0.0	33.1
LnGrp LOS	B		A	B		B	D		D	D		C
Approach Vol, veh/h		269			422			367			276	
Approach Delay, s/veh		9.6			10.5			40.8			38.3	
Approach LOS		A			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	22.0		57.0	10.9	22.1		57.0
Change Period (Y+Rc), s	4.6	4.6		4.0	4.6	4.6		4.0
Max Green Setting (Gmax), s	11.4	28.4		37.0	16.0	23.8		37.0
Max Q Clear Time (g_c+I1), s	7.0	15.5		12.0	6.9	10.1		11.3
Green Ext Time (p_c), s	0.1	1.5		3.2	0.2	1.6		3.3

Intersection Summary	
HCM 2010 Ctrl Delay	24.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	177	74	70	253	75	98	197	98	86	157	23
Future Volume (veh/h)	15	177	74	70	253	75	98	197	98	86	157	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	16	192	80	76	275	82	107	214	107	93	171	25
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	545	703	293	616	775	231	145	258	129	127	336	49
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.09	0.22	0.22	0.08	0.21	0.21
Sat Flow, veh/h	1019	1244	518	1102	1370	408	1634	1157	579	1634	1581	231
Grp Volume(v), veh/h	16	0	272	76	0	357	107	0	321	93	0	196
Grp Sat Flow(s),veh/h/ln	1019	0	1762	1102	0	1778	1634	0	1736	1634	0	1812
Q Serve(g_s), s	0.8	0.0	7.1	3.4	0.0	9.8	5.7	0.0	15.9	5.0	0.0	8.6
Cycle Q Clear(g_c), s	10.6	0.0	7.1	10.6	0.0	9.8	5.7	0.0	15.9	5.0	0.0	8.6
Prop In Lane	1.00		0.29	1.00		0.23	1.00		0.33	1.00		0.13
Lane Grp Cap(c), veh/h	545	0	997	616	0	1006	145	0	388	127	0	385
V/C Ratio(X)	0.03	0.00	0.27	0.12	0.00	0.35	0.74	0.00	0.83	0.73	0.00	0.51
Avail Cap(c_a), veh/h	545	0	997	616	0	1006	301	0	559	218	0	491
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.5	0.0	10.0	12.8	0.0	10.6	40.0	0.0	33.4	40.6	0.0	31.3
Incr Delay (d2), s/veh	0.1	0.0	0.7	0.4	0.0	1.0	7.1	0.0	6.8	7.8	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.7	1.1	0.0	5.0	2.9	0.0	8.3	2.5	0.0	4.4
LnGrp Delay(d),s/veh	13.6	0.0	10.7	13.2	0.0	11.6	47.1	0.0	40.2	48.4	0.0	32.4
LnGrp LOS	B		B	B		B	D		D	D		C
Approach Vol, veh/h		288			433			428			289	
Approach Delay, s/veh		10.9			11.9			42.0			37.5	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	24.1		54.9	12.0	23.1		54.9
Change Period (Y+Rc), s	4.6	4.6		4.0	4.6	4.6		4.0
Max Green Setting (Gmax), s	11.4	28.4		37.0	16.0	23.8		37.0
Max Q Clear Time (g_c+I1), s	7.0	17.9		12.6	7.7	10.6		12.6
Green Ext Time (p_c), s	0.1	1.6		3.4	0.2	1.8		3.4

Intersection Summary	
HCM 2010 Ctrl Delay	25.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	253	80	86	361	107	120	251	111	123	207	33
Future Volume (veh/h)	21	253	80	86	361	107	120	251	111	123	207	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	23	275	87	93	392	116	130	273	121	134	225	36
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	673	213	455	683	202	171	318	141	173	412	66
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.10	0.26	0.26	0.11	0.26	0.26
Sat Flow, veh/h	888	1352	428	1015	1372	406	1634	1210	536	1634	1559	250
Grp Volume(v), veh/h	23	0	362	93	0	508	130	0	394	134	0	261
Grp Sat Flow(s),veh/h/ln	888	0	1779	1015	0	1778	1634	0	1747	1634	0	1809
Q Serve(g_s), s	1.7	0.0	11.5	5.7	0.0	18.1	7.0	0.0	19.3	7.2	0.0	11.2
Cycle Q Clear(g_c), s	19.7	0.0	11.5	17.3	0.0	18.1	7.0	0.0	19.3	7.2	0.0	11.2
Prop In Lane	1.00		0.24	1.00		0.23	1.00		0.31	1.00		0.14
Lane Grp Cap(c), veh/h	344	0	886	455	0	886	171	0	459	173	0	477
V/C Ratio(X)	0.07	0.00	0.41	0.20	0.00	0.57	0.76	0.00	0.86	0.77	0.00	0.55
Avail Cap(c_a), veh/h	344	0	886	455	0	886	301	0	563	218	0	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.8	0.0	14.2	19.7	0.0	15.9	39.2	0.0	31.7	39.2	0.0	28.5
Incr Delay (d2), s/veh	0.4	0.0	1.4	1.0	0.0	2.7	6.8	0.0	10.8	12.5	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	6.0	1.7	0.0	9.4	3.5	0.0	10.7	3.8	0.0	5.7
LnGrp Delay(d),s/veh	23.2	0.0	15.6	20.7	0.0	18.6	46.0	0.0	42.5	51.7	0.0	29.7
LnGrp LOS	C		B	C		B	D		D	D		C
Approach Vol, veh/h		385			601			524			395	
Approach Delay, s/veh		16.1			18.9			43.4			37.2	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.5	27.6		48.8	13.4	27.8		48.8
Change Period (Y+Rc), s	4.6	4.6		4.0	4.6	4.6		4.0
Max Green Setting (Gmax), s	11.4	28.4		37.0	16.0	23.8		37.0
Max Q Clear Time (g_c+I1), s	9.2	21.3		21.7	9.0	13.2		20.1
Green Ext Time (p_c), s	0.1	1.7		4.4	0.2	2.1		4.6

Intersection Summary	
HCM 2010 Ctrl Delay	28.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	253	98	96	361	107	134	272	131	123	219	33
Future Volume (veh/h)	21	253	98	96	361	107	134	272	131	123	219	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	23	275	107	104	392	116	146	296	142	134	238	36
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	318	607	236	412	655	194	188	334	160	173	432	65
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.12	0.28	0.28	0.11	0.27	0.27
Sat Flow, veh/h	888	1271	495	997	1372	406	1634	1177	565	1634	1574	238
Grp Volume(v), veh/h	23	0	382	104	0	508	146	0	438	134	0	274
Grp Sat Flow(s),veh/h/ln	888	0	1766	997	0	1778	1634	0	1742	1634	0	1812
Q Serve(g_s), s	1.8	0.0	13.0	7.0	0.0	18.8	7.8	0.0	21.7	7.2	0.0	11.6
Cycle Q Clear(g_c), s	20.6	0.0	13.0	20.0	0.0	18.8	7.8	0.0	21.7	7.2	0.0	11.6
Prop In Lane	1.00		0.28	1.00		0.23	1.00		0.32	1.00		0.13
Lane Grp Cap(c), veh/h	318	0	843	412	0	848	188	0	494	173	0	497
V/C Ratio(X)	0.07	0.00	0.45	0.25	0.00	0.60	0.77	0.00	0.89	0.77	0.00	0.55
Avail Cap(c_a), veh/h	318	0	843	412	0	848	301	0	561	218	0	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.8	0.0	15.7	22.4	0.0	17.2	38.7	0.0	31.0	39.2	0.0	28.0
Incr Delay (d2), s/veh	0.4	0.0	1.8	1.5	0.0	3.1	6.7	0.0	14.6	12.5	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	6.7	2.1	0.0	9.9	3.9	0.0	12.3	3.8	0.0	6.0
LnGrp Delay(d),s/veh	25.2	0.0	17.5	23.8	0.0	20.3	45.3	0.0	45.5	51.7	0.0	29.3
LnGrp LOS	C		B	C		C	D		D	D		C
Approach Vol, veh/h		405			612			584			408	
Approach Delay, s/veh		17.9			20.9			45.5			36.6	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.5	29.5		46.9	14.4	28.7		46.9
Change Period (Y+Rc), s	4.6	4.6		4.0	4.6	4.6		4.0
Max Green Setting (Gmax), s	11.4	28.4		37.0	16.0	23.8		37.0
Max Q Clear Time (g_c+I1), s	9.2	23.7		22.6	9.8	13.6		22.0
Green Ext Time (p_c), s	0.1	1.2		4.5	0.2	2.3		4.5

Intersection Summary	
HCM 2010 Ctrl Delay	30.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	376	102	39	242	93	53	161	69	131	193	24
Future Volume (veh/h)	23	376	102	39	242	93	53	161	69	131	193	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	25	409	111	42	263	101	58	175	75	142	210	26
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	540	798	217	422	722	277	84	230	99	182	402	50
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.05	0.19	0.18	0.11	0.25	0.24
Sat Flow, veh/h	1013	1407	382	878	1273	489	1634	1222	524	1634	1619	200
Grp Volume(v), veh/h	25	0	520	42	0	364	58	0	250	142	0	236
Grp Sat Flow(s),veh/h/ln	1013	0	1788	878	0	1761	1634	0	1746	1634	0	1819
Q Serve(g_s), s	1.2	0.0	16.0	2.8	0.0	10.1	3.1	0.0	12.2	7.6	0.0	10.1
Cycle Q Clear(g_c), s	11.4	0.0	16.0	18.7	0.0	10.1	3.1	0.0	12.2	7.6	0.0	10.1
Prop In Lane	1.00		0.21	1.00		0.28	1.00		0.30	1.00		0.11
Lane Grp Cap(c), veh/h	540	0	1014	422	0	999	84	0	329	182	0	452
V/C Ratio(X)	0.05	0.00	0.51	0.10	0.00	0.36	0.69	0.00	0.76	0.78	0.00	0.52
Avail Cap(c_a), veh/h	540	0	1014	422	0	999	301	0	563	218	0	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	11.9	17.6	0.0	10.6	42.0	0.0	34.7	38.9	0.0	29.3
Incr Delay (d2), s/veh	0.2	0.0	1.9	0.5	0.0	1.0	9.8	0.0	3.6	14.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	8.3	0.7	0.0	5.1	1.6	0.0	6.2	4.1	0.0	5.2
LnGrp Delay(d),s/veh	13.9	0.0	13.7	18.1	0.0	11.6	51.8	0.0	38.3	53.0	0.0	30.2
LnGrp LOS	B		B	B		B	D		D	D		C
Approach Vol, veh/h		545			406			308			378	
Approach Delay, s/veh		13.7			12.3			40.9			38.8	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	20.9		55.1	8.6	26.3		55.1
Change Period (Y+Rc), s	4.6	4.6		4.0	4.6	4.6		4.0
Max Green Setting (Gmax), s	11.4	28.4		37.0	16.0	23.8		37.0
Max Q Clear Time (g_c+I1), s	9.6	14.2		18.0	5.1	12.1		20.7
Green Ext Time (p_c), s	0.1	1.7		4.5	0.1	1.5		4.3

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	376	118	48	242	93	64	177	85	131	204	24
Future Volume (veh/h)	23	376	118	48	242	93	64	177	85	131	204	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	25	409	128	52	263	101	70	192	92	142	222	26
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	517	745	233	386	699	268	99	242	116	182	418	49
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.06	0.21	0.20	0.11	0.26	0.25
Sat Flow, veh/h	1013	1356	424	864	1273	489	1634	1175	563	1634	1630	191
Grp Volume(v), veh/h	25	0	537	52	0	364	70	0	284	142	0	248
Grp Sat Flow(s),veh/h/ln	1013	0	1780	864	0	1761	1634	0	1739	1634	0	1821
Q Serve(g_s), s	1.3	0.0	17.5	3.7	0.0	10.6	3.8	0.0	14.0	7.6	0.0	10.6
Cycle Q Clear(g_c), s	11.9	0.0	17.5	21.2	0.0	10.6	3.8	0.0	14.0	7.6	0.0	10.6
Prop In Lane	1.00		0.24	1.00		0.28	1.00		0.32	1.00		0.10
Lane Grp Cap(c), veh/h	517	0	978	386	0	967	99	0	358	182	0	467
V/C Ratio(X)	0.05	0.00	0.55	0.13	0.00	0.38	0.70	0.00	0.79	0.78	0.00	0.53
Avail Cap(c_a), veh/h	517	0	978	386	0	967	301	0	560	218	0	494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	13.1	19.9	0.0	11.5	41.5	0.0	34.0	38.9	0.0	28.8
Incr Delay (d2), s/veh	0.2	0.0	2.2	0.7	0.0	1.1	8.8	0.0	4.2	14.1	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	9.1	1.0	0.0	5.4	2.0	0.0	7.1	4.1	0.0	5.4
LnGrp Delay(d),s/veh	15.1	0.0	15.3	20.7	0.0	12.6	50.2	0.0	38.1	53.0	0.0	29.8
LnGrp LOS	B		B	C		B	D		D	D		C
Approach Vol, veh/h		562			416			354			390	
Approach Delay, s/veh		15.3			13.6			40.5			38.2	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	22.6		53.4	9.5	27.1		53.4
Change Period (Y+Rc), s	4.6	4.6		4.0	4.6	4.6		4.0
Max Green Setting (Gmax), s	11.4	28.4		37.0	16.0	23.8		37.0
Max Q Clear Time (g_c+I1), s	9.6	16.0		19.5	5.8	12.6		23.2
Green Ext Time (p_c), s	0.1	1.8		4.6	0.1	1.7		4.2

Intersection Summary	
HCM 2010 Ctrl Delay	25.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	391	106	41	252	97	55	168	72	136	201	25
Future Volume (veh/h)	24	391	106	41	252	97	55	168	72	136	201	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	26	425	115	45	274	105	60	183	78	148	218	27
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	516	785	212	396	710	272	86	238	101	188	415	51
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.05	0.19	0.19	0.12	0.26	0.25
Sat Flow, veh/h	999	1408	381	862	1273	488	1634	1225	522	1634	1619	201
Grp Volume(v), veh/h	26	0	540	45	0	379	60	0	261	148	0	245
Grp Sat Flow(s),veh/h/ln	999	0	1789	862	0	1761	1634	0	1747	1634	0	1819
Q Serve(g_s), s	1.4	0.0	17.2	3.1	0.0	10.9	3.2	0.0	12.7	7.9	0.0	10.4
Cycle Q Clear(g_c), s	12.3	0.0	17.2	20.4	0.0	10.9	3.2	0.0	12.7	7.9	0.0	10.4
Prop In Lane	1.00		0.21	1.00		0.28	1.00		0.30	1.00		0.11
Lane Grp Cap(c), veh/h	516	0	997	396	0	982	86	0	339	188	0	466
V/C Ratio(X)	0.05	0.00	0.54	0.11	0.00	0.39	0.70	0.00	0.77	0.79	0.00	0.53
Avail Cap(c_a), veh/h	516	0	997	396	0	982	301	0	563	218	0	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	12.6	19.1	0.0	11.2	41.9	0.0	34.5	38.8	0.0	28.8
Incr Delay (d2), s/veh	0.2	0.0	2.1	0.6	0.0	1.1	9.6	0.0	3.7	15.2	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	9.0	0.8	0.0	5.6	1.7	0.0	6.5	4.4	0.0	5.4
LnGrp Delay(d),s/veh	14.9	0.0	14.7	19.6	0.0	12.4	51.5	0.0	38.2	54.0	0.0	29.7
LnGrp LOS	B		B	B		B	D		D	D		C
Approach Vol, veh/h		566			424			321			393	
Approach Delay, s/veh		14.7			13.1			40.7			38.9	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.4	21.5		54.2	8.8	27.1		54.2
Change Period (Y+Rc), s	4.6	4.6		4.0	4.6	4.6		4.0
Max Green Setting (Gmax), s	11.4	28.4		37.0	16.0	23.8		37.0
Max Q Clear Time (g_c+I1), s	9.9	14.7		19.2	5.2	12.4		22.4
Green Ext Time (p_c), s	0.1	1.7		4.7	0.1	1.6		4.3

Intersection Summary	
HCM 2010 Ctrl Delay	24.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	391	122	50	252	97	66	184	88	136	212	25
Future Volume (veh/h)	24	391	122	50	252	97	66	184	88	136	212	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	26	425	133	54	274	105	72	200	96	148	230	27
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	492	731	229	359	687	263	102	250	120	188	432	51
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.06	0.21	0.21	0.12	0.27	0.26
Sat Flow, veh/h	999	1356	424	848	1273	488	1634	1175	564	1634	1630	191
Grp Volume(v), veh/h	26	0	558	54	0	379	72	0	296	148	0	257
Grp Sat Flow(s),veh/h/ln	999	0	1780	848	0	1761	1634	0	1739	1634	0	1821
Q Serve(g_s), s	1.4	0.0	18.9	4.1	0.0	11.4	3.9	0.0	14.6	7.9	0.0	10.9
Cycle Q Clear(g_c), s	12.8	0.0	18.9	23.0	0.0	11.4	3.9	0.0	14.6	7.9	0.0	10.9
Prop In Lane	1.00		0.24	1.00		0.28	1.00		0.32	1.00		0.11
Lane Grp Cap(c), veh/h	492	0	960	359	0	950	102	0	369	188	0	483
V/C Ratio(X)	0.05	0.00	0.58	0.15	0.00	0.40	0.71	0.00	0.80	0.79	0.00	0.53
Avail Cap(c_a), veh/h	492	0	960	359	0	950	301	0	560	218	0	494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.9	0.0	13.9	21.6	0.0	12.2	41.4	0.0	33.7	38.8	0.0	28.3
Incr Delay (d2), s/veh	0.2	0.0	2.6	0.9	0.0	1.3	8.6	0.0	4.9	15.2	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	9.8	1.0	0.0	5.8	2.0	0.0	7.5	4.4	0.0	5.6
LnGrp Delay(d),s/veh	16.1	0.0	16.5	22.5	0.0	13.4	50.0	0.0	38.6	54.0	0.0	29.4
LnGrp LOS	B		B	C		B	D		D	D		C
Approach Vol, veh/h		584			433			368			405	
Approach Delay, s/veh		16.5			14.6			40.8			38.4	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.4	23.1		52.5	9.6	27.9		52.5
Change Period (Y+Rc), s	4.6	4.6		4.0	4.6	4.6		4.0
Max Green Setting (Gmax), s	11.4	28.4		37.0	16.0	23.8		37.0
Max Q Clear Time (g_c+I1), s	9.9	16.6		20.9	5.9	12.9		25.0
Green Ext Time (p_c), s	0.1	1.8		4.7	0.1	1.8		4.1

Intersection Summary	
HCM 2010 Ctrl Delay	26.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	34	559	152	58	360	138	79	239	103	195	287	36
Future Volume (veh/h)	34	559	152	58	360	138	79	239	103	195	287	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	37	608	165	63	391	150	86	260	112	212	312	39
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	687	186	149	622	239	120	299	129	218	493	62
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.07	0.24	0.24	0.13	0.30	0.30
Sat Flow, veh/h	861	1406	382	694	1273	488	1634	1222	526	1634	1617	202
Grp Volume(v), veh/h	37	0	773	63	0	541	86	0	372	212	0	351
Grp Sat Flow(s),veh/h/ln	861	0	1788	694	0	1761	1634	0	1748	1634	0	1820
Q Serve(g_s), s	3.0	0.0	35.0	8.1	0.0	20.4	4.6	0.0	18.4	11.6	0.0	15.0
Cycle Q Clear(g_c), s	23.4	0.0	35.0	43.1	0.0	20.4	4.6	0.0	18.4	11.6	0.0	15.0
Prop In Lane	1.00		0.21	1.00		0.28	1.00		0.30	1.00		0.11
Lane Grp Cap(c), veh/h	305	0	874	149	0	860	120	0	428	218	0	555
V/C Ratio(X)	0.12	0.00	0.88	0.42	0.00	0.63	0.72	0.00	0.87	0.97	0.00	0.63
Avail Cap(c_a), veh/h	305	0	874	149	0	860	301	0	563	218	0	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.6	0.0	20.7	40.2	0.0	17.0	40.8	0.0	32.7	38.8	0.0	27.0
Incr Delay (d2), s/veh	0.8	0.0	12.7	8.6	0.0	3.5	7.8	0.0	11.0	53.1	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	20.3	1.9	0.0	10.7	2.4	0.0	10.2	8.5	0.0	7.9
LnGrp Delay(d),s/veh	26.4	0.0	33.4	48.7	0.0	20.5	48.6	0.0	43.7	92.0	0.0	29.3
LnGrp LOS	C		C	D		C	D		D	F		C
Approach Vol, veh/h		810			604			458			563	
Approach Delay, s/veh		33.1			23.4			44.6			52.9	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.0	26.0		48.0	10.6	31.4		48.0
Change Period (Y+Rc), s	4.6	4.6		4.0	4.6	4.6		4.0
Max Green Setting (Gmax), s	11.4	28.4		37.0	16.0	23.8		37.0
Max Q Clear Time (g_c+I1), s	13.6	20.4		37.0	6.6	17.0		45.1
Green Ext Time (p_c), s	0.0	1.0		0.0	0.1	1.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Volume (veh/h)	34	559	168	67	360	138	90	255	119	195	298	36
Future Volume (veh/h)	34	559	168	67	360	138	90	255	119	195	298	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	37	608	183	73	391	150	98	277	129	212	324	39
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	282	643	194	112	598	229	134	313	146	218	512	62
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.08	0.26	0.26	0.13	0.31	0.31
Sat Flow, veh/h	861	1370	412	683	1273	488	1634	1189	554	1634	1625	196
Grp Volume(v), veh/h	37	0	791	73	0	541	98	0	406	212	0	363
Grp Sat Flow(s),veh/h/ln	861	0	1782	683	0	1761	1634	0	1743	1634	0	1821
Q Serve(g_s), s	3.1	0.0	38.1	4.2	0.0	21.2	5.3	0.0	20.1	11.6	0.0	15.4
Cycle Q Clear(g_c), s	24.3	0.0	38.1	42.3	0.0	21.2	5.3	0.0	20.1	11.6	0.0	15.4
Prop In Lane	1.00		0.23	1.00		0.28	1.00		0.32	1.00		0.11
Lane Grp Cap(c), veh/h	282	0	837	112	0	827	134	0	459	218	0	573
V/C Ratio(X)	0.13	0.00	0.94	0.65	0.00	0.65	0.73	0.00	0.88	0.97	0.00	0.63
Avail Cap(c_a), veh/h	282	0	837	112	0	827	301	0	562	218	0	573
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	22.8	44.1	0.0	18.3	40.3	0.0	31.9	38.8	0.0	26.4
Incr Delay (d2), s/veh	1.0	0.0	20.3	26.0	0.0	4.0	7.4	0.0	13.4	53.1	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	23.4	2.6	0.0	11.1	2.6	0.0	11.4	8.5	0.0	8.0
LnGrp Delay(d),s/veh	28.5	0.0	43.0	70.1	0.0	22.3	47.7	0.0	45.3	92.0	0.0	28.7
LnGrp LOS	C		D	E		C	D		D	F		C
Approach Vol, veh/h		828			614			504			575	
Approach Delay, s/veh		42.4			28.0			45.8			52.0	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.0	27.7		46.3	11.4	32.3		46.3
Change Period (Y+Rc), s	4.6	4.6		4.0	4.6	4.6		4.0
Max Green Setting (Gmax), s	11.4	28.4		37.0	16.0	23.8		37.0
Max Q Clear Time (g_c+I1), s	13.6	22.1		40.1	7.3	17.4		44.3
Green Ext Time (p_c), s	0.0	1.0		0.0	0.2	1.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	41.7
HCM 2010 LOS	D

Intersection 2
N Prospect St & Project Entrance/W Henderson Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	335	66	184	335	241	82	251	198	156	196	40
Future Volume (veh/h)	55	335	66	184	335	241	82	251	198	156	196	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	60	364	72	200	364	262	89	273	215	170	213	43
Adj No. of Lanes	1	2	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1240	242	218	940	724	118	358	272	202	702	139
Arrive On Green	0.05	0.42	0.40	0.22	0.84	0.84	0.07	0.19	0.18	0.12	0.24	0.23
Sat Flow, veh/h	1634	2943	576	1634	1863	1435	1634	1899	1441	1634	2929	578
Grp Volume(v), veh/h	60	217	219	200	364	262	89	254	234	170	127	129
Grp Sat Flow(s),veh/h/ln	1634	1770	1750	1634	1863	1435	1634	1770	1570	1634	1770	1737
Q Serve(g_s), s	4.3	9.7	10.0	14.4	5.5	2.7	6.4	16.3	17.1	12.2	7.0	7.3
Cycle Q Clear(g_c), s	4.3	9.7	10.0	14.4	5.5	2.7	6.4	16.3	17.1	12.2	7.0	7.3
Prop In Lane	1.00		0.33	1.00		1.00	1.00		0.92	1.00		0.33
Lane Grp Cap(c), veh/h	82	745	737	218	940	724	118	334	296	202	424	416
V/C Ratio(X)	0.73	0.29	0.30	0.92	0.39	0.36	0.75	0.76	0.79	0.84	0.30	0.31
Avail Cap(c_a), veh/h	82	745	737	218	940	724	219	608	539	204	591	580
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	22.9	23.2	46.0	5.1	1.5	54.6	46.1	46.7	51.5	37.4	37.6
Incr Delay (d2), s/veh	28.7	1.0	1.0	35.5	1.0	1.2	9.2	3.6	4.7	25.9	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	5.0	5.0	8.6	2.9	1.2	3.2	8.3	7.8	7.0	3.5	3.6
LnGrp Delay(d),s/veh	84.9	23.9	24.2	81.5	6.2	2.7	63.8	49.7	51.4	77.4	37.7	38.0
LnGrp LOS	F	C	C	F	A	A	E	D	D	E	D	D
Approach Vol, veh/h		496			826			577			426	
Approach Delay, s/veh		31.4			23.3			52.5			53.6	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	26.7	20.0	54.5	12.7	32.8	10.0	64.5
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	14.2	19.1	16.4	12.0	8.4	9.3	6.3	7.5
Green Ext Time (p_c), s	0.0	2.0	0.0	3.9	0.1	1.7	0.0	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	37.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	363	66	194	363	261	82	251	208	176	196	40
Future Volume (veh/h)	55	363	66	194	363	261	82	251	208	176	196	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	60	395	72	211	395	284	89	273	226	191	213	43
Adj No. of Lanes	1	2	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1243	225	218	931	717	118	356	284	204	717	141
Arrive On Green	0.05	0.42	0.40	0.22	0.83	0.83	0.07	0.19	0.19	0.13	0.24	0.24
Sat Flow, veh/h	1634	2987	539	1634	1863	1435	1634	1854	1478	1634	2929	578
Grp Volume(v), veh/h	60	233	234	211	395	284	89	260	239	191	127	129
Grp Sat Flow(s),veh/h/ln	1634	1770	1757	1634	1863	1435	1634	1770	1562	1634	1770	1737
Q Serve(g_s), s	4.3	10.6	10.9	15.4	6.5	3.2	6.4	16.7	17.5	13.9	7.0	7.3
Cycle Q Clear(g_c), s	4.3	10.6	10.9	15.4	6.5	3.2	6.4	16.7	17.5	13.9	7.0	7.3
Prop In Lane	1.00		0.31	1.00		1.00	1.00		0.95	1.00		0.33
Lane Grp Cap(c), veh/h	82	737	731	218	931	717	118	340	300	204	433	425
V/C Ratio(X)	0.73	0.32	0.32	0.97	0.42	0.40	0.75	0.77	0.80	0.94	0.29	0.30
Avail Cap(c_a), veh/h	82	737	731	218	931	717	219	608	536	204	591	581
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	23.5	23.8	46.4	5.5	1.7	54.6	45.9	46.5	52.0	36.9	37.1
Incr Delay (d2), s/veh	28.7	1.1	1.2	47.1	1.2	1.4	9.2	3.6	4.8	44.9	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	5.4	5.5	9.8	3.6	1.4	3.2	8.5	8.0	8.8	3.5	3.5
LnGrp Delay(d),s/veh	84.9	24.7	25.0	93.5	6.7	3.0	63.8	49.5	51.3	97.0	37.2	37.5
LnGrp LOS	F	C	C	F	A	A	E	D	D	F	D	D
Approach Vol, veh/h		527			890			588			447	
Approach Delay, s/veh		31.7			26.1			52.4			62.8	
Approach LOS		C			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	27.1	20.0	53.9	12.7	33.4	10.0	63.9
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	15.9	19.5	17.4	12.9	8.4	9.3	6.3	8.5
Green Ext Time (p_c), s	0.0	2.0	0.0	4.2	0.1	1.8	0.0	4.7

Intersection Summary	
HCM 2010 Ctrl Delay	40.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	498	81	225	498	294	100	373	242	190	291	59
Future Volume (veh/h)	67	498	81	225	498	294	100	373	242	190	291	59
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	73	541	88	245	541	320	109	405	263	207	316	64
Adj No. of Lanes	1	2	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1137	184	218	851	656	140	481	309	204	800	160
Arrive On Green	0.05	0.37	0.36	0.22	0.76	0.76	0.09	0.23	0.23	0.13	0.27	0.27
Sat Flow, veh/h	1634	3042	493	1634	1863	1435	1634	2052	1316	1634	2924	583
Grp Volume(v), veh/h	73	314	315	245	541	320	109	349	319	207	189	191
Grp Sat Flow(s),veh/h/ln	1634	1770	1766	1634	1863	1435	1634	1770	1598	1634	1770	1737
Q Serve(g_s), s	5.3	16.2	16.4	16.0	16.0	5.9	7.8	22.5	23.0	15.0	10.4	10.8
Cycle Q Clear(g_c), s	5.3	16.2	16.4	16.0	16.0	5.9	7.8	22.5	23.0	15.0	10.4	10.8
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.82	1.00		0.34
Lane Grp Cap(c), veh/h	82	661	660	218	851	656	140	415	375	204	484	475
V/C Ratio(X)	0.89	0.47	0.48	1.12	0.64	0.49	0.78	0.84	0.85	1.01	0.39	0.40
Avail Cap(c_a), veh/h	82	661	660	218	851	656	219	608	549	204	591	581
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.50	0.50	0.50	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.7	28.6	28.9	46.6	9.6	3.1	53.7	43.8	44.2	52.5	35.4	35.6
Incr Delay (d2), s/veh	65.2	2.4	2.5	81.5	1.8	1.3	8.8	6.9	8.4	66.5	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	8.4	8.5	12.1	8.4	2.5	3.9	11.8	11.0	10.5	5.2	5.2
LnGrp Delay(d),s/veh	121.9	31.0	31.4	128.1	11.4	4.3	62.5	50.6	52.6	119.1	36.0	36.2
LnGrp LOS	F	C	C	F	B	A	E	D	D	F	D	D
Approach Vol, veh/h		702			1106			777			587	
Approach Delay, s/veh		40.6			35.2			53.1			65.3	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	32.2	20.0	48.8	14.3	36.8	10.0	58.8
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	17.0	25.0	18.0	18.4	9.8	12.8	7.3	18.0
Green Ext Time (p_c), s	0.0	2.6	0.0	4.7	0.1	2.3	0.0	6.2

Intersection Summary	
HCM 2010 Ctrl Delay	46.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	526	81	235	526	314	100	373	252	210	291	59
Future Volume (veh/h)	67	526	81	235	526	314	100	373	252	210	291	59
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	73	572	88	255	572	341	109	405	274	228	316	64
Adj No. of Lanes	1	2	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1136	174	218	845	650	140	480	321	204	811	162
Arrive On Green	0.05	0.37	0.35	0.22	0.76	0.76	0.09	0.24	0.23	0.13	0.28	0.27
Sat Flow, veh/h	1634	3069	471	1634	1863	1435	1634	2015	1347	1634	2924	583
Grp Volume(v), veh/h	73	329	331	255	572	341	109	355	324	228	189	191
Grp Sat Flow(s),veh/h/ln	1634	1770	1770	1634	1863	1435	1634	1770	1592	1634	1770	1737
Q Serve(g_s), s	5.3	17.3	17.5	16.0	18.4	6.8	7.8	22.9	23.4	15.0	10.4	10.7
Cycle Q Clear(g_c), s	5.3	17.3	17.5	16.0	18.4	6.8	7.8	22.9	23.4	15.0	10.4	10.7
Prop In Lane	1.00		0.27	1.00		1.00	1.00		0.85	1.00		0.34
Lane Grp Cap(c), veh/h	82	655	655	218	845	650	140	422	379	204	491	482
V/C Ratio(X)	0.89	0.50	0.51	1.17	0.68	0.52	0.78	0.84	0.85	1.12	0.39	0.40
Avail Cap(c_a), veh/h	82	655	655	218	845	650	219	608	547	204	591	581
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.44	0.44	0.44	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.7	29.3	29.5	46.6	10.2	3.2	53.7	43.6	44.0	52.5	35.1	35.3
Incr Delay (d2), s/veh	65.2	2.7	2.8	96.4	1.9	1.3	8.8	7.2	8.8	97.7	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	8.9	9.0	13.0	9.4	2.8	3.9	12.1	11.2	12.3	5.2	5.2
LnGrp Delay(d),s/veh	121.9	32.0	32.3	143.0	12.1	4.6	62.5	50.8	52.8	150.2	35.6	35.8
LnGrp LOS	F	C	C	F	B	A	E	D	D	F	D	D
Approach Vol, veh/h		733			1168			788			608	
Approach Delay, s/veh		41.1			38.5			53.2			78.6	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	32.6	20.0	48.4	14.3	37.3	10.0	58.4
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	17.0	25.4	18.0	19.5	9.8	12.7	7.3	20.4
Green Ext Time (p_c), s	0.0	2.6	0.0	4.8	0.1	2.4	0.0	6.4

Intersection Summary	
HCM 2010 Ctrl Delay	50.0
HCM 2010 LOS	D

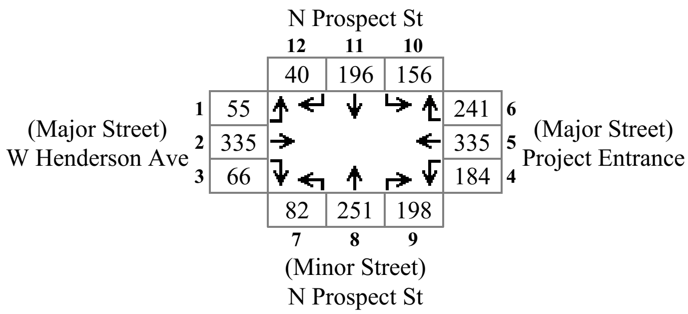
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	526	81	235	526	314	100	373	252	210	291	59
Future Volume (veh/h)	67	526	81	235	526	314	100	373	252	210	291	59
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	73	572	88	255	572	341	109	405	274	228	316	64
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1136	174	218	1605	650	140	480	321	204	813	162
Arrive On Green	0.05	0.37	0.35	0.22	0.76	0.76	0.09	0.24	0.23	0.13	0.28	0.27
Sat Flow, veh/h	1634	3069	471	1634	3539	1435	1634	2015	1347	1634	2931	585
Grp Volume(v), veh/h	73	329	331	255	572	341	109	355	324	228	189	191
Grp Sat Flow(s),veh/h/ln	1634	1770	1770	1634	1770	1435	1634	1770	1592	1634	1770	1746
Q Serve(g_s), s	5.3	17.3	17.5	16.0	6.5	6.8	7.8	22.9	23.4	15.0	10.4	10.7
Cycle Q Clear(g_c), s	5.3	17.3	17.5	16.0	6.5	6.8	7.8	22.9	23.4	15.0	10.4	10.7
Prop In Lane	1.00		0.27	1.00		1.00	1.00		0.85	1.00		0.34
Lane Grp Cap(c), veh/h	82	655	655	218	1605	650	140	422	379	204	491	484
V/C Ratio(X)	0.89	0.50	0.51	1.17	0.36	0.52	0.78	0.84	0.85	1.12	0.39	0.39
Avail Cap(c_a), veh/h	82	655	655	218	1605	650	219	608	547	204	591	583
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.43	0.43	0.43	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.7	29.3	29.5	46.6	8.7	3.2	53.7	43.6	44.0	52.5	35.1	35.3
Incr Delay (d2), s/veh	65.2	2.7	2.8	96.2	0.3	1.3	8.8	7.2	8.8	97.7	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	8.9	9.0	13.0	3.1	2.8	3.9	12.1	11.2	12.3	5.2	5.2
LnGrp Delay(d),s/veh	121.9	32.0	32.3	142.8	9.0	4.5	62.5	50.8	52.8	150.2	35.6	35.8
LnGrp LOS	F	C	C	F	A	A	E	D	D	F	D	D
Approach Vol, veh/h		733			1168			788			608	
Approach Delay, s/veh		41.1			36.9			53.2			78.6	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	32.6	20.0	48.4	14.3	37.3	10.0	58.4
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	17.0	25.4	18.0	19.5	9.8	12.7	7.3	8.8
Green Ext Time (p_c), s	0.0	2.6	0.0	4.9	0.1	2.4	0.0	7.5

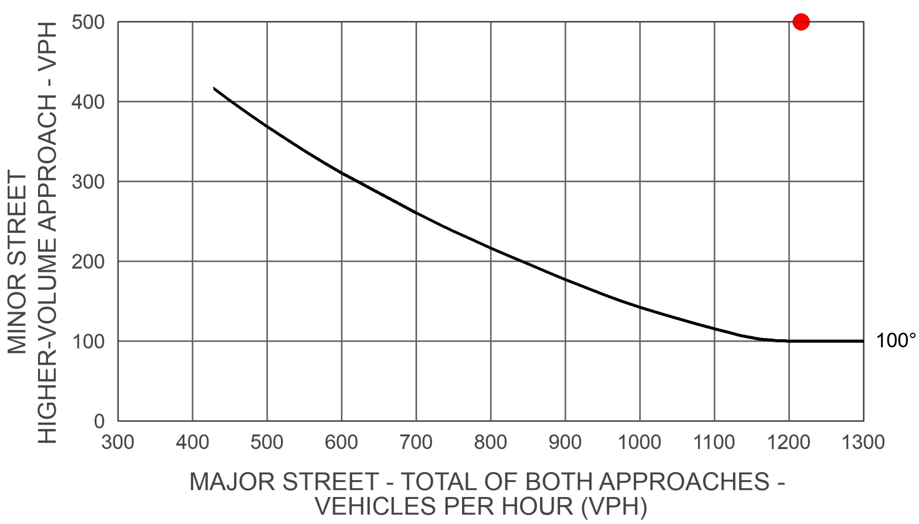
Intersection Summary	
HCM 2010 Ctrl Delay	49.4
HCM 2010 LOS	D

Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Existing
Intersection #: 2

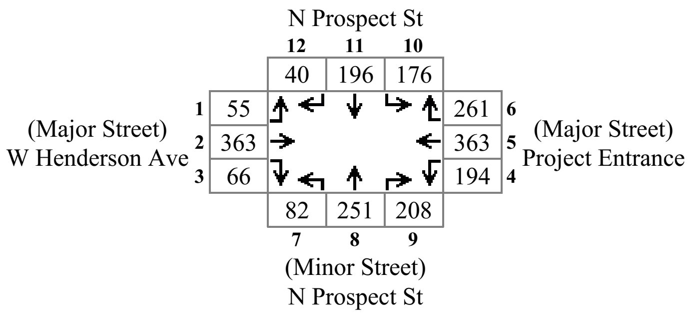


Major Total: 1216
Minor High Volume: 531

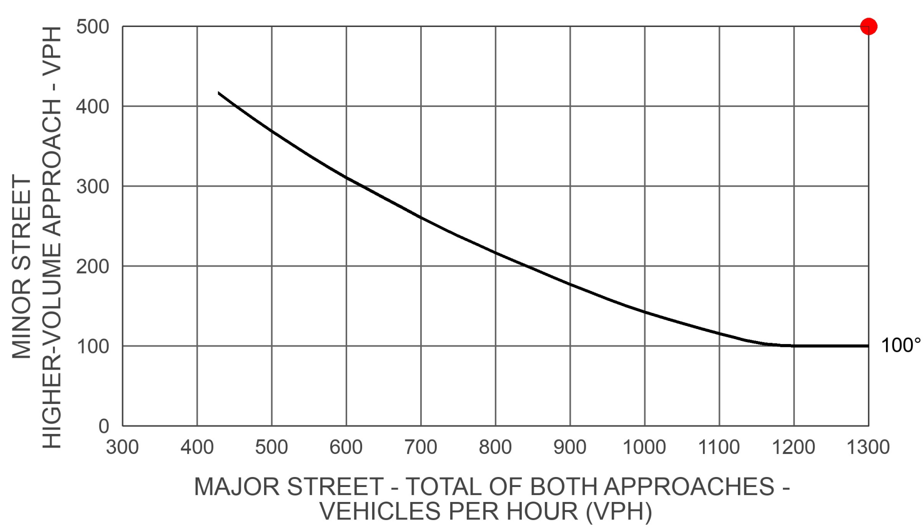


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Existing+Project
Intersection #: 2



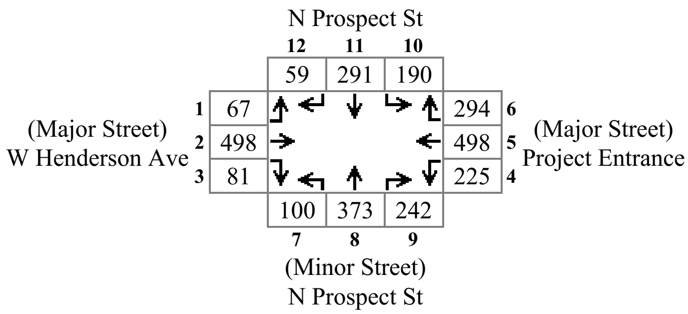
Major Total: 1302
Minor High Volume: 541



Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

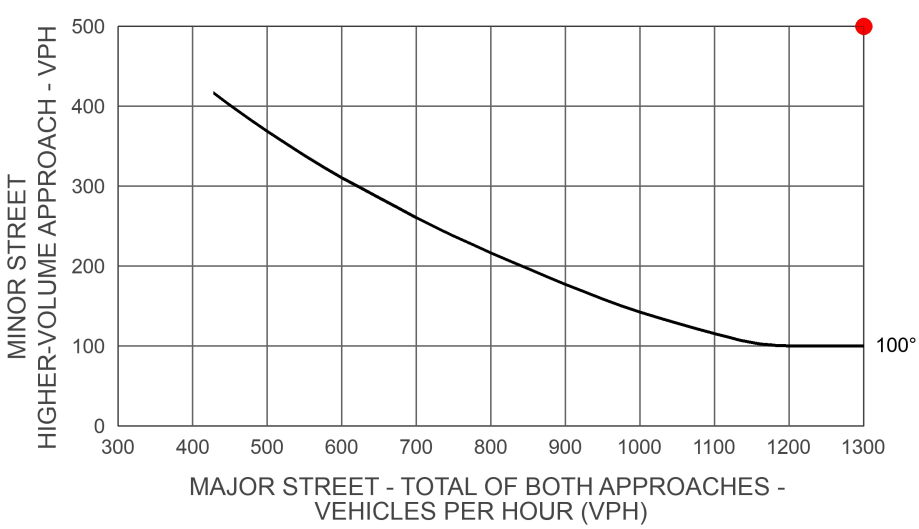
Scenario: PM Future

Intersection #: 2



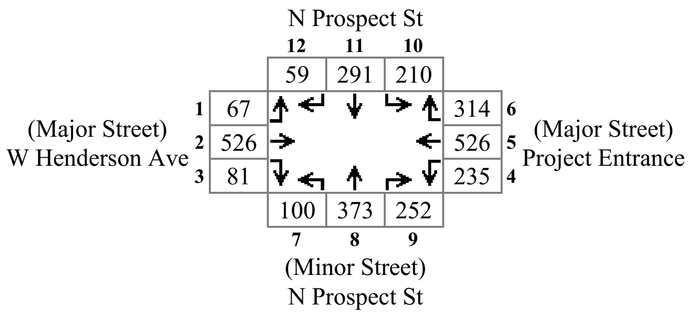
Major Total: 1663

Minor High Volume: 715

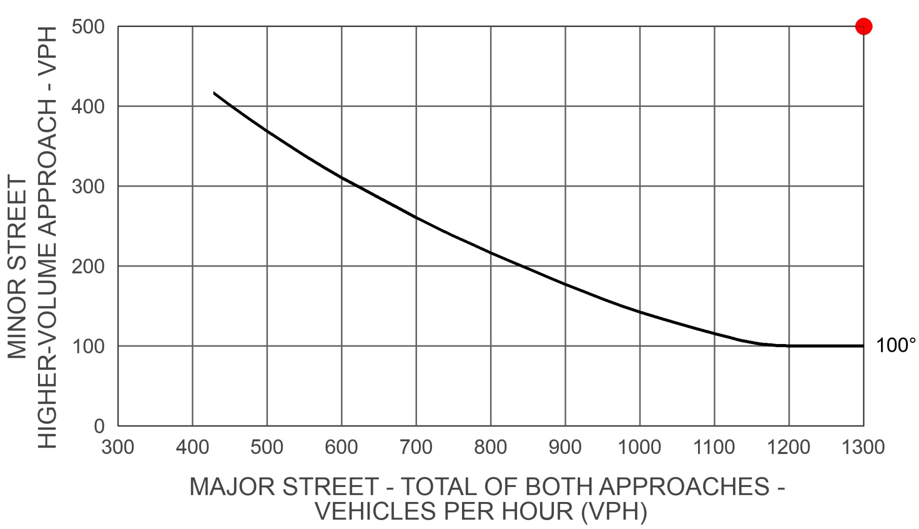


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project
Intersection #: 2



Major Total: 1749
Minor High Volume: 725



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	319	87	173	239	221	70	322	107	154	212	68
Future Volume (veh/h)	155	319	87	173	239	221	70	322	107	154	212	68
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	168	347	95	188	260	240	76	350	116	167	230	74
Adj No. of Lanes	1	2	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1192	321	218	964	743	103	463	151	199	621	194
Arrive On Green	0.05	0.43	0.42	0.22	0.86	0.86	0.06	0.18	0.17	0.12	0.24	0.23
Sat Flow, veh/h	1634	2746	741	1634	1863	1435	1634	2609	850	1634	2633	821
Grp Volume(v), veh/h	168	222	220	188	260	240	76	235	231	167	152	152
Grp Sat Flow(s),veh/h/ln	1634	1770	1717	1634	1863	1435	1634	1770	1689	1634	1770	1684
Q Serve(g_s), s	6.0	9.7	10.1	13.3	3.0	2.0	5.5	15.1	15.6	12.0	8.6	9.1
Cycle Q Clear(g_c), s	6.0	9.7	10.1	13.3	3.0	2.0	5.5	15.1	15.6	12.0	8.6	9.1
Prop In Lane	1.00		0.43	1.00		1.00	1.00		0.50	1.00		0.49
Lane Grp Cap(c), veh/h	82	768	745	218	964	743	103	314	300	199	418	398
V/C Ratio(X)	2.06	0.29	0.30	0.86	0.27	0.32	0.74	0.75	0.77	0.84	0.36	0.38
Avail Cap(c_a), veh/h	82	768	745	218	964	743	219	608	580	204	591	563
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	22.0	22.4	45.6	4.1	1.2	55.2	46.8	47.2	51.5	38.3	38.6
Incr Delay (d2), s/veh	514.9	0.9	1.0	27.1	0.7	1.1	9.7	3.6	4.2	24.9	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.4	4.9	5.0	7.6	1.6	0.9	2.7	7.7	7.7	6.8	4.3	4.3
LnGrp Delay(d),s/veh	571.9	22.9	23.4	72.7	4.8	2.3	64.9	50.4	51.3	76.4	38.8	39.2
LnGrp LOS	F	C	C	E	A	A	E	D	D	E	D	D
Approach Vol, veh/h		610			688			542			471	
Approach Delay, s/veh		174.3			22.5			52.9			52.3	
Approach LOS		F			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	25.3	20.0	56.1	11.6	32.3	10.0	66.1
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	14.0	17.6	15.3	12.1	7.5	11.1	8.0	5.0
Green Ext Time (p_c), s	0.1	1.8	0.0	3.4	0.1	1.9	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	75.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	345	87	181	261	237	70	322	116	172	212	68
Future Volume (veh/h)	155	345	87	181	261	237	70	322	116	172	212	68
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	168	375	95	197	284	258	76	350	126	187	230	74
Adj No. of Lanes	1	2	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1196	299	218	952	734	103	460	162	204	638	199
Arrive On Green	0.05	0.43	0.41	0.22	0.85	0.85	0.06	0.18	0.18	0.13	0.24	0.24
Sat Flow, veh/h	1634	2796	699	1634	1863	1435	1634	2548	901	1634	2633	821
Grp Volume(v), veh/h	168	236	234	197	284	258	76	241	235	187	152	152
Grp Sat Flow(s),veh/h/ln	1634	1770	1725	1634	1863	1435	1634	1770	1679	1634	1770	1684
Q Serve(g_s), s	6.0	10.5	10.9	14.1	3.6	2.4	5.5	15.5	16.0	13.6	8.6	9.0
Cycle Q Clear(g_c), s	6.0	10.5	10.9	14.1	3.6	2.4	5.5	15.5	16.0	13.6	8.6	9.0
Prop In Lane	1.00		0.41	1.00		1.00	1.00		0.54	1.00		0.49
Lane Grp Cap(c), veh/h	82	757	738	218	952	734	103	319	303	204	429	408
V/C Ratio(X)	2.06	0.31	0.32	0.90	0.30	0.35	0.74	0.76	0.78	0.92	0.36	0.37
Avail Cap(c_a), veh/h	82	757	738	218	952	734	219	608	576	204	591	563
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	22.7	23.0	45.9	4.5	1.3	55.2	46.7	47.0	51.9	37.7	38.0
Incr Delay (d2), s/veh	514.9	1.1	1.1	34.0	0.7	1.2	9.7	3.6	4.3	40.3	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.4	5.4	5.4	8.4	1.9	1.2	2.7	7.9	7.8	8.4	4.2	4.2
LnGrp Delay(d),s/veh	571.9	23.7	24.1	79.9	5.3	2.6	64.9	50.3	51.3	92.1	38.2	38.6
LnGrp LOS	F	C	C	E	A	A	E	D	D	F	D	D
Approach Vol, veh/h		638			739			552			491	
Approach Delay, s/veh		168.2			24.2			52.7			58.9	
Approach LOS		F			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	25.6	20.0	55.4	11.6	33.1	10.0	65.4
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	15.6	18.0	16.1	12.9	7.5	11.0	8.0	5.6
Green Ext Time (p_c), s	0.0	1.9	0.0	3.6	0.1	2.0	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	75.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	474	106	211	355	270	85	478	131	188	315	101
Future Volume (veh/h)	189	474	106	211	355	270	85	478	131	188	315	101
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	205	515	115	229	386	293	92	520	142	204	342	110
Adj No. of Lanes	1	2	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1096	243	218	866	667	122	620	168	204	727	230
Arrive On Green	0.05	0.38	0.37	0.22	0.78	0.78	0.07	0.23	0.22	0.13	0.28	0.27
Sat Flow, veh/h	1634	2869	637	1634	1863	1435	1634	2739	744	1634	2625	829
Grp Volume(v), veh/h	205	317	313	229	386	293	92	335	327	204	228	224
Grp Sat Flow(s),veh/h/ln	1634	1770	1737	1634	1863	1435	1634	1770	1713	1634	1770	1685
Q Serve(g_s), s	6.0	16.2	16.4	16.0	8.5	4.8	6.6	21.7	21.9	15.0	12.9	13.3
Cycle Q Clear(g_c), s	6.0	16.2	16.4	16.0	8.5	4.8	6.6	21.7	21.9	15.0	12.9	13.3
Prop In Lane	1.00		0.37	1.00		1.00	1.00		0.43	1.00		0.49
Lane Grp Cap(c), veh/h	82	676	663	218	866	667	122	401	388	204	490	467
V/C Ratio(X)	2.51	0.47	0.47	1.05	0.45	0.44	0.76	0.84	0.84	1.00	0.47	0.48
Avail Cap(c_a), veh/h	82	676	663	218	866	667	219	608	588	204	591	563
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	27.9	28.3	46.6	8.1	2.7	54.5	44.3	44.5	52.5	36.0	36.3
Incr Delay (d2), s/veh	714.0	2.3	2.4	72.0	1.5	1.9	9.1	6.3	6.9	62.6	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.9	8.4	8.3	11.5	4.6	2.2	3.3	11.3	11.1	10.3	6.4	6.3
LnGrp Delay(d),s/veh	771.0	30.2	30.7	118.6	9.6	4.6	63.6	50.5	51.4	115.1	36.7	37.1
LnGrp LOS	F	C	C	F	A	A	E	D	D	F	D	D
Approach Vol, veh/h		835			908			754			656	
Approach Delay, s/veh		212.3			35.5			52.5			61.2	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	31.2	20.0	49.8	12.9	37.2	10.0	59.8
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	17.0	23.9	18.0	18.4	8.6	15.3	8.0	10.5
Green Ext Time (p_c), s	0.0	2.5	0.0	4.1	0.1	2.7	0.0	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	91.7
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	500	106	219	377	286	85	478	140	206	315	101
Future Volume (veh/h)	189	500	106	219	377	286	85	478	140	206	315	101
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	205	543	115	238	410	311	92	520	152	224	342	110
Adj No. of Lanes	1	2	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1099	232	218	861	663	122	618	180	204	735	232
Arrive On Green	0.05	0.38	0.36	0.22	0.77	0.77	0.07	0.23	0.22	0.13	0.28	0.27
Sat Flow, veh/h	1634	2900	612	1634	1863	1435	1634	2692	783	1634	2625	829
Grp Volume(v), veh/h	205	330	328	238	410	311	92	341	331	224	228	224
Grp Sat Flow(s),veh/h/ln	1634	1770	1742	1634	1863	1435	1634	1770	1705	1634	1770	1685
Q Serve(g_s), s	6.0	17.1	17.4	16.0	9.5	5.4	6.6	22.1	22.3	15.0	12.8	13.3
Cycle Q Clear(g_c), s	6.0	17.1	17.4	16.0	9.5	5.4	6.6	22.1	22.3	15.0	12.8	13.3
Prop In Lane	1.00		0.35	1.00		1.00	1.00		0.46	1.00		0.49
Lane Grp Cap(c), veh/h	82	670	660	218	861	663	122	406	391	204	495	472
V/C Ratio(X)	2.51	0.49	0.50	1.09	0.48	0.47	0.76	0.84	0.85	1.10	0.46	0.47
Avail Cap(c_a), veh/h	82	670	660	218	861	663	219	608	585	204	591	563
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	28.5	28.8	46.6	8.4	2.8	54.5	44.1	44.3	52.5	35.7	36.0
Incr Delay (d2), s/veh	714.0	2.6	2.7	83.2	1.6	2.0	9.1	6.6	7.3	91.2	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.9	8.8	8.8	12.2	5.1	2.3	3.3	11.5	11.3	11.9	6.4	6.3
LnGrp Delay(d),s/veh	771.0	31.0	31.5	129.9	10.1	4.9	63.6	50.7	51.7	143.7	36.4	36.7
LnGrp LOS	F	C	C	F	B	A	E	D	D	F	D	D
Approach Vol, veh/h		863			959			764			676	
Approach Delay, s/veh		207.0			38.1			52.7			72.1	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	31.5	20.0	49.5	12.9	37.6	10.0	59.5
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	17.0	24.3	18.0	19.4	8.6	15.3	8.0	11.5
Green Ext Time (p_c), s	0.0	2.6	0.0	4.2	0.1	2.8	0.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay	93.2
HCM 2010 LOS	F

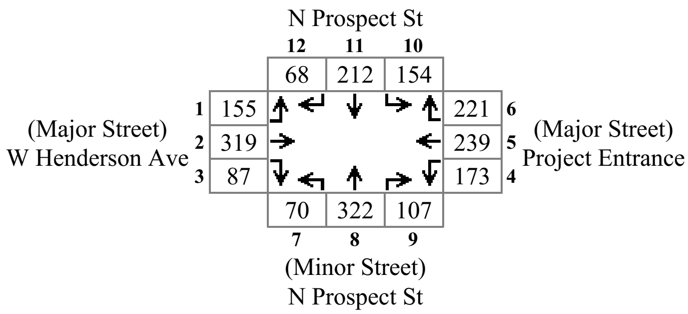
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	501	106	218	376	285	85	478	140	208	315	101
Future Volume (veh/h)	189	501	106	218	376	285	85	478	140	208	315	101
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1750	1863	1863	1863	1863	1863	1750	1863	1863	1750
Adj Flow Rate, veh/h	205	545	115	237	409	310	92	520	152	226	342	110
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	279	654	137	237	713	312	125	1031	300	222	1153	364
Arrive On Green	0.16	0.23	0.21	0.04	0.07	0.07	0.07	0.38	0.38	0.13	0.44	0.43
Sat Flow, veh/h	1774	2900	609	1774	3539	1549	1774	2695	784	1774	2636	833
Grp Volume(v), veh/h	205	332	328	237	409	310	92	341	331	226	228	224
Grp Sat Flow(s),veh/h/ln	1774	1770	1740	1774	1770	1549	1774	1770	1708	1774	1770	1699
Q Serve(g_s), s	13.2	21.4	21.6	16.0	13.5	17.2	6.1	17.7	17.9	15.0	10.0	10.3
Cycle Q Clear(g_c), s	13.2	21.4	21.6	16.0	13.5	17.2	6.1	17.7	17.9	15.0	10.0	10.3
Prop In Lane	1.00		0.35	1.00		1.00	1.00		0.46	1.00		0.49
Lane Grp Cap(c), veh/h	279	399	393	237	713	312	125	677	654	222	774	743
V/C Ratio(X)	0.73	0.83	0.84	1.00	0.57	0.99	0.74	0.50	0.51	1.02	0.29	0.30
Avail Cap(c_a), veh/h	279	469	461	237	1233	540	238	677	654	222	774	743
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.2	44.3	44.7	57.4	51.0	28.8	54.7	28.3	28.5	52.5	21.8	22.0
Incr Delay (d2), s/veh	9.6	10.5	11.2	54.6	0.6	25.5	8.1	2.7	2.8	65.5	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	11.7	11.6	11.4	6.7	9.6	3.3	9.1	8.9	11.4	5.1	5.0
LnGrp Delay(d),s/veh	57.8	54.8	55.9	111.9	51.6	54.3	62.8	31.0	31.3	118.1	22.8	23.0
LnGrp LOS	E	D	E	F	D	D	E	C	C	F	C	C
Approach Vol, veh/h		865			956			764			678	
Approach Delay, s/veh		55.9			67.4			34.9			54.6	
Approach LOS		E			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	49.9	20.0	31.1	12.4	56.5	22.9	28.2
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	17.0	19.9	18.0	23.6	8.1	12.3	15.2	19.2
Green Ext Time (p_c), s	0.0	4.8	0.0	1.4	0.1	5.0	0.0	3.0

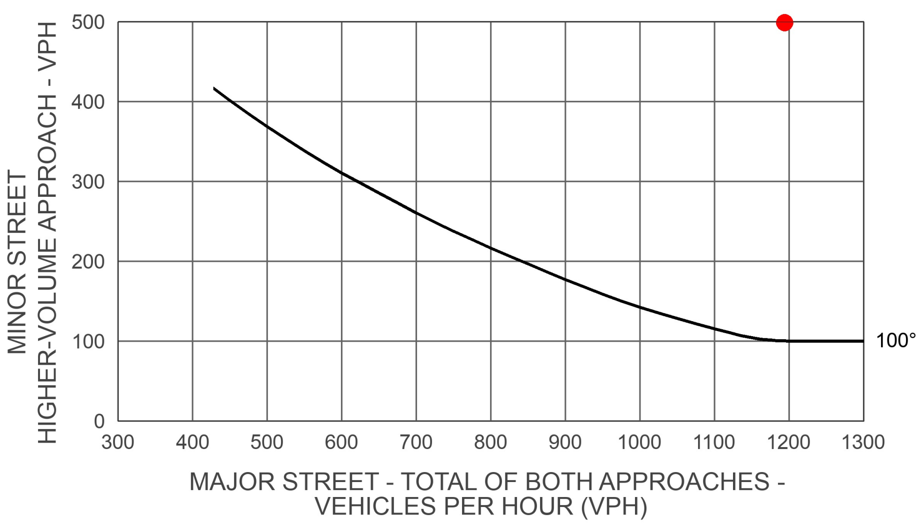
Intersection Summary	
HCM 2010 Ctrl Delay	54.1
HCM 2010 LOS	D

Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Existing
Intersection #: 2



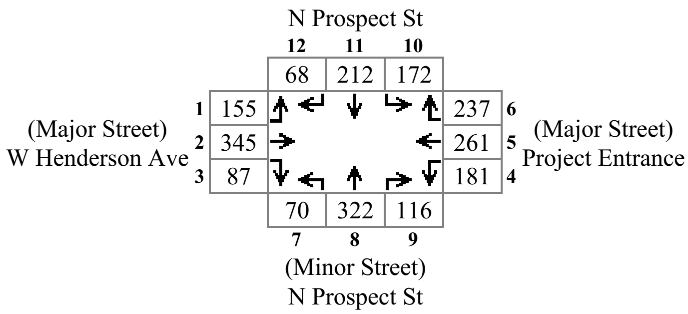
Major Total: 1194
Minor High Volume: 499



Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

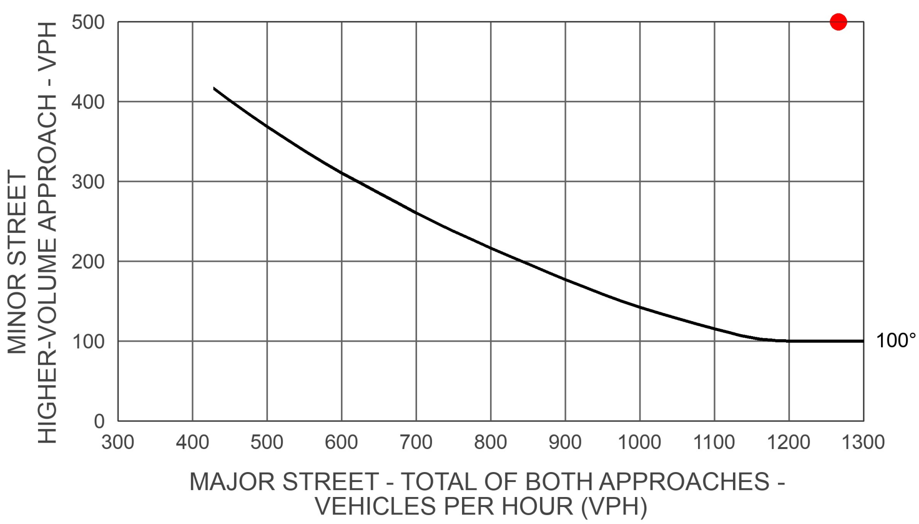
Scenario: AM Existing+Project

Intersection #: 2



Major Total: 1266

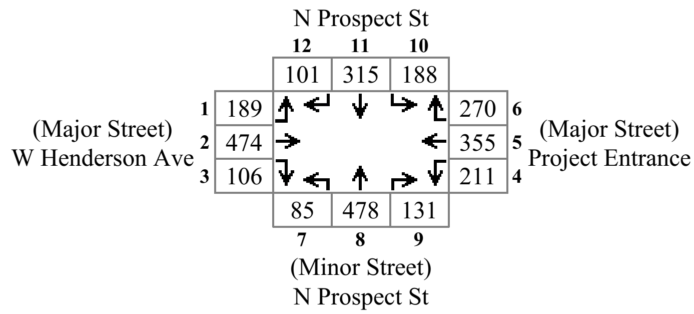
Minor High Volume: 508



Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

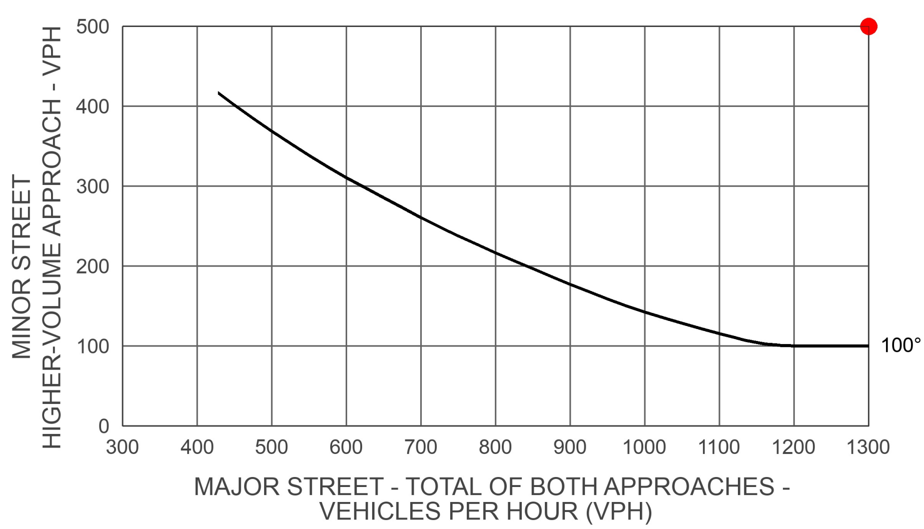
Scenario: AM Future

Intersection #: 2



Major Total: 1605

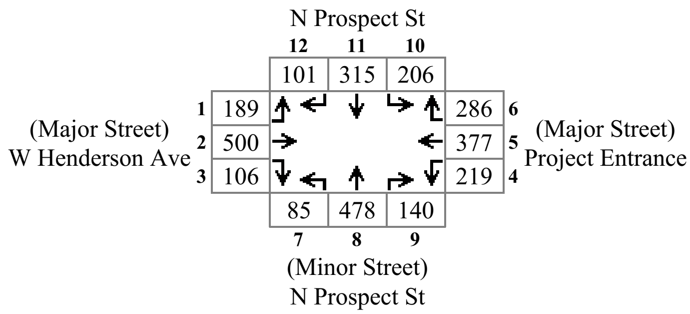
Minor High Volume: 694



Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

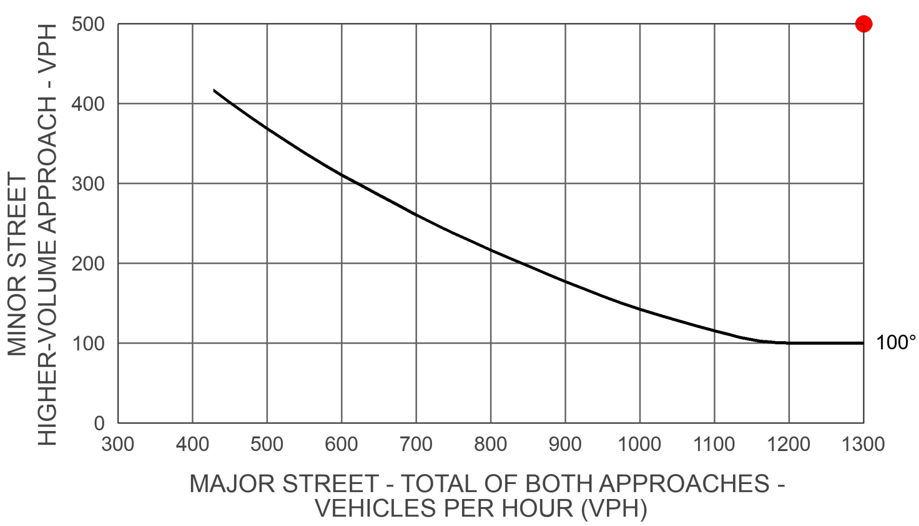
Scenario: AM Future+Project

Intersection #: 2



Major Total: 1677

Minor High Volume: 703



Intersection 3
N Newcomb St & W Henderson Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	572	96	238	536	250	138	191	150	204	298	94
Future Volume (veh/h)	219	572	96	238	536	250	138	191	150	204	298	94
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	238	622	104	259	583	272	150	208	163	182	380	102
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	917	366	520	1418	575	150	331	245	191	735	278
Arrive On Green	0.12	0.17	0.17	0.32	0.40	0.40	0.09	0.17	0.17	0.12	0.20	0.20
Sat Flow, veh/h	1634	3539	1411	1634	3539	1434	1634	1920	1422	1634	3725	1406
Grp Volume(v), veh/h	238	622	104	259	583	272	150	191	180	182	380	102
Grp Sat Flow(s),veh/h/ln	1634	1770	1411	1634	1770	1434	1634	1770	1572	1634	1863	1406
Q Serve(g_s), s	17.1	19.8	5.7	15.4	14.2	16.8	11.0	12.0	12.9	13.3	10.9	7.5
Cycle Q Clear(g_c), s	17.1	19.8	5.7	15.4	14.2	16.8	11.0	12.0	12.9	13.3	10.9	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.90	1.00		1.00
Lane Grp Cap(c), veh/h	289	917	366	520	1418	575	150	305	271	191	735	278
V/C Ratio(X)	0.82	0.68	0.28	0.50	0.41	0.47	1.00	0.63	0.67	0.95	0.52	0.37
Avail Cap(c_a), veh/h	313	917	366	520	1418	575	150	500	444	191	1146	432
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	44.9	21.9	33.1	25.8	26.6	54.5	46.1	46.7	52.7	43.0	41.7
Incr Delay (d2), s/veh	14.0	3.7	1.8	0.7	0.9	2.8	69.1	1.8	2.4	52.0	0.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	10.1	2.4	7.1	7.1	7.1	7.8	6.0	5.8	8.8	5.7	3.0
LnGrp Delay(d),s/veh	65.0	48.5	23.7	33.9	26.7	29.4	123.6	47.9	49.1	104.7	43.6	42.5
LnGrp LOS	E	D	C	C	C	C	F	D	D	F	D	D
Approach Vol, veh/h		964			1114			521			664	
Approach Delay, s/veh		49.9			29.0			70.1			60.2	
Approach LOS		D			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	24.7	42.2	35.1	15.0	27.7	25.2	52.1
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	15.3	14.9	17.4	21.8	13.0	12.9	19.1	18.8
Green Ext Time (p_c), s	0.0	3.6	2.4	1.9	0.0	3.8	0.2	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	48.1
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	635	96	472	599	317	138	191	215	255	298	94
Future Volume (veh/h)	219	635	96	472	599	317	138	191	215	255	298	94
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	238	690	104	513	651	345	150	208	234	200	431	102
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	917	366	470	1309	530	150	360	315	191	851	322
Arrive On Green	0.12	0.17	0.17	0.29	0.37	0.37	0.09	0.20	0.20	0.12	0.23	0.23
Sat Flow, veh/h	1634	3539	1411	1634	3539	1433	1634	1770	1549	1634	3725	1409
Grp Volume(v), veh/h	238	690	104	513	651	345	150	208	234	200	431	102
Grp Sat Flow(s),veh/h/ln	1634	1770	1411	1634	1770	1433	1634	1770	1549	1634	1863	1409
Q Serve(g_s), s	17.1	22.2	5.7	34.5	17.0	24.0	11.0	12.7	17.0	14.0	12.1	7.2
Cycle Q Clear(g_c), s	17.1	22.2	5.7	34.5	17.0	24.0	11.0	12.7	17.0	14.0	12.1	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	917	366	470	1309	530	150	360	315	191	851	322
V/C Ratio(X)	0.82	0.75	0.28	1.09	0.50	0.65	1.00	0.58	0.74	1.05	0.51	0.32
Avail Cap(c_a), veh/h	313	917	366	470	1309	530	150	500	438	191	1146	433
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	0.84	0.84	0.84	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	45.9	21.9	42.8	29.2	31.4	54.5	43.1	45.1	53.0	40.4	38.5
Incr Delay (d2), s/veh	13.6	5.0	1.7	68.8	1.4	6.1	67.9	1.2	3.6	78.7	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	11.5	2.4	24.5	8.6	10.3	7.8	6.4	7.6	10.5	6.3	2.9
LnGrp Delay(d),s/veh	64.7	50.9	23.6	111.6	30.6	37.5	122.4	44.4	48.8	131.7	40.9	39.1
LnGrp LOS	E	D	C	F	C	D	F	D	D	F	D	D
Approach Vol, veh/h		1032			1509			592			733	
Approach Delay, s/veh		51.3			59.7			65.9			65.4	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	28.4	38.5	35.1	15.0	31.4	25.2	48.4
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	16.0	19.0	36.5	24.2	13.0	14.1	19.1	26.0
Green Ext Time (p_c), s	0.0	3.9	0.0	1.6	0.0	4.4	0.2	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	59.5
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	349	67	188	349	246	84	261	202	159	204	42
Future Volume (veh/h)	56	349	67	188	349	246	84	261	202	159	204	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	61	379	73	204	379	267	91	284	220	173	222	46
Adj No. of Lanes	1	2	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1229	234	218	929	716	121	369	276	204	711	144
Arrive On Green	0.05	0.42	0.40	0.22	0.83	0.83	0.07	0.19	0.19	0.12	0.24	0.24
Sat Flow, veh/h	1634	2958	564	1634	1863	1435	1634	1911	1431	1634	2914	590
Grp Volume(v), veh/h	61	225	227	204	379	267	91	262	242	173	133	135
Grp Sat Flow(s),veh/h/ln	1634	1770	1752	1634	1863	1435	1634	1770	1572	1634	1770	1735
Q Serve(g_s), s	4.4	10.2	10.5	14.7	6.2	3.0	6.6	16.8	17.6	12.4	7.4	7.7
Cycle Q Clear(g_c), s	4.4	10.2	10.5	14.7	6.2	3.0	6.6	16.8	17.6	12.4	7.4	7.7
Prop In Lane	1.00		0.32	1.00		1.00	1.00		0.91	1.00		0.34
Lane Grp Cap(c), veh/h	82	735	728	218	929	716	121	341	303	204	432	423
V/C Ratio(X)	0.75	0.31	0.31	0.94	0.41	0.37	0.75	0.77	0.80	0.85	0.31	0.32
Avail Cap(c_a), veh/h	82	735	728	218	929	716	219	608	540	204	591	580
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	23.5	23.8	46.1	5.5	1.7	54.5	45.9	46.5	51.4	37.1	37.3
Incr Delay (d2), s/veh	30.8	1.1	1.1	39.2	1.1	1.3	9.1	3.6	4.8	26.8	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	5.2	5.3	9.0	3.2	1.3	3.3	8.6	8.1	7.1	3.7	3.7
LnGrp Delay(d),s/veh	87.1	24.6	24.9	85.4	6.7	2.9	63.6	49.5	51.2	78.2	37.5	37.7
LnGrp LOS	F	C	C	F	A	A	E	D	D	E	D	D
Approach Vol, veh/h		513			850			595			441	
Approach Delay, s/veh		32.1			24.4			52.4			53.5	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	27.2	20.0	53.9	12.9	33.3	10.0	63.9
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	14.4	19.6	16.7	12.5	8.6	9.7	6.4	8.2
Green Ext Time (p_c), s	0.0	2.0	0.0	4.0	0.1	1.7	0.0	4.5

Intersection Summary	
HCM 2010 Ctrl Delay	38.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	377	67	198	377	266	84	261	212	179	204	42
Future Volume (veh/h)	56	377	67	198	377	266	84	261	212	179	204	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	61	410	73	215	410	289	91	284	230	195	222	46
Adj No. of Lanes	1	2	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1237	218	218	923	712	121	367	287	204	720	146
Arrive On Green	0.05	0.41	0.40	0.22	0.83	0.83	0.07	0.20	0.19	0.13	0.25	0.24
Sat Flow, veh/h	1634	2999	529	1634	1863	1435	1634	1871	1464	1634	2914	591
Grp Volume(v), veh/h	61	241	242	215	410	289	91	268	246	195	133	135
Grp Sat Flow(s),veh/h/ln	1634	1770	1759	1634	1863	1435	1634	1770	1566	1634	1770	1735
Q Serve(g_s), s	4.4	11.1	11.4	15.7	7.2	3.5	6.6	17.2	18.0	14.2	7.3	7.6
Cycle Q Clear(g_c), s	4.4	11.1	11.4	15.7	7.2	3.5	6.6	17.2	18.0	14.2	7.3	7.6
Prop In Lane	1.00		0.30	1.00		1.00	1.00		0.94	1.00		0.34
Lane Grp Cap(c), veh/h	82	730	725	218	923	712	121	347	307	204	437	429
V/C Ratio(X)	0.75	0.33	0.33	0.99	0.44	0.41	0.75	0.77	0.80	0.95	0.30	0.32
Avail Cap(c_a), veh/h	82	730	725	218	923	712	219	608	538	204	591	580
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	24.0	24.3	46.5	5.8	1.8	54.5	45.7	46.3	52.2	36.8	37.0
Incr Delay (d2), s/veh	30.8	1.2	1.2	51.6	1.3	1.4	9.1	3.7	4.9	50.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	5.7	5.7	10.2	3.9	1.5	3.3	8.8	8.2	9.3	3.6	3.7
LnGrp Delay(d),s/veh	87.1	25.2	25.5	98.1	7.1	3.2	63.6	49.4	51.2	102.2	37.2	37.4
LnGrp LOS	F	C	C	F	A	A	E	D	D	F	D	D
Approach Vol, veh/h		544			914			605			463	
Approach Delay, s/veh		32.3			27.3			52.3			64.6	
Approach LOS		C			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	27.5	20.0	53.5	12.9	33.6	10.0	63.5
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	16.2	20.0	17.7	13.4	8.6	9.6	6.4	9.2
Green Ext Time (p_c), s	0.0	2.1	0.0	4.3	0.1	1.8	0.0	4.9

Intersection Summary	
HCM 2010 Ctrl Delay	41.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	641	143	267	601	280	205	284	183	225	443	140
Future Volume (veh/h)	325	641	143	267	601	280	205	284	183	225	443	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	353	697	155	290	653	304	223	309	199	242	486	152
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	917	366	460	1235	500	150	434	272	191	873	330
Arrive On Green	0.06	0.09	0.09	0.28	0.35	0.35	0.09	0.21	0.20	0.12	0.23	0.23
Sat Flow, veh/h	1634	3539	1411	1634	3539	1433	1634	2072	1298	1634	3725	1409
Grp Volume(v), veh/h	353	697	155	290	653	304	223	263	245	242	486	152
Grp Sat Flow(s),veh/h/ln	1634	1770	1411	1634	1770	1433	1634	1770	1600	1634	1863	1409
Q Serve(g_s), s	23.0	23.1	9.3	18.6	17.7	21.0	11.0	16.5	17.2	14.0	13.8	11.1
Cycle Q Clear(g_c), s	23.0	23.1	9.3	18.6	17.7	21.0	11.0	16.5	17.2	14.0	13.8	11.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.81	1.00		1.00
Lane Grp Cap(c), veh/h	313	917	366	460	1235	500	150	370	335	191	873	330
V/C Ratio(X)	1.13	0.76	0.42	0.63	0.53	0.61	1.49	0.71	0.73	1.27	0.56	0.46
Avail Cap(c_a), veh/h	313	917	366	460	1235	500	150	500	452	191	1146	433
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	1.00	1.00	1.00	0.77	0.77	0.77	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	51.2	25.5	37.7	31.2	32.3	54.5	44.0	44.5	53.0	40.5	39.4
Incr Delay (d2), s/veh	81.7	4.1	2.5	2.8	1.6	5.4	245.2	2.3	3.1	155.9	0.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.5	11.9	3.9	8.7	8.9	9.0	15.2	8.3	7.9	14.6	7.2	4.4
LnGrp Delay(d),s/veh	137.9	55.3	27.9	40.4	32.8	37.7	299.7	46.3	47.7	208.9	41.0	40.4
LnGrp LOS	F	E	C	D	C	D	F	D	D	F	D	D
Approach Vol, veh/h		1205			1247			731			880	
Approach Delay, s/veh		76.0			35.8			124.1			87.1	
Approach LOS		E			D			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	29.1	37.8	35.1	15.0	32.1	27.0	45.9
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	16.0	19.2	20.6	25.1	13.0	15.8	25.0	23.0
Green Ext Time (p_c), s	0.0	4.5	1.3	1.5	0.0	5.2	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	74.7
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	704	143	501	664	347	205	284	248	276	443	140
Future Volume (veh/h)	325	704	143	501	664	347	205	284	248	276	443	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	353	765	155	545	722	377	223	309	270	261	537	152
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	917	366	429	1167	472	150	411	349	191	944	358
Arrive On Green	0.06	0.09	0.09	0.26	0.33	0.33	0.09	0.23	0.22	0.12	0.25	0.25
Sat Flow, veh/h	1634	3539	1411	1634	3539	1432	1634	1797	1528	1634	3725	1411
Grp Volume(v), veh/h	353	765	155	545	722	377	223	304	275	261	537	152
Grp Sat Flow(s),veh/h/ln	1634	1770	1411	1634	1770	1432	1634	1770	1555	1634	1863	1411
Q Serve(g_s), s	23.0	25.5	9.3	31.5	20.6	28.7	11.0	19.2	19.9	14.0	15.1	10.8
Cycle Q Clear(g_c), s	23.0	25.5	9.3	31.5	20.6	28.7	11.0	19.2	19.9	14.0	15.1	10.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Lane Grp Cap(c), veh/h	313	917	366	429	1167	472	150	404	355	191	944	358
V/C Ratio(X)	1.13	0.83	0.42	1.27	0.62	0.80	1.49	0.75	0.77	1.37	0.57	0.43
Avail Cap(c_a), veh/h	313	917	366	429	1167	472	150	500	439	191	1146	434
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	1.00	1.00	1.00	0.70	0.70	0.70	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	52.3	25.5	44.3	33.9	36.6	54.5	43.1	43.7	53.0	39.1	37.5
Incr Delay (d2), s/veh	80.9	6.0	2.4	139.4	2.5	13.1	243.2	3.6	4.8	195.8	0.5	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.5	13.3	3.9	30.8	10.4	13.1	15.1	9.8	9.0	16.7	7.8	4.3
LnGrp Delay(d),s/veh	137.2	58.3	27.8	183.6	36.3	49.7	297.7	46.7	48.4	248.8	39.6	38.3
LnGrp LOS	F	E	C	F	D	D	F	D	D	F	D	D
Approach Vol, veh/h		1273			1644			802			950	
Approach Delay, s/veh		76.5			88.2			117.1			96.9	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	31.4	35.5	35.1	15.0	34.4	27.0	43.6
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	16.0	21.9	33.5	27.5	13.0	17.1	25.0	30.7
Green Ext Time (p_c), s	0.0	4.6	0.0	0.7	0.0	5.8	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	91.7
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	704	143	501	664	347	205	284	248	276	443	140
Future Volume (veh/h)	325	704	143	501	664	347	205	284	248	276	443	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	353	765	155	545	722	377	223	309	270	261	537	152
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	1095	219	455	1174	539	214	381	324	191	736	282
Arrive On Green	0.06	0.09	0.09	0.28	0.35	0.35	0.13	0.21	0.21	0.12	0.20	0.20
Sat Flow, veh/h	1634	4224	847	1634	3390	1556	1634	1796	1528	1634	3725	1427
Grp Volume(v), veh/h	353	612	308	545	722	377	223	304	275	261	537	152
Grp Sat Flow(s),veh/h/ln	1634	1695	1680	1634	1695	1556	1634	1770	1554	1634	1863	1427
Q Serve(g_s), s	23.0	21.1	21.4	33.4	21.2	25.1	15.7	19.6	20.3	14.0	16.2	7.6
Cycle Q Clear(g_c), s	23.0	21.1	21.4	33.4	21.2	25.1	15.7	19.6	20.3	14.0	16.2	7.6
Prop In Lane	1.00		0.50	1.00		1.00	1.00		0.98	1.00		1.00
Lane Grp Cap(c), veh/h	313	879	435	455	1174	539	214	375	330	191	736	282
V/C Ratio(X)	1.13	0.70	0.71	1.20	0.62	0.70	1.04	0.81	0.83	1.37	0.73	0.54
Avail Cap(c_a), veh/h	313	879	435	455	1174	539	214	500	439	191	1146	439
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.47	0.47	0.47	0.70	0.70	0.70	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	50.3	50.4	43.3	32.6	33.8	52.1	45.0	45.5	53.0	45.1	19.2
Incr Delay (d2), s/veh	80.9	3.0	6.3	98.7	1.1	3.6	62.2	5.2	7.2	195.8	1.4	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.5	10.3	10.7	27.5	10.1	11.3	10.8	10.2	9.4	16.7	8.5	3.1
LnGrp Delay(d),s/veh	137.2	53.3	56.7	141.9	33.7	37.4	114.4	50.2	52.8	248.8	46.6	20.8
LnGrp LOS	F	D	E	F	C	D	F	D	D	F	D	C
Approach Vol, veh/h		1273			1644			802			950	
Approach Delay, s/veh		77.4			70.5			68.9			98.0	
Approach LOS		E			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	29.5	37.4	35.1	19.7	27.7	27.0	45.5
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	16.0	22.3	35.4	23.4	17.7	18.2	25.0	27.1
Green Ext Time (p_c), s	0.0	2.0	0.0	2.0	0.0	3.0	0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	77.7
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	505	75	93	513	180	71	150	77	283	253	98
Future Volume (veh/h)	52	505	75	93	513	180	71	150	77	283	253	98
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	57	549	82	101	558	196	77	163	84	325	251	107
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	917	366	584	1967	798	104	304	148	381	347	262
Arrive On Green	0.02	0.09	0.09	0.36	0.56	0.56	0.06	0.13	0.13	0.12	0.19	0.19
Sat Flow, veh/h	1634	3539	1411	1634	3539	1436	1634	2285	1114	3268	1863	1404
Grp Volume(v), veh/h	57	549	82	101	558	196	77	124	123	325	251	107
Grp Sat Flow(s),veh/h/ln	1634	1770	1411	1634	1770	1436	1634	1770	1630	1634	1863	1404
Q Serve(g_s), s	4.1	17.9	5.1	5.1	10.0	8.4	5.6	7.8	8.5	11.7	15.2	8.1
Cycle Q Clear(g_c), s	4.1	17.9	5.1	5.1	10.0	8.4	5.6	7.8	8.5	11.7	15.2	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.68	1.00		1.00
Lane Grp Cap(c), veh/h	100	917	366	584	1967	798	104	236	217	381	347	262
V/C Ratio(X)	0.57	0.60	0.22	0.17	0.28	0.25	0.74	0.53	0.57	0.85	0.72	0.41
Avail Cap(c_a), veh/h	313	917	366	584	1967	798	150	500	460	381	573	432
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	48.9	26.5	26.4	14.1	13.7	55.2	48.5	49.0	52.0	45.9	43.0
Incr Delay (d2), s/veh	4.6	2.6	1.3	0.1	0.4	0.7	10.5	1.7	2.2	16.7	2.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	9.1	2.1	2.3	5.0	3.5	2.8	3.9	4.0	6.2	8.1	3.2
LnGrp Delay(d),s/veh	61.8	51.4	27.8	26.5	14.4	14.4	65.7	50.2	51.2	68.7	48.8	44.0
LnGrp LOS	E	D	C	C	B	B	E	D	D	E	D	D
Approach Vol, veh/h		688			855			324			683	
Approach Delay, s/veh		49.5			15.9			54.3			57.5	
Approach LOS		D			B			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	20.0	46.9	35.1	11.6	26.4	11.3	70.7
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	13.7	10.5	7.1	19.9	7.6	17.2	6.1	12.0
Green Ext Time (p_c), s	0.0	2.4	0.9	1.9	0.0	2.3	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	41.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	563	75	280	563	233	71	150	136	329	253	98
Future Volume (veh/h)	52	563	75	280	563	233	71	150	136	329	253	98
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	57	612	82	304	612	253	77	163	148	358	275	107
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	917	366	551	1895	769	104	277	233	381	385	291
Arrive On Green	0.02	0.09	0.09	0.34	0.54	0.54	0.06	0.15	0.15	0.12	0.21	0.21
Sat Flow, veh/h	1634	3539	1411	1634	3539	1436	1634	1805	1514	3268	1863	1407
Grp Volume(v), veh/h	57	612	82	304	612	253	77	160	151	358	275	107
Grp Sat Flow(s),veh/h/ln	1634	1770	1411	1634	1770	1436	1634	1770	1550	1634	1863	1407
Q Serve(g_s), s	4.1	20.1	5.1	18.2	11.7	11.9	5.6	10.1	11.0	13.0	16.5	7.8
Cycle Q Clear(g_c), s	4.1	20.1	5.1	18.2	11.7	11.9	5.6	10.1	11.0	13.0	16.5	7.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Lane Grp Cap(c), veh/h	100	917	366	551	1895	769	104	272	238	381	385	291
V/C Ratio(X)	0.57	0.67	0.22	0.55	0.32	0.33	0.74	0.59	0.64	0.94	0.71	0.37
Avail Cap(c_a), veh/h	313	917	366	551	1895	769	150	500	438	381	573	433
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	49.8	26.5	32.4	15.7	15.7	55.2	47.2	47.9	52.6	44.3	40.9
Incr Delay (d2), s/veh	4.5	3.4	1.2	1.2	0.5	1.1	10.5	1.9	2.7	30.9	2.5	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	10.3	2.1	8.4	5.8	4.9	2.8	5.1	4.9	7.5	8.7	3.1
LnGrp Delay(d),s/veh	61.7	53.2	27.7	33.6	16.1	16.9	65.7	49.2	50.6	83.5	46.8	41.6
LnGrp LOS	E	D	C	C	B	B	E	D	D	F	D	D
Approach Vol, veh/h		751			1169			388			740	
Approach Delay, s/veh		51.1			20.8			53.0			63.8	
Approach LOS		D			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	22.4	44.5	35.1	11.6	28.8	11.3	68.3
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	15.0	13.0	20.2	22.1	7.6	18.5	6.1	13.9
Green Ext Time (p_c), s	0.0	2.8	0.4	1.8	0.0	2.7	0.1	4.6

Intersection Summary	
HCM 2010 Ctrl Delay	42.8
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	332	89	176	249	225	71	335	109	157	221	71
Future Volume (veh/h)	158	332	89	176	249	225	71	335	109	157	221	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	172	361	97	191	271	245	77	364	118	171	240	77
Adj No. of Lanes	1	2	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1181	313	218	953	734	104	476	152	202	636	198
Arrive On Green	0.05	0.43	0.41	0.22	0.85	0.85	0.06	0.18	0.18	0.12	0.24	0.24
Sat Flow, veh/h	1634	2758	731	1634	1863	1435	1634	2624	837	1634	2634	820
Grp Volume(v), veh/h	172	230	228	191	271	245	77	244	238	171	159	158
Grp Sat Flow(s),veh/h/ln	1634	1770	1719	1634	1863	1435	1634	1770	1692	1634	1770	1685
Q Serve(g_s), s	6.0	10.2	10.6	13.5	3.4	2.3	5.6	15.7	16.1	12.3	9.0	9.5
Cycle Q Clear(g_c), s	6.0	10.2	10.6	13.5	3.4	2.3	5.6	15.7	16.1	12.3	9.0	9.5
Prop In Lane	1.00		0.43	1.00		1.00	1.00		0.49	1.00		0.49
Lane Grp Cap(c), veh/h	82	758	736	218	953	734	104	321	307	202	427	406
V/C Ratio(X)	2.11	0.30	0.31	0.88	0.28	0.33	0.74	0.76	0.78	0.84	0.37	0.39
Avail Cap(c_a), veh/h	82	758	736	218	953	734	219	608	581	204	591	563
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	22.6	22.9	45.7	4.5	1.3	55.2	46.6	47.0	51.4	37.9	38.2
Incr Delay (d2), s/veh	536.3	1.0	1.1	29.4	0.7	1.2	9.6	3.7	4.2	26.2	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.9	5.2	5.3	7.9	1.8	1.0	2.8	8.0	7.9	7.0	4.4	4.5
LnGrp Delay(d),s/veh	593.3	23.6	24.0	75.1	5.2	2.5	64.8	50.3	51.2	77.6	38.5	38.9
LnGrp LOS	F	C	C	E	A	A	E	D	D	E	D	D
Approach Vol, veh/h		630			707			559			488	
Approach Delay, s/veh		179.3			23.2			52.7			52.3	
Approach LOS		F			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	25.8	20.0	55.4	11.7	33.0	10.0	65.4
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	14.3	18.1	15.5	12.6	7.6	11.5	8.0	5.4
Green Ext Time (p_c), s	0.0	1.9	0.0	3.5	0.1	1.9	0.0	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	77.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	358	89	184	271	241	71	335	118	175	221	71
Future Volume (veh/h)	158	358	89	184	271	241	71	335	118	175	221	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	172	389	97	200	295	262	77	364	128	190	240	77
Adj No. of Lanes	1	2	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1189	293	218	945	728	104	473	164	204	647	201
Arrive On Green	0.05	0.42	0.41	0.22	0.85	0.85	0.06	0.18	0.18	0.13	0.25	0.24
Sat Flow, veh/h	1634	2805	691	1634	1863	1435	1634	2565	887	1634	2634	820
Grp Volume(v), veh/h	172	244	242	200	295	262	77	249	243	190	159	158
Grp Sat Flow(s),veh/h/ln	1634	1770	1727	1634	1863	1435	1634	1770	1682	1634	1770	1685
Q Serve(g_s), s	6.0	11.0	11.4	14.4	3.9	2.6	5.6	16.0	16.5	13.8	8.9	9.4
Cycle Q Clear(g_c), s	6.0	11.0	11.4	14.4	3.9	2.6	5.6	16.0	16.5	13.8	8.9	9.4
Prop In Lane	1.00		0.40	1.00		1.00	1.00		0.53	1.00		0.49
Lane Grp Cap(c), veh/h	82	750	732	218	945	728	104	326	310	204	434	414
V/C Ratio(X)	2.11	0.32	0.33	0.92	0.31	0.36	0.74	0.76	0.78	0.93	0.37	0.38
Avail Cap(c_a), veh/h	82	750	732	218	945	728	219	608	577	204	591	563
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	23.1	23.5	46.0	4.8	1.4	55.2	46.5	46.8	52.0	37.5	37.8
Incr Delay (d2), s/veh	536.3	1.2	1.2	36.7	0.8	1.3	9.6	3.7	4.3	43.7	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.9	5.7	5.7	8.7	2.1	1.2	2.8	8.2	8.1	8.7	4.4	4.4
LnGrp Delay(d),s/veh	593.3	24.2	24.7	82.7	5.6	2.7	64.8	50.2	51.1	95.7	38.0	38.4
LnGrp LOS	F	C	C	F	A	A	E	D	D	F	D	D
Approach Vol, veh/h		658			757			569			507	
Approach Delay, s/veh		173.1			25.0			52.6			59.8	
Approach LOS		F			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	26.1	20.0	54.9	11.7	33.5	10.0	64.9
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	40.6	14.0	29.8	15.5	39.5	4.0	39.8
Max Q Clear Time (g_c+I1), s	15.8	18.5	16.4	13.4	7.6	11.4	8.0	5.9
Green Ext Time (p_c), s	0.0	1.9	0.0	3.7	0.1	2.0	0.0	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	77.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	566	111	104	575	202	106	223	94	313	376	146
Future Volume (veh/h)	77	566	111	104	575	202	106	223	94	313	376	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	84	615	121	113	625	220	115	242	102	250	535	159
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	917	366	510	1735	703	145	435	177	191	769	290
Arrive On Green	0.03	0.09	0.09	0.31	0.49	0.49	0.09	0.18	0.17	0.12	0.21	0.21
Sat Flow, veh/h	1634	3539	1411	1634	3539	1435	1634	2437	993	1634	3725	1407
Grp Volume(v), veh/h	84	615	121	113	625	220	115	173	171	250	535	159
Grp Sat Flow(s),veh/h/ln	1634	1770	1411	1634	1770	1435	1634	1770	1660	1634	1863	1407
Q Serve(g_s), s	6.1	20.2	7.2	6.1	13.1	11.1	8.3	10.7	11.3	14.0	16.0	12.1
Cycle Q Clear(g_c), s	6.1	20.2	7.2	6.1	13.1	11.1	8.3	10.7	11.3	14.0	16.0	12.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	133	917	366	510	1735	703	145	316	296	191	769	290
V/C Ratio(X)	0.63	0.67	0.33	0.22	0.36	0.31	0.79	0.55	0.58	1.31	0.70	0.55
Avail Cap(c_a), veh/h	313	917	366	510	1735	703	150	500	469	191	1146	433
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.68	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	49.9	25.0	30.5	18.9	18.4	53.6	44.9	45.3	53.0	44.1	42.6
Incr Delay (d2), s/veh	3.4	2.7	1.7	0.2	0.6	1.2	22.9	1.4	1.7	172.5	1.1	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	10.3	3.0	2.8	6.6	4.6	4.7	5.4	5.3	15.4	8.4	4.9
LnGrp Delay(d),s/veh	60.0	52.6	26.7	30.7	19.5	19.6	76.5	46.3	47.0	225.5	45.3	44.2
LnGrp LOS	E	D	C	C	B	B	E	D	D	F	D	D
Approach Vol, veh/h		820			958			459			944	
Approach Delay, s/veh		49.5			20.9			54.1			92.8	
Approach LOS		D			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	25.4	41.5	35.1	14.7	28.8	13.8	62.8
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	16.0	13.3	8.1	22.2	10.3	18.0	8.1	15.1
Green Ext Time (p_c), s	0.0	4.6	2.1	1.9	0.0	4.5	0.2	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	54.4
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	624	111	291	625	255	106	223	153	359	376	146
Future Volume (veh/h)	77	624	111	291	625	255	106	223	153	359	376	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	84	678	121	316	679	277	115	242	166	266	582	159
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	917	366	489	1689	685	145	388	255	191	817	309
Arrive On Green	0.03	0.09	0.09	0.30	0.48	0.48	0.09	0.19	0.19	0.12	0.22	0.22
Sat Flow, veh/h	1634	3539	1411	1634	3539	1435	1634	2029	1332	1634	3725	1408
Grp Volume(v), veh/h	84	678	121	316	679	277	115	210	198	266	582	159
Grp Sat Flow(s),veh/h/ln	1634	1770	1411	1634	1770	1435	1634	1770	1592	1634	1863	1408
Q Serve(g_s), s	6.1	22.4	7.2	20.2	14.9	15.0	8.3	13.0	13.8	14.0	17.3	11.9
Cycle Q Clear(g_c), s	6.1	22.4	7.2	20.2	14.9	15.0	8.3	13.0	13.8	14.0	17.3	11.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.84	1.00		1.00
Lane Grp Cap(c), veh/h	133	917	366	489	1689	685	145	339	305	191	817	309
V/C Ratio(X)	0.63	0.74	0.33	0.65	0.40	0.40	0.79	0.62	0.65	1.40	0.71	0.52
Avail Cap(c_a), veh/h	313	917	366	489	1689	685	150	500	450	191	1146	433
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	50.9	25.0	36.5	20.3	20.3	53.6	44.5	45.1	53.0	43.4	41.2
Incr Delay (d2), s/veh	3.2	3.5	1.6	2.9	0.7	1.8	22.9	1.7	2.2	206.6	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	11.5	3.0	9.5	7.4	6.2	4.7	6.6	6.3	17.2	9.0	4.7
LnGrp Delay(d),s/veh	59.8	54.4	26.6	39.4	21.0	22.1	76.5	46.3	47.3	259.6	44.6	42.6
LnGrp LOS	E	D	C	D	C	C	E	D	D	F	D	D
Approach Vol, veh/h		883			1272			523			1007	
Approach Delay, s/veh		51.1			25.8			53.3			101.1	
Approach LOS		D			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	27.0	39.9	35.1	14.7	30.3	13.8	61.3
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	16.0	15.8	22.2	24.4	10.3	19.3	8.1	17.0
Green Ext Time (p_c), s	0.0	5.0	0.1	1.6	0.0	4.9	0.2	4.7

Intersection Summary	
HCM 2010 Ctrl Delay	56.3
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	810	111	275	622	250	106	223	157	361	376	146
Future Volume (veh/h)	77	810	111	275	622	250	106	223	157	361	376	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	84	880	121	299	676	272	115	242	171	267	584	159
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	1576	216	340	1704	674	145	384	260	191	819	314
Arrive On Green	0.08	0.35	0.35	0.07	0.16	0.16	0.09	0.19	0.19	0.12	0.22	0.22
Sat Flow, veh/h	1634	4506	616	1634	3567	1410	1634	2003	1354	1634	3725	1428
Grp Volume(v), veh/h	84	661	340	299	642	306	115	213	200	267	584	159
Grp Sat Flow(s),veh/h/ln	1634	1695	1732	1634	1695	1587	1634	1770	1588	1634	1863	1428
Q Serve(g_s), s	6.0	18.9	19.1	21.8	20.4	20.8	8.3	13.2	14.0	14.0	17.4	11.7
Cycle Q Clear(g_c), s	6.0	18.9	19.1	21.8	20.4	20.8	8.3	13.2	14.0	14.0	17.4	11.7
Prop In Lane	1.00		0.36	1.00		0.89	1.00		0.85	1.00		1.00
Lane Grp Cap(c), veh/h	131	1186	606	340	1620	758	145	340	305	191	819	314
V/C Ratio(X)	0.64	0.56	0.56	0.88	0.40	0.40	0.79	0.63	0.66	1.40	0.71	0.51
Avail Cap(c_a), veh/h	313	1186	606	340	1620	758	150	500	448	191	1146	439
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.51	0.51	0.51	0.83	0.83	0.83	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	31.5	31.6	54.4	35.0	35.2	53.6	44.5	45.1	53.0	43.3	41.1
Incr Delay (d2), s/veh	2.6	1.0	1.9	19.0	0.6	1.3	22.9	1.8	2.3	208.8	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	9.0	9.4	11.7	9.7	9.4	4.7	6.7	6.3	17.4	9.1	4.7
LnGrp Delay(d),s/veh	56.1	32.5	33.5	73.4	35.6	36.5	76.5	46.3	47.4	261.8	44.6	42.4
LnGrp LOS	E	C	C	E	D	D	E	D	D	F	D	D
Approach Vol, veh/h		1085			1247			528			1010	
Approach Delay, s/veh		34.6			44.9			53.3			101.6	
Approach LOS		C			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	27.0	29.0	46.0	14.7	30.4	13.6	61.3
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	16.0	16.0	23.8	21.1	10.3	19.4	8.0	22.8
Green Ext Time (p_c), s	0.0	5.0	0.0	5.1	0.0	5.0	0.2	5.2

Intersection Summary			
HCM 2010 Ctrl Delay			58.0
HCM 2010 LOS			E

Notes

User approved volume balancing among the lanes for turning movement.

Intersection 4
N Prospect St & W Henderson Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	744	328	90	921	0	0	0	0	140	0	144
Future Volume (veh/h)	0	744	328	90	921	0	0	0	0	140	0	144
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1716	1716	1863	0				1750	1863	1716
Adj Flow Rate, veh/h	0	809	357	98	1001	0				152	0	157
Adj No. of Lanes	0	2	1	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2320	932	143	2748	0				279	0	223
Arrive On Green	0.00	0.66	0.66	0.17	1.00	0.00				0.16	0.00	0.16
Sat Flow, veh/h	0	3632	1422	1634	3632	0				1774	0	1423
Grp Volume(v), veh/h	0	809	357	98	1001	0				152	0	157
Grp Sat Flow(s),veh/h/ln	0	1770	1422	1634	1770	0				1774	0	1423
Q Serve(g_s), s	0.0	12.2	13.9	6.7	0.0	0.0				9.5	0.0	12.5
Cycle Q Clear(g_c), s	0.0	12.2	13.9	6.7	0.0	0.0				9.5	0.0	12.5
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2320	932	143	2748	0				279	0	223
V/C Ratio(X)	0.00	0.35	0.38	0.69	0.36	0.00				0.55	0.00	0.70
Avail Cap(c_a), veh/h	0	2320	932	191	2748	0				698	0	560
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.88	0.88	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.2	9.5	48.0	0.0	0.0				46.6	0.0	47.9
Incr Delay (d2), s/veh	0.0	0.4	1.2	5.6	0.3	0.0				1.7	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.1	5.7	3.3	0.1	0.0				4.8	0.0	5.2
LnGrp Delay(d),s/veh	0.0	9.6	10.7	53.6	0.3	0.0				48.3	0.0	51.9
LnGrp LOS		A	B	D	A					D		D
Approach Vol, veh/h		1166			1099						309	
Approach Delay, s/veh		10.0			5.1						50.1	
Approach LOS		A			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			14.5	82.7		22.8		97.2
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			12.0	44.8		45.2		62.8
Max Q Clear Time (g_c+I1), s			8.7	15.9		14.5		2.0
Green Ext Time (p_c), s			0.1	12.4		1.2		14.9

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	883	366	90	1017	0	0	0	0	140	0	200
Future Volume (veh/h)	0	883	366	90	1017	0	0	0	0	140	0	200
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1716	1716	1863	0				1750	1863	1716
Adj Flow Rate, veh/h	0	960	398	98	1105	0				152	0	217
Adj No. of Lanes	0	2	1	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2185	877	143	2612	0				347	0	279
Arrive On Green	0.00	0.62	0.62	0.17	1.00	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3632	1422	1634	3632	0				1774	0	1427
Grp Volume(v), veh/h	0	960	398	98	1105	0				152	0	217
Grp Sat Flow(s),veh/h/ln	0	1770	1422	1634	1770	0				1774	0	1427
Q Serve(g_s), s	0.0	17.1	17.9	6.7	0.0	0.0				9.0	0.0	17.3
Cycle Q Clear(g_c), s	0.0	17.1	17.9	6.7	0.0	0.0				9.0	0.0	17.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2185	877	143	2612	0				347	0	279
V/C Ratio(X)	0.00	0.44	0.45	0.69	0.42	0.00				0.44	0.00	0.78
Avail Cap(c_a), veh/h	0	2185	877	191	2612	0				698	0	561
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.80	0.80	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	12.1	12.2	48.0	0.0	0.0				42.5	0.0	45.8
Incr Delay (d2), s/veh	0.0	0.6	1.7	5.1	0.4	0.0				0.9	0.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.5	7.4	3.2	0.1	0.0				4.5	0.0	7.2
LnGrp Delay(d),s/veh	0.0	12.7	13.9	53.1	0.4	0.0				43.4	0.0	50.5
LnGrp LOS		B	B	D	A					D		D
Approach Vol, veh/h		1358			1203						369	
Approach Delay, s/veh		13.1			4.7						47.5	
Approach LOS		B			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			14.5	78.1		27.5		92.5
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			12.0	44.8		45.2		62.8
Max Q Clear Time (g_c+I1), s			8.7	19.9		19.3		2.0
Green Ext Time (p_c), s			0.1	13.7		1.4		19.1

Intersection Summary	
HCM 2010 Ctrl Delay	14.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	579	100	241	542	253	144	199	153	206	310	98
Future Volume (veh/h)	228	579	100	241	542	253	144	199	153	206	310	98
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	248	629	109	262	589	275	157	216	166	187	389	107
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	917	366	515	1387	562	150	340	247	191	747	282
Arrive On Green	0.12	0.17	0.17	0.32	0.39	0.39	0.09	0.18	0.17	0.12	0.20	0.20
Sat Flow, veh/h	1634	3539	1411	1634	3539	1434	1634	1935	1409	1634	3725	1406
Grp Volume(v), veh/h	248	629	109	262	589	275	157	197	185	187	389	107
Grp Sat Flow(s),veh/h/ln	1634	1770	1411	1634	1770	1434	1634	1770	1575	1634	1863	1406
Q Serve(g_s), s	17.8	20.0	6.0	15.7	14.6	17.3	11.0	12.4	13.2	13.7	11.2	7.9
Cycle Q Clear(g_c), s	17.8	20.0	6.0	15.7	14.6	17.3	11.0	12.4	13.2	13.7	11.2	7.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.90	1.00		1.00
Lane Grp Cap(c), veh/h	298	917	366	515	1387	562	150	311	276	191	747	282
V/C Ratio(X)	0.83	0.69	0.30	0.51	0.42	0.49	1.05	0.63	0.67	0.98	0.52	0.38
Avail Cap(c_a), veh/h	313	917	366	515	1387	562	150	500	445	191	1146	432
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	45.0	22.0	33.5	26.6	27.4	54.5	45.9	46.5	52.9	42.8	41.5
Incr Delay (d2), s/veh	15.0	3.7	1.9	0.8	1.0	3.0	81.9	1.9	2.5	59.4	0.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	10.3	2.5	7.2	7.3	7.3	8.4	6.2	6.0	9.3	5.8	3.1
LnGrp Delay(d),s/veh	65.9	48.7	23.9	34.3	27.6	30.5	136.5	47.7	48.9	112.3	43.4	42.3
LnGrp LOS	E	D	C	C	C	C	F	D	D	F	D	D
Approach Vol, veh/h		986			1126			539			683	
Approach Delay, s/veh		50.3			29.8			74.0			62.1	
Approach LOS		D			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	25.1	41.8	35.1	15.0	28.1	25.9	51.0
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	15.7	15.2	17.7	22.0	13.0	13.2	19.8	19.3
Green Ext Time (p_c), s	0.0	3.7	2.3	1.9	0.0	3.9	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	49.6
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	642	100	475	605	320	144	199	218	257	310	98
Future Volume (veh/h)	228	642	100	475	605	320	144	199	218	257	310	98
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	248	698	109	516	658	348	157	216	237	205	440	107
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	917	366	466	1282	519	150	364	318	191	858	325
Arrive On Green	0.12	0.17	0.17	0.29	0.36	0.36	0.09	0.21	0.20	0.12	0.23	0.23
Sat Flow, veh/h	1634	3539	1411	1634	3539	1433	1634	1770	1549	1634	3725	1409
Grp Volume(v), veh/h	248	698	109	516	658	348	157	216	237	205	440	107
Grp Sat Flow(s),veh/h/ln	1634	1770	1411	1634	1770	1433	1634	1770	1549	1634	1863	1409
Q Serve(g_s), s	17.8	22.5	6.0	34.2	17.5	24.5	11.0	13.3	17.3	14.0	12.4	7.6
Cycle Q Clear(g_c), s	17.8	22.5	6.0	34.2	17.5	24.5	11.0	13.3	17.3	14.0	12.4	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	298	917	366	466	1282	519	150	364	318	191	858	325
V/C Ratio(X)	0.83	0.76	0.30	1.11	0.51	0.67	1.05	0.59	0.74	1.08	0.51	0.33
Avail Cap(c_a), veh/h	313	917	366	466	1282	519	150	500	438	191	1146	433
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	0.84	0.84	0.84	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	46.0	22.0	42.9	30.0	32.2	54.5	43.1	45.0	53.0	40.3	38.5
Incr Delay (d2), s/veh	14.6	5.2	1.8	73.9	1.5	6.8	80.6	1.3	3.8	86.6	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	11.7	2.5	25.0	8.8	10.7	8.3	6.6	7.7	10.9	6.4	3.0
LnGrp Delay(d),s/veh	65.4	51.2	23.8	116.8	31.5	39.0	135.3	44.5	48.8	139.6	40.8	39.0
LnGrp LOS	E	D	C	F	C	D	F	D	D	F	D	D
Approach Vol, veh/h		1055			1522			610			752	
Approach Delay, s/veh		51.7			62.1			69.5			67.5	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	28.7	38.2	35.1	15.0	31.7	25.9	47.5
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	16.0	19.3	36.2	24.5	13.0	14.4	19.8	26.5
Green Ext Time (p_c), s	0.0	3.9	0.0	1.6	0.0	4.6	0.1	2.7

Intersection Summary	
HCM 2010 Ctrl Delay	61.5
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	834	367	100	1020	0	0	0	0	152	0	156
Future Volume (veh/h)	0	834	367	100	1020	0	0	0	0	152	0	156
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1716	1716	1863	0				1750	1863	1716
Adj Flow Rate, veh/h	0	907	399	109	1109	0				165	0	170
Adj No. of Lanes	0	2	1	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2265	910	154	2717	0				294	0	236
Arrive On Green	0.00	0.64	0.64	0.19	1.00	0.00				0.17	0.00	0.17
Sat Flow, veh/h	0	3632	1422	1634	3632	0				1774	0	1424
Grp Volume(v), veh/h	0	907	399	109	1109	0				165	0	170
Grp Sat Flow(s),veh/h/ln	0	1770	1422	1634	1770	0				1774	0	1424
Q Serve(g_s), s	0.0	14.9	16.8	7.5	0.0	0.0				10.3	0.0	13.6
Cycle Q Clear(g_c), s	0.0	14.9	16.8	7.5	0.0	0.0				10.3	0.0	13.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2265	910	154	2717	0				294	0	236
V/C Ratio(X)	0.00	0.40	0.44	0.71	0.41	0.00				0.56	0.00	0.72
Avail Cap(c_a), veh/h	0	2265	910	191	2717	0				698	0	560
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.80	0.80	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.4	10.8	47.1	0.0	0.0				46.0	0.0	47.4
Incr Delay (d2), s/veh	0.0	0.5	1.5	7.1	0.4	0.0				1.7	0.0	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.3	6.9	3.7	0.1	0.0				5.2	0.0	5.6
LnGrp Delay(d),s/veh	0.0	11.0	12.3	54.3	0.4	0.0				47.7	0.0	51.5
LnGrp LOS		B	B	D	A					D		D
Approach Vol, veh/h		1306			1218						335	
Approach Delay, s/veh		11.4			5.2						49.7	
Approach LOS		B			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			15.3	80.8		23.9		96.1
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			12.0	44.8		45.2		62.8
Max Q Clear Time (g_c+I1), s			9.5	18.8		15.6		2.0
Green Ext Time (p_c), s			0.1	13.7		1.3		18.4

Intersection Summary	
HCM 2010 Ctrl Delay	13.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	973	405	100	1116	0	0	0	0	152	0	212
Future Volume (veh/h)	0	973	405	100	1116	0	0	0	0	152	0	212
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1716	1716	1863	0				1750	1863	1716
Adj Flow Rate, veh/h	0	1058	440	109	1213	0				165	0	230
Adj No. of Lanes	0	2	1	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2130	855	154	2581	0				362	0	291
Arrive On Green	0.00	0.60	0.60	0.19	1.00	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3632	1421	1634	3632	0				1774	0	1427
Grp Volume(v), veh/h	0	1058	440	109	1213	0				165	0	230
Grp Sat Flow(s),veh/h/ln	0	1770	1421	1634	1770	0				1774	0	1427
Q Serve(g_s), s	0.0	20.4	21.4	7.5	0.0	0.0				9.8	0.0	18.3
Cycle Q Clear(g_c), s	0.0	20.4	21.4	7.5	0.0	0.0				9.8	0.0	18.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2130	855	154	2581	0				362	0	291
V/C Ratio(X)	0.00	0.50	0.51	0.71	0.47	0.00				0.46	0.00	0.79
Avail Cap(c_a), veh/h	0	2130	855	191	2581	0				698	0	561
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.68	0.68	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.6	13.8	47.1	0.0	0.0				41.9	0.0	45.3
Incr Delay (d2), s/veh	0.0	0.8	2.2	6.0	0.4	0.0				0.9	0.0	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.1	8.8	3.6	0.1	0.0				4.9	0.0	7.6
LnGrp Delay(d),s/veh	0.0	14.4	16.0	53.2	0.4	0.0				42.8	0.0	50.1
LnGrp LOS		B	B	D	A					D		D
Approach Vol, veh/h		1498			1322						395	
Approach Delay, s/veh		14.9			4.8						47.0	
Approach LOS		B			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			15.3	76.2		28.5		91.5
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			12.0	44.8		45.2		62.8
Max Q Clear Time (g_c+I1), s			9.5	23.4		20.3		2.0
Green Ext Time (p_c), s			0.1	14.0		1.5		23.2

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	553	272	101	736	0	0	0	0	149	0	132
Future Volume (veh/h)	0	553	272	101	736	0	0	0	0	149	0	132
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1716	1716	1863	0				1750	1863	1716
Adj Flow Rate, veh/h	0	601	296	110	800	0				162	0	143
Adj No. of Lanes	0	2	1	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2325	934	155	2778	0				263	0	211
Arrive On Green	0.00	0.66	0.66	0.19	1.00	0.00				0.15	0.00	0.15
Sat Flow, veh/h	0	3632	1422	1634	3632	0				1774	0	1422
Grp Volume(v), veh/h	0	601	296	110	800	0				162	0	143
Grp Sat Flow(s),veh/h/ln	0	1770	1422	1634	1770	0				1774	0	1422
Q Serve(g_s), s	0.0	8.4	10.8	7.6	0.0	0.0				10.3	0.0	11.4
Cycle Q Clear(g_c), s	0.0	8.4	10.8	7.6	0.0	0.0				10.3	0.0	11.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2325	934	155	2778	0				263	0	211
V/C Ratio(X)	0.00	0.26	0.32	0.71	0.29	0.00				0.62	0.00	0.68
Avail Cap(c_a), veh/h	0	2325	934	191	2778	0				698	0	559
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.96	0.96	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.5	8.9	47.1	0.0	0.0				47.9	0.0	48.4
Incr Delay (d2), s/veh	0.0	0.3	0.9	8.6	0.3	0.0				2.3	0.0	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.2	4.4	3.8	0.1	0.0				5.2	0.0	4.7
LnGrp Delay(d),s/veh	0.0	8.8	9.8	55.7	0.3	0.0				50.2	0.0	52.2
LnGrp LOS		A	A	E	A					D		D
Approach Vol, veh/h		897			910						305	
Approach Delay, s/veh		9.1			7.0						51.1	
Approach LOS		A			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			15.4	82.8		21.8		98.2
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			12.0	44.8		45.2		62.8
Max Q Clear Time (g_c+I1), s			9.6	12.8		13.4		2.0
Green Ext Time (p_c), s			0.1	9.0		1.1		9.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑						↰	↱
Traffic Volume (veh/h)	0	664	302	101	823	0	0	0	0	149	0	183
Future Volume (veh/h)	0	664	302	101	823	0	0	0	0	149	0	183
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1716	1716	1863	0				1750	1863	1716
Adj Flow Rate, veh/h	0	722	328	110	895	0				162	0	199
Adj No. of Lanes	0	2	1	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2198	883	155	2651	0				327	0	263
Arrive On Green	0.00	0.62	0.62	0.19	1.00	0.00				0.18	0.00	0.18
Sat Flow, veh/h	0	3632	1422	1634	3632	0				1774	0	1426
Grp Volume(v), veh/h	0	722	328	110	895	0				162	0	199
Grp Sat Flow(s),veh/h/ln	0	1770	1422	1634	1770	0				1774	0	1426
Q Serve(g_s), s	0.0	11.7	13.6	7.6	0.0	0.0				9.8	0.0	15.9
Cycle Q Clear(g_c), s	0.0	11.7	13.6	7.6	0.0	0.0				9.8	0.0	15.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2198	883	155	2651	0				327	0	263
V/C Ratio(X)	0.00	0.33	0.37	0.71	0.34	0.00				0.50	0.00	0.76
Avail Cap(c_a), veh/h	0	2198	883	191	2651	0				698	0	561
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.93	0.93	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.8	11.2	47.1	0.0	0.0				43.9	0.0	46.4
Incr Delay (d2), s/veh	0.0	0.4	1.2	8.4	0.3	0.0				1.2	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.7	5.6	3.8	0.1	0.0				4.9	0.0	6.6
LnGrp Delay(d),s/veh	0.0	11.2	12.4	55.5	0.3	0.0				45.1	0.0	50.9
LnGrp LOS		B	B	E	A					D		D
Approach Vol, veh/h		1050			1005						361	
Approach Delay, s/veh		11.6			6.4						48.3	
Approach LOS		B			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			15.4	78.5		26.1		93.9
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			12.0	44.8		45.2		62.8
Max Q Clear Time (g_c+I1), s			9.6	15.6		17.9		2.0
Green Ext Time (p_c), s			0.1	10.6		1.4		12.2

Intersection Summary		
HCM 2010 Ctrl Delay		14.9
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	511	78	94	519	182	74	156	79	286	263	102
Future Volume (veh/h)	54	511	78	94	519	182	74	156	79	286	263	102
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	59	555	85	102	564	198	80	170	86	333	255	111
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	917	366	578	1949	790	107	315	151	381	350	264
Arrive On Green	0.02	0.09	0.09	0.35	0.55	0.55	0.07	0.14	0.13	0.12	0.19	0.19
Sat Flow, veh/h	1634	3539	1411	1634	3539	1436	1634	2299	1103	3268	1863	1404
Grp Volume(v), veh/h	59	555	85	102	564	198	80	129	127	333	255	111
Grp Sat Flow(s),veh/h/ln	1634	1770	1411	1634	1770	1436	1634	1770	1633	1634	1863	1404
Q Serve(g_s), s	4.3	18.1	5.2	5.2	10.2	8.6	5.8	8.1	8.8	12.0	15.5	8.4
Cycle Q Clear(g_c), s	4.3	18.1	5.2	5.2	10.2	8.6	5.8	8.1	8.8	12.0	15.5	8.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.68	1.00		1.00
Lane Grp Cap(c), veh/h	102	917	366	578	1949	790	107	242	224	381	350	264
V/C Ratio(X)	0.58	0.61	0.23	0.18	0.29	0.25	0.75	0.53	0.57	0.87	0.73	0.42
Avail Cap(c_a), veh/h	313	917	366	578	1949	790	150	500	461	381	573	432
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	48.9	26.4	26.7	14.4	14.1	55.1	48.2	48.7	52.1	45.8	43.0
Incr Delay (d2), s/veh	4.5	2.6	1.3	0.1	0.4	0.8	11.6	1.7	2.2	19.5	2.9	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	9.2	2.2	2.3	5.1	3.6	2.9	4.1	4.1	6.4	8.2	3.3
LnGrp Delay(d),s/veh	61.7	51.6	27.7	26.9	14.8	14.8	66.7	49.9	50.8	71.6	48.7	44.0
LnGrp LOS	E	D	C	C	B	B	E	D	D	E	D	D
Approach Vol, veh/h		699			864			336			699	
Approach Delay, s/veh		49.5			16.2			54.3			58.9	
Approach LOS		D			B			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	20.4	46.5	35.1	11.9	26.6	11.5	70.1
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	14.0	10.8	7.2	20.1	7.8	17.5	6.3	12.2
Green Ext Time (p_c), s	0.0	2.5	1.0	1.9	0.0	2.4	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	41.6
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	569	78	281	569	235	74	156	138	332	263	102
Future Volume (veh/h)	54	569	78	281	569	235	74	156	138	332	263	102
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1900	1716	1863	1716
Adj Flow Rate, veh/h	59	618	85	305	618	255	80	170	150	361	286	111
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	917	366	547	1880	763	107	286	234	381	386	292
Arrive On Green	0.02	0.09	0.09	0.33	0.53	0.53	0.07	0.16	0.15	0.12	0.21	0.21
Sat Flow, veh/h	1634	3539	1411	1634	3539	1436	1634	1828	1496	3268	1863	1407
Grp Volume(v), veh/h	59	618	85	305	618	255	80	164	156	361	286	111
Grp Sat Flow(s),veh/h/ln	1634	1770	1411	1634	1770	1436	1634	1770	1554	1634	1863	1407
Q Serve(g_s), s	4.3	20.3	5.2	18.3	11.9	12.1	5.8	10.4	11.3	13.2	17.3	8.1
Cycle Q Clear(g_c), s	4.3	20.3	5.2	18.3	11.9	12.1	5.8	10.4	11.3	13.2	17.3	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.96	1.00		1.00
Lane Grp Cap(c), veh/h	102	917	366	547	1880	763	107	276	243	381	386	292
V/C Ratio(X)	0.58	0.67	0.23	0.56	0.33	0.33	0.75	0.59	0.64	0.95	0.74	0.38
Avail Cap(c_a), veh/h	313	917	366	547	1880	763	150	500	439	381	573	433
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	49.9	26.4	32.7	16.0	16.0	55.1	47.1	47.8	52.6	44.5	40.9
Incr Delay (d2), s/veh	4.4	3.4	1.3	1.3	0.5	1.2	11.6	1.9	2.7	32.6	2.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	10.4	2.2	8.5	5.9	5.0	2.9	5.2	5.0	7.7	9.2	3.2
LnGrp Delay(d),s/veh	61.6	53.4	27.6	33.9	16.4	17.2	66.7	49.0	50.5	85.2	47.3	41.7
LnGrp LOS	E	D	C	C	B	B	E	D	D	F	D	D
Approach Vol, veh/h		762			1178			400			758	
Approach Delay, s/veh		51.1			21.1			53.1			64.6	
Approach LOS		D			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	22.7	44.2	35.1	11.9	28.9	11.5	67.7
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.4	33.3	23.0	29.1	10.4	36.3	21.0	31.1
Max Q Clear Time (g_c+I1), s	15.2	13.3	20.3	22.3	7.8	19.3	6.3	14.1
Green Ext Time (p_c), s	0.0	2.9	0.4	1.8	0.0	2.8	0.1	4.7

Intersection Summary	
HCM 2010 Ctrl Delay	43.3
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑						↰	↱
Traffic Volume (veh/h)	0	620	305	112	815	0	0	0	0	161	0	143
Future Volume (veh/h)	0	620	305	112	815	0	0	0	0	161	0	143
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1716	1716	1863	0				1750	1863	1716
Adj Flow Rate, veh/h	0	674	332	122	886	0				175	0	155
Adj No. of Lanes	0	2	1	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2271	912	167	2750	0				277	0	222
Arrive On Green	0.00	0.64	0.64	0.20	1.00	0.00				0.16	0.00	0.16
Sat Flow, veh/h	0	3632	1422	1634	3632	0				1774	0	1423
Grp Volume(v), veh/h	0	674	332	122	886	0				175	0	155
Grp Sat Flow(s),veh/h/ln	0	1770	1422	1634	1770	0				1774	0	1423
Q Serve(g_s), s	0.0	10.1	13.1	8.4	0.0	0.0				11.1	0.0	12.4
Cycle Q Clear(g_c), s	0.0	10.1	13.1	8.4	0.0	0.0				11.1	0.0	12.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2271	912	167	2750	0				277	0	222
V/C Ratio(X)	0.00	0.30	0.36	0.73	0.32	0.00				0.63	0.00	0.70
Avail Cap(c_a), veh/h	0	2271	912	191	2750	0				698	0	560
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.94	0.94	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.5	10.1	46.2	0.0	0.0				47.4	0.0	47.9
Incr Delay (d2), s/veh	0.0	0.3	1.1	11.0	0.3	0.0				2.4	0.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.1	5.4	4.3	0.1	0.0				5.6	0.0	5.1
LnGrp Delay(d),s/veh	0.0	9.9	11.2	57.2	0.3	0.0				49.7	0.0	51.8
LnGrp LOS		A	B	E	A					D		D
Approach Vol, veh/h		1006			1008						330	
Approach Delay, s/veh		10.3			7.2						50.7	
Approach LOS		B			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			16.3	81.0		22.8		97.2
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			12.0	44.8		45.2		62.8
Max Q Clear Time (g_c+I1), s			10.4	15.1		14.4		2.0
Green Ext Time (p_c), s			0.0	10.3		1.2		11.6

Intersection Summary	
HCM 2010 Ctrl Delay	14.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	731	335	112	902	0	0	0	0	161	0	194
Future Volume (veh/h)	0	731	335	112	902	0	0	0	0	161	0	194
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1716	1716	1863	0				1750	1863	1716
Adj Flow Rate, veh/h	0	795	364	122	980	0				175	0	211
Adj No. of Lanes	0	2	1	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2144	861	167	2623	0				341	0	274
Arrive On Green	0.00	0.61	0.61	0.20	1.00	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	3632	1421	1634	3632	0				1774	0	1426
Grp Volume(v), veh/h	0	795	364	122	980	0				175	0	211
Grp Sat Flow(s),veh/h/ln	0	1770	1421	1634	1770	0				1774	0	1426
Q Serve(g_s), s	0.0	13.7	16.3	8.4	0.0	0.0				10.6	0.0	16.8
Cycle Q Clear(g_c), s	0.0	13.7	16.3	8.4	0.0	0.0				10.6	0.0	16.8
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2144	861	167	2623	0				341	0	274
V/C Ratio(X)	0.00	0.37	0.42	0.73	0.37	0.00				0.51	0.00	0.77
Avail Cap(c_a), veh/h	0	2144	861	191	2623	0				698	0	561
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.89	0.89	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	12.0	12.5	46.2	0.0	0.0				43.4	0.0	46.0
Incr Delay (d2), s/veh	0.0	0.5	1.5	10.5	0.4	0.0				1.2	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.8	6.7	4.3	0.1	0.0				5.3	0.0	7.0
LnGrp Delay(d),s/veh	0.0	12.5	14.1	56.7	0.4	0.0				44.6	0.0	50.5
LnGrp LOS		B	B	E	A					D		D
Approach Vol, veh/h		1159			1102						386	
Approach Delay, s/veh		13.0			6.6						47.8	
Approach LOS		B			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			16.3	76.7		27.1		92.9
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			12.0	44.8		45.2		62.8
Max Q Clear Time (g_c+I1), s			10.4	18.3		18.8		2.0
Green Ext Time (p_c), s			0.0	11.7		1.5		14.5

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Intersection 5
SR 65 SB Onramp & W Henderson Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	695	0	0	710	167	303	0	184	0	0	0
Future Volume (veh/h)	184	695	0	0	710	167	303	0	184	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1716	1863	0	0	1863	1716	1750	1863	1716			
Adj Flow Rate, veh/h	200	755	0	0	772	182	329	0	200			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	246	2510	0	0	1859	746	398	0	320			
Arrive On Green	0.30	1.00	0.00	0.00	1.00	1.00	0.22	0.00	0.22			
Sat Flow, veh/h	1634	3632	0	0	3632	1420	1774	0	1428			
Grp Volume(v), veh/h	200	755	0	0	772	182	329	0	200			
Grp Sat Flow(s),veh/h/ln	1634	1770	0	0	1770	1420	1774	0	1428			
Q Serve(g_s), s	13.6	0.0	0.0	0.0	0.0	0.0	21.2	0.0	15.2			
Cycle Q Clear(g_c), s	13.6	0.0	0.0	0.0	0.0	0.0	21.2	0.0	15.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	246	2510	0	0	1859	746	398	0	320			
V/C Ratio(X)	0.81	0.30	0.00	0.00	0.42	0.24	0.83	0.00	0.62			
Avail Cap(c_a), veh/h	408	2510	0	0	1859	746	562	0	452			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.94	0.94	0.00	0.00	0.72	0.72	1.00	0.00	1.00			
Uniform Delay (d), s/veh	40.4	0.0	0.0	0.0	0.0	0.0	44.3	0.0	42.0			
Incr Delay (d2), s/veh	6.0	0.3	0.0	0.0	0.5	0.6	7.0	0.0	2.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.5	0.1	0.0	0.0	0.1	0.1	11.2	0.0	6.2			
LnGrp Delay(d),s/veh	46.4	0.3	0.0	0.0	0.5	0.6	51.3	0.0	44.0			
LnGrp LOS	D	A			A	A	D		D			
Approach Vol, veh/h		955			954			529				
Approach Delay, s/veh		9.9			0.5			48.5				
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		30.9		89.1			22.1	67.0
Change Period (Y+Rc), s		6.0		6.0			6.0	6.0
Max Green Setting (Gmax), s		36.0		72.0			28.0	38.0
Max Q Clear Time (g_c+I1), s		23.2		2.0			15.6	2.0
Green Ext Time (p_c), s		1.7		9.8			0.5	9.3

Intersection Summary	
HCM 2010 Ctrl Delay	14.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	257	761	0	0	766	167	343	0	184	0	0	0
Future Volume (veh/h)	257	761	0	0	766	167	343	0	184	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1716	1863	0	0	1863	1716	1750	1863	1716			
Adj Flow Rate, veh/h	279	827	0	0	833	182	373	0	200			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	320	2427	0	0	1616	648	439	0	354			
Arrive On Green	0.39	1.00	0.00	0.00	0.91	0.91	0.25	0.00	0.25			
Sat Flow, veh/h	1634	3632	0	0	3632	1419	1774	0	1430			
Grp Volume(v), veh/h	279	827	0	0	833	182	373	0	200			
Grp Sat Flow(s),veh/h/ln	1634	1770	0	0	1770	1419	1774	0	1430			
Q Serve(g_s), s	18.9	0.0	0.0	0.0	4.6	1.8	24.0	0.0	14.7			
Cycle Q Clear(g_c), s	18.9	0.0	0.0	0.0	4.6	1.8	24.0	0.0	14.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	320	2427	0	0	1616	648	439	0	354			
V/C Ratio(X)	0.87	0.34	0.00	0.00	0.52	0.28	0.85	0.00	0.57			
Avail Cap(c_a), veh/h	408	2427	0	0	1616	648	562	0	453			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.90	0.90	0.00	0.00	0.70	0.70	1.00	0.00	1.00			
Uniform Delay (d), s/veh	35.1	0.0	0.0	0.0	3.0	2.9	43.0	0.0	39.5			
Incr Delay (d2), s/veh	13.9	0.3	0.0	0.0	0.8	0.8	9.6	0.0	1.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	9.8	0.1	0.0	0.0	2.0	0.7	13.0	0.0	5.9			
LnGrp Delay(d),s/veh	49.1	0.3	0.0	0.0	3.8	3.7	52.6	0.0	40.9			
LnGrp LOS	D	A			A	A	D		D			
Approach Vol, veh/h		1106			1015			573				
Approach Delay, s/veh		12.6			3.8			48.5				
Approach LOS		B			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		33.7		86.3			27.5	58.8
Change Period (Y+Rc), s		6.0		6.0			6.0	6.0
Max Green Setting (Gmax), s		36.0		72.0			28.0	38.0
Max Q Clear Time (g_c+I1), s		26.0		2.0			20.9	6.6
Green Ext Time (p_c), s		1.7		11.2			0.6	10.1

Intersection Summary	
HCM 2010 Ctrl Delay	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑						↰	↱
Traffic Volume (veh/h)	0	753	332	91	930	0	0	0	0	141	0	145
Future Volume (veh/h)	0	753	332	91	930	0	0	0	0	141	0	145
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1716	1716	1863	0				1750	1863	1716
Adj Flow Rate, veh/h	0	818	361	99	1011	0				153	0	158
Adj No. of Lanes	0	2	1	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2316	931	144	2745	0				280	0	224
Arrive On Green	0.00	0.65	0.65	0.18	1.00	0.00				0.16	0.00	0.16
Sat Flow, veh/h	0	3632	1422	1634	3632	0				1774	0	1423
Grp Volume(v), veh/h	0	818	361	99	1011	0				153	0	158
Grp Sat Flow(s),veh/h/ln	0	1770	1422	1634	1770	0				1774	0	1423
Q Serve(g_s), s	0.0	12.5	14.1	6.8	0.0	0.0				9.5	0.0	12.6
Cycle Q Clear(g_c), s	0.0	12.5	14.1	6.8	0.0	0.0				9.5	0.0	12.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2316	931	144	2745	0				280	0	224
V/C Ratio(X)	0.00	0.35	0.39	0.69	0.37	0.00				0.55	0.00	0.70
Avail Cap(c_a), veh/h	0	2316	931	191	2745	0				698	0	560
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.88	0.88	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.3	9.6	47.9	0.0	0.0				46.6	0.0	47.9
Incr Delay (d2), s/veh	0.0	0.4	1.2	5.8	0.3	0.0				1.7	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.2	5.8	3.3	0.1	0.0				4.8	0.0	5.2
LnGrp Delay(d),s/veh	0.0	9.7	10.8	53.7	0.3	0.0				48.3	0.0	51.9
LnGrp LOS		A	B	D	A					D		D
Approach Vol, veh/h		1179			1110						311	
Approach Delay, s/veh		10.1			5.1						50.1	
Approach LOS		B			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			14.6	82.5		22.9		97.1
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			12.0	44.8		45.2		62.8
Max Q Clear Time (g_c+I1), s			8.8	16.1		14.6		2.0
Green Ext Time (p_c), s			0.1	12.5		1.2		15.2

Intersection Summary		
HCM 2010 Ctrl Delay		12.7
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	892	370	91	1026	0	0	0	0	141	0	201
Future Volume (veh/h)	0	892	370	91	1026	0	0	0	0	141	0	201
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1716	1716	1863	0				1750	1863	1716
Adj Flow Rate, veh/h	0	970	402	99	1115	0				153	0	218
Adj No. of Lanes	0	2	1	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2180	876	144	2609	0				348	0	280
Arrive On Green	0.00	0.62	0.62	0.18	1.00	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3632	1422	1634	3632	0				1774	0	1427
Grp Volume(v), veh/h	0	970	402	99	1115	0				153	0	218
Grp Sat Flow(s),veh/h/ln	0	1770	1422	1634	1770	0				1774	0	1427
Q Serve(g_s), s	0.0	17.4	18.2	6.8	0.0	0.0				9.1	0.0	17.4
Cycle Q Clear(g_c), s	0.0	17.4	18.2	6.8	0.0	0.0				9.1	0.0	17.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2180	876	144	2609	0				348	0	280
V/C Ratio(X)	0.00	0.44	0.46	0.69	0.43	0.00				0.44	0.00	0.78
Avail Cap(c_a), veh/h	0	2180	876	191	2609	0				698	0	561
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.79	0.79	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	12.2	12.3	47.9	0.0	0.0				42.4	0.0	45.8
Incr Delay (d2), s/veh	0.0	0.7	1.7	5.2	0.4	0.0				0.9	0.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.7	7.5	3.3	0.1	0.0				4.5	0.0	7.2
LnGrp Delay(d),s/veh	0.0	12.9	14.1	53.1	0.4	0.0				43.3	0.0	50.5
LnGrp LOS		B	B	D	A					D		D
Approach Vol, veh/h		1372			1214						371	
Approach Delay, s/veh		13.2			4.7						47.5	
Approach LOS		B			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			14.6	77.9		27.5		92.5
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			12.0	44.8		45.2		62.8
Max Q Clear Time (g_c+I1), s			8.8	20.2		19.4		2.0
Green Ext Time (p_c), s			0.1	13.8		1.4		19.5

Intersection Summary	
HCM 2010 Ctrl Delay	14.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	769	0	0	791	186	365	0	221	0	0	0
Future Volume (veh/h)	204	769	0	0	791	186	365	0	221	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1716	1863	0	0	1863	1716	1750	1863	1716			
Adj Flow Rate, veh/h	222	836	0	0	860	202	397	0	240			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	267	2380	0	0	1684	675	463	0	373			
Arrive On Green	0.33	1.00	0.00	0.00	0.95	0.95	0.26	0.00	0.26			
Sat Flow, veh/h	1634	3632	0	0	3632	1419	1774	0	1430			
Grp Volume(v), veh/h	222	836	0	0	860	202	397	0	240			
Grp Sat Flow(s),veh/h/ln	1634	1770	0	0	1770	1419	1774	0	1430			
Q Serve(g_s), s	15.1	0.0	0.0	0.0	2.7	1.2	25.6	0.0	17.9			
Cycle Q Clear(g_c), s	15.1	0.0	0.0	0.0	2.7	1.2	25.6	0.0	17.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	267	2380	0	0	1684	675	463	0	373			
V/C Ratio(X)	0.83	0.35	0.00	0.00	0.51	0.30	0.86	0.00	0.64			
Avail Cap(c_a), veh/h	408	2380	0	0	1684	675	562	0	453			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.91	0.91	0.00	0.00	0.64	0.64	1.00	0.00	1.00			
Uniform Delay (d), s/veh	38.9	0.0	0.0	0.0	1.6	1.6	42.2	0.0	39.4			
Incr Delay (d2), s/veh	7.8	0.4	0.0	0.0	0.7	0.7	10.8	0.0	2.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.4	0.1	0.0	0.0	1.1	0.5	13.9	0.0	7.3			
LnGrp Delay(d),s/veh	46.7	0.4	0.0	0.0	2.3	2.3	53.1	0.0	41.6			
LnGrp LOS	D	A			A	A	D		D			
Approach Vol, veh/h		1058			1062			637				
Approach Delay, s/veh		10.1			2.3			48.8				
Approach LOS		B			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		35.3		84.7			23.6	61.1
Change Period (Y+Rc), s		6.0		6.0			6.0	6.0
Max Green Setting (Gmax), s		36.0		72.0			28.0	38.0
Max Q Clear Time (g_c+I1), s		27.6		2.0			17.1	4.7
Green Ext Time (p_c), s		1.7		11.8			0.5	10.7

Intersection Summary	
HCM 2010 Ctrl Delay	16.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑			↑↑	↱		↰	↱			
Traffic Volume (veh/h)	277	835	0	0	847	186	405	0	221	0	0	0
Future Volume (veh/h)	277	835	0	0	847	186	405	0	221	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1716	1863	0	0	1863	1716	1750	1863	1716			
Adj Flow Rate, veh/h	301	908	0	0	921	202	440	0	240			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	340	2305	0	0	1451	581	501	0	404			
Arrive On Green	0.42	1.00	0.00	0.00	0.82	0.82	0.28	0.00	0.28			
Sat Flow, veh/h	1634	3632	0	0	3632	1418	1774	0	1431			
Grp Volume(v), veh/h	301	908	0	0	921	202	440	0	240			
Grp Sat Flow(s),veh/h/ln	1634	1770	0	0	1770	1418	1774	0	1431			
Q Serve(g_s), s	20.4	0.0	0.0	0.0	11.7	4.3	28.4	0.0	17.4			
Cycle Q Clear(g_c), s	20.4	0.0	0.0	0.0	11.7	4.3	28.4	0.0	17.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	340	2305	0	0	1451	581	501	0	404			
V/C Ratio(X)	0.89	0.39	0.00	0.00	0.63	0.35	0.88	0.00	0.59			
Avail Cap(c_a), veh/h	408	2305	0	0	1451	581	562	0	453			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.86	0.86	0.00	0.00	0.62	0.62	1.00	0.00	1.00			
Uniform Delay (d), s/veh	33.7	0.0	0.0	0.0	7.4	6.8	41.1	0.0	37.1			
Incr Delay (d2), s/veh	15.8	0.4	0.0	0.0	1.3	1.0	13.8	0.0	1.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	10.5	0.1	0.0	0.0	5.6	1.7	15.8	0.0	7.1			
LnGrp Delay(d),s/veh	49.5	0.4	0.0	0.0	8.8	7.8	54.9	0.0	38.8			
LnGrp LOS	D	A			A	A	D		D			
Approach Vol, veh/h		1209			1123			680				
Approach Delay, s/veh		12.7			8.6			49.2				
Approach LOS		B			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		37.9		82.1			29.0	53.2
Change Period (Y+Rc), s		6.0		6.0			6.0	6.0
Max Green Setting (Gmax), s		36.0		72.0			28.0	38.0
Max Q Clear Time (g_c+I1), s		30.4		2.0			22.4	13.7
Green Ext Time (p_c), s		1.4		13.4			0.5	10.6

Intersection Summary			
HCM 2010 Ctrl Delay			19.4
HCM 2010 LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	657	0	0	541	111	292	0	103	0	0	0
Future Volume (veh/h)	94	657	0	0	541	111	292	0	103	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1716	1863	0	0	1863	1716	1750	1863	1716			
Adj Flow Rate, veh/h	102	714	0	0	588	121	317	0	112			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	149	2541	0	0	2100	844	382	0	307			
Arrive On Green	0.18	1.00	0.00	0.00	1.00	1.00	0.22	0.00	0.22			
Sat Flow, veh/h	1634	3632	0	0	3632	1421	1774	0	1428			
Grp Volume(v), veh/h	102	714	0	0	588	121	317	0	112			
Grp Sat Flow(s),veh/h/ln	1634	1770	0	0	1770	1421	1774	0	1428			
Q Serve(g_s), s	7.0	0.0	0.0	0.0	0.0	0.0	20.5	0.0	8.0			
Cycle Q Clear(g_c), s	7.0	0.0	0.0	0.0	0.0	0.0	20.5	0.0	8.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	149	2541	0	0	2100	844	382	0	307			
V/C Ratio(X)	0.68	0.28	0.00	0.00	0.28	0.14	0.83	0.00	0.36			
Avail Cap(c_a), veh/h	408	2541	0	0	2100	844	562	0	452			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.97	0.97	0.00	0.00	0.93	0.93	1.00	0.00	1.00			
Uniform Delay (d), s/veh	47.4	0.0	0.0	0.0	0.0	0.0	45.0	0.0	40.1			
Incr Delay (d2), s/veh	5.3	0.3	0.0	0.0	0.3	0.3	6.7	0.0	0.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.3	0.1	0.0	0.0	0.1	0.1	10.7	0.0	3.2			
LnGrp Delay(d),s/veh	52.7	0.3	0.0	0.0	0.3	0.3	51.7	0.0	40.8			
LnGrp LOS	D	A			A	A	D		D			
Approach Vol, veh/h		816			709			429				
Approach Delay, s/veh		6.8			0.3			48.8				
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		29.8		90.2			14.9	75.2
Change Period (Y+Rc), s		6.0		6.0			6.0	6.0
Max Green Setting (Gmax), s		36.0		72.0			28.0	38.0
Max Q Clear Time (g_c+I1), s		22.5		2.0			9.0	2.0
Green Ext Time (p_c), s		1.4		7.4			0.3	7.1

Intersection Summary	
HCM 2010 Ctrl Delay	13.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	710	0	0	592	111	328	0	103	0	0	0
Future Volume (veh/h)	153	710	0	0	592	111	328	0	103	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1716	1863	0	0	1863	1716	1750	1863	1716			
Adj Flow Rate, veh/h	166	772	0	0	643	121	357	0	112			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	213	2464	0	0	1884	756	420	0	339			
Arrive On Green	0.26	1.00	0.00	0.00	1.00	1.00	0.24	0.00	0.24			
Sat Flow, veh/h	1634	3632	0	0	3632	1420	1774	0	1429			
Grp Volume(v), veh/h	166	772	0	0	643	121	357	0	112			
Grp Sat Flow(s),veh/h/ln	1634	1770	0	0	1770	1420	1774	0	1429			
Q Serve(g_s), s	11.3	0.0	0.0	0.0	0.0	0.0	23.1	0.0	7.8			
Cycle Q Clear(g_c), s	11.3	0.0	0.0	0.0	0.0	0.0	23.1	0.0	7.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	213	2464	0	0	1884	756	420	0	339			
V/C Ratio(X)	0.78	0.31	0.00	0.00	0.34	0.16	0.85	0.00	0.33			
Avail Cap(c_a), veh/h	408	2464	0	0	1884	756	562	0	453			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.95	0.95	0.00	0.00	0.92	0.92	1.00	0.00	1.00			
Uniform Delay (d), s/veh	42.7	0.0	0.0	0.0	0.0	0.0	43.7	0.0	37.9			
Incr Delay (d2), s/veh	5.7	0.3	0.0	0.0	0.5	0.4	9.1	0.0	0.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.4	0.1	0.0	0.0	0.1	0.1	12.4	0.0	3.1			
LnGrp Delay(d),s/veh	48.4	0.3	0.0	0.0	0.5	0.4	52.8	0.0	38.5			
LnGrp LOS	D	A			A	A	D		D			
Approach Vol, veh/h		938			764			469				
Approach Delay, s/veh		8.8			0.4			49.4				
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		32.4		87.6			19.7	67.9
Change Period (Y+Rc), s		6.0		6.0			6.0	6.0
Max Green Setting (Gmax), s		36.0		72.0			28.0	38.0
Max Q Clear Time (g_c+I1), s		25.1		2.0			13.3	2.0
Green Ext Time (p_c), s		1.4		8.3			0.4	8.0

Intersection Summary	
HCM 2010 Ctrl Delay	14.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	559	275	102	744	0	0	0	0	150	0	133
Future Volume (veh/h)	0	559	275	102	744	0	0	0	0	150	0	133
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1716	1716	1863	0				1750	1863	1716
Adj Flow Rate, veh/h	0	608	299	111	809	0				163	0	145
Adj No. of Lanes	0	2	1	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2318	931	156	2774	0				265	0	213
Arrive On Green	0.00	0.65	0.65	0.19	1.00	0.00				0.15	0.00	0.15
Sat Flow, veh/h	0	3632	1422	1634	3632	0				1774	0	1422
Grp Volume(v), veh/h	0	608	299	111	809	0				163	0	145
Grp Sat Flow(s),veh/h/ln	0	1770	1422	1634	1770	0				1774	0	1422
Q Serve(g_s), s	0.0	8.6	11.0	7.6	0.0	0.0				10.3	0.0	11.6
Cycle Q Clear(g_c), s	0.0	8.6	11.0	7.6	0.0	0.0				10.3	0.0	11.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2318	931	156	2774	0				265	0	213
V/C Ratio(X)	0.00	0.26	0.32	0.71	0.29	0.00				0.61	0.00	0.68
Avail Cap(c_a), veh/h	0	2318	931	191	2774	0				698	0	559
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.96	0.96	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.6	9.0	47.0	0.0	0.0				47.8	0.0	48.3
Incr Delay (d2), s/veh	0.0	0.3	0.9	8.8	0.3	0.0				2.3	0.0	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.2	4.6	3.8	0.1	0.0				5.2	0.0	4.8
LnGrp Delay(d),s/veh	0.0	8.9	10.0	55.8	0.3	0.0				50.1	0.0	52.1
LnGrp LOS		A	A	E	A					D		D
Approach Vol, veh/h		907			920						308	
Approach Delay, s/veh		9.3			7.0						51.0	
Approach LOS		A			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			15.5	82.6		22.0		98.0
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			12.0	44.8		45.2		62.8
Max Q Clear Time (g_c+I1), s			9.6	13.0		13.6		2.0
Green Ext Time (p_c), s			0.1	9.1		1.2		9.8

Intersection Summary			
HCM 2010 Ctrl Delay			14.3
HCM 2010 LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	670	305	102	831	0	0	0	0	150	0	184
Future Volume (veh/h)	0	670	305	102	831	0	0	0	0	150	0	184
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1716	1716	1863	0				1750	1863	1716
Adj Flow Rate, veh/h	0	728	332	111	903	0				163	0	200
Adj No. of Lanes	0	2	1	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2193	881	156	2649	0				328	0	264
Arrive On Green	0.00	0.62	0.62	0.19	1.00	0.00				0.18	0.00	0.18
Sat Flow, veh/h	0	3632	1422	1634	3632	0				1774	0	1426
Grp Volume(v), veh/h	0	728	332	111	903	0				163	0	200
Grp Sat Flow(s),veh/h/ln	0	1770	1422	1634	1770	0				1774	0	1426
Q Serve(g_s), s	0.0	11.8	13.9	7.6	0.0	0.0				9.9	0.0	16.0
Cycle Q Clear(g_c), s	0.0	11.8	13.9	7.6	0.0	0.0				9.9	0.0	16.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2193	881	156	2649	0				328	0	264
V/C Ratio(X)	0.00	0.33	0.38	0.71	0.34	0.00				0.50	0.00	0.76
Avail Cap(c_a), veh/h	0	2193	881	191	2649	0				698	0	561
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.93	0.93	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.9	11.3	47.0	0.0	0.0				43.9	0.0	46.4
Incr Delay (d2), s/veh	0.0	0.4	1.2	8.6	0.3	0.0				1.2	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.9	5.7	3.8	0.1	0.0				5.0	0.0	6.6
LnGrp Delay(d),s/veh	0.0	11.3	12.6	55.6	0.3	0.0				45.1	0.0	50.8
LnGrp LOS		B	B	E	A					D		D
Approach Vol, veh/h		1060			1014						363	
Approach Delay, s/veh		11.7			6.4						48.2	
Approach LOS		B			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			15.5	78.4		26.2		93.8
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			12.0	44.8		45.2		62.8
Max Q Clear Time (g_c+I1), s			9.6	15.9		18.0		2.0
Green Ext Time (p_c), s			0.1	10.8		1.4		12.4

Intersection Summary	
HCM 2010 Ctrl Delay	14.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	727	0	0	603	124	351	0	124	0	0	0
Future Volume (veh/h)	104	727	0	0	603	124	351	0	124	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1716	1863	0	0	1863	1716	1750	1863	1716			
Adj Flow Rate, veh/h	113	790	0	0	655	135	382	0	135			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	161	2416	0	0	1950	783	445	0	359			
Arrive On Green	0.20	1.00	0.00	0.00	1.00	1.00	0.25	0.00	0.25			
Sat Flow, veh/h	1634	3632	0	0	3632	1421	1774	0	1430			
Grp Volume(v), veh/h	113	790	0	0	655	135	382	0	135			
Grp Sat Flow(s),veh/h/ln	1634	1770	0	0	1770	1421	1774	0	1430			
Q Serve(g_s), s	7.7	0.0	0.0	0.0	0.0	0.0	24.7	0.0	9.4			
Cycle Q Clear(g_c), s	7.7	0.0	0.0	0.0	0.0	0.0	24.7	0.0	9.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	161	2416	0	0	1950	783	445	0	359			
V/C Ratio(X)	0.70	0.33	0.00	0.00	0.34	0.17	0.86	0.00	0.38			
Avail Cap(c_a), veh/h	408	2416	0	0	1950	783	562	0	453			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.96	0.96	0.00	0.00	0.94	0.94	1.00	0.00	1.00			
Uniform Delay (d), s/veh	46.6	0.0	0.0	0.0	0.0	0.0	42.9	0.0	37.2			
Incr Delay (d2), s/veh	5.3	0.3	0.0	0.0	0.4	0.4	10.5	0.0	0.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.7	0.1	0.0	0.0	0.1	0.1	13.4	0.0	3.8			
LnGrp Delay(d),s/veh	51.9	0.3	0.0	0.0	0.4	0.4	53.4	0.0	37.8			
LnGrp LOS	D	A			A	A	D		D			
Approach Vol, veh/h		903			790			517				
Approach Delay, s/veh		6.8			0.4			49.3				
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		34.1		85.9			15.8	70.1
Change Period (Y+Rc), s		6.0		6.0			6.0	6.0
Max Green Setting (Gmax), s		36.0		72.0			28.0	38.0
Max Q Clear Time (g_c+I1), s		26.7		2.0			9.7	2.0
Green Ext Time (p_c), s		1.4		8.7			0.3	8.3

Intersection Summary	
HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	780	0	0	654	124	387	0	124	0	0	0
Future Volume (veh/h)	163	780	0	0	654	124	387	0	124	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1716	1863	0	0	1863	1716	1750	1863	1716			
Adj Flow Rate, veh/h	177	848	0	0	711	135	421	0	135			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	224	2344	0	0	1741	698	481	0	388			
Arrive On Green	0.27	1.00	0.00	0.00	0.98	0.98	0.27	0.00	0.27			
Sat Flow, veh/h	1634	3632	0	0	3632	1420	1774	0	1431			
Grp Volume(v), veh/h	177	848	0	0	711	135	421	0	135			
Grp Sat Flow(s),veh/h/ln	1634	1770	0	0	1770	1420	1774	0	1431			
Q Serve(g_s), s	12.0	0.0	0.0	0.0	0.7	0.2	27.2	0.0	9.1			
Cycle Q Clear(g_c), s	12.0	0.0	0.0	0.0	0.7	0.2	27.2	0.0	9.1			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	224	2344	0	0	1741	698	481	0	388			
V/C Ratio(X)	0.79	0.36	0.00	0.00	0.41	0.19	0.88	0.00	0.35			
Avail Cap(c_a), veh/h	408	2344	0	0	1741	698	562	0	453			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.93	0.93	0.00	0.00	0.91	0.91	1.00	0.00	1.00			
Uniform Delay (d), s/veh	41.9	0.0	0.0	0.0	0.5	0.5	41.8	0.0	35.2			
Incr Delay (d2), s/veh	5.7	0.4	0.0	0.0	0.7	0.6	13.0	0.0	0.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.8	0.1	0.0	0.0	0.3	0.2	15.1	0.0	3.7			
LnGrp Delay(d),s/veh	47.7	0.4	0.0	0.0	1.2	1.1	54.8	0.0	35.7			
LnGrp LOS	D	A			A	A	D		D			
Approach Vol, veh/h		1025			846			556				
Approach Delay, s/veh		8.6			1.1			50.2				
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		36.5		83.5			20.5	63.0
Change Period (Y+Rc), s		6.0		6.0			6.0	6.0
Max Green Setting (Gmax), s		36.0		72.0			28.0	38.0
Max Q Clear Time (g_c+I1), s		29.2		2.0			14.0	2.7
Green Ext Time (p_c), s		1.3		9.7			0.5	9.2

Intersection Summary	
HCM 2010 Ctrl Delay	15.5
HCM 2010 LOS	B

Intersection 6
SR 65 NB Offramp & W Henderson Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	616	143	51	605	51	142	36	43	83	29	135
Future Volume (veh/h)	100	616	143	51	605	51	142	36	43	83	29	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1750	1863	1716
Adj Flow Rate, veh/h	109	670	155	55	658	55	154	39	47	90	32	147
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	831	192	95	843	70	626	293	353	177	63	190
Arrive On Green	0.19	0.58	0.55	0.06	0.26	0.24	0.38	0.38	0.38	0.13	0.13	0.13
Sat Flow, veh/h	1634	2850	659	1634	3304	276	1634	764	921	1325	471	1420
Grp Volume(v), veh/h	109	416	409	55	352	361	154	0	86	122	0	147
Grp Sat Flow(s),veh/h/ln	1634	1770	1739	1634	1770	1811	1634	0	1686	1796	0	1420
Q Serve(g_s), s	7.5	22.2	22.5	3.9	22.2	22.3	7.7	0.0	4.0	7.6	0.0	12.0
Cycle Q Clear(g_c), s	7.5	22.2	22.5	3.9	22.2	22.3	7.7	0.0	4.0	7.6	0.0	12.0
Prop In Lane	1.00		0.38	1.00		0.15	1.00		0.55	0.74		1.00
Lane Grp Cap(c), veh/h	155	516	507	95	452	462	626	0	645	241	0	190
V/C Ratio(X)	0.70	0.81	0.81	0.58	0.78	0.78	0.25	0.00	0.13	0.51	0.00	0.77
Avail Cap(c_a), veh/h	231	649	638	123	531	543	626	0	645	374	0	296
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.1	22.3	23.1	55.1	41.6	41.7	25.2	0.0	24.2	48.3	0.0	50.2
Incr Delay (d2), s/veh	5.5	5.7	5.8	5.4	6.3	6.2	0.9	0.0	0.4	1.7	0.0	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	11.4	11.3	1.9	11.6	11.9	3.6	0.0	1.9	3.9	0.0	5.0
LnGrp Delay(d),s/veh	52.6	28.0	28.9	60.5	47.8	47.9	26.2	0.0	24.6	49.9	0.0	56.7
LnGrp LOS	D	C	C	E	D	D	C		C	D		E
Approach Vol, veh/h		934			768			240			269	
Approach Delay, s/veh		31.3			48.8			25.6			53.7	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		50.0	11.0	39.0		20.1	15.4	34.6
Change Period (Y+Rc), s		4.6	6.0	6.0		4.6	6.0	6.0
Max Green Setting (Gmax), s		25.4	7.0	42.0		24.4	15.0	34.0
Max Q Clear Time (g_c+I1), s		9.7	5.9	24.5		14.0	9.5	24.3
Green Ext Time (p_c), s		0.7	0.0	5.8		0.7	0.1	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	39.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	640	164	51	625	51	160	36	43	83	29	153
Future Volume (veh/h)	121	640	164	51	625	51	160	36	43	83	29	153
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1750	1863	1716
Adj Flow Rate, veh/h	132	696	178	55	679	55	174	39	47	90	32	166
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	867	222	95	864	70	574	269	324	193	69	207
Arrive On Green	0.22	0.62	0.59	0.06	0.26	0.24	0.35	0.35	0.35	0.15	0.15	0.15
Sat Flow, veh/h	1634	2787	712	1634	3314	268	1634	764	921	1325	471	1422
Grp Volume(v), veh/h	132	442	432	55	362	372	174	0	86	122	0	166
Grp Sat Flow(s),veh/h/ln	1634	1770	1730	1634	1770	1812	1634	0	1686	1796	0	1422
Q Serve(g_s), s	9.1	22.6	23.0	3.9	22.8	22.9	9.3	0.0	4.2	7.5	0.0	13.6
Cycle Q Clear(g_c), s	9.1	22.6	23.0	3.9	22.8	22.9	9.3	0.0	4.2	7.5	0.0	13.6
Prop In Lane	1.00		0.41	1.00		0.15	1.00		0.55	0.74		1.00
Lane Grp Cap(c), veh/h	177	550	538	95	461	472	574	0	593	262	0	207
V/C Ratio(X)	0.74	0.80	0.80	0.58	0.79	0.79	0.30	0.00	0.15	0.47	0.00	0.80
Avail Cap(c_a), veh/h	231	649	634	123	531	544	574	0	593	374	0	296
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.4	19.9	20.7	55.1	41.2	41.4	28.2	0.0	26.7	47.0	0.0	49.6
Incr Delay (d2), s/veh	8.4	5.9	6.0	5.4	6.7	6.6	1.4	0.0	0.5	1.3	0.0	9.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	11.7	11.5	1.9	12.0	12.3	4.4	0.0	2.1	3.8	0.0	5.9
LnGrp Delay(d),s/veh	53.8	25.8	26.7	60.5	47.9	48.0	29.6	0.0	27.2	48.3	0.0	59.4
LnGrp LOS	D	C	C	E	D	D	C		C	D		E
Approach Vol, veh/h		1006			789			260			288	
Approach Delay, s/veh		29.9			48.9			28.8			54.7	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		46.2	11.0	41.3		21.5	17.0	35.3
Change Period (Y+Rc), s		4.6	6.0	6.0		4.6	6.0	6.0
Max Green Setting (Gmax), s		25.4	7.0	42.0		24.4	15.0	34.0
Max Q Clear Time (g_c+I1), s		11.3	5.9	25.0		15.6	11.1	24.9
Green Ext Time (p_c), s		0.7	0.0	6.0		0.7	0.1	4.4

Intersection Summary	
HCM 2010 Ctrl Delay	39.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	702	0	0	718	169	309	0	187	0	0	0
Future Volume (veh/h)	186	702	0	0	718	169	309	0	187	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1716	1863	0	0	1863	1716	1750	1863	1716			
Adj Flow Rate, veh/h	202	763	0	0	780	184	336	0	203			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	248	2496	0	0	1841	739	405	0	326			
Arrive On Green	0.30	1.00	0.00	0.00	1.00	1.00	0.23	0.00	0.23			
Sat Flow, veh/h	1634	3632	0	0	3632	1420	1774	0	1429			
Grp Volume(v), veh/h	202	763	0	0	780	184	336	0	203			
Grp Sat Flow(s),veh/h/ln	1634	1770	0	0	1770	1420	1774	0	1429			
Q Serve(g_s), s	13.7	0.0	0.0	0.0	0.0	0.0	21.6	0.0	15.3			
Cycle Q Clear(g_c), s	13.7	0.0	0.0	0.0	0.0	0.0	21.6	0.0	15.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	248	2496	0	0	1841	739	405	0	326			
V/C Ratio(X)	0.81	0.31	0.00	0.00	0.42	0.25	0.83	0.00	0.62			
Avail Cap(c_a), veh/h	408	2496	0	0	1841	739	562	0	452			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.93	0.93	0.00	0.00	0.71	0.71	1.00	0.00	1.00			
Uniform Delay (d), s/veh	40.2	0.0	0.0	0.0	0.0	0.0	44.1	0.0	41.7			
Incr Delay (d2), s/veh	6.0	0.3	0.0	0.0	0.5	0.6	7.4	0.0	2.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.6	0.1	0.0	0.0	0.1	0.1	11.5	0.0	6.2			
LnGrp Delay(d),s/veh	46.2	0.3	0.0	0.0	0.5	0.6	51.5	0.0	43.6			
LnGrp LOS	D	A			A	A	D		D			
Approach Vol, veh/h		965			964			539				
Approach Delay, s/veh		9.9			0.5			48.5				
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		31.4		88.6			22.2	66.4
Change Period (Y+Rc), s		6.0		6.0			6.0	6.0
Max Green Setting (Gmax), s		36.0		72.0			28.0	38.0
Max Q Clear Time (g_c+I1), s		23.6		2.0			15.7	2.0
Green Ext Time (p_c), s		1.7		10.0			0.5	9.4

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	259	768	0	0	774	169	349	0	187	0	0	0
Future Volume (veh/h)	259	768	0	0	774	169	349	0	187	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1716	1863	0	0	1863	1716	1750	1863	1716			
Adj Flow Rate, veh/h	282	835	0	0	841	184	379	0	203			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	323	2416	0	0	1599	641	445	0	359			
Arrive On Green	0.39	1.00	0.00	0.00	0.90	0.90	0.25	0.00	0.25			
Sat Flow, veh/h	1634	3632	0	0	3632	1419	1774	0	1430			
Grp Volume(v), veh/h	282	835	0	0	841	184	379	0	203			
Grp Sat Flow(s),veh/h/ln	1634	1770	0	0	1770	1419	1774	0	1430			
Q Serve(g_s), s	19.1	0.0	0.0	0.0	5.2	2.0	24.4	0.0	14.9			
Cycle Q Clear(g_c), s	19.1	0.0	0.0	0.0	5.2	2.0	24.4	0.0	14.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	323	2416	0	0	1599	641	445	0	359			
V/C Ratio(X)	0.87	0.35	0.00	0.00	0.53	0.29	0.85	0.00	0.57			
Avail Cap(c_a), veh/h	408	2416	0	0	1599	641	562	0	453			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.89	0.89	0.00	0.00	0.69	0.69	1.00	0.00	1.00			
Uniform Delay (d), s/veh	34.9	0.0	0.0	0.0	3.4	3.3	42.8	0.0	39.3			
Incr Delay (d2), s/veh	14.2	0.4	0.0	0.0	0.9	0.8	9.9	0.0	1.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	9.9	0.1	0.0	0.0	2.5	0.9	13.2	0.0	6.0			
LnGrp Delay(d),s/veh	49.2	0.4	0.0	0.0	4.3	4.0	52.7	0.0	40.7			
LnGrp LOS	D	A			A	A	D		D			
Approach Vol, veh/h		1117			1025			582				
Approach Delay, s/veh		12.7			4.2			48.5				
Approach LOS		B			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		34.1		85.9			27.7	58.2
Change Period (Y+Rc), s		6.0		6.0			6.0	6.0
Max Green Setting (Gmax), s		36.0		72.0			28.0	38.0
Max Q Clear Time (g_c+I1), s		26.4		2.0			21.1	7.2
Green Ext Time (p_c), s		1.7		11.4			0.6	10.2

Intersection Summary	
HCM 2010 Ctrl Delay	17.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	686	159	58	689	58	170	43	51	114	43	185
Future Volume (veh/h)	111	686	159	58	689	58	170	43	51	114	43	185
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1750	1863	1716
Adj Flow Rate, veh/h	121	746	173	63	749	63	185	47	55	124	47	201
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	896	208	105	914	77	523	249	291	219	83	239
Arrive On Green	0.20	0.63	0.60	0.06	0.28	0.26	0.32	0.32	0.31	0.17	0.17	0.17
Sat Flow, veh/h	1634	2849	661	1634	3303	278	1634	778	910	1304	494	1424
Grp Volume(v), veh/h	121	463	456	63	401	411	185	0	102	171	0	201
Grp Sat Flow(s),veh/h/ln	1634	1770	1740	1634	1770	1811	1634	0	1688	1798	0	1424
Q Serve(g_s), s	8.3	24.5	24.8	4.5	25.4	25.5	10.4	0.0	5.3	10.5	0.0	16.4
Cycle Q Clear(g_c), s	8.3	24.5	24.8	4.5	25.4	25.5	10.4	0.0	5.3	10.5	0.0	16.4
Prop In Lane	1.00		0.38	1.00		0.15	1.00		0.54	0.73		1.00
Lane Grp Cap(c), veh/h	167	557	547	105	490	501	523	0	540	302	0	239
V/C Ratio(X)	0.73	0.83	0.83	0.60	0.82	0.82	0.35	0.00	0.19	0.57	0.00	0.84
Avail Cap(c_a), veh/h	231	649	638	123	531	543	523	0	540	374	0	297
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.2	19.8	20.5	54.6	40.6	40.7	31.3	0.0	29.7	45.9	0.0	48.4
Incr Delay (d2), s/veh	6.4	7.5	7.6	5.9	9.2	9.1	1.9	0.0	0.8	1.7	0.0	16.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	12.7	12.9	2.2	13.6	14.1	5.0	0.0	2.6	5.4	0.0	7.5
LnGrp Delay(d),s/veh	52.6	27.3	28.2	60.6	49.8	49.8	33.2	0.0	30.4	47.6	0.0	64.3
LnGrp LOS	D	C	C	E	D	D	C		C	D		E
Approach Vol, veh/h		1040			875			287			372	
Approach Delay, s/veh		30.6			50.6			32.2			56.6	
Approach LOS		C			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		42.4	11.7	41.7		24.2	16.2	37.2
Change Period (Y+Rc), s		4.6	6.0	6.0		4.6	6.0	6.0
Max Green Setting (Gmax), s		25.4	7.0	42.0		24.4	15.0	34.0
Max Q Clear Time (g_c+I1), s		12.4	6.5	26.8		18.4	10.3	27.5
Green Ext Time (p_c), s		0.8	0.0	6.3		0.7	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	41.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	710	180	58	709	58	188	43	51	114	43	203
Future Volume (veh/h)	132	710	180	58	709	58	188	43	51	114	43	203
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1750	1863	1716
Adj Flow Rate, veh/h	143	772	196	63	771	63	204	47	55	124	47	221
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	927	235	105	931	76	475	226	264	234	89	256
Arrive On Green	0.23	0.66	0.63	0.06	0.28	0.26	0.29	0.29	0.29	0.18	0.18	0.18
Sat Flow, veh/h	1634	2792	709	1634	3311	270	1634	778	910	1304	494	1425
Grp Volume(v), veh/h	143	489	479	63	412	422	204	0	102	171	0	221
Grp Sat Flow(s),veh/h/ln	1634	1770	1731	1634	1770	1812	1634	0	1687	1798	0	1425
Q Serve(g_s), s	9.8	24.9	25.3	4.5	26.2	26.2	12.1	0.0	5.5	10.3	0.0	18.1
Cycle Q Clear(g_c), s	9.8	24.9	25.3	4.5	26.2	26.2	12.1	0.0	5.5	10.3	0.0	18.1
Prop In Lane	1.00		0.41	1.00		0.15	1.00		0.54	0.73		1.00
Lane Grp Cap(c), veh/h	188	588	575	105	498	510	475	0	490	323	0	256
V/C Ratio(X)	0.76	0.83	0.83	0.60	0.83	0.83	0.43	0.00	0.21	0.53	0.00	0.86
Avail Cap(c_a), veh/h	231	649	635	123	531	544	475	0	490	374	0	297
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	17.6	18.4	54.6	40.4	40.6	34.5	0.0	32.3	44.6	0.0	47.8
Incr Delay (d2), s/veh	10.2	7.8	7.9	5.9	10.0	9.8	2.8	0.0	1.0	1.3	0.0	19.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	12.9	13.0	2.2	14.2	14.5	5.9	0.0	2.7	5.3	0.0	8.5
LnGrp Delay(d),s/veh	54.8	25.4	26.4	60.6	50.4	50.4	37.3	0.0	33.2	45.9	0.0	67.7
LnGrp LOS	D	C	C	E	D	D	D		C	D		E
Approach Vol, veh/h		1111			897			306			392	
Approach Delay, s/veh		29.6			51.1			36.0			58.2	
Approach LOS		C			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		38.9	11.7	43.8		25.6	17.8	37.7
Change Period (Y+Rc), s		4.6	6.0	6.0		4.6	6.0	6.0
Max Green Setting (Gmax), s		25.4	7.0	42.0		24.4	15.0	34.0
Max Q Clear Time (g_c+I1), s		14.1	6.5	27.3		20.1	11.8	28.2
Green Ext Time (p_c), s		0.8	0.0	6.5		0.6	0.1	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	41.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	333	80	18	301	2	97	10	17	12	7	25
Future Volume (veh/h)	15	333	80	18	301	2	97	10	17	12	7	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1750	1863	1716
Adj Flow Rate, veh/h	16	362	87	20	327	2	105	11	18	13	8	27
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	50	496	118	54	641	4	987	381	624	61	38	76
Arrive On Green	0.06	0.35	0.32	0.03	0.18	0.16	0.60	0.60	0.60	0.05	0.05	0.05
Sat Flow, veh/h	1634	2830	671	1634	3606	22	1634	631	1033	1119	688	1390
Grp Volume(v), veh/h	16	225	224	20	160	169	105	0	29	21	0	27
Grp Sat Flow(s),veh/h/ln	1634	1770	1732	1634	1770	1858	1634	0	1665	1807	0	1390
Q Serve(g_s), s	1.1	13.3	13.7	1.4	9.8	9.8	3.3	0.0	0.8	1.3	0.0	2.2
Cycle Q Clear(g_c), s	1.1	13.3	13.7	1.4	9.8	9.8	3.3	0.0	0.8	1.3	0.0	2.2
Prop In Lane	1.00		0.39	1.00		0.01	1.00		0.62	0.62		1.00
Lane Grp Cap(c), veh/h	50	310	303	54	314	330	987	0	1005	99	0	76
V/C Ratio(X)	0.32	0.72	0.74	0.37	0.51	0.51	0.11	0.00	0.03	0.21	0.00	0.35
Avail Cap(c_a), veh/h	231	649	635	123	531	558	987	0	1005	376	0	290
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.2	36.4	37.3	56.8	44.6	44.6	10.1	0.0	9.7	54.2	0.0	54.7
Incr Delay (d2), s/veh	3.5	3.1	3.4	4.2	1.3	1.2	0.2	0.0	0.1	1.1	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	6.6	6.8	0.7	4.9	5.2	1.5	0.0	0.4	0.7	0.0	0.9
LnGrp Delay(d),s/veh	58.7	39.6	40.7	61.0	45.9	45.9	10.3	0.0	9.7	55.3	0.0	57.5
LnGrp LOS	E	D	D	E	D	D	B		A	E		E
Approach Vol, veh/h		465			349			134			48	
Approach Delay, s/veh		40.8			46.7			10.2			56.5	
Approach LOS		D			D			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		76.5	7.9	25.0		10.6	7.7	25.3
Change Period (Y+Rc), s		4.6	6.0	6.0		4.6	6.0	6.0
Max Green Setting (Gmax), s		25.4	7.0	42.0		24.4	15.0	34.0
Max Q Clear Time (g_c+I1), s		5.3	3.4	15.7		4.2	3.1	11.8
Green Ext Time (p_c), s		0.4	0.0	2.8		0.1	0.0	2.7

Intersection Summary	
HCM 2010 Ctrl Delay	39.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	352	97	18	319	2	113	10	17	12	7	41
Future Volume (veh/h)	32	352	97	18	319	2	113	10	17	12	7	41
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.99	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1750	1863	1716
Adj Flow Rate, veh/h	35	383	105	20	347	2	123	11	18	13	8	45
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	510	138	54	635	4	950	367	601	74	46	93
Arrive On Green	0.08	0.37	0.34	0.03	0.18	0.16	0.58	0.58	0.58	0.07	0.07	0.07
Sat Flow, veh/h	1634	2745	743	1634	3608	21	1634	631	1033	1119	688	1399
Grp Volume(v), veh/h	35	245	243	20	170	179	123	0	29	21	0	45
Grp Sat Flow(s),veh/h/ln	1634	1770	1718	1634	1770	1859	1634	0	1665	1807	0	1399
Q Serve(g_s), s	2.5	14.5	15.0	1.4	10.5	10.5	4.1	0.0	0.9	1.3	0.0	3.7
Cycle Q Clear(g_c), s	2.5	14.5	15.0	1.4	10.5	10.5	4.1	0.0	0.9	1.3	0.0	3.7
Prop In Lane	1.00		0.43	1.00		0.01	1.00		0.62	0.62		1.00
Lane Grp Cap(c), veh/h	69	329	319	54	312	327	950	0	968	120	0	93
V/C Ratio(X)	0.50	0.75	0.76	0.37	0.55	0.55	0.13	0.00	0.03	0.17	0.00	0.48
Avail Cap(c_a), veh/h	231	649	630	123	531	558	950	0	968	376	0	291
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	35.3	36.2	56.8	45.1	45.1	11.4	0.0	10.8	52.9	0.0	54.0
Incr Delay (d2), s/veh	5.4	3.2	3.6	4.2	1.5	1.4	0.3	0.0	0.1	0.7	0.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	7.2	7.4	0.7	5.3	5.5	1.9	0.0	0.4	0.7	0.0	1.5
LnGrp Delay(d),s/veh	59.1	38.5	39.8	61.0	46.6	46.5	11.6	0.0	10.8	53.6	0.0	57.9
LnGrp LOS	E	D	D	E	D	D	B		B	D		E
Approach Vol, veh/h		523			369			152			66	
Approach Delay, s/veh		40.5			47.3			11.5			56.5	
Approach LOS		D			D			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		73.8	7.9	26.3		12.0	9.1	25.1
Change Period (Y+Rc), s		4.6	6.0	6.0		4.6	6.0	6.0
Max Green Setting (Gmax), s		25.4	7.0	42.0		24.4	15.0	34.0
Max Q Clear Time (g_c+I1), s		6.1	3.4	17.0		5.7	4.5	12.5
Green Ext Time (p_c), s		0.4	0.0	3.0		0.2	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	664	0	0	547	112	297	0	105	0	0	0
Future Volume (veh/h)	95	664	0	0	547	112	297	0	105	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1716	1863	0	0	1863	1716	1750	1863	1716			
Adj Flow Rate, veh/h	103	722	0	0	595	122	323	0	114			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	150	2529	0	0	2086	838	388	0	312			
Arrive On Green	0.18	1.00	0.00	0.00	1.00	1.00	0.22	0.00	0.22			
Sat Flow, veh/h	1634	3632	0	0	3632	1421	1774	0	1428			
Grp Volume(v), veh/h	103	722	0	0	595	122	323	0	114			
Grp Sat Flow(s),veh/h/ln	1634	1770	0	0	1770	1421	1774	0	1428			
Q Serve(g_s), s	7.1	0.0	0.0	0.0	0.0	0.0	20.9	0.0	8.1			
Cycle Q Clear(g_c), s	7.1	0.0	0.0	0.0	0.0	0.0	20.9	0.0	8.1			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	150	2529	0	0	2086	838	388	0	312			
V/C Ratio(X)	0.69	0.29	0.00	0.00	0.29	0.15	0.83	0.00	0.37			
Avail Cap(c_a), veh/h	408	2529	0	0	2086	838	562	0	452			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.97	0.97	0.00	0.00	0.93	0.93	1.00	0.00	1.00			
Uniform Delay (d), s/veh	47.4	0.0	0.0	0.0	0.0	0.0	44.8	0.0	39.8			
Incr Delay (d2), s/veh	5.3	0.3	0.0	0.0	0.3	0.3	7.0	0.0	0.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.4	0.1	0.0	0.0	0.1	0.1	11.0	0.0	3.3			
LnGrp Delay(d),s/veh	52.7	0.3	0.0	0.0	0.3	0.3	51.8	0.0	40.5			
LnGrp LOS	D	A			A	A	D		D			
Approach Vol, veh/h		825			717			437				
Approach Delay, s/veh		6.8			0.3			48.9				
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		30.2		89.8			15.0	74.7
Change Period (Y+Rc), s		6.0		6.0			6.0	6.0
Max Green Setting (Gmax), s		36.0		72.0			28.0	38.0
Max Q Clear Time (g_c+I1), s		22.9		2.0			9.1	2.0
Green Ext Time (p_c), s		1.4		7.5			0.3	7.3

Intersection Summary	
HCM 2010 Ctrl Delay	13.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	717	0	0	598	112	333	0	105	0	0	0
Future Volume (veh/h)	154	717	0	0	598	112	333	0	105	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1716	1863	0	0	1863	1716	1750	1863	1716			
Adj Flow Rate, veh/h	167	779	0	0	650	122	362	0	114			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	214	2455	0	0	1872	751	425	0	343			
Arrive On Green	0.26	1.00	0.00	0.00	1.00	1.00	0.24	0.00	0.24			
Sat Flow, veh/h	1634	3632	0	0	3632	1420	1774	0	1429			
Grp Volume(v), veh/h	167	779	0	0	650	122	362	0	114			
Grp Sat Flow(s),veh/h/ln	1634	1770	0	0	1770	1420	1774	0	1429			
Q Serve(g_s), s	11.4	0.0	0.0	0.0	0.0	0.0	23.4	0.0	7.9			
Cycle Q Clear(g_c), s	11.4	0.0	0.0	0.0	0.0	0.0	23.4	0.0	7.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	214	2455	0	0	1872	751	425	0	343			
V/C Ratio(X)	0.78	0.32	0.00	0.00	0.35	0.16	0.85	0.00	0.33			
Avail Cap(c_a), veh/h	408	2455	0	0	1872	751	562	0	453			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.95	0.95	0.00	0.00	0.92	0.92	1.00	0.00	1.00			
Uniform Delay (d), s/veh	42.6	0.0	0.0	0.0	0.0	0.0	43.6	0.0	37.7			
Incr Delay (d2), s/veh	5.7	0.3	0.0	0.0	0.5	0.4	9.4	0.0	0.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.4	0.1	0.0	0.0	0.1	0.1	12.6	0.0	3.2			
LnGrp Delay(d),s/veh	48.4	0.3	0.0	0.0	0.5	0.4	53.0	0.0	38.3			
LnGrp LOS	D	A			A	A	D		D			
Approach Vol, veh/h		946			772			476				
Approach Delay, s/veh		8.8			0.5			49.4				
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		32.8		87.2			19.7	67.5
Change Period (Y+Rc), s		6.0		6.0			6.0	6.0
Max Green Setting (Gmax), s		36.0		72.0			28.0	38.0
Max Q Clear Time (g_c+I1), s		25.4		2.0			13.4	2.0
Green Ext Time (p_c), s		1.4		8.4			0.4	8.1

Intersection Summary			
HCM 2010 Ctrl Delay			14.7
HCM 2010 LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	371	89	20	343	2	116	12	20	16	10	34
Future Volume (veh/h)	17	371	89	20	343	2	116	12	20	16	10	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1750	1863	1716
Adj Flow Rate, veh/h	18	403	97	22	373	2	126	13	22	17	11	37
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	52	533	127	56	688	4	952	360	609	67	44	86
Arrive On Green	0.06	0.38	0.34	0.03	0.19	0.17	0.58	0.58	0.58	0.06	0.06	0.06
Sat Flow, veh/h	1634	2828	674	1634	3609	19	1634	617	1045	1098	710	1396
Grp Volume(v), veh/h	18	251	249	22	183	192	126	0	35	28	0	37
Grp Sat Flow(s),veh/h/ln	1634	1770	1732	1634	1770	1859	1634	0	1662	1808	0	1396
Q Serve(g_s), s	1.3	14.8	15.2	1.6	11.2	11.2	4.2	0.0	1.1	1.8	0.0	3.1
Cycle Q Clear(g_c), s	1.3	14.8	15.2	1.6	11.2	11.2	4.2	0.0	1.1	1.8	0.0	3.1
Prop In Lane	1.00		0.39	1.00		0.01	1.00		0.63	0.61		1.00
Lane Grp Cap(c), veh/h	52	333	326	56	338	355	952	0	969	111	0	86
V/C Ratio(X)	0.35	0.75	0.76	0.40	0.54	0.54	0.13	0.00	0.04	0.25	0.00	0.43
Avail Cap(c_a), veh/h	231	649	635	123	531	558	952	0	969	377	0	291
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.0	34.9	35.8	56.8	43.8	43.8	11.3	0.0	10.7	53.7	0.0	54.3
Incr Delay (d2), s/veh	3.8	3.3	3.6	4.5	1.4	1.3	0.3	0.0	0.1	1.2	0.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	7.4	7.6	0.8	5.6	5.9	2.0	0.0	0.5	0.9	0.0	1.3
LnGrp Delay(d),s/veh	58.8	38.2	39.4	61.3	45.2	45.1	11.6	0.0	10.8	54.9	0.0	57.7
LnGrp LOS	E	D	D	E	D	D	B		B	D		E
Approach Vol, veh/h		518			397			161			65	
Approach Delay, s/veh		39.5			46.0			11.4			56.5	
Approach LOS		D			D			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		73.9	8.1	26.6		11.4	7.8	26.9
Change Period (Y+Rc), s		4.6	6.0	6.0		4.6	6.0	6.0
Max Green Setting (Gmax), s		25.4	7.0	42.0		24.4	15.0	34.0
Max Q Clear Time (g_c+I1), s		6.2	3.6	17.2		5.1	3.3	13.2
Green Ext Time (p_c), s		0.5	0.0	3.1		0.2	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	38.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	390	106	20	361	2	132	12	20	16	10	50
Future Volume (veh/h)	34	390	106	20	361	2	132	12	20	16	10	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1750	1863	1716
Adj Flow Rate, veh/h	37	424	115	22	392	2	143	13	22	17	11	54
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	547	147	56	681	3	917	347	587	79	51	102
Arrive On Green	0.09	0.40	0.36	0.03	0.19	0.17	0.56	0.56	0.56	0.07	0.07	0.07
Sat Flow, veh/h	1634	2751	739	1634	3610	18	1634	617	1045	1098	710	1403
Grp Volume(v), veh/h	37	271	268	22	192	202	143	0	35	28	0	54
Grp Sat Flow(s),veh/h/ln	1634	1770	1720	1634	1770	1859	1634	0	1662	1808	0	1403
Q Serve(g_s), s	2.6	16.0	16.5	1.6	11.9	11.9	5.0	0.0	1.1	1.8	0.0	4.5
Cycle Q Clear(g_c), s	2.6	16.0	16.5	1.6	11.9	11.9	5.0	0.0	1.1	1.8	0.0	4.5
Prop In Lane	1.00		0.43	1.00		0.01	1.00		0.63	0.61		1.00
Lane Grp Cap(c), veh/h	72	352	342	56	334	351	917	0	933	131	0	102
V/C Ratio(X)	0.51	0.77	0.78	0.40	0.58	0.58	0.16	0.00	0.04	0.21	0.00	0.53
Avail Cap(c_a), veh/h	231	649	631	123	531	558	917	0	933	377	0	292
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.5	33.8	34.7	56.8	44.3	44.3	12.6	0.0	11.9	52.4	0.0	53.7
Incr Delay (d2), s/veh	5.3	3.4	3.7	4.5	1.6	1.5	0.4	0.0	0.1	0.8	0.0	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	8.0	8.1	0.8	6.0	6.3	2.4	0.0	0.5	0.9	0.0	1.8
LnGrp Delay(d),s/veh	58.8	37.2	38.5	61.3	45.9	45.8	13.0	0.0	11.9	53.2	0.0	58.0
LnGrp LOS	E	D	D	E	D	D	B		B	D		E
Approach Vol, veh/h		576			416			178			82	
Approach Delay, s/veh		39.2			46.6			12.8			56.3	
Approach LOS		D			D			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		71.4	8.1	27.9		12.7	9.3	26.6
Change Period (Y+Rc), s		4.6	6.0	6.0		4.6	6.0	6.0
Max Green Setting (Gmax), s		25.4	7.0	42.0		24.4	15.0	34.0
Max Q Clear Time (g_c+I1), s		7.0	3.6	18.5		6.5	4.6	13.9
Green Ext Time (p_c), s		0.5	0.0	3.4		0.2	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	39.0
HCM 2010 LOS	D

Intersection 7
Porter Rd & W Henderson Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	313	10	44	448	293	5	111	70	193	109	159
Future Volume (veh/h)	121	313	10	44	448	293	5	111	70	193	109	159
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	132	340	11	48	487	318	5	121	76	210	118	173
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	1956	63	70	1016	661	44	281	172	346	493	378
Arrive On Green	0.10	0.56	0.55	0.04	0.50	0.49	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1634	3496	113	1634	2043	1329	13	1063	649	1177	1863	1430
Grp Volume(v), veh/h	132	172	179	48	422	383	202	0	0	210	118	173
Grp Sat Flow(s),veh/h/ln	1634	1770	1839	1634	1770	1603	1725	0	0	1177	1863	1430
Q Serve(g_s), s	7.1	4.3	4.3	2.6	14.1	14.3	0.0	0.0	0.0	9.8	4.5	9.1
Cycle Q Clear(g_c), s	7.1	4.3	4.3	2.6	14.1	14.3	8.8	0.0	0.0	18.6	4.5	9.1
Prop In Lane	1.00		0.06	1.00		0.83	0.02		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	171	990	1029	70	880	797	497	0	0	346	493	378
V/C Ratio(X)	0.77	0.17	0.17	0.69	0.48	0.48	0.41	0.00	0.00	0.61	0.24	0.46
Avail Cap(c_a), veh/h	218	990	1029	176	880	797	697	0	0	484	710	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.71	0.71	0.71
Uniform Delay (d), s/veh	39.2	9.7	9.7	42.5	14.9	15.1	27.7	0.0	0.0	32.2	26.0	27.7
Incr Delay (d2), s/veh	12.1	0.4	0.4	11.4	1.9	2.1	0.5	0.0	0.0	1.2	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	2.2	2.2	1.4	7.4	6.8	4.2	0.0	0.0	5.0	2.3	3.6
LnGrp Delay(d),s/veh	51.4	10.0	10.1	53.9	16.8	17.2	28.2	0.0	0.0	33.4	26.2	28.3
LnGrp LOS	D	B	B	D	B	B	C			C	C	C
Approach Vol, veh/h		483			853			202			501	
Approach Delay, s/veh		21.3			19.1			28.2			30.0	
Approach LOS		C			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.8	7.8	54.4		27.8	13.4	48.8
Change Period (Y+Rc), s		4.6	4.6	4.6		4.6	4.6	4.6
Max Green Setting (Gmax), s		33.7	9.1	33.4		33.7	11.4	31.1
Max Q Clear Time (g_c+I1), s		10.8	4.6	6.3		20.6	9.1	16.3
Green Ext Time (p_c), s		3.1	0.0	5.3		2.6	0.1	4.5

Intersection Summary	
HCM 2010 Ctrl Delay	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	313	10	44	448	318	5	124	70	222	123	183
Future Volume (veh/h)	144	313	10	44	448	318	5	124	70	222	123	183
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	157	340	11	48	487	346	5	135	76	241	134	199
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	1851	60	70	888	629	44	327	180	376	548	421
Arrive On Green	0.12	0.53	0.52	0.04	0.45	0.44	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1634	3496	113	1634	1966	1393	12	1112	610	1163	1863	1431
Grp Volume(v), veh/h	157	172	179	48	438	395	216	0	0	241	134	199
Grp Sat Flow(s),veh/h/ln	1634	1770	1839	1634	1770	1590	1734	0	0	1163	1863	1431
Q Serve(g_s), s	8.4	4.5	4.6	2.6	16.2	16.4	0.0	0.0	0.0	12.2	4.9	10.3
Cycle Q Clear(g_c), s	8.4	4.5	4.6	2.6	16.2	16.4	9.0	0.0	0.0	21.2	4.9	10.3
Prop In Lane	1.00		0.06	1.00		0.88	0.02		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	197	937	974	70	799	718	551	0	0	376	548	421
V/C Ratio(X)	0.80	0.18	0.18	0.69	0.55	0.55	0.39	0.00	0.00	0.64	0.24	0.47
Avail Cap(c_a), veh/h	218	937	974	176	799	718	700	0	0	476	710	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	38.5	11.0	11.0	42.5	18.0	18.2	25.7	0.0	0.0	31.1	24.1	26.0
Incr Delay (d2), s/veh	17.0	0.4	0.4	11.4	2.7	3.0	0.5	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	2.3	2.4	1.4	8.5	7.8	4.4	0.0	0.0	5.6	2.5	4.1
LnGrp Delay(d),s/veh	55.5	11.5	11.5	53.9	20.7	21.2	26.1	0.0	0.0	31.2	24.2	26.1
LnGrp LOS	E	B	B	D	C	C	C			C	C	C
Approach Vol, veh/h		508			881			216			574	
Approach Delay, s/veh		25.1			22.7			26.1			27.8	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.5	7.8	51.7		30.5	14.9	44.6
Change Period (Y+Rc), s		4.6	4.6	4.6		4.6	4.6	4.6
Max Green Setting (Gmax), s		33.7	9.1	33.4		33.7	11.4	31.1
Max Q Clear Time (g_c+I1), s		11.0	4.6	6.6		23.2	10.4	18.4
Green Ext Time (p_c), s		3.6	0.0	5.5		2.7	0.0	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	623	145	52	613	52	145	37	44	86	30	139
Future Volume (veh/h)	101	623	145	52	613	52	145	37	44	86	30	139
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1750	1863	1716
Adj Flow Rate, veh/h	110	677	158	57	666	57	158	40	48	93	33	151
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	834	194	98	849	73	616	289	347	181	64	194
Arrive On Green	0.19	0.59	0.55	0.06	0.26	0.24	0.38	0.38	0.37	0.14	0.14	0.14
Sat Flow, veh/h	1634	2845	663	1634	3297	282	1634	766	920	1326	470	1420
Grp Volume(v), veh/h	110	421	414	57	357	366	158	0	88	126	0	151
Grp Sat Flow(s),veh/h/ln	1634	1770	1739	1634	1770	1810	1634	0	1686	1796	0	1420
Q Serve(g_s), s	7.6	22.5	22.8	4.1	22.5	22.6	8.0	0.0	4.1	7.8	0.0	12.3
Cycle Q Clear(g_c), s	7.6	22.5	22.8	4.1	22.5	22.6	8.0	0.0	4.1	7.8	0.0	12.3
Prop In Lane	1.00		0.38	1.00		0.16	1.00		0.55	0.74		1.00
Lane Grp Cap(c), veh/h	156	519	510	98	456	466	616	0	636	245	0	194
V/C Ratio(X)	0.71	0.81	0.81	0.58	0.78	0.78	0.26	0.00	0.14	0.51	0.00	0.78
Avail Cap(c_a), veh/h	231	649	637	123	531	543	616	0	636	374	0	296
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.0	22.2	23.0	55.0	41.4	41.6	25.8	0.0	24.7	48.1	0.0	50.1
Incr Delay (d2), s/veh	5.5	6.0	6.1	5.4	6.5	6.5	1.0	0.0	0.5	1.7	0.0	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	11.6	11.5	2.0	11.8	12.1	3.8	0.0	2.0	4.0	0.0	5.2
LnGrp Delay(d),s/veh	52.5	28.2	29.1	60.4	47.9	48.1	26.8	0.0	25.1	49.8	0.0	57.1
LnGrp LOS	D	C	C	E	D	D	C		C	D		E
Approach Vol, veh/h		945			780			246			277	
Approach Delay, s/veh		31.4			48.9			26.2			53.8	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		49.3	11.2	39.2		20.4	15.4	34.9
Change Period (Y+Rc), s		4.6	6.0	6.0		4.6	6.0	6.0
Max Green Setting (Gmax), s		25.4	7.0	42.0		24.4	15.0	34.0
Max Q Clear Time (g_c+I1), s		10.0	6.1	24.8		14.3	9.6	24.6
Green Ext Time (p_c), s		0.7	0.0	5.8		0.7	0.1	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	647	166	52	633	52	163	37	44	86	30	157
Future Volume (veh/h)	122	647	166	52	633	52	163	37	44	86	30	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1750	1863	1716
Adj Flow Rate, veh/h	133	703	180	57	688	57	177	40	48	93	33	171
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	871	223	98	870	72	564	265	317	198	70	212
Arrive On Green	0.22	0.63	0.59	0.06	0.26	0.25	0.35	0.35	0.34	0.15	0.15	0.15
Sat Flow, veh/h	1634	2786	713	1634	3307	274	1634	766	920	1326	470	1422
Grp Volume(v), veh/h	133	446	437	57	368	377	177	0	88	126	0	171
Grp Sat Flow(s),veh/h/ln	1634	1770	1730	1634	1770	1811	1634	0	1686	1796	0	1422
Q Serve(g_s), s	9.1	22.9	23.2	4.1	23.2	23.3	9.5	0.0	4.3	7.7	0.0	14.0
Cycle Q Clear(g_c), s	9.1	22.9	23.2	4.1	23.2	23.3	9.5	0.0	4.3	7.7	0.0	14.0
Prop In Lane	1.00		0.41	1.00		0.15	1.00		0.55	0.74		1.00
Lane Grp Cap(c), veh/h	178	553	541	98	466	477	564	0	582	268	0	212
V/C Ratio(X)	0.75	0.81	0.81	0.58	0.79	0.79	0.31	0.00	0.15	0.47	0.00	0.81
Avail Cap(c_a), veh/h	231	649	634	123	531	543	564	0	582	374	0	296
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.3	19.7	20.5	55.0	41.1	41.3	28.8	0.0	27.3	46.7	0.0	49.4
Incr Delay (d2), s/veh	8.6	6.1	6.3	5.4	7.0	6.9	1.5	0.0	0.6	1.3	0.0	10.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	11.8	11.7	2.0	12.3	12.6	4.6	0.0	2.1	3.9	0.0	6.1
LnGrp Delay(d),s/veh	53.9	25.8	26.8	60.4	48.1	48.2	30.3	0.0	27.8	48.0	0.0	60.1
LnGrp LOS	D	C	C	E	D	D	C		C	D		E
Approach Vol, veh/h		1016			802			265			297	
Approach Delay, s/veh		29.9			49.0			29.5			55.0	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		45.4	11.2	41.5		21.9	17.1	35.6
Change Period (Y+Rc), s		4.6	6.0	6.0		4.6	6.0	6.0
Max Green Setting (Gmax), s		25.4	7.0	42.0		24.4	15.0	34.0
Max Q Clear Time (g_c+I1), s		11.5	6.1	25.2		16.0	11.1	25.3
Green Ext Time (p_c), s		0.7	0.0	6.1		0.7	0.1	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	39.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↱		↰	↑↱			✥		↰	↑	↱
Traffic Volume (veh/h)	171	465	14	62	666	415	7	165	96	270	162	223
Future Volume (veh/h)	171	465	14	62	666	415	7	165	96	270	162	223
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	186	505	15	67	724	451	8	179	104	293	176	242
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	1558	46	95	769	477	47	399	225	409	679	522
Arrive On Green	0.13	0.44	0.44	0.06	0.37	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1634	3507	104	1634	2085	1292	16	1095	618	1090	1863	1433
Grp Volume(v), veh/h	186	255	265	67	614	561	291	0	0	293	176	242
Grp Sat Flow(s),veh/h/ln	1634	1770	1841	1634	1770	1608	1728	0	0	1090	1863	1433
Q Serve(g_s), s	10.0	8.4	8.4	3.6	30.2	30.5	0.0	0.0	0.0	17.3	6.0	11.6
Cycle Q Clear(g_c), s	10.0	8.4	8.4	3.6	30.2	30.5	11.5	0.0	0.0	28.8	6.0	11.6
Prop In Lane	1.00		0.06	1.00		0.80	0.03		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	218	786	818	95	653	593	671	0	0	409	679	522
V/C Ratio(X)	0.85	0.32	0.32	0.71	0.94	0.95	0.43	0.00	0.00	0.72	0.26	0.46
Avail Cap(c_a), veh/h	218	786	818	176	653	593	699	0	0	427	710	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.60	0.60	0.60
Uniform Delay (d), s/veh	38.1	16.2	16.2	41.7	27.5	27.8	21.9	0.0	0.0	29.4	20.1	21.9
Incr Delay (d2), s/veh	26.5	1.1	1.1	9.4	23.3	25.8	0.4	0.0	0.0	3.3	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	4.3	4.5	1.9	18.9	17.7	5.6	0.0	0.0	7.3	3.1	4.6
LnGrp Delay(d),s/veh	64.6	17.3	17.3	51.0	50.8	53.6	22.4	0.0	0.0	32.7	20.2	22.3
LnGrp LOS	E	B	B	D	D	D	C			C	C	C
Approach Vol, veh/h		706			1242			291			711	
Approach Delay, s/veh		29.8			52.1			22.4			26.0	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		36.8	9.2	44.0		36.8	16.0	37.2
Change Period (Y+Rc), s		4.6	4.6	4.6		4.6	4.6	4.6
Max Green Setting (Gmax), s		33.7	9.1	33.4		33.7	11.4	31.1
Max Q Clear Time (g_c+I1), s		13.5	5.6	10.4		30.8	12.0	32.5
Green Ext Time (p_c), s		4.7	0.0	8.6		1.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	465	14	62	666	440	7	178	96	299	176	247
Future Volume (veh/h)	194	465	14	62	666	440	7	178	96	299	176	247
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	211	505	15	67	724	478	8	193	104	325	191	268
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	1500	44	95	717	470	47	430	225	419	710	546
Arrive On Green	0.13	0.43	0.42	0.06	0.35	0.35	0.38	0.38	0.37	0.38	0.38	0.38
Sat Flow, veh/h	1634	3507	104	1634	2035	1334	15	1127	591	1076	1863	1434
Grp Volume(v), veh/h	211	255	265	67	629	573	305	0	0	325	191	268
Grp Sat Flow(s),veh/h/ln	1634	1770	1841	1634	1770	1599	1733	0	0	1076	1863	1434
Q Serve(g_s), s	11.6	8.7	8.7	3.6	31.7	31.7	0.0	0.0	0.0	20.7	6.4	12.8
Cycle Q Clear(g_c), s	11.6	8.7	8.7	3.6	31.7	31.7	11.8	0.0	0.0	32.6	6.4	12.8
Prop In Lane	1.00		0.06	1.00		0.83	0.03		0.34	1.00		1.00
Lane Grp Cap(c), veh/h	218	757	787	95	623	563	702	0	0	419	710	546
V/C Ratio(X)	0.97	0.34	0.34	0.71	1.01	1.02	0.43	0.00	0.00	0.77	0.27	0.49
Avail Cap(c_a), veh/h	218	757	787	176	623	563	702	0	0	419	710	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	38.8	17.2	17.2	41.7	29.1	29.4	21.0	0.0	0.0	29.6	19.2	21.2
Incr Delay (d2), s/veh	51.8	1.2	1.2	9.4	38.3	42.3	0.4	0.0	0.0	0.9	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	4.5	4.7	1.9	22.0	20.5	5.8	0.0	0.0	8.0	3.3	5.0
LnGrp Delay(d),s/veh	90.7	18.4	18.4	51.0	67.5	71.7	21.4	0.0	0.0	30.4	19.2	21.3
LnGrp LOS	F	B	B	D	F	F	C			C	B	C
Approach Vol, veh/h		731			1269			305			784	
Approach Delay, s/veh		39.3			68.5			21.4			24.6	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		38.3	9.2	42.5		38.3	16.0	35.7
Change Period (Y+Rc), s		4.6	4.6	4.6		4.6	4.6	4.6
Max Green Setting (Gmax), s		33.7	9.1	33.4		33.7	11.4	31.1
Max Q Clear Time (g_c+I1), s		13.8	5.6	10.7		34.6	13.6	33.7
Green Ext Time (p_c), s		5.2	0.0	8.7		0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	659	143	28	364	137	4	91	49	186	75	116
Future Volume (veh/h)	11	659	143	28	364	137	4	91	49	186	75	116
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	12	716	155	30	396	149	4	99	53	202	82	126
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	1747	378	49	1556	578	44	261	136	338	428	329
Arrive On Green	0.02	0.61	0.60	0.03	0.62	0.61	0.23	0.23	0.22	0.23	0.23	0.23
Sat Flow, veh/h	1634	2880	623	1634	2516	934	13	1134	590	1225	1863	1429
Grp Volume(v), veh/h	12	440	431	30	277	268	156	0	0	202	82	126
Grp Sat Flow(s),veh/h/ln	1634	1770	1734	1634	1770	1681	1738	0	0	1225	1863	1429
Q Serve(g_s), s	0.7	11.7	11.8	1.6	6.4	6.6	0.0	0.0	0.0	9.0	3.2	6.7
Cycle Q Clear(g_c), s	0.7	11.7	11.8	1.6	6.4	6.6	6.8	0.0	0.0	15.8	3.2	6.7
Prop In Lane	1.00		0.36	1.00		0.56	0.03		0.34	1.00		1.00
Lane Grp Cap(c), veh/h	30	1073	1052	49	1094	1040	441	0	0	338	428	329
V/C Ratio(X)	0.40	0.41	0.41	0.61	0.25	0.26	0.35	0.00	0.00	0.60	0.19	0.38
Avail Cap(c_a), veh/h	218	1073	1052	176	1094	1040	701	0	0	523	710	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.73	0.73	0.73
Uniform Delay (d), s/veh	43.7	9.3	9.3	43.1	7.8	7.9	29.4	0.0	0.0	33.3	27.9	29.3
Incr Delay (d2), s/veh	8.6	1.2	1.2	11.6	0.6	0.6	0.5	0.0	0.0	1.2	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.0	5.9	0.9	3.2	3.2	3.4	0.0	0.0	4.8	1.7	2.7
LnGrp Delay(d),s/veh	52.3	10.4	10.5	54.7	8.3	8.5	29.9	0.0	0.0	34.5	28.1	29.8
LnGrp LOS	D	B	B	D	A	A	C			C	C	C
Approach Vol, veh/h		883			575			156			410	
Approach Delay, s/veh		11.0			10.8			29.9			31.8	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.7	6.7	58.6		24.7	5.6	59.7
Change Period (Y+Rc), s		4.6	4.6	4.6		4.6	4.6	4.6
Max Green Setting (Gmax), s		33.7	9.1	33.4		33.7	11.4	31.1
Max Q Clear Time (g_c+I1), s		8.8	3.6	13.8		17.8	2.7	8.6
Green Ext Time (p_c), s		2.5	0.0	6.2		2.2	0.0	6.5

Intersection Summary	
HCM 2010 Ctrl Delay	16.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↱		↰	↑↱			✥		↰	↑	↱
Traffic Volume (veh/h)	32	659	143	28	364	160	4	103	49	209	86	135
Future Volume (veh/h)	32	659	143	28	364	160	4	103	49	209	86	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	35	716	155	30	396	174	4	112	53	227	93	147
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	1675	362	49	1386	601	44	303	140	362	475	365
Arrive On Green	0.03	0.58	0.57	0.03	0.58	0.57	0.26	0.26	0.25	0.26	0.26	0.26
Sat Flow, veh/h	1634	2880	623	1634	2393	1037	12	1187	548	1211	1863	1430
Grp Volume(v), veh/h	35	440	431	30	291	279	169	0	0	227	93	147
Grp Sat Flow(s),veh/h/ln	1634	1770	1734	1634	1770	1661	1747	0	0	1211	1863	1430
Q Serve(g_s), s	1.9	12.5	12.5	1.6	7.5	7.7	0.0	0.0	0.0	10.8	3.5	7.7
Cycle Q Clear(g_c), s	1.9	12.5	12.5	1.6	7.5	7.7	7.2	0.0	0.0	18.0	3.5	7.7
Prop In Lane	1.00		0.36	1.00		0.62	0.02		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	53	1029	1008	49	1025	962	487	0	0	362	475	365
V/C Ratio(X)	0.66	0.43	0.43	0.61	0.28	0.29	0.35	0.00	0.00	0.63	0.20	0.40
Avail Cap(c_a), veh/h	218	1029	1008	176	1025	962	705	0	0	514	710	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.51	0.51	0.51
Uniform Delay (d), s/veh	43.0	10.5	10.6	43.1	9.5	9.7	27.7	0.0	0.0	32.3	26.3	27.8
Incr Delay (d2), s/veh	12.9	1.3	1.3	11.6	0.7	0.8	0.4	0.0	0.0	0.9	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	6.4	6.3	0.9	3.8	3.7	3.5	0.0	0.0	5.4	1.8	3.1
LnGrp Delay(d),s/veh	56.0	11.8	11.9	54.7	10.2	10.5	28.1	0.0	0.0	33.2	26.4	28.2
LnGrp LOS	E	B	B	D	B	B	C			C	C	C
Approach Vol, veh/h		906			600			169			467	
Approach Delay, s/veh		13.5			12.6			28.1			30.3	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	6.7	56.3		27.0	6.9	56.1
Change Period (Y+Rc), s		4.6	4.6	4.6		4.6	4.6	4.6
Max Green Setting (Gmax), s		33.7	9.1	33.4		33.7	11.4	31.1
Max Q Clear Time (g_c+I1), s		9.2	3.6	14.5		20.0	3.9	9.7
Green Ext Time (p_c), s		2.8	0.0	6.3		2.4	0.0	6.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	337	81	18	305	2	99	10	17	12	7	26
Future Volume (veh/h)	15	337	81	18	305	2	99	10	17	12	7	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1750	1863	1716
Adj Flow Rate, veh/h	16	366	88	20	332	2	108	11	18	13	8	28
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	50	500	119	54	646	4	983	380	622	62	38	77
Arrive On Green	0.06	0.35	0.32	0.03	0.18	0.16	0.60	0.60	0.60	0.06	0.06	0.06
Sat Flow, veh/h	1634	2829	672	1634	3606	22	1634	631	1033	1119	688	1391
Grp Volume(v), veh/h	16	227	227	20	163	171	108	0	29	21	0	28
Grp Sat Flow(s),veh/h/ln	1634	1770	1732	1634	1770	1859	1634	0	1665	1807	0	1391
Q Serve(g_s), s	1.1	13.4	13.9	1.4	10.0	10.0	3.4	0.0	0.9	1.3	0.0	2.3
Cycle Q Clear(g_c), s	1.1	13.4	13.9	1.4	10.0	10.0	3.4	0.0	0.9	1.3	0.0	2.3
Prop In Lane	1.00		0.39	1.00		0.01	1.00		0.62	0.62		1.00
Lane Grp Cap(c), veh/h	50	312	306	54	317	333	983	0	1002	100	0	77
V/C Ratio(X)	0.32	0.73	0.74	0.37	0.51	0.51	0.11	0.00	0.03	0.21	0.00	0.36
Avail Cap(c_a), veh/h	231	649	635	123	531	558	983	0	1002	376	0	290
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.2	36.3	37.2	56.8	44.5	44.6	10.2	0.0	9.8	54.2	0.0	54.6
Incr Delay (d2), s/veh	3.5	3.1	3.4	4.2	1.3	1.2	0.2	0.0	0.1	1.0	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	6.7	6.9	0.7	5.0	5.2	1.6	0.0	0.4	0.7	0.0	1.0
LnGrp Delay(d),s/veh	58.7	39.4	40.6	61.0	45.8	45.8	10.4	0.0	9.8	55.2	0.0	57.5
LnGrp LOS	E	D	D	E	D	D	B		A	E		E
Approach Vol, veh/h		470			354			137			49	
Approach Delay, s/veh		40.7			46.7			10.3			56.5	
Approach LOS		D			D			B			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		76.2	7.9	25.2		10.6	7.7	25.5				
Change Period (Y+Rc), s		4.6	6.0	6.0		4.6	6.0	6.0				
Max Green Setting (Gmax), s		25.4	7.0	42.0		24.4	15.0	34.0				
Max Q Clear Time (g_c+I1), s		5.4	3.4	15.9		4.3	3.1	12.0				
Green Ext Time (p_c), s		0.4	0.0	2.8		0.1	0.0	2.7				
Intersection Summary												
HCM 2010 Ctrl Delay			39.4									
HCM 2010 LOS			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	356	98	18	323	2	115	10	17	12	7	42
Future Volume (veh/h)	32	356	98	18	323	2	115	10	17	12	7	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.99	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1750	1863	1716
Adj Flow Rate, veh/h	35	387	107	20	351	2	125	11	18	13	8	46
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	513	140	54	641	4	947	366	599	75	46	94
Arrive On Green	0.08	0.37	0.34	0.03	0.18	0.16	0.58	0.58	0.57	0.07	0.07	0.07
Sat Flow, veh/h	1634	2739	748	1634	3608	21	1634	631	1033	1119	688	1400
Grp Volume(v), veh/h	35	248	246	20	172	181	125	0	29	21	0	46
Grp Sat Flow(s),veh/h/ln	1634	1770	1718	1634	1770	1859	1634	0	1665	1807	0	1400
Q Serve(g_s), s	2.5	14.6	15.2	1.4	10.6	10.6	4.2	0.0	0.9	1.3	0.0	3.8
Cycle Q Clear(g_c), s	2.5	14.6	15.2	1.4	10.6	10.6	4.2	0.0	0.9	1.3	0.0	3.8
Prop In Lane	1.00		0.44	1.00		0.01	1.00		0.62	0.62		1.00
Lane Grp Cap(c), veh/h	69	331	322	54	314	330	947	0	965	121	0	94
V/C Ratio(X)	0.50	0.75	0.76	0.37	0.55	0.55	0.13	0.00	0.03	0.17	0.00	0.49
Avail Cap(c_a), veh/h	231	649	630	123	531	558	947	0	965	376	0	292
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	35.1	36.1	56.8	44.9	45.0	11.5	0.0	10.9	52.8	0.0	54.0
Incr Delay (d2), s/veh	5.3	3.3	3.6	4.2	1.5	1.4	0.3	0.0	0.1	0.7	0.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	7.3	7.5	0.7	5.3	5.6	2.0	0.0	0.4	0.7	0.0	1.6
LnGrp Delay(d),s/veh	59.0	38.4	39.7	61.0	46.4	46.4	11.8	0.0	10.9	53.5	0.0	57.9
LnGrp LOS	E	D	D	E	D	D	B		B	D		E
Approach Vol, veh/h		529			373			154			67	
Approach Delay, s/veh		40.3			47.2			11.6			56.5	
Approach LOS		D			D			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		73.5	7.9	26.5		12.0	9.1	25.3
Change Period (Y+Rc), s		4.6	6.0	6.0		4.6	6.0	6.0
Max Green Setting (Gmax), s		25.4	7.0	42.0		24.4	15.0	34.0
Max Q Clear Time (g_c+I1), s		6.2	3.4	17.2		5.8	4.5	12.6
Green Ext Time (p_c), s		0.4	0.0	3.0		0.2	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	39.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	979	202	40	541	194	5	135	67	261	111	163
Future Volume (veh/h)	16	979	202	40	541	194	5	135	67	261	111	163
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	17	1064	220	43	588	211	5	147	73	284	121	177
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	1460	301	63	1319	472	45	381	185	411	608	467
Arrive On Green	0.02	0.50	0.50	0.04	0.52	0.51	0.33	0.33	0.32	0.33	0.33	0.33
Sat Flow, veh/h	1634	2909	599	1634	2544	911	11	1167	566	1154	1863	1432
Grp Volume(v), veh/h	17	646	638	43	409	390	225	0	0	284	121	177
Grp Sat Flow(s),veh/h/ln	1634	1770	1738	1634	1770	1685	1744	0	0	1154	1863	1432
Q Serve(g_s), s	0.9	25.7	26.1	2.3	13.0	13.1	0.0	0.0	0.0	15.5	4.2	8.6
Cycle Q Clear(g_c), s	0.9	25.7	26.1	2.3	13.0	13.1	9.0	0.0	0.0	24.5	4.2	8.6
Prop In Lane	1.00		0.34	1.00		0.54	0.02		0.32	1.00		1.00
Lane Grp Cap(c), veh/h	36	888	872	63	917	874	610	0	0	411	608	467
V/C Ratio(X)	0.47	0.73	0.73	0.68	0.45	0.45	0.37	0.00	0.00	0.69	0.20	0.38
Avail Cap(c_a), veh/h	218	888	872	176	917	874	705	0	0	474	710	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.59	0.59	0.59
Uniform Delay (d), s/veh	43.5	17.6	17.7	42.7	13.6	13.7	23.5	0.0	0.0	29.9	21.9	23.3
Incr Delay (d2), s/veh	9.3	5.2	5.4	12.2	1.6	1.7	0.4	0.0	0.0	2.1	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	13.8	13.7	1.3	6.8	6.5	4.4	0.0	0.0	6.9	2.2	3.4
LnGrp Delay(d),s/veh	52.8	22.8	23.1	54.9	15.1	15.4	23.9	0.0	0.0	32.0	21.9	23.6
LnGrp LOS	D	C	C	D	B	B	C			C	C	C
Approach Vol, veh/h		1301			842			225			582	
Approach Delay, s/veh		23.3			17.3			23.9			27.4	
Approach LOS		C			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		33.4	7.5	49.2		33.4	6.0	50.7
Change Period (Y+Rc), s		4.6	4.6	4.6		4.6	4.6	4.6
Max Green Setting (Gmax), s		33.7	9.1	33.4		33.7	11.4	31.1
Max Q Clear Time (g_c+I1), s		11.0	4.3	28.1		26.5	2.9	15.1
Green Ext Time (p_c), s		3.7	0.0	3.9		2.3	0.0	9.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	979	202	40	541	217	5	147	67	284	122	182
Future Volume (veh/h)	37	979	202	40	541	217	5	147	67	284	122	182
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	40	1064	220	43	588	236	5	160	73	309	133	198
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	1395	287	63	1184	474	44	419	187	430	649	499
Arrive On Green	0.04	0.48	0.47	0.04	0.48	0.48	0.35	0.35	0.34	0.35	0.35	0.35
Sat Flow, veh/h	1634	2908	599	1634	2456	984	10	1203	537	1140	1863	1433
Grp Volume(v), veh/h	40	646	638	43	423	401	238	0	0	309	133	198
Grp Sat Flow(s),veh/h/ln	1634	1770	1738	1634	1770	1670	1750	0	0	1140	1863	1433
Q Serve(g_s), s	2.2	26.9	27.2	2.3	14.7	14.8	0.0	0.0	0.0	17.7	4.5	9.4
Cycle Q Clear(g_c), s	2.2	26.9	27.2	2.3	14.7	14.8	9.2	0.0	0.0	26.9	4.5	9.4
Prop In Lane	1.00		0.34	1.00		0.59	0.02		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	59	849	833	63	853	805	651	0	0	430	649	499
V/C Ratio(X)	0.68	0.76	0.77	0.68	0.50	0.50	0.37	0.00	0.00	0.72	0.20	0.40
Avail Cap(c_a), veh/h	218	849	833	176	853	805	707	0	0	468	710	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.27	0.27	0.27
Uniform Delay (d), s/veh	42.8	19.2	19.4	42.7	15.9	16.0	22.2	0.0	0.0	29.2	20.6	22.2
Incr Delay (d2), s/veh	12.6	6.4	6.6	12.2	2.1	2.2	0.3	0.0	0.0	1.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	14.6	14.5	1.3	7.7	7.3	4.5	0.0	0.0	7.5	2.3	3.7
LnGrp Delay(d),s/veh	55.4	25.5	26.0	54.9	17.9	18.2	22.5	0.0	0.0	30.6	20.6	22.3
LnGrp LOS	E	C	C	D	B	B	C			C	C	C
Approach Vol, veh/h		1324			867			238			640	
Approach Delay, s/veh		26.7			19.9			22.5			25.9	
Approach LOS		C			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.4	7.5	47.2		35.4	7.3	47.4
Change Period (Y+Rc), s		4.6	4.6	4.6		4.6	4.6	4.6
Max Green Setting (Gmax), s		33.7	9.1	33.4		33.7	11.4	31.1
Max Q Clear Time (g_c+I1), s		11.2	4.3	29.2		28.9	4.2	16.8
Green Ext Time (p_c), s		4.1	0.0	3.2		1.9	0.0	8.5

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Intersection 8
N Prospect St & Morton Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	326	10	46	466	303	5	115	72	200	113	164
Future Volume (veh/h)	125	326	10	46	466	303	5	115	72	200	113	164
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	136	354	11	50	507	329	5	125	78	217	123	178
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	1924	60	72	996	645	44	291	177	353	508	391
Arrive On Green	0.11	0.55	0.54	0.04	0.49	0.48	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1634	3501	109	1634	2048	1326	13	1066	647	1171	1863	1431
Grp Volume(v), veh/h	136	178	187	50	438	398	208	0	0	217	123	178
Grp Sat Flow(s),veh/h/ln	1634	1770	1840	1634	1770	1603	1726	0	0	1171	1863	1431
Q Serve(g_s), s	7.3	4.5	4.6	2.7	15.2	15.4	0.0	0.0	0.0	10.3	4.6	9.3
Cycle Q Clear(g_c), s	7.3	4.5	4.6	2.7	15.2	15.4	8.9	0.0	0.0	19.3	4.6	9.3
Prop In Lane	1.00		0.06	1.00		0.83	0.02		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	175	972	1011	72	861	780	512	0	0	353	508	391
V/C Ratio(X)	0.78	0.18	0.18	0.69	0.51	0.51	0.41	0.00	0.00	0.61	0.24	0.46
Avail Cap(c_a), veh/h	218	972	1011	176	861	780	697	0	0	480	710	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.70	0.70	0.70
Uniform Delay (d), s/veh	39.1	10.2	10.2	42.4	15.8	16.0	27.1	0.0	0.0	31.9	25.5	27.2
Incr Delay (d2), s/veh	12.9	0.4	0.4	11.1	2.1	2.4	0.5	0.0	0.0	1.2	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	2.3	2.4	1.4	7.9	7.3	4.4	0.0	0.0	5.2	2.4	3.7
LnGrp Delay(d),s/veh	52.0	10.6	10.6	53.5	17.9	18.4	27.6	0.0	0.0	33.1	25.6	27.7
LnGrp LOS	D	B	B	D	B	B	C			C	C	C
Approach Vol, veh/h		501			886			208			518	
Approach Delay, s/veh		21.8			20.1			27.6			29.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		28.6	8.0	53.4		28.6	13.7	47.8
Change Period (Y+Rc), s		4.6	4.6	4.6		4.6	4.6	4.6
Max Green Setting (Gmax), s		33.7	9.1	33.4		33.7	11.4	31.1
Max Q Clear Time (g_c+I1), s		10.9	4.7	6.6		21.3	9.3	17.4
Green Ext Time (p_c), s		3.2	0.0	5.6		2.7	0.1	4.5

Intersection Summary			
HCM 2010 Ctrl Delay			23.6
HCM 2010 LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	326	10	46	466	328	5	128	72	229	127	188
Future Volume (veh/h)	148	326	10	46	466	328	5	128	72	229	127	188
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	161	354	11	50	507	357	5	139	78	249	138	204
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	1817	56	72	869	611	44	338	185	382	565	434
Arrive On Green	0.12	0.52	0.51	0.04	0.44	0.43	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1634	3501	109	1634	1973	1387	12	1113	609	1157	1863	1432
Grp Volume(v), veh/h	161	179	186	50	455	409	222	0	0	249	138	204
Grp Sat Flow(s),veh/h/ln	1634	1770	1840	1634	1770	1591	1734	0	0	1157	1863	1432
Q Serve(g_s), s	8.6	4.9	4.9	2.7	17.4	17.6	0.0	0.0	0.0	12.8	5.0	10.4
Cycle Q Clear(g_c), s	8.6	4.9	4.9	2.7	17.4	17.6	9.2	0.0	0.0	22.0	5.0	10.4
Prop In Lane	1.00		0.06	1.00		0.87	0.02		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	201	919	955	72	779	700	567	0	0	382	565	434
V/C Ratio(X)	0.80	0.19	0.20	0.69	0.58	0.58	0.39	0.00	0.00	0.65	0.24	0.47
Avail Cap(c_a), veh/h	218	919	955	176	779	700	700	0	0	472	710	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	38.4	11.6	11.6	42.4	19.0	19.2	25.1	0.0	0.0	30.7	23.6	25.5
Incr Delay (d2), s/veh	17.7	0.5	0.5	11.1	3.2	3.5	0.4	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	2.5	2.6	1.4	9.1	8.3	4.5	0.0	0.0	5.8	2.6	4.1
LnGrp Delay(d),s/veh	56.1	12.0	12.0	53.5	22.2	22.8	25.6	0.0	0.0	31.0	23.6	25.5
LnGrp LOS	E	B	B	D	C	C	C			C	C	C
Approach Vol, veh/h		526			914			222			591	
Approach Delay, s/veh		25.5			24.1			25.6			27.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		31.3	8.0	50.7		31.3	15.1	43.6
Change Period (Y+Rc), s		4.6	4.6	4.6		4.6	4.6	4.6
Max Green Setting (Gmax), s		33.7	9.1	33.4		33.7	11.4	31.1
Max Q Clear Time (g_c+I1), s		11.2	4.7	6.9		24.0	10.6	19.6
Green Ext Time (p_c), s		3.7	0.0	5.8		2.7	0.0	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	686	148	29	379	142	4	95	51	192	78	120
Future Volume (veh/h)	11	686	148	29	379	142	4	95	51	192	78	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	12	746	161	32	412	154	4	103	55	209	85	130
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	1722	372	51	1539	568	44	270	140	344	443	340
Arrive On Green	0.02	0.60	0.59	0.03	0.61	0.60	0.24	0.24	0.23	0.24	0.24	0.24
Sat Flow, veh/h	1634	2882	622	1634	2520	931	13	1135	590	1218	1863	1429
Grp Volume(v), veh/h	12	458	449	32	288	278	162	0	0	209	85	130
Grp Sat Flow(s),veh/h/ln	1634	1770	1734	1634	1770	1682	1738	0	0	1218	1863	1429
Q Serve(g_s), s	0.7	12.6	12.7	1.7	6.8	7.0	0.0	0.0	0.0	9.5	3.3	6.9
Cycle Q Clear(g_c), s	0.7	12.6	12.7	1.7	6.8	7.0	7.0	0.0	0.0	16.5	3.3	6.9
Prop In Lane	1.00		0.36	1.00		0.55	0.02		0.34	1.00		1.00
Lane Grp Cap(c), veh/h	30	1057	1036	51	1080	1027	455	0	0	344	443	340
V/C Ratio(X)	0.40	0.43	0.43	0.63	0.27	0.27	0.36	0.00	0.00	0.61	0.19	0.38
Avail Cap(c_a), veh/h	218	1057	1036	176	1080	1027	701	0	0	518	710	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.72	0.72	0.72
Uniform Delay (d), s/veh	43.7	9.8	9.9	43.1	8.2	8.3	28.9	0.0	0.0	33.0	27.4	28.7
Incr Delay (d2), s/veh	8.6	1.3	1.3	12.1	0.6	0.7	0.5	0.0	0.0	1.3	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.5	6.4	1.0	3.5	3.4	3.4	0.0	0.0	5.0	1.7	2.7
LnGrp Delay(d),s/veh	52.3	11.1	11.2	55.2	8.8	8.9	29.4	0.0	0.0	34.3	27.5	29.3
LnGrp LOS	D	B	B	E	A	A	C			C	C	C
Approach Vol, veh/h		919			598			162			424	
Approach Delay, s/veh		11.7			11.3			29.4			31.4	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.4	6.8	57.8		25.4	5.6	58.9
Change Period (Y+Rc), s		4.6	4.6	4.6		4.6	4.6	4.6
Max Green Setting (Gmax), s		33.7	9.1	33.4		33.7	11.4	31.1
Max Q Clear Time (g_c+I1), s		9.0	3.7	14.7		18.5	2.7	9.0
Green Ext Time (p_c), s		2.6	0.0	6.4		2.3	0.0	6.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	686	148	29	379	165	4	107	51	215	89	139
Future Volume (veh/h)	32	686	148	29	379	165	4	107	51	215	89	139
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	35	746	161	32	412	179	4	116	55	234	97	151
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	1648	356	51	1370	588	44	313	145	368	491	377
Arrive On Green	0.03	0.57	0.57	0.03	0.57	0.56	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1634	2882	622	1634	2401	1030	11	1187	549	1205	1863	1430
Grp Volume(v), veh/h	35	458	449	32	302	289	175	0	0	234	97	151
Grp Sat Flow(s),veh/h/ln	1634	1770	1734	1634	1770	1662	1747	0	0	1205	1863	1430
Q Serve(g_s), s	1.9	13.5	13.5	1.7	8.0	8.2	0.0	0.0	0.0	11.3	3.6	7.8
Cycle Q Clear(g_c), s	1.9	13.5	13.5	1.7	8.0	8.2	7.4	0.0	0.0	18.7	3.6	7.8
Prop In Lane	1.00		0.36	1.00		0.62	0.02		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	53	1012	991	51	1009	948	502	0	0	368	491	377
V/C Ratio(X)	0.66	0.45	0.45	0.63	0.30	0.30	0.35	0.00	0.00	0.64	0.20	0.40
Avail Cap(c_a), veh/h	218	1012	991	176	1009	948	705	0	0	510	710	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.50	0.50	0.50
Uniform Delay (d), s/veh	43.0	11.1	11.2	43.1	10.0	10.2	27.2	0.0	0.0	32.0	25.7	27.3
Incr Delay (d2), s/veh	12.9	1.5	1.5	12.1	0.8	0.8	0.4	0.0	0.0	0.9	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	6.9	6.8	1.0	4.1	3.9	3.6	0.0	0.0	5.6	1.9	3.1
LnGrp Delay(d),s/veh	56.0	12.6	12.7	55.2	10.8	11.0	27.6	0.0	0.0	32.9	25.8	27.6
LnGrp LOS	E	B	B	E	B	B	C			C	C	C
Approach Vol, veh/h		942			623			175			482	
Approach Delay, s/veh		14.3			13.2			27.6			29.8	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.7	6.8	55.5		27.7	6.9	55.3
Change Period (Y+Rc), s		4.6	4.6	4.6		4.6	4.6	4.6
Max Green Setting (Gmax), s		33.7	9.1	33.4		33.7	11.4	31.1
Max Q Clear Time (g_c+I1), s		9.4	3.7	15.5		20.7	3.9	10.2
Green Ext Time (p_c), s		2.9	0.0	6.4		2.4	0.0	6.8

Intersection Summary	
HCM 2010 Ctrl Delay	18.4
HCM 2010 LOS	B

Location ID: 1
North/South: Prospect Ave
East/West: Westfield Ave

Date: 10/12/2022
City: Porterville, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	1	29	22	21	43	8	15	26	12	28	53	2	260
7:45	8	32	28	19	69	10	14	32	18	27	74	5	336
8:00	8	50	19	24	60	19	22	48	23	33	100	5	411
8:15	9	48	19	20	54	12	29	36	27	44	72	4	374
Total Volume:	26	159	88	84	226	49	80	142	80	132	299	16	1381
Approach %	10%	58%	32%	23%	63%	14%	26%	47%	26%	30%	67%	4%	

Peak Hr Begin:	7:30												
PHV	26	159	88	84	226	49	80	142	80	132	299	16	1381
PHF		0.886			0.871			0.812			0.810		0.840

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	8	34	15	18	56	17	16	40	17	17	49	4	291
16:45	7	35	19	24	62	14	22	40	19	13	49	2	306
17:00	3	31	27	18	73	17	24	43	27	14	42	5	324
17:15	4	39	22	12	52	10	13	46	18	10	30	3	259
Total Volume:	22	139	83	72	243	58	75	169	81	54	170	14	1180
Approach %	9%	57%	34%	19%	65%	16%	23%	52%	25%	23%	71%	6%	

Peak Hr Begin:	16:30												
PHV	22	139	83	72	243	58	75	169	81	54	170	14	1180
PHF		0.250			0.250			0.250			0.250		0.250

Location ID: 3
North/South: Newcomb St
East/West: Henderson Ave

Date: 10/12/2022
City: Porterville, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	23	51	43	30	52	26	21	48	19	24	65	24	426
7:45	17	64	43	43	71	29	26	58	37	19	125	28	560
8:00	19	81	53	64	52	56	32	113	23	20	85	51	649
8:15	29	74	45	89	58	56	38	93	16	28	99	57	682
Total Volume:	88	270	184	226	233	167	117	312	95	91	374	160	2317
Approach %	16%	50%	34%	36%	37%	27%	22%	60%	18%	15%	60%	26%	
Peak Hr Begin:	7:30												
PHV	88	270	184	226	233	167	117	312	95	91	374	160	2317
PHF		0.886			0.771			0.780			0.849		0.849

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	14	45	34	52	81	47	50	60	19	19	82	16	519
16:45	8	48	32	62	85	41	46	66	19	16	88	13	524
17:00	5	46	33	58	91	45	41	62	18	14	84	11	508
17:15	13	57	57	69	78	51	61	63	26	17	81	15	588
Total Volume:	40	196	156	241	335	184	198	251	82	66	335	55	2139
Approach %	10%	50%	40%	32%	44%	24%	37%	47%	15%	14%	73%	12%	
Peak Hr Begin:	16:30												
PHV	40	196	156	241	335	184	198	251	82	66	335	55	2139
PHF		0.250			0.250			0.250			0.250		0.250

Location ID: 4
North/South: Prospect Ave
East/West: Henderson Ave

Date: 10/12/2022
City: Porterville, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	13	74	29	38	87	26	18	35	21	7	94	12	454
7:45	23	66	44	44	112	34	17	27	21	14	149	19	570
8:00	27	76	59	42	129	25	21	51	29	23	141	30	653
8:15	38	87	76	72	130	31	26	54	41	20	128	34	737
Total Volume:	101	303	208	196	458	116	82	167	112	64	512	95	2414
Approach %	17%	50%	34%	25%	59%	15%	23%	46%	31%	10%	76%	14%	

Peak Hr Begin:	7:30												
PHV	101	303	208	196	458	116	82	167	112	64	512	95	2414
PHF		0.761			0.826			0.746			0.865		0.819

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	14	86	47	43	121	77	40	46	34	24	140	69	741
16:45	30	66	50	51	121	59	48	55	35	21	143	55	734
17:00	27	56	57	77	158	55	36	49	42	33	149	48	787
17:15	23	90	50	79	136	47	26	41	27	18	140	47	724
Total Volume:	94	298	204	250	536	238	150	191	138	96	572	219	2986
Approach %	16%	50%	34%	24%	52%	23%	31%	40%	29%	11%	64%	25%	

Peak Hr Begin:	16:30												
PHV	94	298	204	250	536	238	150	191	138	96	572	219	2986
PHF		0.250			0.250			0.250			0.250		0.250

Location ID: 5
North/South: SR 65 SB Ramps
East/West: Henderson Ave

Date: 10/12/2022
City: Porterville, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	41	0	20	1	143	22	0	0	0	77	90	0	394
7:45	43	0	61	0	187	22	0	0	0	67	162	0	542
8:00	38	0	45	0	197	13	0	0	0	67	155	0	515
8:15	42	0	50	0	198	16	0	0	0	70	174	0	550
Total Volume:	164	0	176	1	725	73	0	0	0	281	581	0	2001
Approach %	48%	0%	52%	0%	91%	9%	0%	0%	0%	33%	67%	0%	
Peak Hr Begin:	7:30												
PHV	164	0	176	1	725	73	0	0	0	281	581	0	2001
PHF		0.817			0.933			0.000			0.883		0.910

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	35	1	36	0	214	17	0	0	0	71	189	0	563
16:45	40	0	33	0	225	20	0	0	0	81	187	0	586
17:00	33	0	38	0	251	31	0	0	0	98	204	0	655
17:15	36	0	33	0	231	22	0	0	0	78	164	0	564
Total Volume:	144	1	140	0	921	90	0	0	0	328	744	0	2368
Approach %	51%	0%	49%	0%	91%	9%	0%	0%	0%	31%	69%	0%	
Peak Hr Begin:	16:30												
PHV	144	1	140	0	921	90	0	0	0	328	744	0	2368
PHF		0.250			0.250			0.000			0.250		0.250

Location ID: 6
North/South: SR 65 NB Ramps
East/West: Henderson Ave

Date: 10/12/2022
City: Porterville, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	0	0	0	18	99	0	25	2	67	0	96	16	323
7:45	0	0	0	26	145	0	30	0	67	0	182	38	488
8:00	0	0	0	25	117	0	29	0	89	0	166	28	454
8:15	0	0	0	31	146	0	25	0	69	0	198	34	503
Total Volume:	0	0	0	100	507	0	109	2	292	0	642	116	1768
Approach %	0%	0%	0%	16%	84%	0%	27%	0%	72%	0%	85%	15%	

Peak Hr Begin:	7:30												
PHV	0	0	0	100	507	0	109	2	292	0	642	116	1768
PHF		0.000			0.857			0.854			0.817		0.879

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	0	0	0	45	167	0	49	1	64	0	174	45	545
16:45	0	0	0	48	143	0	62	0	94	0	177	45	569
17:00	0	0	0	44	218	0	45	0	73	0	188	51	619
17:15	0	0	0	30	182	0	28	0	72	0	156	43	511
Total Volume:	0	0	0	167	710	0	184	1	303	0	695	184	2244
Approach %	0%	0%	0%	19%	81%	0%	38%	0%	62%	0%	79%	21%	

Peak Hr Begin:	16:30												
PHV	0	0	0	167	710	0	184	1	303	0	695	184	2244
PHF		0.000			0.250			0.250			0.250		0.250

Location ID: 7
North/South: Porter St
East/West: Henderson Ave

Date: 10/12/2022
City: Porterville, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	3	0	0	3	92	1	7	1	23	16	98	4	248
7:45	8	0	2	5	136	1	6	2	24	35	152	5	376
8:00	4	0	2	9	129	4	3	4	19	31	167	5	377
8:15	9	3	7	8	132	4	9	1	31	36	163	11	414
Total Volume:	24	3	11	25	489	10	25	8	97	118	580	25	1415
Approach %	63%	8%	29%	5%	93%	2%	19%	6%	75%	16%	80%	3%	

Peak Hr Begin:	7:30												
PHV	24	3	11	25	489	10	25	8	97	118	580	25	1415
PHF	0.500			0.910			0.793			0.861			0.854

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	34	7	17	15	139	12	5	10	33	41	138	26	477
16:45	32	8	19	10	159	17	10	8	28	44	169	28	532
17:00	31	10	22	11	169	11	17	14	42	34	176	24	561
17:15	38	4	25	15	138	11	11	4	39	24	133	22	464
Total Volume:	135	29	83	51	605	51	43	36	142	143	616	100	2034
Approach %	55%	12%	34%	7%	86%	7%	19%	16%	64%	17%	72%	12%	

Peak Hr Begin:	16:30												
PHV	135	29	83	51	605	51	43	36	142	143	616	100	2034
PHF	0.250			0.250			0.250			0.250			0.250

Location ID: 8
North/South: Prospect Ave
East/West: Morton Ave

Date: 10/12/2022
City: Porterville, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	25	10	19	26	84	8	7	11	1	0	102	28	321
7:45	29	11	46	37	104	3	20	28	1	0	149	37	465
8:00	28	20	37	44	90	8	26	23	0	2	182	58	518
8:15	40	19	43	55	94	4	18	41	1	3	145	50	513
Total Volume:	122	60	145	162	372	23	71	103	3	5	578	173	1817
Approach %	37%	18%	44%	29%	67%	4%	40%	58%	2%	1%	76%	23%	

Peak Hr Begin:	7:30												
PHV	122	60	145	162	372	23	71	103	3	5	578	173	1817
PHF	0.801			0.910			0.738			0.781			0.877

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	40	21	43	65	113	12	17	40	0	1	66	28	446
16:45	42	26	46	79	85	11	15	27	0	2	96	42	471
17:00	42	43	51	76	140	9	15	25	2	2	68	23	496
17:15	35	19	53	73	110	12	23	19	3	5	83	28	463
Total Volume:	159	109	193	293	448	44	70	111	5	10	313	121	1876
Approach %	34%	24%	42%	37%	57%	6%	38%	60%	3%	2%	70%	27%	

Peak Hr Begin:	16:30												
PHV	159	109	193	293	448	44	70	111	5	10	313	121	1876
PHF	0.250			0.250			0.250			0.250			0.250