Appendix A

Notice of Preparation and Comment Letters

326 Huss Drive
Chico, California 95928-8441
(530) 809-4616 FAX (530) 879-2444

Notice of Preparation of a Supplemental Environmental Impact Report for the 2020 Regional Transportation Plan and Sustainable Communities Strategy

NOTICE IS HEREBY GIVEN that the Butte County Association of Governments (BCAG) is the lead agency for the preparation and review of the Supplemental Environmental Impact Report (SEIR) for the 2020 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS). Pursuant to Section 15082 of the California Environmental Quality Act (CEQA), BCAG is soliciting views from your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. BCAG will accept written comments concerning the scope and content of the SEIR from interested persons and organizations concerned with the project. The Final EIR for the 2016 RTP was certified in November 2016. The Final EIR can be found at the following link http://www.bcag.org/Planning/RTP--SCS/ in the Appendices (Appendix 2) section.

The SEIR for the 2020 RTP-SCS will be a supplement to the 2016 RTP Program EIR (State Clearinghouse # 2015092038). This is the appropriate level of environmental documentation for the 2020 RTP-SCS because changes to existing conditions (including regulatory updates), the transportation project list, and land use scenario evaluated in the 2020 RTP-SCS are expected to be minor relative to the 2016 RTP and would not substantially increase the severity of impacts previously identified. As stated in the *CEQA Guidelines*, Section 15163(b), the supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project, as revised. In addition, a more detailed or project-level environmental review (if required) of the projects included in the RTP-SCS will be conducted by the responsible agencies, including Caltrans, Butte County, and the cities within the County, before each project is approved for construction and implementation.

BCAG will host one EIR Scoping Meeting for the 2020 RTP-SCS. The purpose of the Scoping meetings is to solicit input on the scope and content of the environmental analysis that will be included in the Draft SEIR for the 2020 RTP-SCS. The date, time and location of the meeting is as follows:

November 7, 2019 from 4:00 to 6:00 p.m.
326 Huss Drive, BCAG Conference Room, Suite 150
Chico, CA 95928

Future public workshops will be held to discuss development of the draft 2020 Regional Transportation Plan and Sustainable Communities Strategy.

Because of the time-sensitive nature of the regional transportation planning process, we request your response at the earliest possible date. Please mail comments to Iván García at **BCAG, 326 Huss Drive, Chico, CA 95928** or e-mail comments to **igarcia@bcag.org** no later than **5:00 p.m. on November 21, 2019.** Please identify the name, phone number, and email address of a contact person at your agency. Comments from the public must also include name, phone number, and email or postal address.

For more information, visit http://www.bcag.org/Planning/RTP--SCS/2020-RTPSCS-EIR/ or call 530-809-4616.

PROJECT DESCRIPTION AND SCOPE OF ENVIRONMENTAL ANALYSIS

Project Title

Supplemental EIR (SEIR) for the Butte County Association of Governments (BCAG) 2020 Regional Transportation Plan and Sustainable Communities Strategy (RTP-SCS)

Project Location

The geographical extent of the proposed 2020 RTP-SCS includes the area within the limits of Butte County, California, including the incorporated cities of Biggs, Chico, Gridley, Oroville, and Paradise, and all unincorporated areas under the jurisdiction of the County of Butte. The attached figure shows the RTP-SCS plan area.

Project Description

Regional Transportation Plan

The proposed project is the Butte County 2020 RTP-SCS, which updates BCAG's previous 2016 RTP adopted in December 2016. BCAG, as both the federally-designated metropolitan planning organization (MPO) and the State-designated regional transportation planning agency (RTPA) for Butte County, is required by both federal and State law to prepare a long-range (at least 20-year) transportation planning document known as a Regional Transportation Plan (RTP). The RTP is an action-oriented document used to achieve a coordinated and balanced regional transportation system. California Government Code Section 65080 et seq. and Title 23 United States Code (USC) Section 134 require Regional Transportation Planning Agencies (RTPA) and Metropolitan Planning Organizations (MPO) to prepare long-range transportation plans to: 1) establish regional goals, 2) identify present and future needs, deficiencies and constraints, 3) analyze potential solutions, 4) estimate available funding, and 5) propose investments. State Statutes require that the RTP serve as the foundation for the short-range transportation planning documents: the Regional and Federal Transportation Improvement Programs (RTIP and FTIP).

Sustainable Communities Strategy

BCAG has the responsibility to prepare a SCS as part of the RTP, pursuant to the requirements of California Senate Bill 375 as adopted in 2008. The SCS sets forth a forecasted development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, is intended to reduce greenhouse gas (GHG) emissions from passenger vehicles and light trucks to achieve the regional GHG reduction targets set by the California Air Resources Board (ARB). In 2010, the California ARB set GHG reduction targets for the BCAG region from on-road light-duty trucks and passenger vehicles as a 1% increase from 2005 emissions levels by 2020 and a 1% increase from 2005 emissions levels by 2035. The reduction targets were re-evaluated and approved by the California ARB in 2018. These targets apply to the BCAG region as a whole for all on-road light-duty trucks and passenger vehicles emissions, and not to individual cities or sub-regions. BCAG is required to prepare a SCS that demonstrates how GHG reduction targets will be met through integrated land use, housing, and transportation planning. Thus the RTP-SCS will addresses both the transportation component of the RTP, as well as the land use component of the SCS.

SB 375 specifically states that local governments retain their autonomy to plan local General Plan policies and land uses. The RTP-SCS rather is intended to provide a regional policy foundation that local governments may build upon, if they so choose. The RTP-SCS does not propose to change any land use and zoning designations; rather, the land use scenario envisioned by the RTP-SCS is based on and would be consistent with the existing local General Plan policies and land use designations as specified by the local agencies. As such, the RTP-SCS includes and accommodates the quantitative growth projections for the region based on the buildout of the local General Plans. SB 375 also requires that the RTP-SCS's forecasted development pattern for the region be consistent with the eight-year regional housing needs as allocated to member jurisdictions through the Regional Housing Needs Allocation (RHNA) process under State housing law.

CEQA Streamlining

In addition, the RTP-SCS SEIR lays the groundwork for the streamlined review of qualifying development projects within Transit Priority Areas. Qualifying projects that meet statutory criteria and are consistent with the RTP-SCS are eligible for streamlined environmental review pursuant to CEQA. Certain types of development projects (i.e., transit priority projects or residential/mixed use residential projects, as defined by the statute) may qualify for CEQA streamlining if the requisite criteria are met. Generally, this means that the proposed project seeking to utilize the CEQA incentives is determined to be consistent with an approved SCS. Consistency will be determined by the local jurisdiction that is the lead agency for each project to be streamlined. BCAG's primary role is to include appropriate information in the SCS that will

allow a jurisdiction to make a consistency determination with respect to appropriate streamlining options on a project by project basis. The programs and projects to be included in the 2020 RTP-SCS will be addressed programmatically in the SEIR. This will allow BCAG to analyze the regional or general impacts of the program and projects. A more detailed or project level environmental assessment, if required, will be provided by the various responsible agencies, including Caltrans, Butte County, and the cities within the County, for the various projects included in the RTP, before the projects are approved for construction.

2020 RTP-SCS Update

Under both federal and State law, BCAG must update its RTP every four years. The 2020 RTP-SCS is the long-range planning, policy, action, and financial document for the Butte County Region. The RTP-SCS covers a 20-year period from 2020 to 2040 and is an update of the 2016 RTP-SCS. The RTP-SCS identifies the region's transportation needs and issues and sets forth actions, programs, and projects to address those needs and issues. The RTP-SCS adopts policies, sets goals, and identifies financial resources to encourage and promote the safe and efficient management, operation, and development of a regional intermodal transportation system that would serve the mobility needs of goods and people. As described above, BCAG does not propose any land use changes, but rather the land use patterns envisioned by the RTP-SCS are based on the General Plan land use and zoning designations of the local agencies (the five incorporated cities and the county). The RTP-SCS would be consistent with the land use and zoning designations in the incorporated and unincorporated areas.

The 2020 RTP-SCS reflects changes in legislative requirements, local land use policies, and resource constraints since the most recent RTP was adopted on December 8, 2016. The 2020 update to the RTP-SCS is focused on implementation of the 2016 RTP, with minor updates to ensure consistency with federal, state and local planning requirements. The most notable changes that impact this RTP update include:

- California's adoption of safety-related performance measures and targets in July and August 2017 as required under the MAP-21 and FAST Act transportation bills. This also requires MPO targets to be adopted within 180 days after State targets and they must be incorporated into the RTP, RTIP and FTIP;
- Draft guidelines from the Governor's Office of Planning and Research for SB 743 (Steinberg, 2013);
- New funding for transportation projects through California's recently approved Road Repair and Accountability Act of 2017 (SB 1) for the next ten years;
- Minor updates to transportation projects and land use development (specifically focused on growth that has taken place since the last RTP); and
- Addition of components to the RTP to address freight and alternative fuel vehicles, including electric vehicles and autonomous vehicles.

Issues to Be Addressed in the SEIR

The impact categories listed below have been preliminarily identified for analysis in the 2020 RTP-SCS SEIR as these issue areas are anticipated to have potentially different impacts compared to the 2016 RTP/SCS EIR or were not included in the 2016 RTP/SCS EIR.

- Air Quality
- Biological Resources
- Cultural Resources
- Climate Change and Greenhouse Gas Emissions
- Energy
- Population and Housing
- Transportation
- Wildfire

In addition, the SEIR will address cumulative impacts, growth inducing impacts, and other issues required by CEQA.

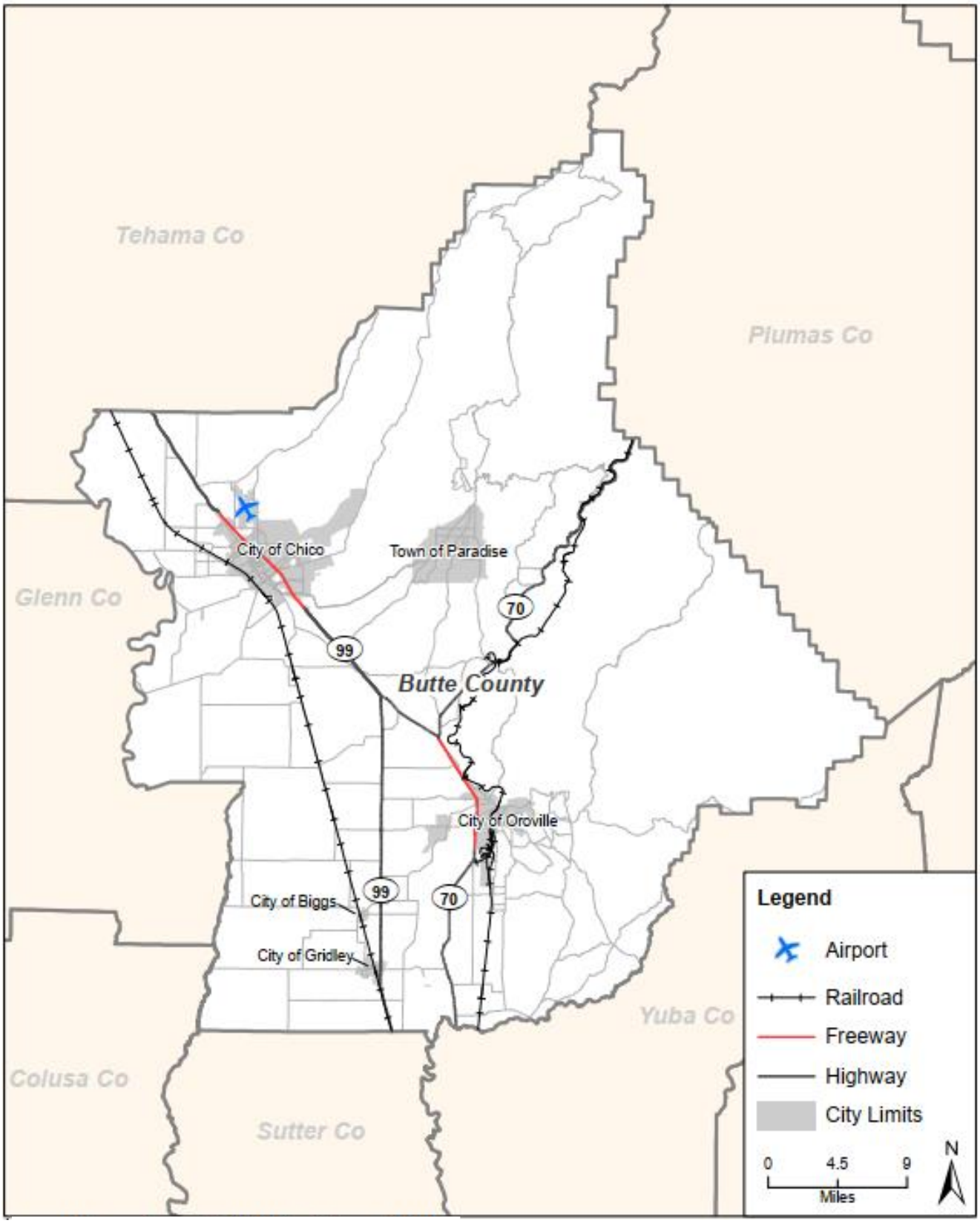
Through the NOP, BCAG is seeking input on further categories of analysis or areas of focus within the specified categories above. Time limits required by State law mandate your response be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Public Review and Public Scoping Meetings

The 30-day public review and comment period will commence on October 22, 2019 and conclude November 21, 2019 at 5:00 p.m. Public comments may be submitted in writing by 5:00 p.m. on November 21, 2019 to Iván García at the address below.

Contact Person: Iván García, Programming Manager
Butte County Association of Governments
326 Huss Drive, Suite150
Chico, CA 95928
igarcia@bcag.org

BCAG will hold one public information/EIR scoping meeting on November 7, 2019 in the Butte County Association of Governments Conference Room located at 2580 Sierra Sunrise Terrace, Suite 150, Chico, CA 95928, from 4:00 p.m. to 6:00 p.m. The purpose of the meeting is to solicit input on the scope and content of the environmental analysis that will be included in the SEIR.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Department of Toxic Substances Control

Jared Blumenfeld
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Acting Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

November 6, 2019

Mr. Iván García, Programming Manager
Butte County Association of Governments (BCAG)
326 Huss Drive
Chico, California 95928

NOTICE OF PREPARATION OF A SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR THE 2020 REGIONAL TRANSPORTATION PLAN (RTP) AND SUSTAINABLE COMMUNITIES STRATEGY (SCS) – DATED OCTOBER 22, 2019 (STATE CLEARINGHOUSE NUMBER: 2015092038)

Dear Mr. García:

The Department of Toxic Substances Control (DTSC) received a *Notice of Preparation of a Supplemental Environmental Impact Report for the 2020 Regional Transportation Plan* (RTP) *and Sustainable Communities Strategy* (SCS) (NOP).

The 2020 RTP-SCS is an update of a long-range planning document. The 2020 RTP is the culmination of a multiyear effort that aims to maintain or enhance the efficient and effective movement of goods, services, and persons. The SCS will seek to coordinate local land use and transportation systems within the region to reduce emissions from cars and light trucks. BCAG is required by federal law to develop an RTP that determines the needs for the transportation system and prioritizes proposed transportation projects. The RTP is also necessary to obtain and allocate federal funding for regional transportation projects.

DTSC recommends that the following issues be evaluated in the *Supplemental Environmental Impact Report* (SEIR), Hazards and Hazardous Materials section:

1. The Hazards & Hazardous Materials section of the SEIR should acknowledge the potential for historic project site activities to have resulted in the release of hazardous wastes/substances on sites that may be included in the 2020 RTP-SCS. In instances in which releases have occurred, further studies should be carried out to delineate the nature and extent of the contamination, and the

potential threat to public health and/or the environment should be evaluated. The SEIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.

2. If buildings or other structures are to be demolished on the project sites included in the 2020 RTP-SCS, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling should be conducted in accordance with DTSC's 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers* (https://dtsc.ca.gov/wpcontent/uploads/sites/31/2018/09/Guidance_Lead_Contamination_050118.pdf).

3. If any project sites require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to *DTSC's 2001 Information Advisory Clean Imported Fill Material* (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP_FS_Cleanfill-Schools.pdf).

4. If any sites included in the 2020 RTP-SCS have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the SEIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)* (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Ag-Guidance-Rev-3-August-7-2008-2.pdf).

DTSC appreciates the opportunity to review the NOP. Should you need any assistance with an environmental investigation, please submit a request for Lead Agency Oversight Application, which can be found at: https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/VCP_App-1460.doc. Additional information regarding voluntary agreements with DTSC can be found at: https://dtsc.ca.gov/brownfields/.

If you have any questions, please contact me at (916) 255-3710 or via email at Gavin.McCreary@dtsc.ca.gov.

Sincerely,

Gavin McCreary
Project Manager
Site Evaluation and Remediation Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

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

Ms. Lora Jameson, Chief
Site Evaluation and Remediation Unit
Department of Toxic Substances Control
Lora.Jameson@dtsc.ca.gov

Mr. Dave Kereazis
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereasis@dtsc.ca.gov

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691 Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov

November 1, 2019

RECEIVED NOV 0 6 2019

Ivan Garcia
Butte County Association of Governments
326 Huss Drive
Chico, CA 95928

RE: SCH# 2015092038, 2020 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) Project, Butte County

Dear Mr. Garcia:

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)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

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 (http://ohp.parks.ca.gov/?page_id=1068) 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: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green
Staff Services Analyst

cc: State Clearinghouse

-----Original Message-----
From: Michael Garabedian <michaelgarabedian@earthlink.net>
Sent: Friday, November 22, 2019 11:34 AM
To: Ivan Garcia <IGarcia@bcag.org>
Subject: BCAG RTP-SCS/2020-RTPSCS-EIR

The project description and EIR need to include options for establishing new, and for increased and improved rail passenger service, and new and increased rail and light rail transit service from Sacramento and through Lincoln, starting independently at Roseville, extending Sacramento RT, connecting to the Capitol Corridor, changing the State Rail Plan to go north from Sacramento thorough Lincoln, along with other options to and from BACAG.

Mike Garabedian
Placer County Tomorrow
1725 Schellbach Dr
Lincoln CA 95648
916-719-7296

-----Original Message-----
From: Michael Garabedian <michaelgarabedian@earthlink.net>
Sent: Friday, November 22, 2019 11:39 AM
To: Ivan Garcia <IGarcia@bcag.org>
Subject: Re: BCAG RTP-SCS/2020-RTPSCS-EIR supplement

A part of this should be going at this time to Phase 2 of the 1995 BACOG rail passenger study that included Lincoln in Placer County.

> On Nov 22, 2019, at 11:33 AM, Michael Garabedian <michaelgarabedian@earthlink.net> wrote:
>
> The project description and EIR need to include options for establishing new, and for increased and improved rail passenger service, and new and increased rail and light rail transit service, from Sacramento and through Lincoln, starting independently at Roseville, extending Sacramento RT, connecting to the Capitol Corridor, changing the State Rail Plan to go north from Sacramento thorough Lincoln, along with other options to and from BACAG.
>
> Mike Garabedian
> Placer County Tomorrow
> 1725 Schellbach Dr
> Lincoln CA 95648
> 916-719-7296

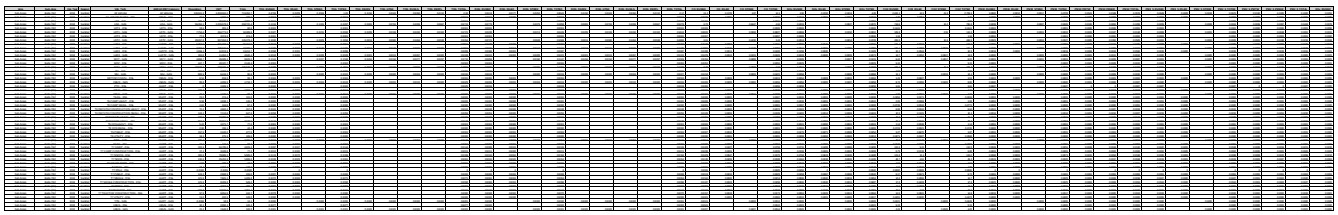
Appendix B

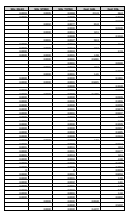
Air Quality and Greenhouse Gas Emissions Modeling Results

Planning Inventory Report
Date: 08/07/2020
Time: 11:07:45
EMFAC2017 Version: v1.0.2

Field Name	Pollutant	Units	Process
TOG_RUNEX	Total Organic Gases	Tons Per Day	Running Exhaust
TOG_IDLEX	Total Organic Gases	Tons Per Day	Idle Exhaust
TOG_STREX	Total Organic Gases	Tons Per Day	Start Exhaust
TOG_TOTEX	Total Organic Gases	Tons Per Day	Total Exhaust
TOG_DIURN	Total Organic Gases	Tons Per Day	Diurnal
TOG_HTSK	Total Organic Gases	Tons Per Day	Hot Soak
TOG_RUNLS	Total Organic Gases	Tons Per Day	Running Loss
TOG_RESTL	Total Organic Gases	Tons Per Day	Resting Loss
TOG_TOTAL	Total Organic Gases	Tons Per Day	Total
ROG_RUNEX	Reactive Organic Gases	Tons Per Day	Running Exhaust
ROG_IDLEX	Reactive Organic Gases	Tons Per Day	Idle Exhaust
ROG_STREX	Reactive Organic Gases	Tons Per Day	Start Exhaust
ROG_TOTEX	Reactive Organic Gases	Tons Per Day	Total Exhaust
ROG_DIURN	Reactive Organic Gases	Tons Per Day	Diurnal
ROG_HTSK	Reactive Organic Gases	Tons Per Day	Hot Soak
ROG_RUNLS	Reactive Organic Gases	Tons Per Day	Running Loss
ROG_RESTL	Reactive Organic Gases	Tons Per Day	Resting Loss
ROG_TOTAL	Reactive Organic Gases	Tons Per Day	Total
CO_RUNEX	Carbon Monoxide	Tons Per Day	Running Exhaust
CO_IDLEX	Carbon Monoxide	Tons Per Day	Idle Exhaust
CO_STREX	Carbon Monoxide	Tons Per Day	Start Exhaust
CO_TOTEX	Carbon Monoxide	Tons Per Day	Total
NOx_RUNEX	Nitrogen Dioxide	Tons Per Day	Running Exhaust
NOx_IDLEX	Nitrogen Dioxide	Tons Per Day	Idle Exhaust
NOx_STREX	Nitrogen Dioxide	Tons Per Day	Start Exhaust
NOx_TOTEX	Nitrogen Dioxide	Tons Per Day	Total
CO2_RUNEX	Carbon Dioxide	Tons Per Day	Running Exhaust
CO2_IDLEX	Carbon Dioxide	Tons Per Day	Idle Exhaust
CO2_STREX	Carbon Dioxide	Tons Per Day	Start Exhaust
CO2_TOTEX	Carbon Dioxide	Tons Per Day	Total
PM10_RUNEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Running Exhaust
PM10_IDLEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Idle Exhaust
PM10_STREX	Fine Particulate Matter (<10 microns)	Tons Per Day	Start Exhaust
PM10_TOTEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Total Exhaust
PM10_PMTW	Fine Particulate Matter (<10 microns)	Tons Per Day	Tire Wear
PM10_PMBW	Fine Particulate Matter (<10 microns)	Tons Per Day	Brake Wear
PM10_TOTAL	Fine Particulate Matter (<10 microns)	Tons Per Day	Total
PM2_5_RUNEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Running Exhaust
PM2_5_IDLEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Idle Exhaust
PM2_5_STREX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Start Exhaust
PM2_5_TOTEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total Exhaust
PM2_5_PMTW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Tire Wear
PM2_5_PMBW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Brake Wear

PM2_5_TOTAL	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total
SOx_RUNEX	Sulfur Oxides	Tons Per Day	Running Exhaust
SOx_IDLEX	Sulfur Oxides	Tons Per Day	Idle Exhaust
SOx_STREX	Sulfur Oxides	Tons Per Day	Start Exhaust
SOx_TOTEX	Sulfur Oxides	Tons Per Day	Total
Fuel_GAS	Fuel	1000s Gallons	Gasoline
Fuel_DSL	Fuel	1000s Gallons	Diesel





Planning Inventory Report
Date: 08/07/2020
Time: 11:20:18
EMFAC2017 Version: v1.0.2

Field Name	Pollutant	Units	Process
TOG_RUNEX	Total Organic Gases	Tons Per Day	Running Exhaust
TOG_IDLEX	Total Organic Gases	Tons Per Day	Idle Exhaust
TOG_STREX	Total Organic Gases	Tons Per Day	Start Exhaust
TOG_TOTEX	Total Organic Gases	Tons Per Day	Total Exhaust
TOG_DIURN	Total Organic Gases	Tons Per Day	Diurnal
TOG_HTSK	Total Organic Gases	Tons Per Day	Hot Soak
TOG_RUNLS	Total Organic Gases	Tons Per Day	Running Loss
TOG_RESTL	Total Organic Gases	Tons Per Day	Resting Loss
TOG_TOTAL	Total Organic Gases	Tons Per Day	Total
ROG_RUNEX	Reactive Organic Gases	Tons Per Day	Running Exhaust
ROG_IDLEX	Reactive Organic Gases	Tons Per Day	Idle Exhaust
ROG_STREX	Reactive Organic Gases	Tons Per Day	Start Exhaust
ROG_TOTEX	Reactive Organic Gases	Tons Per Day	Total Exhaust
ROG_DIURN	Reactive Organic Gases	Tons Per Day	Diurnal
ROG_HTSK	Reactive Organic Gases	Tons Per Day	Hot Soak
ROG_RUNLS	Reactive Organic Gases	Tons Per Day	Running Loss
ROG_RESTL	Reactive Organic Gases	Tons Per Day	Resting Loss
ROG_TOTAL	Reactive Organic Gases	Tons Per Day	Total
CO_RUNEX	Carbon Monoxide	Tons Per Day	Running Exhaust
CO_IDLEX	Carbon Monoxide	Tons Per Day	Idle Exhaust
CO_STREX	Carbon Monoxide	Tons Per Day	Start Exhaust
CO_TOTEX	Carbon Monoxide	Tons Per Day	Total
NOx_RUNEX	Nitrogen Dioxide	Tons Per Day	Running Exhaust
NOx_IDLEX	Nitrogen Dioxide	Tons Per Day	Idle Exhaust
NOx_STREX	Nitrogen Dioxide	Tons Per Day	Start Exhaust
NOx_TOTEX	Nitrogen Dioxide	Tons Per Day	Total
CO2_RUNEX	Carbon Dioxide	Tons Per Day	Running Exhaust
CO2_IDLEX	Carbon Dioxide	Tons Per Day	Idle Exhaust
CO2_STREX	Carbon Dioxide	Tons Per Day	Start Exhaust
CO2_TOTEX	Carbon Dioxide	Tons Per Day	Total
PM10_RUNEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Running Exhaust
PM10_IDLEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Idle Exhaust
PM10_STREX	Fine Particulate Matter (<10 microns)	Tons Per Day	Start Exhaust
PM10_TOTEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Total Exhaust
PM10_PMTW	Fine Particulate Matter (<10 microns)	Tons Per Day	Tire Wear
PM10_PMBW	Fine Particulate Matter (<10 microns)	Tons Per Day	Brake Wear
PM10_TOTAL	Fine Particulate Matter (<10 microns)	Tons Per Day	Total
PM2_5_RUNEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Running Exhaust
PM2_5_IDLEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Idle Exhaust
PM2_5_STREX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Start Exhaust
PM2_5_TOTEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total Exhaust
PM2_5_PMTW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Tire Wear
PM2_5_PMBW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Brake Wear

PM2_5_TOTAL	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total
SOx_RUNEX	Sulfur Oxides	Tons Per Day	Running Exhaust
SOx_IDLEX	Sulfur Oxides	Tons Per Day	Idle Exhaust
SOx_STREX	Sulfur Oxides	Tons Per Day	Start Exhaust
SOx_TOTEX	Sulfur Oxides	Tons Per Day	Total
Fuel_GAS	Fuel	1000s Gallons	Gasoline
Fuel_DSL	Fuel	1000s Gallons	Diesel

Area	Sub-Area	Cal. Year	Season
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter

Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter
Sub-Areas	Butte (SV)	2018	Winter

Veh_Tech	EMFAC2007 Category	Population
All Vehicles	All Vehicles	136,841.9
ALL OTHER BUSES - DSL	OBUS - DSL	32.9
LDA - DSL	LDA - DSL	720.4
LDA - GAS	LDA - GAS	56,394.1
LDT1 - DSL	LDT1 - DSL	18.6
LDT1 - GAS	LDT1 - GAS	7,754.4
LDT2 - DSL	LDT2 - DSL	77.9
LDT2 - GAS	LDT2 - GAS	28,267.8
LHD1 - DSL	LHDT1 - DSL	5,264.2
LHD1 - GAS	LHDT1 - GAS	3,202.0
LHD2 - DSL	LHDT2 - DSL	1,066.4
LHD2 - GAS	LHDT2 - GAS	304.8
MCY - GAS	MCY - GAS	4,966.7
MDV - DSL	MDV - DSL	447.7
MDV - GAS	MDV - GAS	23,622.9
MH - DSL	MH - DSL	241.9
MH - GAS	MH - GAS	805.9
MOTOR COACH - DSL	OBUS - DSL	6.51
OBUS - GAS	OBUS - GAS	85.8
PTO - DSL	HHDT - DSL	0
SBUS - DSL	SBUS - DSL	165.3
SBUS - GAS	SBUS - GAS	23.8
T6 AG - DSL	MHDT - DSL	23.0
T6 CAIRP HEAVY - DSL	MHDT - DSL	9.56
T6 CAIRP SMALL - DSL	MHDT - DSL	4.61
T6 INSTATE CONSTRUCTION HEAVY - DSL	MHDT - DSL	70.2
T6 INSTATE CONSTRUCTION SMALL - DSL	MHDT - DSL	143.2
T6 INSTATE HEAVY - DSL	MHDT - DSL	230.5
T6 INSTATE SMALL - DSL	MHDT - DSL	653.3
T6 OOS HEAVY - DSL	MHDT - DSL	5.31
T6 OOS SMALL - DSL	MHDT - DSL	2.90
T6 PUBLIC - DSL	MHDT - DSL	157.5
T6 UTILITY - DSL	MHDT - DSL	16.1
T6TS - GAS	MHDT - GAS	185.2
T7 AG - DSL	HHDT - DSL	15.6
T7 CAIRP - DSL	HHDT - DSL	331.9
T7 CAIRP CONSTRUCTION - DSL	HHDT - DSL	17.1
T7 NNOOS - DSL	HHDT - DSL	382.6
T7 NOOS - DSL	HHDT - DSL	130.6
T7 OTHER PORT - DSL	HHDT - DSL	4.55
T7 POAK - DSL	HHDT - DSL	18.4
T7 POLA - DSL	HHDT - DSL	0.0000
T7 PUBLIC - DSL	HHDT - DSL	143.2

T7 SINGLE - DSL	HHDT - DSL	121.8
T7 SINGLE CONSTRUCTION - DSL	HHDT - DSL	121.5
T7 SWCV - DSL	HHDT - DSL	75.8
T7 TRACTOR - DSL	HHDT - DSL	342.6
T7 TRACTOR CONSTRUCTION - DSL	HHDT - DSL	97.9
T7 UTILITY - DSL	HHDT - DSL	11.0
T7IS - GAS	HHDT - GAS	0.6066
UBUS - DSL	UBUS - DSL	30.1
UBUS - GAS	UBUS - GAS	25.2

VMT	Trips	TOG_RUNEX	TOG_IDLEX	TOG_STREX
4,869,563.0	713,352.7	0.6384	0.0200	0.5238
1,697.3	276.0	0.0013	0.0000	
26,845.8	3,292.2	0.0011		
2,055,578.6	258,722.4	0.0916		0.1743
301.4	60.6	0.0001		
264,771.6	34,389.8	0.0289		0.0346
3,374.3	374.4	0.0001		
967,652.8	126,378.4	0.0859		0.1383
191,150.1	66,217.5	0.0544	0.0007	
106,631.0	47,705.5	0.0326	0.0024	0.0141
41,819.9	13,413.7	0.0098	0.0001	
11,261.2	4,540.4	0.0016	0.0002	0.0010
35,085.3	9,933.5	0.1278		0.0316
20,107.7	2,146.4	0.0004		
783,771.4	105,526.0	0.0701		0.1269
2,265.6	24.2	0.0005		
6,416.2	80.6	0.0020		0.0000
816.8	95.1	0.0004	0.0001	
4,265.9	1,716.1	0.0012	0.0001	0.0005
1,509.3		0.0020		
5,110.0	1,907.7	0.0011	0.0001	
1,275.6	95.1	0.0009	0.0004	0.0001
274.4	101.0	0.0003	0.0000	
1,938.1	139.5	0.0002	0.0000	
244.6	67.3	0.0000	0.0000	
4,663.2	317.5	0.0043	0.0000	
7,113.6	647.5	0.0058	0.0000	
24,982.8	2,660.1	0.0182	0.0001	
30,652.8	7,538.5	0.0147	0.0001	
1,071.7	77.5	0.0001	0.0000	
155.1	42.4	0.0000	0.0000	
2,445.0	477.9	0.0003	0.0001	
270.3	185.6	0.0000	0.0000	
7,430.5	3,706.0	0.0046	0.0003	0.0023
174.3	68.7	0.0003	0.0001	
64,785.6	4,845.2	0.0097	0.0043	
3,349.6	77.2	0.0012	0.0000	
78,989.3	5,585.8	0.0119	0.0064	
25,451.9	1,906.6	0.0038	0.0021	
736.8	34.6	0.0003	0.0000	
1,967.3	140.0	0.0008	0.0001	
0.0001	0.0000	0	0	
2,908.9	434.5	0.0007	0.0002	

7,601.1	1,405.8	0.0070	0.0004	
8,309.8	549.2	0.0095	0.0003	
3,094.3	295.7	0.0001	0.0001	
47,509.0	4,351.1	0.0153	0.0008	
6,854.9	442.7	0.0078	0.0002	
222.5	126.0	0.0000	0.0000	
18.8	12.1	0.0000		0.0000
2,992.1	120.3	0.0077		
1,646.8	100.8	0.0001		0.0001

TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS	TOG_RESTL
1.18	0.0225	0.1772	0.6346	0.0195
0.0013				
0.0011				
0.2659	0.0075	0.0580	0.1160	0.0067
0.0001				
0.0635	0.0020	0.0147	0.0603	0.0017
0.0001				
0.2242	0.0060	0.0433	0.1783	0.0053
0.0551				
0.0492	0.0001	0.0144	0.1010	0.0000
0.0099				
0.0028	0.0000	0.0009	0.0074	0.0000
0.1594	0.0022	0.0131	0.0437	0.0016
0.0004				
0.1970	0.0046	0.0313	0.1204	0.0042
0.0005				
0.0020	0.0000	0.0000	0.0004	0.0000
0.0004				
0.0018	0.0000	0.0001	0.0011	0.0000
0.0020				
0.0012				
0.0014	0.0000	0.0001	0.0007	0.0000
0.0003				
0.0002				
0.0000				
0.0043				
0.0059				
0.0183				
0.0148				
0.0001				
0.0000				
0.0004				
0.0000				
0.0072	0.0000	0.0013	0.0053	0.0000
0.0004				
0.0140				
0.0012				
0.0182				
0.0060				
0.0003				
0.0009				
0				
0.0009				

0.0074				
0.0098				
0.0002				
0.0161				
0.0080				
0.0000				
0.0000	0.0000	0.0000	0.0000	0.0000
0.0077				
0.0001	0.0000	0.0000	0.0000	0.0000

TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX
2.04	0.4989	0.0169	0.4788	0.9946
0.0013	0.0012	0.0000		0.0012
0.0011	0.0010			0.0010
0.4541	0.0644		0.1593	0.2236
0.0001	0.0001			0.0001
0.1422	0.0215		0.0317	0.0531
0.0001	0.0001			0.0001
0.4572	0.0606		0.1263	0.1869
0.0551	0.0478	0.0006		0.0484
0.1647	0.0242	0.0017	0.0129	0.0388
0.0099	0.0086	0.0001		0.0087
0.0111	0.0011	0.0002	0.0009	0.0022
0.2201	0.1075		0.0291	0.1366
0.0004	0.0004			0.0004
0.3576	0.0521		0.1160	0.1681
0.0005	0.0004			0.0004
0.0025	0.0014		0.0000	0.0014
0.0004	0.0003	0.0001		0.0004
0.0029	0.0008	0.0001	0.0004	0.0013
0.0020	0.0018			0.0018
0.0012	0.0009	0.0001		0.0010
0.0021	0.0006	0.0003	0.0001	0.0009
0.0003	0.0003	0.0000		0.0003
0.0002	0.0001	0.0000		0.0001
0.0000	0.0000	0.0000		0.0000
0.0043	0.0038	0.0000		0.0038
0.0059	0.0051	0.0000		0.0052
0.0183	0.0160	0.0001		0.0161
0.0148	0.0129	0.0001		0.0130
0.0001	0.0001	0.0000		0.0001
0.0000	0.0000	0.0000		0.0000
0.0004	0.0003	0.0001		0.0004
0.0000	0.0000	0.0000		0.0000
0.0138	0.0034	0.0002	0.0021	0.0057
0.0004	0.0003	0.0001		0.0003
0.0140	0.0085	0.0038		0.0123
0.0012	0.0011	0.0000		0.0011
0.0182	0.0104	0.0056		0.0160
0.0060	0.0034	0.0019		0.0052
0.0003	0.0002	0.0000		0.0002
0.0009	0.0007	0.0001		0.0008
0	0	0		0
0.0009	0.0006	0.0002		0.0008

0.0074	0.0061	0.0004		0.0065
0.0098	0.0083	0.0003		0.0086
0.0002	0.0001	0.0001		0.0002
0.0161	0.0134	0.0007		0.0141
0.0080	0.0068	0.0002		0.0070
0.0000	0.0000	0.0000		0.0000
0.0001	0.0000		0.0000	0.0000
0.0077	0.0002			0.0002
0.0002	0.0000		0.0001	0.0001

ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_RESTL	ROG_TOTAL
0.0225	0.1772	0.6346	0.0195	1.85
				0.0012
				0.0010
0.0075	0.0580	0.1160	0.0067	0.4118
				0.0001
0.0020	0.0147	0.0603	0.0017	0.1317
				0.0001
0.0060	0.0433	0.1783	0.0053	0.4199
				0.0484
0.0001	0.0144	0.1010	0.0000	0.1544
				0.0087
0.0000	0.0009	0.0074	0.0000	0.0105
0.0022	0.0131	0.0437	0.0016	0.1972
				0.0004
0.0046	0.0313	0.1204	0.0042	0.3287
				0.0004
0.0000	0.0000	0.0004	0.0000	0.0019
				0.0004
0.0000	0.0001	0.0011	0.0000	0.0025
				0.0018
				0.0010
0.0000	0.0001	0.0007	0.0000	0.0017
				0.0003
				0.0001
				0.0000
				0.0038
				0.0052
				0.0161
				0.0130
				0.0001
				0.0000
				0.0004
				0.0000
0.0000	0.0013	0.0053	0.0000	0.0123
				0.0003
				0.0123
				0.0011
				0.0160
				0.0052
				0.0002
				0.0008
				0
				0.0008

				0.0065
				0.0086
				0.0002
				0.0141
				0.0070
				0.0000
0.0000	0.0000	0.0000	0.0000	0.0001
				0.0002
0.0000	0.0000	0.0000	0.0000	0.0002

CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX
9.77	0.1877	2.80	12.8	4.26
0.0029	0.0001		0.0030	0.0119
0.0101			0.0101	0.0089
2.71		0.9913	3.71	0.2744
0.0005			0.0005	0.0006
0.6909		0.1530	0.8439	0.0825
0.0007			0.0007	0.0007
2.27		0.6567	2.93	0.3603
0.2178	0.0053		0.2231	0.9297
0.4581	0.0130	0.1360	0.6071	0.0790
0.0398	0.0011		0.0408	0.1404
0.0214	0.0013	0.0121	0.0347	0.0061
1.02		0.1140	1.13	0.0513
0.0051			0.0051	0.0031
1.80		0.6934	2.50	0.2495
0.0016			0.0016	0.0170
0.0390		0.0004	0.0394	0.0085
0.0010	0.0005		0.0015	0.0058
0.0191	0.0005	0.0100	0.0297	0.0066
0.0065			0.0065	0.0222
0.0022	0.0010		0.0032	0.0635
0.0141	0.0020	0.0027	0.0188	0.0042
0.0006	0.0001		0.0008	0.0036
0.0005	0.0000		0.0005	0.0042
0.0001	0.0000		0.0001	0.0007
0.0070	0.0002		0.0073	0.0351
0.0106	0.0004		0.0111	0.0437
0.0392	0.0008		0.0400	0.2054
0.0347	0.0020		0.0367	0.1673
0.0003	0.0000		0.0003	0.0023
0.0001	0.0000		0.0001	0.0004
0.0007	0.0012		0.0019	0.0191
0.0000	0.0001		0.0001	0.0007
0.0794	0.0039	0.0283	0.1116	0.0144
0.0009	0.0003		0.0012	0.0035
0.0328	0.0457		0.0786	0.2940
0.0036	0.0004		0.0040	0.0215
0.0429	0.0677		0.1106	0.3001
0.0130	0.0223		0.0353	0.1155
0.0008	0.0001		0.0009	0.0051
0.0023	0.0006		0.0028	0.0149
0.0000	0		0.0000	0.0000
0.0019	0.0014		0.0033	0.0497

0.0194	0.0027		0.0221	0.0972
0.0187	0.0024		0.0211	0.0910
0.0002	0.0010		0.0012	0.0370
0.0474	0.0075		0.0549	0.3360
0.0157	0.0019		0.0177	0.0710
0.0001	0.0001		0.0002	0.0013
0.0010		0.0003	0.0013	0.0007
0.0541			0.0541	0.0023
0.0007		0.0011	0.0018	0.0006

NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX
0.2216	0.3898	4.88	2,429.2	34.2
0.0003	0.0002	0.0125	2.25	0.0235
		0.0089	6.82	
	0.1001	0.3746	646.4	
		0.0006	0.1441	
	0.0182	0.1007	97.0	
		0.0007	1.16	
	0.0985	0.4588	405.6	
0.0149		0.9445	123.4	0.8162
0.0001	0.0325	0.1116	122.1	0.4087
0.0030		0.1434	30.2	0.2644
0.0000	0.0030	0.0091	14.7	0.0451
	0.0033	0.0545	6.43	
		0.0031	9.10	
	0.0859	0.3354	387.2	
		0.0170	2.66	
	0.0000	0.0085	13.1	
0.0008	0.0001	0.0067	1.43	0.0785
0.0000	0.0008	0.0074	8.72	0.0355
		0.0222	3.61	
0.0088	0.0006	0.0729	6.74	0.6126
0.0000	0.0001	0.0043	1.26	0.0657
0.0002	0.0000	0.0039	0.3263	0.0150
0.0001	0.0001	0.0044	2.05	0.0068
0.0000	0.0001	0.0008	0.2739	0.0033
0.0006	0.0004	0.0360	6.58	0.0495
0.0012	0.0009	0.0458	10.0	0.1032
0.0021	0.0018	0.2093	30.9	0.1602
0.0056	0.0077	0.1807	38.2	0.4706
0.0000	0.0001	0.0024	1.14	0.0038
0.0000	0.0000	0.0005	0.1724	0.0021
0.0067	0.0006	0.0265	3.27	0.5607
0.0002	0.0003	0.0012	0.3271	0.0319
0.0000	0.0019	0.0163	15.0	0.1000
0.0004	0.0000	0.0040	0.3176	0.0269
0.0513	0.0084	0.3538	103.6	9.36
0.0004	0.0003	0.0223	6.79	0.0737
0.0667	0.0105	0.3774	121.6	12.6
0.0250	0.0033	0.1438	40.7	4.58
0.0002	0.0000	0.0053	1.52	0.0230
0.0010	0.0001	0.0160	4.13	0.1487
0	0	0.0000	0.0000	0.0000
0.0063	0.0006	0.0566	6.17	0.5034

0.0039	0.0016	0.1027	14.3	0.4306
0.0035	0.0011	0.0957	17.5	0.4045
0.0041	0.0006	0.0417	14.0	0.3348
0.0109	0.0045	0.3513	76.0	1.51
0.0028	0.0011	0.0749	14.5	0.3788
0.0002	0.0003	0.0017	0.4251	0.0211
	0.0000	0.0007	0.0421	
		0.0023	5.15	
	0.0001	0.0007	4.19	

CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX
41.9	2,505.3	0.0682	0.0011	0.0017
	2.27	0.0005	0.0000	
	6.82	0.0006		
16.2	662.7	0.0038		0.0007
	0.1441	0.0001		
2.55	99.5	0.0008		0.0001
	1.16	0.0001		
10.8	416.4	0.0023		0.0004
	124.2	0.0092	0.0002	
0.8568	123.3	0.0005		0.0000
	30.5	0.0016	0.0000	
0.0917	14.9	0.0000		0.0000
0.4817	6.91	0.0001		0.0001
	9.10	0.0002		
10.7	397.8	0.0016		0.0004
	2.66	0.0004		
0.0019	13.1	0.0000		0.0000
	1.51	0.0001	0.0000	
0.0402	8.80	0.0000		0.0000
	3.61	0.0007		
	7.35	0.0004	0.0000	
0.0037	1.33	0.0000		0.0000
	0.3413	0.0001	0.0000	
	2.06	0.0001	0.0000	
	0.2772	0.0000	0.0000	
	6.63	0.0012	0.0000	
	10.1	0.0016	0.0000	
	31.1	0.0073	0.0000	
	38.7	0.0056	0.0000	
	1.14	0.0001	0.0000	
	0.1745	0.0000	0.0000	
	3.83	0.0001	0.0000	
	0.3590	0.0000	0.0000	
0.1564	15.2	0.0000		0.0000
	0.3444	0.0001	0.0000	
	113.0	0.0049	0.0002	
	6.86	0.0003	0.0000	
	134.2	0.0068	0.0003	
	45.3	0.0019	0.0001	
	1.54	0.0000	0.0000	
	4.28	0.0001	0.0000	
	0.0000	0	0	
	6.67	0.0003	0.0000	

	14.7	0.0028	0.0000	
	17.9	0.0025	0.0000	
	14.3	0.0000	0.0000	
	77.5	0.0074	0.0000	
	14.9	0.0016	0.0000	
	0.4462	0.0000	0.0000	
0.0005	0.0426	0.0000		0.0000
	5.15	0.0000		
0.0089	4.20	0.0000		0.0000

PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX
0.0710	0.0521	0.2346	0.3577	0.0649
0.0005	0.0000	0.0002	0.0007	0.0004
0.0006	0.0002	0.0011	0.0020	0.0006
0.0045	0.0181	0.0833	0.1059	0.0035
0.0001	0.0000	0.0000	0.0001	0.0001
0.0010	0.0023	0.0107	0.0140	0.0008
0.0001	0.0000	0.0001	0.0002	0.0001
0.0027	0.0085	0.0392	0.0505	0.0021
0.0093	0.0025	0.0161	0.0280	0.0088
0.0005	0.0009	0.0090	0.0104	0.0004
0.0016	0.0006	0.0041	0.0063	0.0015
0.0000	0.0001	0.0011	0.0012	0.0000
0.0001	0.0002	0.0005	0.0007	0.0001
0.0002	0.0002	0.0008	0.0012	0.0002
0.0020	0.0069	0.0318	0.0407	0.0015
0.0004	0.0000	0.0003	0.0008	0.0004
0.0000	0.0001	0.0009	0.0010	0.0000
0.0002	0.0000	0.0001	0.0003	0.0001
0.0000	0.0001	0.0006	0.0007	0.0000
0.0007	0	0	0.0007	0.0007
0.0005	0.0001	0.0042	0.0047	0.0004
0.0000	0.0000	0.0010	0.0011	0.0000
0.0002	0.0000	0.0000	0.0002	0.0001
0.0001	0.0000	0.0003	0.0004	0.0001
0.0000	0.0000	0.0000	0.0001	0.0000
0.0012	0.0001	0.0007	0.0019	0.0012
0.0016	0.0001	0.0010	0.0027	0.0015
0.0074	0.0003	0.0036	0.0113	0.0070
0.0057	0.0004	0.0044	0.0105	0.0054
0.0001	0.0000	0.0002	0.0002	0.0001
0.0000	0.0000	0.0000	0.0000	0.0000
0.0001	0.0000	0.0004	0.0005	0.0001
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0011	0.0012	0.0000
0.0001	0.0000	0.0000	0.0002	0.0001
0.0051	0.0026	0.0044	0.0120	0.0047
0.0003	0.0001	0.0002	0.0006	0.0002
0.0071	0.0031	0.0054	0.0156	0.0065
0.0020	0.0010	0.0017	0.0048	0.0019
0.0000	0.0000	0.0001	0.0001	0.0000
0.0001	0.0001	0.0001	0.0003	0.0001
0	0	0	0	0
0.0003	0.0001	0.0002	0.0006	0.0003

0.0028	0.0003	0.0005	0.0036	0.0027
0.0025	0.0003	0.0006	0.0034	0.0024
0.0001	0.0001	0.0002	0.0004	0.0000
0.0075	0.0019	0.0032	0.0126	0.0071
0.0017	0.0003	0.0005	0.0024	0.0016
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0003	0.0004	0.0000
0.0000	0.0000	0.0002	0.0003	0.0000

PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW
0.0010	0.0016	0.0676	0.0130	0.1005
0.0000		0.0004	0.0000	0.0001
		0.0006	0.0001	0.0005
	0.0006	0.0041	0.0045	0.0357
		0.0001	0.0000	0.0000
	0.0001	0.0009	0.0006	0.0046
		0.0001	0.0000	0.0001
	0.0004	0.0025	0.0021	0.0168
0.0002		0.0089	0.0006	0.0069
	0.0000	0.0005	0.0002	0.0039
0.0000		0.0015	0.0001	0.0018
	0.0000	0.0000	0.0000	0.0005
	0.0000	0.0001	0.0000	0.0002
		0.0002	0.0000	0.0003
	0.0003	0.0019	0.0017	0.0136
		0.0004	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0004
0.0000		0.0001	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0003
		0.0007	0	0
0.0000		0.0004	0.0000	0.0018
	0.0000	0.0000	0.0000	0.0004
0.0000		0.0001	0.0000	0.0000
0.0000		0.0001	0.0000	0.0001
0.0000		0.0000	0.0000	0.0000
0.0000		0.0012	0.0000	0.0003
0.0000		0.0015	0.0000	0.0004
0.0000		0.0070	0.0001	0.0015
0.0000		0.0054	0.0001	0.0019
0.0000		0.0001	0.0000	0.0001
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0002
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0005
0.0000		0.0001	0.0000	0.0000
0.0002		0.0048	0.0006	0.0019
0.0000		0.0002	0.0000	0.0001
0.0003		0.0068	0.0008	0.0023
0.0001		0.0019	0.0003	0.0007
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0001
0		0	0	0
0.0000		0.0003	0.0000	0.0001

0.0000		0.0027	0.0001	0.0002
0.0000		0.0024	0.0001	0.0002
0.0000		0.0001	0.0000	0.0001
0.0000		0.0072	0.0005	0.0014
0.0000		0.0016	0.0001	0.0002
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000
		0.0000	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001

PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX
0.1811	0.0241	0.0003	0.0005	0.0249
0.0005	0.0000	0.0000		0.0000
0.0011	0.0001			0.0001
0.0443	0.0065		0.0002	0.0067
0.0001	0.0000			0.0000
0.0061	0.0010		0.0000	0.0010
0.0001	0.0000			0.0000
0.0215	0.0041		0.0001	0.0042
0.0165	0.0012	0.0000		0.0012
0.0046	0.0012	0.0000	0.0000	0.0012
0.0034	0.0003	0.0000		0.0003
0.0005	0.0001	0.0000	0.0000	0.0001
0.0004	0.0001		0.0000	0.0001
0.0006	0.0001			0.0001
0.0172	0.0039		0.0001	0.0040
0.0006	0.0000			0.0000
0.0004	0.0001		0.0000	0.0001
0.0002	0.0000	0.0000		0.0000
0.0003	0.0001	0.0000	0.0000	0.0001
0.0007	0.0000			0.0000
0.0023	0.0001	0.0000		0.0001
0.0005	0.0000	0.0000	0.0000	0.0000
0.0002	0.0000	0.0000		0.0000
0.0002	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0015	0.0001	0.0000		0.0001
0.0020	0.0001	0.0000		0.0001
0.0087	0.0003	0.0000		0.0003
0.0074	0.0004	0.0000		0.0004
0.0001	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0003	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0005	0.0002	0.0000	0.0000	0.0002
0.0001	0.0000	0.0000		0.0000
0.0074	0.0010	0.0001		0.0011
0.0004	0.0001	0.0000		0.0001
0.0099	0.0012	0.0001		0.0013
0.0029	0.0004	0.0000		0.0004
0.0001	0.0000	0.0000		0.0000
0.0002	0.0000	0.0000		0.0000
0	0	0		0
0.0004	0.0001	0.0000		0.0001

0.0030	0.0001	0.0000		0.0001
0.0027	0.0002	0.0000		0.0002
0.0002	0.0001	0.0000		0.0001
0.0090	0.0007	0.0000		0.0007
0.0019	0.0001	0.0000		0.0001
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000			0.0000
0.0001	0.0000		0.0000	0.0000

Fuel_GAS	Fuel_DSL
190.1	66.8
	0.2045
	0.6134
71.3	
	0.0130
10.8	
	0.1044
44.9	
	11.2
13.2	
	2.74
1.59	
0.9756	
	0.8188
42.8	
	0.2393
1.40	
	0.1358
0.9422	
	0.3248
	0.6614
0.1456	
	0.0307
	0.1855
	0.0249
	0.5970
	0.9101
	2.80
	3.48
	0.1029
	0.0157
	0.3443
	0.0323
1.64	
	0.0310
	10.2
	0.6177
	12.1
	4.08
	0.1388
	0.3849
	0.0000
	0.6005

	1.32
	1.61
	1.29
	6.98
	1.34
	0.0402
0.0048	
	0.5392
0.4472	

Planning Inventory Report
Date: 08/07/2020
Time: 12:50:14
EMFAC2017 Version: v1.0.2

Field Name	Pollutant	Units	Process
TOG_RUNEX	Total Organic Gases	Tons Per Day	Running Exhaust
TOG_IDLEX	Total Organic Gases	Tons Per Day	Idle Exhaust
TOG_STREX	Total Organic Gases	Tons Per Day	Start Exhaust
TOG_TOTEX	Total Organic Gases	Tons Per Day	Total Exhaust
TOG_DIURN	Total Organic Gases	Tons Per Day	Diurnal
TOG_HTSK	Total Organic Gases	Tons Per Day	Hot Soak
TOG_RUNLS	Total Organic Gases	Tons Per Day	Running Loss
TOG_RESTL	Total Organic Gases	Tons Per Day	Resting Loss
TOG_TOTAL	Total Organic Gases	Tons Per Day	Total
ROG_RUNEX	Reactive Organic Gases	Tons Per Day	Running Exhaust
ROG_IDLEX	Reactive Organic Gases	Tons Per Day	Idle Exhaust
ROG_STREX	Reactive Organic Gases	Tons Per Day	Start Exhaust
ROG_TOTEX	Reactive Organic Gases	Tons Per Day	Total Exhaust
ROG_DIURN	Reactive Organic Gases	Tons Per Day	Diurnal
ROG_HTSK	Reactive Organic Gases	Tons Per Day	Hot Soak
ROG_RUNLS	Reactive Organic Gases	Tons Per Day	Running Loss
ROG_RESTL	Reactive Organic Gases	Tons Per Day	Resting Loss
ROG_TOTAL	Reactive Organic Gases	Tons Per Day	Total
CO_RUNEX	Carbon Monoxide	Tons Per Day	Running Exhaust
CO_IDLEX	Carbon Monoxide	Tons Per Day	Idle Exhaust
CO_STREX	Carbon Monoxide	Tons Per Day	Start Exhaust
CO_TOTEX	Carbon Monoxide	Tons Per Day	Total
NOx_RUNEX	Nitrogen Dioxide	Tons Per Day	Running Exhaust
NOx_IDLEX	Nitrogen Dioxide	Tons Per Day	Idle Exhaust
NOx_STREX	Nitrogen Dioxide	Tons Per Day	Start Exhaust
NOx_TOTEX	Nitrogen Dioxide	Tons Per Day	Total
CO2_RUNEX	Carbon Dioxide	Tons Per Day	Running Exhaust
CO2_IDLEX	Carbon Dioxide	Tons Per Day	Idle Exhaust
CO2_STREX	Carbon Dioxide	Tons Per Day	Start Exhaust
CO2_TOTEX	Carbon Dioxide	Tons Per Day	Total
PM10_RUNEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Running Exhaust
PM10_IDLEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Idle Exhaust
PM10_STREX	Fine Particulate Matter (<10 microns)	Tons Per Day	Start Exhaust
PM10_TOTEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Total Exhaust
PM10_PMTW	Fine Particulate Matter (<10 microns)	Tons Per Day	Tire Wear
PM10_PMBW	Fine Particulate Matter (<10 microns)	Tons Per Day	Brake Wear
PM10_TOTAL	Fine Particulate Matter (<10 microns)	Tons Per Day	Total
PM2_5_RUNEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Running Exhaust
PM2_5_IDLEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Idle Exhaust
PM2_5_STREX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Start Exhaust
PM2_5_TOTEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total Exhaust
PM2_5_PMTW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Tire Wear
PM2_5_PMBW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Brake Wear

PM2_5_TOTAL	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total
SOx_RUNEX	Sulfur Oxides	Tons Per Day	Running Exhaust
SOx_IDLEX	Sulfur Oxides	Tons Per Day	Idle Exhaust
SOx_STREX	Sulfur Oxides	Tons Per Day	Start Exhaust
SOx_TOTEX	Sulfur Oxides	Tons Per Day	Total
Fuel_GAS	Fuel	1000s Gallons	Gasoline
Fuel_DSL	Fuel	1000s Gallons	Diesel

Area	Sub-Area	Cal. Year	Season
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer

Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer

Veh_Tech	EMFAC2007 Category	Population
All Vehicles	All Vehicles	156,151.0
ALL OTHER BUSES - DSL	OBUS - DSL	27.8
LDA - DSL	LDA - DSL	1,060.7
LDA - GAS	LDA - GAS	90,068.9
LDT1 - DSL	LDT1 - DSL	1.12
LDT1 - GAS	LDT1 - GAS	8,089.4
LDT2 - DSL	LDT2 - DSL	241.4
LDT2 - GAS	LDT2 - GAS	26,017.2
LHD1 - DSL	LHDT1 - DSL	1,797.5
LHD1 - GAS	LHDT1 - GAS	1,409.1
LHD2 - DSL	LHDT2 - DSL	667.8
LHD2 - GAS	LHDT2 - GAS	203.3
MCY - GAS	MCY - GAS	4,106.2
MDV - DSL	MDV - DSL	565.7
MDV - GAS	MDV - GAS	17,023.4
MH - DSL	MH - DSL	142.7
MH - GAS	MH - GAS	223.9
MOTOR COACH - DSL	OBUS - DSL	8.48
OBUS - GAS	OBUS - GAS	48.0
PTO - DSL	HHDT - DSL	0
SBUS - DSL	SBUS - DSL	119.0
SBUS - GAS	SBUS - GAS	24.9
T6 AG - DSL	MHDT - DSL	14.0
T6 CAIRP HEAVY - DSL	MHDT - DSL	16.5
T6 CAIRP SMALL - DSL	MHDT - DSL	5.63
T6 INSTATE CONSTRUCTION HEAVY - DSL	MHDT - DSL	156.1
T6 INSTATE CONSTRUCTION SMALL - DSL	MHDT - DSL	313.8
T6 INSTATE HEAVY - DSL	MHDT - DSL	215.9
T6 INSTATE SMALL - DSL	MHDT - DSL	539.8
T6 OOS HEAVY - DSL	MHDT - DSL	7.92
T6 OOS SMALL - DSL	MHDT - DSL	5.22
T6 PUBLIC - DSL	MHDT - DSL	273.8
T6 UTILITY - DSL	MHDT - DSL	18.6
T6TS - GAS	MHDT - GAS	155.9
T7 AG - DSL	HHDT - DSL	16.8
T7 CAIRP - DSL	HHDT - DSL	405.3
T7 CAIRP CONSTRUCTION - DSL	HHDT - DSL	41.2
T7 NNOOS - DSL	HHDT - DSL	628.1
T7 NOOS - DSL	HHDT - DSL	161.1
T7 OTHER PORT - DSL	HHDT - DSL	6.49
T7 POAK - DSL	HHDT - DSL	27.0
T7 POLA - DSL	HHDT - DSL	0.0000
T7 PUBLIC - DSL	HHDT - DSL	57.6

T7 SINGLE - DSL	HHDT - DSL	125.3
T7 SINGLE CONSTRUCTION - DSL	HHDT - DSL	239.6
T7 SWCV - DSL	HHDT - DSL	87.7
T7 TRACTOR - DSL	HHDT - DSL	512.4
T7 TRACTOR CONSTRUCTION - DSL	HHDT - DSL	200.8
T7 UTILITY - DSL	HHDT - DSL	12.4
T7IS - GAS	HHDT - GAS	0.5877
UBUS - DSL	UBUS - DSL	32.0
UBUS - GAS	UBUS - GAS	26.8

VMT	Trips	TOG_RUNEX	TOG_IDLEX	TOG_STREX
5,527,717.0	767,552.3	0.1324	0.0244	0.0779
1,354.8	233.2	0.0000	0.0000	
36,894.7	4,912.3	0.0002		
3,154,903.0	417,278.5	0.0109		0.0304
36.7	5.00	0.0000		
272,919.7	36,763.2	0.0012		0.0032
8,506.6	1,121.6	0.0001		
870,732.9	118,342.1	0.0060		0.0145
57,412.2	22,610.0	0.0102	0.0002	
48,952.9	20,993.4	0.0006	0.0007	0.0017
21,508.5	8,399.5	0.0038	0.0001	
7,344.1	3,028.5	0.0001	0.0001	0.0002
23,777.2	8,212.4	0.0712		0.0156
19,218.5	2,579.4	0.0001		
550,502.0	76,086.8	0.0040		0.0115
1,194.0	14.3	0.0002		
2,315.4	22.4	0.0000		0.0000
1,047.2	123.8	0.0000	0.0000	
1,908.0	961.1	0.0001	0.0001	0.0002
1,946.2		0.0001		
3,789.3	1,373.7	0.0001	0.0000	
1,235.9	99.7	0.0000	0.0004	0.0000
13.6	61.7	0.0000	0.0000	
2,745.2	240.7	0.0000	0.0000	
240.8	82.2	0.0000	0.0000	
10,234.6	705.9	0.0002	0.0000	
15,612.7	1,418.6	0.0003	0.0000	
18,645.8	2,491.7	0.0003	0.0000	
23,543.7	6,229.8	0.0003	0.0000	
1,326.9	115.7	0.0000	0.0000	
221.4	76.3	0.0000	0.0000	
4,265.3	830.6	0.0001	0.0001	
310.6	214.2	0.0000	0.0000	
8,647.6	3,119.7	0.0002	0.0002	0.0005
21.4	73.8	0.0000	0.0000	
85,748.4	5,917.5	0.0021	0.0056	
7,351.6	186.1	0.0003	0.0001	
104,562.1	9,169.7	0.0025	0.0108	
33,699.1	2,352.0	0.0008	0.0028	
1,104.3	49.4	0.0000	0.0000	
4,675.5	205.4	0.0002	0.0001	
0.0002	0.0000	0	0	
1,167.3	174.6	0.0001	0.0001	

9,801.5	1,445.9	0.0003	0.0004	
18,238.0	1,083.0	0.0007	0.0005	
3,575.3	342.0	0.0001	0.0002	
64,146.1	6,507.3	0.0015	0.0013	
15,044.7	907.6	0.0007	0.0004	
251.4	142.6	0.0000	0.0000	
79.9	11.8	0.0000		0.0000
3,187.7	128.2	0.0126		
1,754.5	107.4	0.0001		0.0001

TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS	TOG_RESTL
0.2347	0.1101	0.0685	0.1725	0.0789
0.0000				
0.0002				
0.0413	0.0266	0.0236	0.0731	0.0215
0.0000				
0.0045	0.0042	0.0031	0.0100	0.0034
0.0001				
0.0205	0.0193	0.0116	0.0349	0.0157
0.0105				
0.0031	0.0002	0.0029	0.0125	0.0001
0.0039				
0.0003	0.0000	0.0002	0.0011	0.0000
0.0868	0.0403	0.0155	0.0120	0.0222
0.0001				
0.0155	0.0195	0.0112	0.0274	0.0160
0.0002				
0.0001	0.0000	0.0000	0.0000	0.0000
0.0001				
0.0003	0.0000	0.0001	0.0006	0.0000
0.0001				
0.0001				
0.0005	0.0000	0.0000	0.0000	0.0000
0.0000				
0.0000				
0.0000				
0.0002				
0.0003				
0.0003				
0.0003				
0.0000				
0.0000				
0.0002				
0.0000				
0.0009	0.0000	0.0002	0.0009	0.0000
0.0000				
0.0078				
0.0004				
0.0133				
0.0036				
0.0001				
0.0003				
0				
0.0002				

0.0006				
0.0012				
0.0003				
0.0028				
0.0011				
0.0000				
0.0000	0.0000	0.0000	0.0000	0.0000
0.0126				
0.0001	0.0000	0.0000	0.0000	0.0000

TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX
0.6647	0.0953	0.0212	0.0712	0.1877
0.0000	0.0000	0.0000		0.0000
0.0002	0.0002			0.0002
0.1860	0.0074		0.0278	0.0352
0.0000	0.0000			0.0000
0.0252	0.0008		0.0029	0.0038
0.0001	0.0001			0.0001
0.1019	0.0041		0.0132	0.0173
0.0105	0.0090	0.0002		0.0092
0.0188	0.0004	0.0005	0.0016	0.0025
0.0039	0.0033	0.0001		0.0034
0.0017	0.0001	0.0001	0.0002	0.0003
0.1767	0.0569		0.0143	0.0712
0.0001	0.0001			0.0001
0.0896	0.0028		0.0105	0.0133
0.0002	0.0001			0.0001
0.0001	0.0000		0.0000	0.0000
0.0001	0.0000	0.0000		0.0001
0.0010	0.0001	0.0000	0.0002	0.0003
0.0001	0.0001			0.0001
0.0001	0.0001	0.0000		0.0001
0.0005	0.0000	0.0003	0.0000	0.0003
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0002	0.0000		0.0002
0.0003	0.0003	0.0000		0.0003
0.0003	0.0003	0.0000		0.0003
0.0003	0.0002	0.0000		0.0003
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0001	0.0001		0.0001
0.0000	0.0000	0.0000		0.0000
0.0020	0.0001	0.0002	0.0005	0.0008
0.0000	0.0000	0.0000		0.0000
0.0078	0.0019	0.0049		0.0068
0.0004	0.0003	0.0001		0.0004
0.0133	0.0022	0.0095		0.0117
0.0036	0.0007	0.0024		0.0032
0.0001	0.0000	0.0000		0.0000
0.0003	0.0001	0.0001		0.0002
0	0	0		0
0.0002	0.0001	0.0001		0.0002

0.0006	0.0002	0.0003		0.0006
0.0012	0.0006	0.0004		0.0011
0.0003	0.0001	0.0001		0.0002
0.0028	0.0013	0.0011		0.0024
0.0011	0.0006	0.0004		0.0010
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0126	0.0002			0.0002
0.0002	0.0000		0.0001	0.0001

ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_RESTL	ROG_TOTAL
0.1101	0.0685	0.1725	0.0789	0.6178
				0.0000
				0.0002
0.0266	0.0236	0.0731	0.0215	0.1799
				0.0000
0.0042	0.0031	0.0100	0.0034	0.0246
				0.0001
0.0193	0.0116	0.0349	0.0157	0.0988
				0.0092
0.0002	0.0029	0.0125	0.0001	0.0182
				0.0034
0.0000	0.0002	0.0011	0.0000	0.0017
0.0403	0.0155	0.0120	0.0222	0.1612
				0.0001
0.0195	0.0112	0.0274	0.0160	0.0874
				0.0001
0.0000	0.0000	0.0000	0.0000	0.0001
				0.0001
0.0000	0.0001	0.0006	0.0000	0.0009
				0.0001
				0.0001
0.0000	0.0000	0.0000	0.0000	0.0004
				0.0000
				0.0000
				0.0000
				0.0002
				0.0003
				0.0003
				0.0003
				0.0000
				0.0000
				0.0001
				0.0000
0.0000	0.0002	0.0009	0.0000	0.0019
				0.0000
				0.0068
				0.0004
				0.0117
				0.0032
				0.0000
				0.0002
				0
				0.0002

				0.0006
				0.0011
				0.0002
				0.0024
				0.0010
				0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
				0.0002
0.0000	0.0000	0.0000	0.0000	0.0001

CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX
3.38	0.2908	1.08	4.75	1.16
0.0002	0.0001		0.0003	0.0030
0.0049			0.0049	0.0004
1.57		0.5443	2.11	0.0557
0.0000			0.0000	0.0000
0.1459		0.0516	0.1975	0.0056
0.0011			0.0011	0.0002
0.5584		0.2111	0.7695	0.0209
0.0440	0.0018		0.0458	0.0446
0.0095	0.0059	0.0303	0.0458	0.0030
0.0162	0.0007		0.0168	0.0153
0.0013	0.0008	0.0043	0.0064	0.0004
0.4750		0.0731	0.5481	0.0254
0.0027			0.0027	0.0002
0.3556		0.1472	0.5028	0.0149
0.0004			0.0004	0.0042
0.0005		0.0000	0.0006	0.0003
0.0002	0.0005		0.0007	0.0019
0.0017	0.0003	0.0032	0.0052	0.0005
0.0009			0.0009	0.0099
0.0005	0.0014		0.0019	0.0063
0.0003	0.0023	0.0005	0.0030	0.0001
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000		0.0002	0.0026
0.0000	0.0000		0.0000	0.0002
0.0024	0.0004		0.0027	0.0267
0.0032	0.0007		0.0039	0.0335
0.0025	0.0005		0.0030	0.0370
0.0027	0.0012		0.0039	0.0366
0.0001	0.0000		0.0001	0.0013
0.0000	0.0000		0.0000	0.0002
0.0005	0.0032		0.0037	0.0060
0.0000	0.0001		0.0001	0.0003
0.0021	0.0018	0.0093	0.0133	0.0008
0.0000	0.0002		0.0002	0.0001
0.0175	0.0680		0.0855	0.1826
0.0040	0.0011		0.0050	0.0305
0.0200	0.1308		0.1508	0.2026
0.0069	0.0335		0.0404	0.0719
0.0005	0.0002		0.0007	0.0045
0.0021	0.0011		0.0033	0.0194
0	0		0.0000	0.0000
0.0004	0.0009		0.0014	0.0060

0.0025	0.0044		0.0069	0.0243
0.0087	0.0061		0.0148	0.0623
0.0003	0.0020		0.0022	0.0055
0.0112	0.0154		0.0266	0.1192
0.0085	0.0051		0.0136	0.0658
0.0001	0.0001		0.0002	0.0004
0.0027		0.0001	0.0027	0.0002
0.0931			0.0931	0.0018
0.0008		0.0008	0.0015	0.0005

NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX
0.2237	0.2109	1.59	1,800.1	37.1
0.0001	0.0006	0.0037	1.38	0.0167
		0.0004	6.27	
	0.0503	0.1061	704.8	
		0.0000	0.0122	
	0.0050	0.0106	72.1	
		0.0002	1.92	
	0.0173	0.0381	229.8	
0.0030		0.0476	29.6	0.2344
0.0000	0.0079	0.0110	45.2	0.1506
0.0011		0.0163	12.4	0.1389
0.0000	0.0010	0.0014	7.70	0.0247
	0.0022	0.0276	4.58	
		0.0002	5.72	
	0.0134	0.0284	173.3	
		0.0042	1.17	
	0.0000	0.0003	3.69	
0.0004	0.0003	0.0027	1.37	0.0790
0.0000	0.0003	0.0008	3.04	0.0170
		0.0099	3.41	
0.0021	0.0031	0.0115	3.57	0.3713
0.0000	0.0001	0.0002	0.9736	0.0548
0.0000	0.0003	0.0003	0.0158	0.0099
0.0000	0.0003	0.0030	2.04	0.0086
0.0000	0.0001	0.0004	0.1989	0.0029
0.0005	0.0021	0.0292	11.6	0.0901
0.0009	0.0042	0.0387	16.3	0.1695
0.0007	0.0057	0.0434	16.9	0.1289
0.0016	0.0147	0.0528	21.1	0.2954
0.0000	0.0002	0.0015	0.9877	0.0041
0.0000	0.0001	0.0003	0.1831	0.0027
0.0046	0.0028	0.0134	4.10	0.7854
0.0002	0.0005	0.0009	0.2679	0.0266
0.0000	0.0011	0.0019	13.4	0.0753
0.0002	0.0005	0.0008	0.0381	0.0372
0.0523	0.0146	0.2495	88.7	8.60
0.0008	0.0009	0.0323	10.3	0.1329
0.1007	0.0226	0.3259	108.1	16.5
0.0258	0.0058	0.1035	34.9	4.25
0.0001	0.0001	0.0048	1.39	0.0214
0.0009	0.0004	0.0207	5.91	0.1419
0	0	0.0000	0.0000	0.0000
0.0014	0.0008	0.0083	1.86	0.1765

0.0034	0.0057	0.0334	12.7	0.6013
0.0047	0.0054	0.0725	27.9	0.8325
0.0020	0.0019	0.0095	11.3	0.2913
0.0119	0.0134	0.1446	66.2	2.05
0.0040	0.0046	0.0743	22.5	0.6802
0.0001	0.0005	0.0011	0.3316	0.0173
	0.0000	0.0002	0.1299	
		0.0018	5.45	
	0.0001	0.0006	3.28	

CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX
28.7	1,865.9	0.0152	0.0001	0.0006
	1.40	0.0000	0.0000	
	6.27	0.0000		
16.0	720.9	0.0018		0.0004
	0.0122	0.0000		
1.73	73.9	0.0002		0.0000
	1.92	0.0000		
5.61	235.4	0.0006		0.0001
	29.9	0.0010	0.0001	
0.3189	45.6	0.0001		0.0000
	12.5	0.0005	0.0000	
0.0532	7.78	0.0000		0.0000
0.3496	4.93	0.0001		0.0000
	5.72	0.0000		
4.52	177.8	0.0003		0.0001
	1.17	0.0001		
0.0004	3.69	0.0000		0.0000
	1.45	0.0000	0.0000	
0.0193	3.08	0.0000		0.0000
	3.41	0.0000		
	3.94	0.0000	0.0000	
0.0031	1.03	0.0000		0.0000
	0.0256	0.0000	0.0000	
	2.05	0.0000	0.0000	
	0.2018	0.0000	0.0000	
	11.7	0.0001	0.0000	
	16.4	0.0001	0.0000	
	17.0	0.0002	0.0000	
	21.4	0.0002	0.0000	
	0.9918	0.0000	0.0000	
	0.1858	0.0000	0.0000	
	4.89	0.0000	0.0000	
	0.2945	0.0000	0.0000	
0.0853	13.5	0.0000		0.0000
	0.0753	0.0000	0.0000	
	97.3	0.0026	0.0000	
	10.4	0.0002	0.0000	
	124.6	0.0028	0.0000	
	39.1	0.0010	0.0000	
	1.41	0.0000	0.0000	
	6.05	0.0001	0.0000	
	0.0000	0	0	
	2.03	0.0000	0.0000	

	13.3	0.0002	0.0000	
	28.8	0.0003	0.0000	
	11.6	0.0001	0.0000	
	68.2	0.0019	0.0000	
	23.2	0.0004	0.0000	
	0.3490	0.0000	0.0000	
0.0004	0.1303	0.0000		0.0000
	5.45	0.0000		
0.0070	3.29	0.0000		0.0000

PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX
0.0160	0.0603	0.2531	0.3293	0.0144
0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0003	0.0015	0.0019	0.0000
0.0022	0.0278	0.1278	0.1578	0.0017
0.0000	0.0000	0.0000	0.0000	0.0000
0.0002	0.0024	0.0111	0.0137	0.0002
0.0000	0.0001	0.0003	0.0005	0.0000
0.0007	0.0077	0.0353	0.0436	0.0005
0.0010	0.0008	0.0048	0.0066	0.0009
0.0001	0.0004	0.0041	0.0047	0.0001
0.0005	0.0003	0.0021	0.0029	0.0005
0.0000	0.0001	0.0007	0.0008	0.0000
0.0001	0.0001	0.0003	0.0005	0.0001
0.0000	0.0002	0.0008	0.0010	0.0000
0.0004	0.0049	0.0223	0.0276	0.0003
0.0001	0.0000	0.0002	0.0003	0.0001
0.0000	0.0000	0.0003	0.0004	0.0000
0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0000	0.0003	0.0003	0.0000
0.0000	0	0	0.0000	0.0000
0.0000	0.0001	0.0031	0.0032	0.0000
0.0000	0.0000	0.0010	0.0010	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0004	0.0005	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0001	0.0001	0.0015	0.0017	0.0001
0.0001	0.0002	0.0022	0.0026	0.0001
0.0002	0.0002	0.0027	0.0031	0.0002
0.0002	0.0003	0.0034	0.0039	0.0002
0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0006	0.0007	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0012	0.0014	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0027	0.0034	0.0058	0.0119	0.0025
0.0002	0.0003	0.0005	0.0010	0.0002
0.0028	0.0041	0.0071	0.0141	0.0027
0.0010	0.0013	0.0023	0.0047	0.0010
0.0000	0.0000	0.0001	0.0001	0.0000
0.0001	0.0002	0.0003	0.0006	0.0001
0	0	0	0	0
0.0000	0.0000	0.0001	0.0002	0.0000

0.0002	0.0004	0.0007	0.0012	0.0002
0.0003	0.0007	0.0012	0.0023	0.0003
0.0001	0.0001	0.0002	0.0005	0.0001
0.0019	0.0025	0.0044	0.0088	0.0018
0.0004	0.0006	0.0010	0.0020	0.0004
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0003	0.0004	0.0000
0.0000	0.0000	0.0003	0.0003	0.0000

PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW
0.0001	0.0006	0.0151	0.0151	0.1085
0.0000		0.0000	0.0000	0.0001
		0.0000	0.0001	0.0006
	0.0003	0.0020	0.0070	0.0548
		0.0000	0.0000	0.0000
	0.0000	0.0002	0.0006	0.0047
		0.0000	0.0000	0.0001
	0.0001	0.0006	0.0019	0.0151
0.0001		0.0010	0.0002	0.0021
	0.0000	0.0001	0.0001	0.0018
0.0000		0.0005	0.0001	0.0009
	0.0000	0.0000	0.0000	0.0003
	0.0000	0.0001	0.0000	0.0001
		0.0000	0.0000	0.0003
	0.0001	0.0004	0.0012	0.0096
		0.0001	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001
0.0000		0.0000	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001
		0.0000	0	0
0.0000		0.0000	0.0000	0.0013
	0.0000	0.0000	0.0000	0.0004
0.0000		0.0000	0.0000	0.0000
0.0000		0.0000	0.0000	0.0002
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0006
0.0000		0.0001	0.0001	0.0010
0.0000		0.0002	0.0001	0.0011
0.0000		0.0002	0.0001	0.0014
0.0000		0.0000	0.0000	0.0001
0.0000		0.0000	0.0000	0.0000
0.0000		0.0000	0.0000	0.0003
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0005
0.0000		0.0000	0.0000	0.0000
0.0000		0.0025	0.0009	0.0025
0.0000		0.0002	0.0001	0.0002
0.0000		0.0027	0.0010	0.0030
0.0000		0.0010	0.0003	0.0010
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0001
0		0	0	0
0.0000		0.0000	0.0000	0.0000

0.0000		0.0002	0.0001	0.0003
0.0000		0.0003	0.0002	0.0005
0.0000		0.0001	0.0000	0.0001
0.0000		0.0018	0.0006	0.0019
0.0000		0.0004	0.0001	0.0004
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000
		0.0000	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001

PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX
0.1387	0.0177	0.0004	0.0003	0.0184
0.0001	0.0000	0.0000		0.0000
0.0008	0.0001			0.0001
0.0637	0.0071		0.0002	0.0072
0.0000	0.0000			0.0000
0.0055	0.0007		0.0000	0.0007
0.0002	0.0000			0.0000
0.0176	0.0023		0.0001	0.0024
0.0032	0.0003	0.0000		0.0003
0.0020	0.0005	0.0000	0.0000	0.0005
0.0015	0.0001	0.0000		0.0001
0.0003	0.0001	0.0000	0.0000	0.0001
0.0002	0.0001		0.0000	0.0001
0.0004	0.0001			0.0001
0.0112	0.0017		0.0000	0.0018
0.0002	0.0000			0.0000
0.0002	0.0000		0.0000	0.0000
0.0001	0.0000	0.0000		0.0000
0.0001	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000			0.0000
0.0014	0.0000	0.0000		0.0000
0.0004	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0008	0.0001	0.0000		0.0001
0.0012	0.0002	0.0000		0.0002
0.0014	0.0002	0.0000		0.0002
0.0017	0.0002	0.0000		0.0002
0.0001	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0003	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0006	0.0001	0.0000	0.0000	0.0001
0.0000	0.0000	0.0000		0.0000
0.0059	0.0008	0.0001		0.0009
0.0004	0.0001	0.0000		0.0001
0.0068	0.0010	0.0002		0.0012
0.0023	0.0003	0.0000		0.0004
0.0001	0.0000	0.0000		0.0000
0.0003	0.0001	0.0000		0.0001
0	0	0		0
0.0001	0.0000	0.0000		0.0000

0.0005	0.0001	0.0000		0.0001
0.0010	0.0003	0.0000		0.0003
0.0002	0.0001	0.0000		0.0001
0.0043	0.0006	0.0000		0.0007
0.0009	0.0002	0.0000		0.0002
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000			0.0000
0.0001	0.0000		0.0000	0.0000

Fuel_GAS	Fuel_DSL
138.2	51.9
	0.1259
	0.5645
77.1	
	0.0011
7.90	
	0.1726
25.2	
	2.69
4.87	
	1.13
0.8293	
0.6443	
	0.5145
19.0	
	0.1055
0.3932	
	0.1301
0.3284	
	0.3065
	0.3546
0.1105	
	0.0023
	0.1848
	0.0182
	1.05
	1.48
	1.53
	1.93
	0.0893
	0.0167
	0.4400
	0.0265
1.44	
	0.0068
	8.76
	0.9398
	11.2
	3.52
	0.1273
	0.5448
	0.0000
	0.1830

	1.20
	2.59
	1.04
	6.14
	2.09
	0.0314
0.0143	
	0.6192
0.3505	

Planning Inventory Report
Date: 08/07/2020
Time: 13:02:29
EMFAC2017 Version: v1.0.2

Field Name	Pollutant	Units	Process
TOG_RUNEX	Total Organic Gases	Tons Per Day	Running Exhaust
TOG_IDLEX	Total Organic Gases	Tons Per Day	Idle Exhaust
TOG_STREX	Total Organic Gases	Tons Per Day	Start Exhaust
TOG_TOTEX	Total Organic Gases	Tons Per Day	Total Exhaust
TOG_DIURN	Total Organic Gases	Tons Per Day	Diurnal
TOG_HTSK	Total Organic Gases	Tons Per Day	Hot Soak
TOG_RUNLS	Total Organic Gases	Tons Per Day	Running Loss
TOG_RESTL	Total Organic Gases	Tons Per Day	Resting Loss
TOG_TOTAL	Total Organic Gases	Tons Per Day	Total
ROG_RUNEX	Reactive Organic Gases	Tons Per Day	Running Exhaust
ROG_IDLEX	Reactive Organic Gases	Tons Per Day	Idle Exhaust
ROG_STREX	Reactive Organic Gases	Tons Per Day	Start Exhaust
ROG_TOTEX	Reactive Organic Gases	Tons Per Day	Total Exhaust
ROG_DIURN	Reactive Organic Gases	Tons Per Day	Diurnal
ROG_HTSK	Reactive Organic Gases	Tons Per Day	Hot Soak
ROG_RUNLS	Reactive Organic Gases	Tons Per Day	Running Loss
ROG_RESTL	Reactive Organic Gases	Tons Per Day	Resting Loss
ROG_TOTAL	Reactive Organic Gases	Tons Per Day	Total
CO_RUNEX	Carbon Monoxide	Tons Per Day	Running Exhaust
CO_IDLEX	Carbon Monoxide	Tons Per Day	Idle Exhaust
CO_STREX	Carbon Monoxide	Tons Per Day	Start Exhaust
CO_TOTEX	Carbon Monoxide	Tons Per Day	Total
NOx_RUNEX	Nitrogen Dioxide	Tons Per Day	Running Exhaust
NOx_IDLEX	Nitrogen Dioxide	Tons Per Day	Idle Exhaust
NOx_STREX	Nitrogen Dioxide	Tons Per Day	Start Exhaust
NOx_TOTEX	Nitrogen Dioxide	Tons Per Day	Total
CO2_RUNEX	Carbon Dioxide	Tons Per Day	Running Exhaust
CO2_IDLEX	Carbon Dioxide	Tons Per Day	Idle Exhaust
CO2_STREX	Carbon Dioxide	Tons Per Day	Start Exhaust
CO2_TOTEX	Carbon Dioxide	Tons Per Day	Total
PM10_RUNEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Running Exhaust
PM10_IDLEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Idle Exhaust
PM10_STREX	Fine Particulate Matter (<10 microns)	Tons Per Day	Start Exhaust
PM10_TOTEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Total Exhaust
PM10_PMTW	Fine Particulate Matter (<10 microns)	Tons Per Day	Tire Wear
PM10_PMBW	Fine Particulate Matter (<10 microns)	Tons Per Day	Brake Wear
PM10_TOTAL	Fine Particulate Matter (<10 microns)	Tons Per Day	Total
PM2_5_RUNEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Running Exhaust
PM2_5_IDLEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Idle Exhaust
PM2_5_STREX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Start Exhaust
PM2_5_TOTEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total Exhaust
PM2_5_PMTW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Tire Wear
PM2_5_PMBW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Brake Wear

PM2_5_TOTAL	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total
SOx_RUNEX	Sulfur Oxides	Tons Per Day	Running Exhaust
SOx_IDLEX	Sulfur Oxides	Tons Per Day	Idle Exhaust
SOx_STREX	Sulfur Oxides	Tons Per Day	Start Exhaust
SOx_TOTEX	Sulfur Oxides	Tons Per Day	Total
Fuel_GAS	Fuel	1000s Gallons	Gasoline
Fuel_DSL	Fuel	1000s Gallons	Diesel

Area	Sub-Area	Cal. Year	Season
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter

Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter

Veh_Tech	EMFAC2007 Category	Population
All Vehicles	All Vehicles	156,151.0
ALL OTHER BUSES - DSL	OBUS - DSL	27.8
LDA - DSL	LDA - DSL	1,060.7
LDA - GAS	LDA - GAS	90,068.9
LDT1 - DSL	LDT1 - DSL	1.12
LDT1 - GAS	LDT1 - GAS	8,089.4
LDT2 - DSL	LDT2 - DSL	241.4
LDT2 - GAS	LDT2 - GAS	26,017.2
LHD1 - DSL	LHDT1 - DSL	1,797.5
LHD1 - GAS	LHDT1 - GAS	1,409.1
LHD2 - DSL	LHDT2 - DSL	667.8
LHD2 - GAS	LHDT2 - GAS	203.3
MCY - GAS	MCY - GAS	4,106.2
MDV - DSL	MDV - DSL	565.7
MDV - GAS	MDV - GAS	17,023.4
MH - DSL	MH - DSL	142.7
MH - GAS	MH - GAS	223.9
MOTOR COACH - DSL	OBUS - DSL	8.48
OBUS - GAS	OBUS - GAS	48.0
PTO - DSL	HHDT - DSL	0
SBUS - DSL	SBUS - DSL	119.0
SBUS - GAS	SBUS - GAS	24.9
T6 AG - DSL	MHDT - DSL	14.0
T6 CAIRP HEAVY - DSL	MHDT - DSL	16.5
T6 CAIRP SMALL - DSL	MHDT - DSL	5.63
T6 INSTATE CONSTRUCTION HEAVY - DSL	MHDT - DSL	156.1
T6 INSTATE CONSTRUCTION SMALL - DSL	MHDT - DSL	313.8
T6 INSTATE HEAVY - DSL	MHDT - DSL	215.9
T6 INSTATE SMALL - DSL	MHDT - DSL	539.8
T6 OOS HEAVY - DSL	MHDT - DSL	7.92
T6 OOS SMALL - DSL	MHDT - DSL	5.22
T6 PUBLIC - DSL	MHDT - DSL	273.8
T6 UTILITY - DSL	MHDT - DSL	18.6
T6TS - GAS	MHDT - GAS	155.9
T7 AG - DSL	HHDT - DSL	16.8
T7 CAIRP - DSL	HHDT - DSL	405.3
T7 CAIRP CONSTRUCTION - DSL	HHDT - DSL	41.2
T7 NNOOS - DSL	HHDT - DSL	628.1
T7 NOOS - DSL	HHDT - DSL	161.1
T7 OTHER PORT - DSL	HHDT - DSL	6.49
T7 POAK - DSL	HHDT - DSL	27.0
T7 POLA - DSL	HHDT - DSL	0.0000
T7 PUBLIC - DSL	HHDT - DSL	57.6

T7 SINGLE - DSL	HHDT - DSL	125.3
T7 SINGLE CONSTRUCTION - DSL	HHDT - DSL	239.6
T7 SWCV - DSL	HHDT - DSL	87.7
T7 TRACTOR - DSL	HHDT - DSL	512.4
T7 TRACTOR CONSTRUCTION - DSL	HHDT - DSL	200.8
T7 UTILITY - DSL	HHDT - DSL	12.4
T7IS - GAS	HHDT - GAS	0.5877
UBUS - DSL	UBUS - DSL	32.0
UBUS - GAS	UBUS - GAS	26.8

VMT	Trips	TOG_RUNEX	TOG_IDLEX	TOG_STREX
5,527,717.0	767,552.3	0.1322	0.0214	0.1128
1,354.8	233.2	0.0000	0.0000	
36,894.7	4,912.3	0.0002		
3,154,903.0	417,278.5	0.0087		0.0442
36.7	5.00	0.0000		
272,919.7	36,763.2	0.0010		0.0047
8,506.6	1,121.6	0.0001		
870,732.9	118,342.1	0.0048		0.0212
57,412.2	22,610.0	0.0102	0.0002	
48,952.9	20,993.4	0.0006	0.0007	0.0020
21,508.5	8,399.5	0.0038	0.0001	
7,344.1	3,028.5	0.0001	0.0001	0.0002
23,777.2	8,212.4	0.0756		0.0228
19,218.5	2,579.4	0.0001		
550,502.0	76,086.8	0.0032		0.0168
1,194.0	14.3	0.0002		
2,315.4	22.4	0.0000		0.0000
1,047.2	123.8	0.0000	0.0000	
1,908.0	961.1	0.0001	0.0001	0.0002
1,946.2		0.0001		
3,789.3	1,373.7	0.0001	0.0000	
1,235.9	99.7	0.0000	0.0004	0.0000
13.6	61.7	0.0000	0.0000	
2,745.2	240.7	0.0000	0.0000	
240.8	82.2	0.0000	0.0000	
10,234.6	705.9	0.0002	0.0000	
15,612.7	1,418.6	0.0003	0.0000	
18,645.8	2,491.7	0.0003	0.0000	
23,543.7	6,229.8	0.0003	0.0000	
1,326.9	115.7	0.0000	0.0000	
221.4	76.3	0.0000	0.0000	
4,265.3	830.6	0.0001	0.0001	
310.6	214.2	0.0000	0.0000	
8,647.6	3,119.7	0.0002	0.0003	0.0006
21.4	73.8	0.0000	0.0000	
85,748.4	5,917.5	0.0021	0.0049	
7,351.6	186.1	0.0003	0.0001	
104,562.1	9,169.7	0.0025	0.0094	
33,699.1	2,352.0	0.0008	0.0024	
1,104.3	49.4	0.0000	0.0000	
4,675.5	205.4	0.0002	0.0001	
0.0002	0.0000	0	0	
1,167.3	174.6	0.0001	0.0001	

9,801.5	1,445.9	0.0003	0.0003	
18,238.0	1,083.0	0.0007	0.0004	
3,575.3	342.0	0.0001	0.0001	
64,146.1	6,507.3	0.0015	0.0011	
15,044.7	907.6	0.0007	0.0004	
251.4	142.6	0.0000	0.0000	
79.9	11.8	0.0000		0.0000
3,187.7	128.2	0.0126		
1,754.5	107.4	0.0001		0.0001

TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS	TOG_RESTL
0.2664	0.0091	0.0528	0.2084	0.0084
0.0000				
0.0002				
0.0528	0.0026	0.0203	0.0891	0.0025
0.0000				
0.0057	0.0004	0.0027	0.0122	0.0004
0.0001				
0.0260	0.0020	0.0097	0.0425	0.0020
0.0105				
0.0033	0.0000	0.0025	0.0138	0.0000
0.0039				
0.0004	0.0000	0.0002	0.0012	0.0000
0.0983	0.0020	0.0079	0.0146	0.0014
0.0001				
0.0200	0.0020	0.0093	0.0331	0.0020
0.0002				
0.0000	0.0000	0.0000	0.0000	0.0000
0.0001				
0.0004	0.0000	0.0001	0.0006	0.0000
0.0001				
0.0001				
0.0005	0.0000	0.0000	0.0001	0.0000
0.0000				
0.0000				
0.0000				
0.0002				
0.0003				
0.0003				
0.0003				
0.0000				
0.0000				
0.0001				
0.0000				
0.0011	0.0000	0.0002	0.0010	0.0000
0.0000				
0.0070				
0.0004				
0.0118				
0.0032				
0.0001				
0.0003				
0				
0.0002				

0.0006				
0.0012				
0.0003				
0.0026				
0.0011				
0.0000				
0.0000	0.0000	0.0000	0.0000	0.0000
0.0126				
0.0001	0.0000	0.0000	0.0000	0.0000

TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX
0.5450	0.0958	0.0185	0.1031	0.2174
0.0000	0.0000	0.0000		0.0000
0.0002	0.0002			0.0002
0.1674	0.0059		0.0404	0.0463
0.0000	0.0000			0.0000
0.0214	0.0007		0.0043	0.0050
0.0001	0.0001			0.0001
0.0821	0.0033		0.0193	0.0226
0.0105	0.0090	0.0002		0.0092
0.0197	0.0004	0.0005	0.0018	0.0027
0.0039	0.0033	0.0001		0.0034
0.0018	0.0001	0.0001	0.0002	0.0003
0.1242	0.0605		0.0209	0.0814
0.0001	0.0001			0.0001
0.0665	0.0022		0.0153	0.0176
0.0002	0.0001			0.0001
0.0001	0.0000		0.0000	0.0000
0.0001	0.0000	0.0000		0.0001
0.0011	0.0001	0.0000	0.0002	0.0003
0.0001	0.0001			0.0001
0.0001	0.0001	0.0000		0.0001
0.0006	0.0000	0.0003	0.0000	0.0003
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0002	0.0000		0.0002
0.0003	0.0003	0.0000		0.0003
0.0003	0.0003	0.0000		0.0003
0.0003	0.0002	0.0000		0.0003
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0001	0.0001	0.0001		0.0001
0.0000	0.0000	0.0000		0.0000
0.0022	0.0001	0.0002	0.0006	0.0009
0.0000	0.0000	0.0000		0.0000
0.0070	0.0019	0.0043		0.0062
0.0004	0.0003	0.0001		0.0004
0.0118	0.0022	0.0082		0.0104
0.0032	0.0007	0.0021		0.0029
0.0001	0.0000	0.0000		0.0000
0.0003	0.0001	0.0001		0.0002
0	0	0		0
0.0002	0.0001	0.0001		0.0002

0.0006	0.0002	0.0003		0.0005
0.0012	0.0006	0.0004		0.0010
0.0003	0.0001	0.0001		0.0002
0.0026	0.0013	0.0010		0.0023
0.0011	0.0006	0.0003		0.0009
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0126	0.0002			0.0002
0.0002	0.0000		0.0001	0.0001

ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_RESTL	ROG_TOTAL
0.0091	0.0528	0.2084	0.0084	0.4960
				0.0000
				0.0002
0.0026	0.0203	0.0891	0.0025	0.1608
				0.0000
0.0004	0.0027	0.0122	0.0004	0.0207
				0.0001
0.0020	0.0097	0.0425	0.0020	0.0787
				0.0092
0.0000	0.0025	0.0138	0.0000	0.0191
				0.0034
0.0000	0.0002	0.0012	0.0000	0.0018
0.0020	0.0079	0.0146	0.0014	0.1073
				0.0001
0.0020	0.0093	0.0331	0.0020	0.0641
				0.0001
0.0000	0.0000	0.0000	0.0000	0.0001
				0.0001
0.0000	0.0001	0.0006	0.0000	0.0010
				0.0001
				0.0001
0.0000	0.0000	0.0001	0.0000	0.0004
				0.0000
				0.0000
				0.0000
				0.0002
				0.0003
				0.0003
				0.0003
				0.0000
				0.0000
				0.0001
				0.0000
0.0000	0.0002	0.0010	0.0000	0.0020
				0.0000
				0.0062
				0.0004
				0.0104
				0.0029
				0.0000
				0.0002
				0
				0.0002

				0.0005
				0.0010
				0.0002
				0.0023
				0.0009
				0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
				0.0002
0.0000	0.0000	0.0000	0.0000	0.0002

CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX
2.68	0.3011	1.60	4.58	1.27
0.0002	0.0001		0.0003	0.0033
0.0049			0.0049	0.0004
1.13		0.8154	1.94	0.0676
0.0000			0.0000	0.0000
0.1058		0.0775	0.1833	0.0068
0.0011			0.0011	0.0003
0.4052		0.3206	0.7258	0.0254
0.0440	0.0018		0.0458	0.0480
0.0089	0.0059	0.0359	0.0507	0.0036
0.0162	0.0007		0.0168	0.0165
0.0012	0.0008	0.0051	0.0071	0.0005
0.5048		0.1016	0.6064	0.0331
0.0027			0.0027	0.0003
0.2579		0.2243	0.4822	0.0182
0.0004			0.0004	0.0046
0.0005		0.0001	0.0006	0.0003
0.0002	0.0006		0.0008	0.0021
0.0016	0.0003	0.0039	0.0058	0.0006
0.0009			0.0009	0.0107
0.0005	0.0015		0.0020	0.0068
0.0003	0.0023	0.0010	0.0036	0.0002
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000		0.0002	0.0028
0.0000	0.0000		0.0000	0.0003
0.0024	0.0004		0.0027	0.0289
0.0032	0.0007		0.0039	0.0364
0.0025	0.0005		0.0030	0.0402
0.0027	0.0013		0.0040	0.0397
0.0001	0.0000		0.0001	0.0014
0.0000	0.0000		0.0000	0.0002
0.0005	0.0033		0.0038	0.0065
0.0000	0.0001		0.0001	0.0003
0.0020	0.0034	0.0113	0.0167	0.0010
0.0000	0.0002		0.0002	0.0001
0.0175	0.0701		0.0876	0.1983
0.0040	0.0011		0.0051	0.0331
0.0200	0.1348		0.1549	0.2200
0.0069	0.0346		0.0415	0.0781
0.0005	0.0002		0.0007	0.0049
0.0021	0.0012		0.0033	0.0210
0	0		0.0000	0.0000
0.0004	0.0010		0.0014	0.0066

0.0025	0.0045		0.0070	0.0263
0.0087	0.0063		0.0150	0.0676
0.0003	0.0021		0.0023	0.0060
0.0112	0.0159		0.0271	0.1293
0.0085	0.0053		0.0138	0.0714
0.0001	0.0001		0.0002	0.0005
0.0025		0.0001	0.0026	0.0003
0.0931			0.0931	0.0018
0.0007		0.0012	0.0019	0.0007

NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX
0.2507	0.2310	1.75	1,660.0	38.2
0.0001	0.0006	0.0039	1.38	0.0173
		0.0004	6.27	
	0.0609	0.1285	612.2	
		0.0000	0.0122	
	0.0060	0.0128	64.0	
		0.0003	1.92	
	0.0209	0.0463	205.8	
0.0030		0.0510	29.6	0.2344
0.0000	0.0092	0.0128	45.2	0.1506
0.0011		0.0175	12.4	0.1389
0.0000	0.0012	0.0016	7.70	0.0247
	0.0027	0.0357	4.58	
		0.0003	5.72	
	0.0162	0.0344	157.9	
		0.0046	1.17	
	0.0000	0.0004	3.69	
0.0005	0.0003	0.0029	1.37	0.0815
0.0000	0.0004	0.0010	3.04	0.0170
		0.0107	3.41	
0.0023	0.0031	0.0122	3.57	0.3792
0.0000	0.0001	0.0003	0.9736	0.0548
0.0000	0.0003	0.0003	0.0158	0.0102
0.0001	0.0003	0.0032	2.04	0.0089
0.0000	0.0001	0.0004	0.1989	0.0030
0.0005	0.0021	0.0315	11.6	0.0934
0.0011	0.0042	0.0416	16.3	0.1756
0.0008	0.0057	0.0466	16.9	0.1327
0.0018	0.0147	0.0562	21.1	0.3060
0.0000	0.0002	0.0016	0.9877	0.0043
0.0000	0.0001	0.0004	0.1831	0.0028
0.0051	0.0028	0.0144	4.10	0.8093
0.0002	0.0005	0.0010	0.2679	0.0276
0.0000	0.0013	0.0023	13.4	0.0656
0.0002	0.0005	0.0008	0.0381	0.0384
0.0589	0.0146	0.2717	88.7	8.88
0.0009	0.0009	0.0350	10.3	0.1371
0.1132	0.0226	0.3558	108.1	17.1
0.0290	0.0058	0.1129	34.9	4.38
0.0001	0.0001	0.0052	1.39	0.0220
0.0010	0.0004	0.0224	5.91	0.1464
0	0	0.0000	0.0000	0.0000
0.0014	0.0008	0.0088	1.86	0.1743

0.0038	0.0057	0.0359	12.7	0.6199
0.0053	0.0054	0.0783	27.9	0.8587
0.0022	0.0019	0.0101	11.3	0.2951
0.0134	0.0134	0.1561	66.2	2.11
0.0045	0.0046	0.0804	22.5	0.7017
0.0001	0.0005	0.0011	0.3316	0.0179
	0.0000	0.0003	0.1299	
		0.0018	5.45	
	0.0001	0.0008	3.28	

CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX
28.7	1,726.9	0.0152	0.0002	0.0006
	1.40	0.0000	0.0000	
	6.27	0.0000		
16.0	628.3	0.0018		0.0004
	0.0122	0.0000		
1.73	65.7	0.0002		0.0000
	1.92	0.0000		
5.61	211.4	0.0006		0.0001
	29.9	0.0010	0.0001	
0.3189	45.6	0.0001		0.0000
	12.5	0.0005	0.0000	
0.0532	7.78	0.0000		0.0000
0.3496	4.93	0.0001		0.0000
	5.72	0.0000		
4.52	162.5	0.0003		0.0001
	1.17	0.0001		
0.0004	3.69	0.0000		0.0000
	1.45	0.0000	0.0000	
0.0193	3.08	0.0000		0.0000
	3.41	0.0000		
	3.95	0.0000	0.0000	
0.0031	1.03	0.0000		0.0000
	0.0260	0.0000	0.0000	
	2.05	0.0000	0.0000	
	0.2019	0.0000	0.0000	
	11.7	0.0001	0.0000	
	16.4	0.0001	0.0000	
	17.0	0.0002	0.0000	
	21.4	0.0002	0.0000	
	0.9919	0.0000	0.0000	
	0.1859	0.0000	0.0000	
	4.91	0.0000	0.0000	
	0.2955	0.0000	0.0000	
0.0853	13.5	0.0000		0.0000
	0.0765	0.0000	0.0000	
	97.6	0.0026	0.0000	
	10.4	0.0002	0.0000	
	125.1	0.0028	0.0000	
	39.3	0.0010	0.0000	
	1.42	0.0000	0.0000	
	6.06	0.0001	0.0000	
	0.0000	0	0	
	2.03	0.0000	0.0000	

	13.4	0.0002	0.0000	
	28.8	0.0003	0.0000	
	11.6	0.0001	0.0000	
	68.3	0.0019	0.0000	
	23.2	0.0004	0.0000	
	0.3495	0.0000	0.0000	
0.0004	0.1303	0.0000		0.0000
	5.45	0.0000		
0.0070	3.29	0.0000		0.0000

PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX
0.0160	0.0603	0.2531	0.3293	0.0144
0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0003	0.0015	0.0019	0.0000
0.0022	0.0278	0.1278	0.1578	0.0017
0.0000	0.0000	0.0000	0.0000	0.0000
0.0002	0.0024	0.0111	0.0137	0.0002
0.0000	0.0001	0.0003	0.0005	0.0000
0.0007	0.0077	0.0353	0.0436	0.0005
0.0010	0.0008	0.0048	0.0066	0.0009
0.0001	0.0004	0.0041	0.0047	0.0001
0.0005	0.0003	0.0021	0.0029	0.0005
0.0000	0.0001	0.0007	0.0008	0.0000
0.0001	0.0001	0.0003	0.0005	0.0001
0.0000	0.0002	0.0008	0.0010	0.0000
0.0004	0.0049	0.0223	0.0276	0.0003
0.0001	0.0000	0.0002	0.0003	0.0001
0.0000	0.0000	0.0003	0.0004	0.0000
0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0000	0.0003	0.0003	0.0000
0.0000	0	0	0.0000	0.0000
0.0000	0.0001	0.0031	0.0032	0.0000
0.0000	0.0000	0.0010	0.0010	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0004	0.0005	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0001	0.0001	0.0015	0.0017	0.0001
0.0001	0.0002	0.0022	0.0026	0.0001
0.0002	0.0002	0.0027	0.0031	0.0002
0.0002	0.0003	0.0034	0.0039	0.0002
0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0006	0.0007	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0012	0.0014	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0027	0.0034	0.0058	0.0119	0.0025
0.0002	0.0003	0.0005	0.0010	0.0002
0.0029	0.0041	0.0071	0.0141	0.0027
0.0010	0.0013	0.0023	0.0047	0.0010
0.0000	0.0000	0.0001	0.0001	0.0000
0.0001	0.0002	0.0003	0.0006	0.0001
0	0	0	0	0
0.0000	0.0000	0.0001	0.0002	0.0000

0.0002	0.0004	0.0007	0.0012	0.0002
0.0003	0.0007	0.0012	0.0023	0.0003
0.0001	0.0001	0.0002	0.0005	0.0001
0.0019	0.0025	0.0044	0.0088	0.0018
0.0004	0.0006	0.0010	0.0020	0.0004
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0003	0.0004	0.0000
0.0000	0.0000	0.0003	0.0003	0.0000

PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW
0.0002	0.0006	0.0152	0.0151	0.1085
0.0000		0.0000	0.0000	0.0001
		0.0000	0.0001	0.0006
	0.0003	0.0020	0.0070	0.0548
		0.0000	0.0000	0.0000
	0.0000	0.0002	0.0006	0.0047
		0.0000	0.0000	0.0001
	0.0001	0.0006	0.0019	0.0151
0.0001		0.0010	0.0002	0.0021
	0.0000	0.0001	0.0001	0.0018
0.0000		0.0005	0.0001	0.0009
	0.0000	0.0000	0.0000	0.0003
	0.0000	0.0001	0.0000	0.0001
		0.0000	0.0000	0.0003
	0.0001	0.0004	0.0012	0.0096
		0.0001	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001
0.0000		0.0000	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001
		0.0000	0	0
0.0000		0.0000	0.0000	0.0013
	0.0000	0.0000	0.0000	0.0004
0.0000		0.0000	0.0000	0.0000
0.0000		0.0000	0.0000	0.0002
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0006
0.0000		0.0001	0.0001	0.0010
0.0000		0.0002	0.0001	0.0011
0.0000		0.0002	0.0001	0.0014
0.0000		0.0000	0.0000	0.0001
0.0000		0.0000	0.0000	0.0000
0.0000		0.0000	0.0000	0.0003
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0005
0.0000		0.0000	0.0000	0.0000
0.0000		0.0025	0.0009	0.0025
0.0000		0.0002	0.0001	0.0002
0.0000		0.0027	0.0010	0.0030
0.0000		0.0010	0.0003	0.0010
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0001
0		0	0	0
0.0000		0.0000	0.0000	0.0000

0.0000		0.0002	0.0001	0.0003
0.0000		0.0003	0.0002	0.0005
0.0000		0.0001	0.0000	0.0001
0.0000		0.0018	0.0006	0.0019
0.0000		0.0004	0.0001	0.0004
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000
		0.0000	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001

PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX
0.1387	0.0163	0.0004	0.0003	0.0170
0.0001	0.0000	0.0000		0.0000
0.0008	0.0001			0.0001
0.0637	0.0061		0.0002	0.0063
0.0000	0.0000			0.0000
0.0055	0.0006		0.0000	0.0007
0.0002	0.0000			0.0000
0.0176	0.0021		0.0001	0.0021
0.0032	0.0003	0.0000		0.0003
0.0020	0.0005	0.0000	0.0000	0.0005
0.0015	0.0001	0.0000		0.0001
0.0003	0.0001	0.0000	0.0000	0.0001
0.0002	0.0001		0.0000	0.0001
0.0004	0.0001			0.0001
0.0112	0.0016		0.0000	0.0016
0.0002	0.0000			0.0000
0.0002	0.0000		0.0000	0.0000
0.0001	0.0000	0.0000		0.0000
0.0001	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000			0.0000
0.0014	0.0000	0.0000		0.0000
0.0004	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0008	0.0001	0.0000		0.0001
0.0012	0.0002	0.0000		0.0002
0.0014	0.0002	0.0000		0.0002
0.0017	0.0002	0.0000		0.0002
0.0001	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0003	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0006	0.0001	0.0000	0.0000	0.0001
0.0000	0.0000	0.0000		0.0000
0.0059	0.0008	0.0001		0.0009
0.0004	0.0001	0.0000		0.0001
0.0068	0.0010	0.0002		0.0012
0.0023	0.0003	0.0000		0.0004
0.0001	0.0000	0.0000		0.0000
0.0003	0.0001	0.0000		0.0001
0	0	0		0
0.0001	0.0000	0.0000		0.0000

0.0005	0.0001	0.0000		0.0001
0.0010	0.0003	0.0000		0.0003
0.0002	0.0001	0.0000		0.0001
0.0043	0.0006	0.0000		0.0007
0.0009	0.0002	0.0000		0.0002
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000			0.0000
0.0001	0.0000		0.0000	0.0000

Fuel_GAS	Fuel_DSL
123.3	52.0
	0.1260
	0.5645
67.2	
	0.0011
7.03	
	0.1726
22.6	
	2.69
4.87	
	1.13
0.8295	
0.6578	
	0.5145
17.4	
	0.1055
0.3932	
	0.1303
0.3285	
	0.3065
	0.3553
0.1106	
	0.0023
	0.1848
	0.0182
	1.05
	1.48
	1.53
	1.93
	0.0893
	0.0167
	0.4422
	0.0266
1.44	
	0.0069
	8.78
	0.9402
	11.3
	3.54
	0.1274
	0.5452
	0.0000
	0.1828

	1.20
	2.59
	1.04
	6.14
	2.09
	0.0315
0.0143	
	0.6192
0.3506	

Planning Inventory Report
Date: 08/07/2020
Time: 12:11:57
EMFAC2017 Version: v1.0.2

Field Name	Pollutant	Units	Process
TOG_RUNEX	Total Organic Gases	Tons Per Day	Running Exhaust
TOG_IDLEX	Total Organic Gases	Tons Per Day	Idle Exhaust
TOG_STREX	Total Organic Gases	Tons Per Day	Start Exhaust
TOG_TOTEX	Total Organic Gases	Tons Per Day	Total Exhaust
TOG_DIURN	Total Organic Gases	Tons Per Day	Diurnal
TOG_HTSK	Total Organic Gases	Tons Per Day	Hot Soak
TOG_RUNLS	Total Organic Gases	Tons Per Day	Running Loss
TOG_RESTL	Total Organic Gases	Tons Per Day	Resting Loss
TOG_TOTAL	Total Organic Gases	Tons Per Day	Total
ROG_RUNEX	Reactive Organic Gases	Tons Per Day	Running Exhaust
ROG_IDLEX	Reactive Organic Gases	Tons Per Day	Idle Exhaust
ROG_STREX	Reactive Organic Gases	Tons Per Day	Start Exhaust
ROG_TOTEX	Reactive Organic Gases	Tons Per Day	Total Exhaust
ROG_DIURN	Reactive Organic Gases	Tons Per Day	Diurnal
ROG_HTSK	Reactive Organic Gases	Tons Per Day	Hot Soak
ROG_RUNLS	Reactive Organic Gases	Tons Per Day	Running Loss
ROG_RESTL	Reactive Organic Gases	Tons Per Day	Resting Loss
ROG_TOTAL	Reactive Organic Gases	Tons Per Day	Total
CO_RUNEX	Carbon Monoxide	Tons Per Day	Running Exhaust
CO_IDLEX	Carbon Monoxide	Tons Per Day	Idle Exhaust
CO_STREX	Carbon Monoxide	Tons Per Day	Start Exhaust
CO_TOTEX	Carbon Monoxide	Tons Per Day	Total
NOx_RUNEX	Nitrogen Dioxide	Tons Per Day	Running Exhaust
NOx_IDLEX	Nitrogen Dioxide	Tons Per Day	Idle Exhaust
NOx_STREX	Nitrogen Dioxide	Tons Per Day	Start Exhaust
NOx_TOTEX	Nitrogen Dioxide	Tons Per Day	Total
CO2_RUNEX	Carbon Dioxide	Tons Per Day	Running Exhaust
CO2_IDLEX	Carbon Dioxide	Tons Per Day	Idle Exhaust
CO2_STREX	Carbon Dioxide	Tons Per Day	Start Exhaust
CO2_TOTEX	Carbon Dioxide	Tons Per Day	Total
PM10_RUNEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Running Exhaust
PM10_IDLEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Idle Exhaust
PM10_STREX	Fine Particulate Matter (<10 microns)	Tons Per Day	Start Exhaust
PM10_TOTEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Total Exhaust
PM10_PMTW	Fine Particulate Matter (<10 microns)	Tons Per Day	Tire Wear
PM10_PMBW	Fine Particulate Matter (<10 microns)	Tons Per Day	Brake Wear
PM10_TOTAL	Fine Particulate Matter (<10 microns)	Tons Per Day	Total
PM2_5_RUNEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Running Exhaust
PM2_5_IDLEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Idle Exhaust
PM2_5_STREX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Start Exhaust
PM2_5_TOTEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total Exhaust
PM2_5_PMTW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Tire Wear
PM2_5_PMBW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Brake Wear

PM2_5_TOTAL	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total
SOx_RUNEX	Sulfur Oxides	Tons Per Day	Running Exhaust
SOx_IDLEX	Sulfur Oxides	Tons Per Day	Idle Exhaust
SOx_STREX	Sulfur Oxides	Tons Per Day	Start Exhaust
SOx_TOTEX	Sulfur Oxides	Tons Per Day	Total
Fuel_GAS	Fuel	1000s Gallons	Gasoline
Fuel_DSL	Fuel	1000s Gallons	Diesel

Area	Sub-Area	Cal. Year	Season
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer

Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer
Sub-Areas	Butte (SV)	2040	Summer

Veh_Tech	EMFAC2007 Category	Population
All Vehicles	All Vehicles	181,132.3
ALL OTHER BUSES - DSL	OBUS - DSL	32.2
LDA - DSL	LDA - DSL	1,230.4
LDA - GAS	LDA - GAS	104,478.3
LDT1 - DSL	LDT1 - DSL	1.30
LDT1 - GAS	LDT1 - GAS	9,383.5
LDT2 - DSL	LDT2 - DSL	280.0
LDT2 - GAS	LDT2 - GAS	30,179.5
LHD1 - DSL	LHDT1 - DSL	2,085.0
LHD1 - GAS	LHDT1 - GAS	1,634.5
LHD2 - DSL	LHDT2 - DSL	774.6
LHD2 - GAS	LHDT2 - GAS	235.8
MCY - GAS	MCY - GAS	4,763.1
MDV - DSL	MDV - DSL	656.2
MDV - GAS	MDV - GAS	19,746.9
MH - DSL	MH - DSL	165.6
MH - GAS	MH - GAS	259.8
MOTOR COACH - DSL	OBUS - DSL	9.84
OBUS - GAS	OBUS - GAS	55.7
PTO - DSL	HHDT - DSL	0
SBUS - DSL	SBUS - DSL	138.1
SBUS - GAS	SBUS - GAS	28.9
T6 AG - DSL	MHDT - DSL	16.3
T6 CAIRP HEAVY - DSL	MHDT - DSL	19.1
T6 CAIRP SMALL - DSL	MHDT - DSL	6.53
T6 INSTATE CONSTRUCTION HEAVY - DSL	MHDT - DSL	181.1
T6 INSTATE CONSTRUCTION SMALL - DSL	MHDT - DSL	364.0
T6 INSTATE HEAVY - DSL	MHDT - DSL	250.5
T6 INSTATE SMALL - DSL	MHDT - DSL	626.2
T6 OOS HEAVY - DSL	MHDT - DSL	9.19
T6 OOS SMALL - DSL	MHDT - DSL	6.06
T6 PUBLIC - DSL	MHDT - DSL	317.6
T6 UTILITY - DSL	MHDT - DSL	21.6
T6TS - GAS	MHDT - GAS	180.9
T7 AG - DSL	HHDT - DSL	19.5
T7 CAIRP - DSL	HHDT - DSL	470.2
T7 CAIRP CONSTRUCTION - DSL	HHDT - DSL	47.8
T7 NNOOS - DSL	HHDT - DSL	728.5
T7 NOOS - DSL	HHDT - DSL	186.9
T7 OTHER PORT - DSL	HHDT - DSL	7.53
T7 POAK - DSL	HHDT - DSL	31.4
T7 POLA - DSL	HHDT - DSL	0.0000
T7 PUBLIC - DSL	HHDT - DSL	66.8

T7 SINGLE - DSL	HHDT - DSL	145.3
T7 SINGLE CONSTRUCTION - DSL	HHDT - DSL	277.9
T7 SWCV - DSL	HHDT - DSL	101.7
T7 TRACTOR - DSL	HHDT - DSL	594.4
T7 TRACTOR CONSTRUCTION - DSL	HHDT - DSL	232.9
T7 UTILITY - DSL	HHDT - DSL	14.4
T7IS - GAS	HHDT - GAS	0.6817
UBUS - DSL	UBUS - DSL	37.2
UBUS - GAS	UBUS - GAS	31.1

VMT	Trips	TOG_RUNEX	TOG_IDLEX	TOG_STREX
6,412,051.0	890,346.7	0.1537	0.0283	0.0904
1,571.6	270.5	0.0000	0.0000	
42,797.2	5,698.2	0.0002		
3,659,629.9	484,035.4	0.0127		0.0353
42.6	5.80	0.0000		
316,581.9	42,644.6	0.0014		0.0037
9,867.5	1,301.0	0.0001		
1,010,034.3	137,274.7	0.0070		0.0168
66,597.1	26,227.2	0.0118	0.0003	
56,784.5	24,352.0	0.0007	0.0008	0.0020
24,949.5	9,743.3	0.0044	0.0001	
8,519.0	3,513.0	0.0001	0.0001	0.0002
27,581.1	9,526.2	0.0826		0.0181
22,293.1	2,992.1	0.0001		
638,572.2	88,259.3	0.0047		0.0133
1,385.1	16.6	0.0002		
2,685.9	26.0	0.0001		0.0000
1,214.7	143.6	0.0000	0.0001	
2,213.2	1,114.9	0.0001	0.0001	0.0002
2,257.6		0.0001		
4,395.5	1,593.5	0.0001	0.0001	
1,433.7	115.7	0.0000	0.0005	0.0000
15.8	71.5	0.0000	0.0000	
3,184.4	279.2	0.0000	0.0000	
279.3	95.3	0.0000	0.0000	
11,872.0	818.8	0.0003	0.0000	
18,110.5	1,645.6	0.0003	0.0000	
21,628.8	2,890.4	0.0004	0.0000	
27,310.2	7,226.4	0.0003	0.0000	
1,539.2	134.2	0.0000	0.0000	
256.8	88.5	0.0000	0.0000	
4,947.7	963.5	0.0001	0.0001	
360.3	248.5	0.0000	0.0000	
10,031.1	3,618.8	0.0002	0.0003	0.0006
24.9	85.6	0.0000	0.0000	
99,466.6	6,864.2	0.0025	0.0065	
8,527.7	215.9	0.0004	0.0001	
121,290.1	10,636.6	0.0028	0.0125	
39,090.3	2,728.3	0.0010	0.0032	
1,281.0	57.3	0.0000	0.0000	
5,423.5	238.3	0.0002	0.0001	
0.0002	0.0000	0	0	
1,354.0	202.5	0.0001	0.0001	

11,369.6	1,677.3	0.0003	0.0004	
21,155.7	1,256.3	0.0008	0.0006	
4,147.3	396.7	0.0001	0.0002	
74,408.3	7,548.4	0.0017	0.0015	
17,451.6	1,052.8	0.0008	0.0005	
291.6	165.5	0.0000	0.0000	
92.6	13.6	0.0000		0.0000
3,697.7	148.7	0.0146		
2,035.1	124.6	0.0001		0.0001

TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS	TOG_RESTL
0.2724	0.1278	0.0794	0.2001	0.0915
0.0000				
0.0002				
0.0480	0.0308	0.0273	0.0848	0.0249
0.0000				
0.0052	0.0049	0.0036	0.0116	0.0040
0.0001				
0.0238	0.0223	0.0135	0.0405	0.0182
0.0121				
0.0036	0.0002	0.0034	0.0145	0.0001
0.0045				
0.0004	0.0000	0.0003	0.0013	0.0000
0.1006	0.0468	0.0180	0.0139	0.0257
0.0001				
0.0180	0.0226	0.0130	0.0318	0.0185
0.0002				
0.0001	0.0000	0.0000	0.0000	0.0000
0.0001				
0.0004	0.0000	0.0001	0.0007	0.0000
0.0001				
0.0002				
0.0006	0.0000	0.0000	0.0001	0.0000
0.0000				
0.0000				
0.0000				
0.0003				
0.0004				
0.0004				
0.0004				
0.0000				
0.0000				
0.0002				
0.0000				
0.0011	0.0000	0.0002	0.0010	0.0000
0.0000				
0.0090				
0.0005				
0.0154				
0.0042				
0.0001				
0.0003				
0				
0.0002				

0.0007				
0.0014				
0.0003				
0.0032				
0.0013				
0.0000				
0.0000	0.0000	0.0000	0.0000	0.0000
0.0146				
0.0001	0.0000	0.0000	0.0000	0.0000

TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX
0.7713	0.1107	0.0245	0.0826	0.2179
0.0000	0.0000	0.0000		0.0000
0.0002	0.0002			0.0002
0.2158	0.0087		0.0322	0.0409
0.0000	0.0000			0.0000
0.0293	0.0010		0.0034	0.0044
0.0001	0.0001			0.0001
0.1183	0.0048		0.0153	0.0201
0.0121	0.0104	0.0003		0.0107
0.0218	0.0005	0.0006	0.0019	0.0029
0.0045	0.0039	0.0001		0.0039
0.0020	0.0001	0.0001	0.0002	0.0003
0.2050	0.0660		0.0166	0.0826
0.0001	0.0001			0.0001
0.1040	0.0032		0.0122	0.0154
0.0002	0.0002			0.0002
0.0001	0.0000		0.0000	0.0000
0.0001	0.0000	0.0000		0.0001
0.0012	0.0001	0.0000	0.0002	0.0003
0.0001	0.0001			0.0001
0.0002	0.0001	0.0000		0.0001
0.0006	0.0000	0.0003	0.0000	0.0004
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0003	0.0002	0.0000		0.0002
0.0004	0.0003	0.0000		0.0003
0.0004	0.0003	0.0000		0.0003
0.0004	0.0003	0.0000		0.0003
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0001	0.0001		0.0002
0.0000	0.0000	0.0000		0.0000
0.0024	0.0001	0.0002	0.0006	0.0009
0.0000	0.0000	0.0000		0.0000
0.0090	0.0022	0.0057		0.0079
0.0005	0.0003	0.0001		0.0004
0.0154	0.0025	0.0110		0.0135
0.0042	0.0009	0.0028		0.0037
0.0001	0.0000	0.0000		0.0001
0.0003	0.0002	0.0001		0.0003
0	0	0		0
0.0002	0.0001	0.0001		0.0002

0.0007	0.0003	0.0004		0.0006
0.0014	0.0007	0.0005		0.0013
0.0003	0.0001	0.0002		0.0003
0.0032	0.0015	0.0013		0.0028
0.0013	0.0007	0.0004		0.0011
0.0000	0.0000	0.0000		0.0000
0.0001	0.0000		0.0000	0.0000
0.0146	0.0002			0.0002
0.0002	0.0001		0.0001	0.0001

ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_RESTL	ROG_TOTAL
0.1278	0.0794	0.2001	0.0915	0.7167
				0.0000
				0.0002
0.0308	0.0273	0.0848	0.0249	0.2088
				0.0000
0.0049	0.0036	0.0116	0.0040	0.0285
				0.0001
0.0223	0.0135	0.0405	0.0182	0.1146
				0.0107
0.0002	0.0034	0.0145	0.0001	0.0211
				0.0039
0.0000	0.0003	0.0013	0.0000	0.0019
0.0468	0.0180	0.0139	0.0257	0.1870
				0.0001
0.0226	0.0130	0.0318	0.0185	0.1014
				0.0002
0.0000	0.0000	0.0000	0.0000	0.0001
				0.0001
0.0000	0.0001	0.0007	0.0000	0.0011
				0.0001
				0.0001
0.0000	0.0000	0.0001	0.0000	0.0005
				0.0000
				0.0000
				0.0000
				0.0002
				0.0003
				0.0003
				0.0003
				0.0000
				0.0000
				0.0002
				0.0000
0.0000	0.0002	0.0010	0.0000	0.0022
				0.0000
				0.0079
				0.0004
				0.0135
				0.0037
				0.0001
				0.0003
				0
				0.0002

				0.0006
				0.0013
				0.0003
				0.0028
				0.0011
				0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
				0.0002
0.0000	0.0000	0.0000	0.0000	0.0002

CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX
3.91	0.3373	1.25	5.49	1.34
0.0002	0.0001		0.0003	0.0035
0.0057			0.0057	0.0005
1.81		0.6313	2.44	0.0648
0.0000			0.0000	0.0000
0.1685		0.0599	0.2284	0.0065
0.0013			0.0013	0.0003
0.6451		0.2449	0.8901	0.0243
0.0511	0.0021		0.0532	0.0517
0.0111	0.0068	0.0352	0.0531	0.0035
0.0187	0.0008		0.0195	0.0177
0.0015	0.0010	0.0050	0.0075	0.0004
0.5510		0.0848	0.6358	0.0294
0.0032			0.0032	0.0003
0.4109		0.1707	0.5816	0.0174
0.0005			0.0005	0.0049
0.0006		0.0001	0.0007	0.0003
0.0002	0.0006		0.0009	0.0023
0.0020	0.0004	0.0037	0.0060	0.0006
0.0011			0.0011	0.0115
0.0006	0.0016		0.0022	0.0073
0.0003	0.0026	0.0006	0.0035	0.0002
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000		0.0003	0.0030
0.0000	0.0000		0.0000	0.0003
0.0027	0.0004		0.0031	0.0309
0.0037	0.0008		0.0045	0.0389
0.0029	0.0006		0.0035	0.0429
0.0031	0.0014		0.0046	0.0424
0.0001	0.0000		0.0001	0.0015
0.0000	0.0000		0.0000	0.0003
0.0006	0.0037		0.0043	0.0070
0.0000	0.0001		0.0002	0.0004
0.0024	0.0021	0.0108	0.0154	0.0009
0.0000	0.0002		0.0002	0.0001
0.0203	0.0789		0.0992	0.2118
0.0046	0.0012		0.0058	0.0354
0.0232	0.1517		0.1749	0.2351
0.0080	0.0389		0.0469	0.0834
0.0006	0.0002		0.0008	0.0053
0.0025	0.0013		0.0038	0.0225
0	0		0.0000	0.0000
0.0005	0.0011		0.0016	0.0070

0.0029	0.0051		0.0080	0.0281
0.0100	0.0071		0.0172	0.0723
0.0003	0.0023		0.0026	0.0064
0.0129	0.0179		0.0309	0.1383
0.0098	0.0060		0.0158	0.0764
0.0001	0.0001		0.0002	0.0005
0.0031		0.0001	0.0032	0.0003
0.1079			0.1079	0.0021
0.0009		0.0009	0.0018	0.0006

NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX
0.2595	0.2446	1.85	2,091.1	43.0
0.0001	0.0007	0.0042	1.60	0.0194
		0.0005	7.33	
	0.0584	0.1231	819.3	
		0.0000	0.0142	
	0.0058	0.0123	83.9	
		0.0003	2.24	
	0.0200	0.0443	267.1	
0.0035		0.0552	34.4	0.2719
0.0001	0.0092	0.0127	52.4	0.1747
0.0012		0.0190	14.3	0.1611
0.0000	0.0012	0.0016	8.93	0.0287
	0.0026	0.0320	5.32	
		0.0003	6.68	
	0.0156	0.0329	201.4	
		0.0049	1.36	
	0.0000	0.0003	4.28	
0.0005	0.0004	0.0031	1.59	0.0916
0.0000	0.0004	0.0009	3.53	0.0198
		0.0115	3.95	
0.0025	0.0035	0.0133	4.14	0.4307
0.0000	0.0001	0.0002	1.13	0.0635
0.0000	0.0003	0.0004	0.0183	0.0114
0.0001	0.0004	0.0035	2.37	0.0100
0.0000	0.0001	0.0004	0.2307	0.0034
0.0005	0.0024	0.0339	13.5	0.1046
0.0011	0.0049	0.0449	18.9	0.1966
0.0008	0.0066	0.0503	19.6	0.1495
0.0019	0.0170	0.0613	24.5	0.3427
0.0000	0.0002	0.0017	1.15	0.0048
0.0000	0.0001	0.0004	0.2124	0.0032
0.0053	0.0033	0.0155	4.76	0.9111
0.0002	0.0005	0.0011	0.3108	0.0309
0.0000	0.0013	0.0022	15.5	0.0874
0.0002	0.0006	0.0009	0.0441	0.0432
0.0607	0.0169	0.2895	102.9	9.98
0.0009	0.0011	0.0374	12.0	0.1542
0.1168	0.0262	0.3780	125.3	19.2
0.0300	0.0067	0.1201	40.5	4.93
0.0002	0.0001	0.0055	1.62	0.0248
0.0010	0.0005	0.0240	6.86	0.1646
0	0	0.0000	0.0000	0.0000
0.0016	0.0010	0.0096	2.15	0.2047

0.0039	0.0066	0.0387	14.8	0.6975
0.0055	0.0063	0.0841	32.4	0.9656
0.0023	0.0022	0.0110	13.1	0.3379
0.0139	0.0155	0.1677	76.7	2.38
0.0046	0.0053	0.0862	26.1	0.7890
0.0001	0.0006	0.0012	0.3847	0.0201
	0.0000	0.0003	0.1507	
		0.0021	6.32	
	0.0001	0.0007	3.81	

CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX
33.3	2,167.4	0.0177	0.0002	0.0007
	1.62	0.0000	0.0000	
	7.33	0.0000		
18.6	837.9	0.0021		0.0004
	0.0142	0.0000		
2.01	85.9	0.0002		0.0000
	2.24	0.0000		
6.51	273.6	0.0006		0.0001
	34.6	0.0011	0.0001	
0.3699	52.9	0.0001		0.0000
	14.5	0.0006	0.0000	
0.0618	9.02	0.0000		0.0000
0.4055	5.72	0.0001		0.0000
	6.68	0.0000		
5.24	206.7	0.0004		0.0001
	1.36	0.0001		
0.0005	4.28	0.0000		0.0000
	1.68	0.0000	0.0000	
0.0224	3.57	0.0000		0.0000
	3.95	0.0000		
	4.57	0.0000	0.0000	
0.0036	1.20	0.0000		0.0000
	0.0297	0.0000	0.0000	
	2.38	0.0000	0.0000	
	0.2341	0.0000	0.0000	
	13.6	0.0001	0.0000	
	19.1	0.0002	0.0000	
	19.8	0.0002	0.0000	
	24.9	0.0002	0.0000	
	1.15	0.0000	0.0000	
	0.2155	0.0000	0.0000	
	5.67	0.0000	0.0000	
	0.3417	0.0000	0.0000	
0.0990	15.7	0.0000		0.0000
	0.0873	0.0000	0.0000	
	112.9	0.0031	0.0000	
	12.1	0.0002	0.0000	
	144.5	0.0033	0.0000	
	45.4	0.0012	0.0000	
	1.64	0.0000	0.0000	
	7.02	0.0001	0.0000	
	0.0000	0	0	
	2.36	0.0000	0.0000	

	15.5	0.0002	0.0000	
	33.4	0.0004	0.0000	
	13.4	0.0001	0.0000	
	79.1	0.0022	0.0000	
	26.9	0.0004	0.0000	
	0.4048	0.0000	0.0000	
0.0004	0.1511	0.0000		0.0000
	6.32	0.0000		
0.0081	3.82	0.0000		0.0000

PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX
0.0185	0.0699	0.2936	0.3820	0.0168
0.0000	0.0000	0.0002	0.0003	0.0000
0.0000	0.0004	0.0017	0.0022	0.0000
0.0026	0.0323	0.1483	0.1831	0.0020
0.0000	0.0000	0.0000	0.0000	0.0000
0.0002	0.0028	0.0128	0.0159	0.0002
0.0000	0.0001	0.0004	0.0005	0.0000
0.0008	0.0089	0.0409	0.0506	0.0006
0.0012	0.0009	0.0056	0.0077	0.0011
0.0001	0.0005	0.0048	0.0054	0.0001
0.0006	0.0003	0.0025	0.0034	0.0006
0.0000	0.0001	0.0008	0.0009	0.0000
0.0001	0.0001	0.0004	0.0006	0.0001
0.0000	0.0002	0.0009	0.0011	0.0000
0.0005	0.0056	0.0259	0.0320	0.0004
0.0001	0.0000	0.0002	0.0003	0.0001
0.0000	0.0000	0.0004	0.0004	0.0000
0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0000	0.0003	0.0004	0.0000
0.0000	0	0	0.0000	0.0000
0.0000	0.0001	0.0036	0.0037	0.0000
0.0000	0.0000	0.0012	0.0012	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0005	0.0005	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0001	0.0002	0.0017	0.0020	0.0001
0.0002	0.0002	0.0026	0.0030	0.0002
0.0002	0.0003	0.0031	0.0036	0.0002
0.0002	0.0004	0.0039	0.0045	0.0002
0.0000	0.0000	0.0002	0.0003	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0007	0.0008	0.0000
0.0000	0.0000	0.0001	0.0001	0.0000
0.0000	0.0001	0.0014	0.0016	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0031	0.0039	0.0068	0.0138	0.0029
0.0002	0.0003	0.0006	0.0011	0.0002
0.0033	0.0048	0.0083	0.0164	0.0031
0.0012	0.0016	0.0027	0.0054	0.0012
0.0000	0.0001	0.0001	0.0002	0.0000
0.0001	0.0002	0.0004	0.0007	0.0001
0	0	0	0	0
0.0000	0.0001	0.0001	0.0002	0.0000

0.0002	0.0005	0.0008	0.0014	0.0002
0.0004	0.0008	0.0014	0.0026	0.0004
0.0001	0.0002	0.0003	0.0005	0.0001
0.0022	0.0030	0.0051	0.0102	0.0021
0.0004	0.0007	0.0012	0.0023	0.0004
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0004	0.0005	0.0000
0.0000	0.0000	0.0003	0.0003	0.0000

PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW
0.0002	0.0007	0.0176	0.0175	0.1258
0.0000		0.0000	0.0000	0.0001
		0.0000	0.0001	0.0007
	0.0004	0.0023	0.0081	0.0635
		0.0000	0.0000	0.0000
	0.0000	0.0002	0.0007	0.0055
		0.0000	0.0000	0.0002
	0.0001	0.0007	0.0022	0.0175
0.0001		0.0011	0.0002	0.0024
	0.0000	0.0001	0.0001	0.0021
0.0000		0.0006	0.0001	0.0011
	0.0000	0.0000	0.0000	0.0004
	0.0000	0.0001	0.0000	0.0002
		0.0000	0.0000	0.0004
	0.0001	0.0005	0.0014	0.0111
		0.0001	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0002
0.0000		0.0000	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001
		0.0000	0	0
0.0000		0.0000	0.0000	0.0015
	0.0000	0.0000	0.0000	0.0005
0.0000		0.0000	0.0000	0.0000
0.0000		0.0000	0.0000	0.0002
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0007
0.0000		0.0002	0.0001	0.0011
0.0000		0.0002	0.0001	0.0013
0.0000		0.0002	0.0001	0.0017
0.0000		0.0000	0.0000	0.0001
0.0000		0.0000	0.0000	0.0000
0.0000		0.0000	0.0000	0.0003
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0006
0.0000		0.0000	0.0000	0.0000
0.0000		0.0029	0.0010	0.0029
0.0000		0.0002	0.0001	0.0002
0.0000		0.0032	0.0012	0.0035
0.0000		0.0012	0.0004	0.0011
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0001	0.0002
0		0	0	0
0.0000		0.0000	0.0000	0.0000

0.0000		0.0002	0.0001	0.0003
0.0000		0.0004	0.0002	0.0006
0.0000		0.0001	0.0000	0.0001
0.0000		0.0021	0.0007	0.0022
0.0000		0.0004	0.0002	0.0005
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000
		0.0000	0.0000	0.0002
	0.0000	0.0000	0.0000	0.0001

PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX
0.1609	0.0206	0.0004	0.0004	0.0214
0.0001	0.0000	0.0000		0.0000
0.0009	0.0001			0.0001
0.0740	0.0082		0.0002	0.0084
0.0000	0.0000			0.0000
0.0064	0.0008		0.0000	0.0009
0.0002	0.0000			0.0000
0.0205	0.0027		0.0001	0.0027
0.0037	0.0003	0.0000		0.0003
0.0023	0.0005	0.0000	0.0000	0.0005
0.0017	0.0001	0.0000		0.0001
0.0004	0.0001	0.0000	0.0000	0.0001
0.0003	0.0001		0.0000	0.0001
0.0005	0.0001			0.0001
0.0130	0.0020		0.0001	0.0021
0.0002	0.0000			0.0000
0.0002	0.0000		0.0000	0.0000
0.0001	0.0000	0.0000		0.0000
0.0001	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000			0.0000
0.0016	0.0000	0.0000		0.0000
0.0005	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0009	0.0001	0.0000		0.0001
0.0013	0.0002	0.0000		0.0002
0.0016	0.0002	0.0000		0.0002
0.0020	0.0002	0.0000		0.0002
0.0001	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0003	0.0000	0.0000		0.0001
0.0000	0.0000	0.0000		0.0000
0.0007	0.0002	0.0000	0.0000	0.0002
0.0000	0.0000	0.0000		0.0000
0.0068	0.0010	0.0001		0.0011
0.0005	0.0001	0.0000		0.0001
0.0079	0.0012	0.0002		0.0014
0.0027	0.0004	0.0000		0.0004
0.0001	0.0000	0.0000		0.0000
0.0003	0.0001	0.0000		0.0001
0	0	0		0
0.0001	0.0000	0.0000		0.0000

0.0006	0.0001	0.0000		0.0001
0.0012	0.0003	0.0000		0.0003
0.0002	0.0001	0.0000		0.0001
0.0050	0.0007	0.0000		0.0008
0.0011	0.0002	0.0000		0.0003
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000			0.0000
0.0001	0.0000		0.0000	0.0000

Fuel_GAS	Fuel_DSL
160.6	60.2
	0.1461
	0.6593
89.6	
	0.0013
9.18	
	0.2016
29.3	
	3.12
5.65	
	1.31
0.9620	
0.7474	
	0.6009
22.1	
	0.1223
0.4561	
	0.1509
0.3810	
	0.3555
	0.4113
0.1282	
	0.0027
	0.2143
	0.0211
	1.22
	1.71
	1.78
	2.24
	0.1035
	0.0194
	0.5104
	0.0307
1.68	
	0.0079
	10.2
	1.09
	13.0
	4.09
	0.1477
	0.6320
	0.0000
	0.2123

	1.39
	3.00
	1.21
	7.12
	2.42
	0.0364
0.0166	
	0.7182
0.4066	

Planning Inventory Report
Date: 08/07/2020
Time: 12:23:25
EMFAC2017 Version: v1.0.2

Field Name	Pollutant	Units	Process
TOG_RUNEX	Total Organic Gases	Tons Per Day	Running Exhaust
TOG_IDLEX	Total Organic Gases	Tons Per Day	Idle Exhaust
TOG_STREX	Total Organic Gases	Tons Per Day	Start Exhaust
TOG_TOTEX	Total Organic Gases	Tons Per Day	Total Exhaust
TOG_DIURN	Total Organic Gases	Tons Per Day	Diurnal
TOG_HTSK	Total Organic Gases	Tons Per Day	Hot Soak
TOG_RUNLS	Total Organic Gases	Tons Per Day	Running Loss
TOG_RESTL	Total Organic Gases	Tons Per Day	Resting Loss
TOG_TOTAL	Total Organic Gases	Tons Per Day	Total
ROG_RUNEX	Reactive Organic Gases	Tons Per Day	Running Exhaust
ROG_IDLEX	Reactive Organic Gases	Tons Per Day	Idle Exhaust
ROG_STREX	Reactive Organic Gases	Tons Per Day	Start Exhaust
ROG_TOTEX	Reactive Organic Gases	Tons Per Day	Total Exhaust
ROG_DIURN	Reactive Organic Gases	Tons Per Day	Diurnal
ROG_HTSK	Reactive Organic Gases	Tons Per Day	Hot Soak
ROG_RUNLS	Reactive Organic Gases	Tons Per Day	Running Loss
ROG_RESTL	Reactive Organic Gases	Tons Per Day	Resting Loss
ROG_TOTAL	Reactive Organic Gases	Tons Per Day	Total
CO_RUNEX	Carbon Monoxide	Tons Per Day	Running Exhaust
CO_IDLEX	Carbon Monoxide	Tons Per Day	Idle Exhaust
CO_STREX	Carbon Monoxide	Tons Per Day	Start Exhaust
CO_TOTEX	Carbon Monoxide	Tons Per Day	Total
NOx_RUNEX	Nitrogen Dioxide	Tons Per Day	Running Exhaust
NOx_IDLEX	Nitrogen Dioxide	Tons Per Day	Idle Exhaust
NOx_STREX	Nitrogen Dioxide	Tons Per Day	Start Exhaust
NOx_TOTEX	Nitrogen Dioxide	Tons Per Day	Total
CO2_RUNEX	Carbon Dioxide	Tons Per Day	Running Exhaust
CO2_IDLEX	Carbon Dioxide	Tons Per Day	Idle Exhaust
CO2_STREX	Carbon Dioxide	Tons Per Day	Start Exhaust
CO2_TOTEX	Carbon Dioxide	Tons Per Day	Total
PM10_RUNEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Running Exhaust
PM10_IDLEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Idle Exhaust
PM10_STREX	Fine Particulate Matter (<10 microns)	Tons Per Day	Start Exhaust
PM10_TOTEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Total Exhaust
PM10_PMTW	Fine Particulate Matter (<10 microns)	Tons Per Day	Tire Wear
PM10_PMBW	Fine Particulate Matter (<10 microns)	Tons Per Day	Brake Wear
PM10_TOTAL	Fine Particulate Matter (<10 microns)	Tons Per Day	Total
PM2_5_RUNEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Running Exhaust
PM2_5_IDLEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Idle Exhaust
PM2_5_STREX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Start Exhaust
PM2_5_TOTEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total Exhaust
PM2_5_PMTW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Tire Wear
PM2_5_PMBW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Brake Wear

PM2_5_TOTAL	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total
SOx_RUNEX	Sulfur Oxides	Tons Per Day	Running Exhaust
SOx_IDLEX	Sulfur Oxides	Tons Per Day	Idle Exhaust
SOx_STREX	Sulfur Oxides	Tons Per Day	Start Exhaust
SOx_TOTEX	Sulfur Oxides	Tons Per Day	Total
Fuel_GAS	Fuel	1000s Gallons	Gasoline
Fuel_DSL	Fuel	1000s Gallons	Diesel

Area	Sub-Area	Cal. Year	Season
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter

Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter
Sub-Areas	Butte (SV)	2040	Winter

Veh_Tech	EMFAC2007 Category	Population
All Vehicles	All Vehicles	181,132.3
ALL OTHER BUSES - DSL	OBUS - DSL	32.2
LDA - DSL	LDA - DSL	1,230.4
LDA - GAS	LDA - GAS	104,478.3
LDT1 - DSL	LDT1 - DSL	1.30
LDT1 - GAS	LDT1 - GAS	9,383.5
LDT2 - DSL	LDT2 - DSL	280.0
LDT2 - GAS	LDT2 - GAS	30,179.5
LHD1 - DSL	LHDT1 - DSL	2,085.0
LHD1 - GAS	LHDT1 - GAS	1,634.5
LHD2 - DSL	LHDT2 - DSL	774.6
LHD2 - GAS	LHDT2 - GAS	235.8
MCY - GAS	MCY - GAS	4,763.1
MDV - DSL	MDV - DSL	656.2
MDV - GAS	MDV - GAS	19,746.9
MH - DSL	MH - DSL	165.6
MH - GAS	MH - GAS	259.8
MOTOR COACH - DSL	OBUS - DSL	9.84
OBUS - GAS	OBUS - GAS	55.7
PTO - DSL	HHDT - DSL	0
SBUS - DSL	SBUS - DSL	138.1
SBUS - GAS	SBUS - GAS	28.9
T6 AG - DSL	MHDT - DSL	16.3
T6 CAIRP HEAVY - DSL	MHDT - DSL	19.1
T6 CAIRP SMALL - DSL	MHDT - DSL	6.53
T6 INSTATE CONSTRUCTION HEAVY - DSL	MHDT - DSL	181.1
T6 INSTATE CONSTRUCTION SMALL - DSL	MHDT - DSL	364.0
T6 INSTATE HEAVY - DSL	MHDT - DSL	250.5
T6 INSTATE SMALL - DSL	MHDT - DSL	626.2
T6 OOS HEAVY - DSL	MHDT - DSL	9.19
T6 OOS SMALL - DSL	MHDT - DSL	6.06
T6 PUBLIC - DSL	MHDT - DSL	317.6
T6 UTILITY - DSL	MHDT - DSL	21.6
T6TS - GAS	MHDT - GAS	180.9
T7 AG - DSL	HHDT - DSL	19.5
T7 CAIRP - DSL	HHDT - DSL	470.2
T7 CAIRP CONSTRUCTION - DSL	HHDT - DSL	47.8
T7 NNOOS - DSL	HHDT - DSL	728.5
T7 NOOS - DSL	HHDT - DSL	186.9
T7 OTHER PORT - DSL	HHDT - DSL	7.53
T7 POAK - DSL	HHDT - DSL	31.4
T7 POLA - DSL	HHDT - DSL	0.0000
T7 PUBLIC - DSL	HHDT - DSL	66.8

T7 SINGLE - DSL	HHDT - DSL	145.3
T7 SINGLE CONSTRUCTION - DSL	HHDT - DSL	277.9
T7 SWCV - DSL	HHDT - DSL	101.7
T7 TRACTOR - DSL	HHDT - DSL	594.4
T7 TRACTOR CONSTRUCTION - DSL	HHDT - DSL	232.9
T7 UTILITY - DSL	HHDT - DSL	14.4
T7IS - GAS	HHDT - GAS	0.6817
UBUS - DSL	UBUS - DSL	37.2
UBUS - GAS	UBUS - GAS	31.1

VMT	Trips	TOG_RUNEX	TOG_IDLEX	TOG_STREX
6,412,051.0	890,346.7	0.1535	0.0249	0.1308
1,571.6	270.5	0.0000	0.0000	
42,797.2	5,698.2	0.0002		
3,659,629.9	484,035.4	0.0101		0.0513
42.6	5.80	0.0000		
316,581.9	42,644.6	0.0011		0.0054
9,867.5	1,301.0	0.0001		
1,010,034.3	137,274.7	0.0056		0.0246
66,597.1	26,227.2	0.0118	0.0003	
56,784.5	24,352.0	0.0007	0.0008	0.0023
24,949.5	9,743.3	0.0044	0.0001	
8,519.0	3,513.0	0.0001	0.0001	0.0002
27,581.1	9,526.2	0.0876		0.0264
22,293.1	2,992.1	0.0001		
638,572.2	88,259.3	0.0038		0.0195
1,385.1	16.6	0.0002		
2,685.9	26.0	0.0001		0.0000
1,214.7	143.6	0.0000	0.0000	
2,213.2	1,114.9	0.0001	0.0001	0.0002
2,257.6		0.0001		
4,395.5	1,593.5	0.0001	0.0000	
1,433.7	115.7	0.0000	0.0005	0.0000
15.8	71.5	0.0000	0.0000	
3,184.4	279.2	0.0000	0.0000	
279.3	95.3	0.0000	0.0000	
11,872.0	818.8	0.0003	0.0000	
18,110.5	1,645.6	0.0003	0.0000	
21,628.8	2,890.4	0.0004	0.0000	
27,310.2	7,226.4	0.0003	0.0000	
1,539.2	134.2	0.0000	0.0000	
256.8	88.5	0.0000	0.0000	
4,947.7	963.5	0.0001	0.0001	
360.3	248.5	0.0000	0.0000	
10,031.1	3,618.8	0.0002	0.0003	0.0007
24.9	85.6	0.0000	0.0000	
99,466.6	6,864.2	0.0025	0.0056	
8,527.7	215.9	0.0004	0.0001	
121,290.1	10,636.6	0.0028	0.0109	
39,090.3	2,728.3	0.0010	0.0028	
1,281.0	57.3	0.0000	0.0000	
5,423.5	238.3	0.0002	0.0001	
0.0002	0.0000	0	0	
1,354.0	202.5	0.0001	0.0001	

11,369.6	1,677.3	0.0003	0.0004	
21,155.7	1,256.3	0.0008	0.0005	
4,147.3	396.7	0.0001	0.0002	
74,408.3	7,548.4	0.0017	0.0013	
17,451.6	1,052.8	0.0008	0.0004	
291.6	165.5	0.0000	0.0000	
92.6	13.6	0.0000		0.0000
3,697.7	148.7	0.0146		
2,035.1	124.6	0.0001		0.0001

TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS	TOG_RESTL
0.3092	0.0105	0.0613	0.2417	0.0097
0.0000				
0.0002				
0.0614	0.0030	0.0235	0.1034	0.0029
0.0000				
0.0066	0.0005	0.0031	0.0142	0.0005
0.0001				
0.0301	0.0023	0.0112	0.0493	0.0023
0.0121				
0.0038	0.0000	0.0029	0.0160	0.0000
0.0045				
0.0004	0.0000	0.0002	0.0014	0.0000
0.1141	0.0023	0.0092	0.0169	0.0016
0.0001				
0.0232	0.0024	0.0108	0.0384	0.0023
0.0002				
0.0001	0.0000	0.0000	0.0000	0.0000
0.0001				
0.0004	0.0000	0.0001	0.0007	0.0000
0.0001				
0.0002				
0.0006	0.0000	0.0000	0.0001	0.0000
0.0000				
0.0000				
0.0000				
0.0003				
0.0004				
0.0004				
0.0004				
0.0000				
0.0000				
0.0002				
0.0000				
0.0012	0.0000	0.0002	0.0011	0.0000
0.0000				
0.0081				
0.0005				
0.0137				
0.0038				
0.0001				
0.0003				
0				
0.0002				

0.0007				
0.0013				
0.0003				
0.0030				
0.0012				
0.0000				
0.0000	0.0000	0.0000	0.0000	0.0000
0.0146				
0.0002	0.0000	0.0000	0.0001	0.0000

TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX
0.6323	0.1112	0.0215	0.1196	0.2523
0.0000	0.0000	0.0000		0.0000
0.0002	0.0002			0.0002
0.1942	0.0069		0.0468	0.0537
0.0000	0.0000			0.0000
0.0249	0.0008		0.0050	0.0058
0.0001	0.0001			0.0001
0.0953	0.0038		0.0224	0.0263
0.0121	0.0104	0.0003		0.0107
0.0228	0.0005	0.0006	0.0021	0.0032
0.0045	0.0039	0.0001		0.0039
0.0021	0.0001	0.0001	0.0002	0.0003
0.1441	0.0702		0.0243	0.0944
0.0001	0.0001			0.0001
0.0772	0.0026		0.0178	0.0204
0.0002	0.0002			0.0002
0.0001	0.0000		0.0000	0.0000
0.0001	0.0000	0.0000		0.0001
0.0012	0.0001	0.0000	0.0002	0.0003
0.0001	0.0001			0.0001
0.0002	0.0001	0.0000		0.0001
0.0007	0.0000	0.0003	0.0000	0.0004
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0003	0.0002	0.0000		0.0002
0.0004	0.0003	0.0000		0.0003
0.0004	0.0003	0.0000		0.0003
0.0004	0.0003	0.0000		0.0003
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0001	0.0001		0.0001
0.0000	0.0000	0.0000		0.0000
0.0026	0.0001	0.0002	0.0007	0.0010
0.0000	0.0000	0.0000		0.0000
0.0081	0.0022	0.0050		0.0071
0.0005	0.0003	0.0001		0.0004
0.0137	0.0025	0.0095		0.0120
0.0038	0.0009	0.0024		0.0033
0.0001	0.0000	0.0000		0.0001
0.0003	0.0002	0.0001		0.0003
0	0	0		0
0.0002	0.0001	0.0001		0.0002

0.0007	0.0003	0.0003		0.0006
0.0013	0.0007	0.0004		0.0012
0.0003	0.0001	0.0002		0.0003
0.0030	0.0015	0.0011		0.0026
0.0012	0.0007	0.0004		0.0011
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0146	0.0002			0.0002
0.0002	0.0000		0.0001	0.0001

ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_RESTL	ROG_TOTAL
0.0105	0.0613	0.2417	0.0097	0.5754
				0.0000
				0.0002
0.0030	0.0235	0.1034	0.0029	0.1866
				0.0000
0.0005	0.0031	0.0142	0.0005	0.0240
				0.0001
0.0023	0.0112	0.0493	0.0023	0.0914
				0.0107
0.0000	0.0029	0.0160	0.0000	0.0221
				0.0039
0.0000	0.0002	0.0014	0.0000	0.0020
0.0023	0.0092	0.0169	0.0016	0.1245
				0.0001
0.0024	0.0108	0.0384	0.0023	0.0743
				0.0002
0.0000	0.0000	0.0000	0.0000	0.0001
				0.0001
0.0000	0.0001	0.0007	0.0000	0.0011
				0.0001
				0.0001
0.0000	0.0000	0.0001	0.0000	0.0005
				0.0000
				0.0000
				0.0000
				0.0002
				0.0003
				0.0003
				0.0003
				0.0000
				0.0000
				0.0001
				0.0000
0.0000	0.0002	0.0011	0.0000	0.0023
				0.0000
				0.0071
				0.0004
				0.0120
				0.0033
				0.0001
				0.0003
				0
				0.0002

				0.0006
				0.0012
				0.0003
				0.0026
				0.0011
				0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
				0.0002
0.0000	0.0000	0.0001	0.0000	0.0002

CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX
3.10	0.3493	1.85	5.30	1.48
0.0002	0.0001		0.0003	0.0038
0.0057			0.0057	0.0005
1.30		0.9459	2.25	0.0786
0.0000			0.0000	0.0000
0.1223		0.0899	0.2122	0.0079
0.0013			0.0013	0.0003
0.4682		0.3719	0.8401	0.0295
0.0511	0.0021		0.0532	0.0557
0.0103	0.0068	0.0417	0.0588	0.0042
0.0187	0.0008		0.0195	0.0191
0.0014	0.0010	0.0059	0.0083	0.0005
0.5855		0.1178	0.7034	0.0383
0.0032			0.0032	0.0003
0.2980		0.2601	0.5581	0.0212
0.0005			0.0005	0.0053
0.0006		0.0001	0.0006	0.0004
0.0002	0.0007		0.0009	0.0024
0.0018	0.0004	0.0046	0.0068	0.0007
0.0011			0.0011	0.0125
0.0006	0.0017		0.0023	0.0079
0.0003	0.0026	0.0012	0.0041	0.0002
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000		0.0003	0.0033
0.0000	0.0000		0.0000	0.0003
0.0027	0.0004		0.0032	0.0336
0.0037	0.0009		0.0045	0.0422
0.0029	0.0006		0.0035	0.0466
0.0031	0.0015		0.0046	0.0461
0.0001	0.0000		0.0001	0.0016
0.0000	0.0000		0.0000	0.0003
0.0006	0.0038		0.0045	0.0076
0.0000	0.0001		0.0002	0.0004
0.0023	0.0040	0.0131	0.0193	0.0012
0.0000	0.0002		0.0002	0.0001
0.0203	0.0813		0.1016	0.2300
0.0046	0.0013		0.0059	0.0384
0.0232	0.1564		0.1796	0.2552
0.0080	0.0401		0.0481	0.0906
0.0006	0.0002		0.0008	0.0057
0.0025	0.0014		0.0038	0.0244
0	0		0.0000	0.0000
0.0005	0.0012		0.0016	0.0076

0.0029	0.0052		0.0081	0.0305
0.0100	0.0073		0.0174	0.0784
0.0003	0.0024		0.0027	0.0070
0.0129	0.0185		0.0314	0.1500
0.0098	0.0062		0.0160	0.0828
0.0001	0.0002		0.0002	0.0006
0.0029		0.0001	0.0030	0.0003
0.1079			0.1079	0.0021
0.0008		0.0014	0.0022	0.0008

NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX
0.2908	0.2680	2.04	1,928.2	44.3
0.0001	0.0007	0.0046	1.60	0.0201
		0.0005	7.33	
	0.0706	0.1492	711.7	
		0.0000	0.0142	
	0.0070	0.0149	74.4	
		0.0003	2.24	
	0.0242	0.0538	239.2	
0.0035		0.0592	34.4	0.2719
0.0001	0.0106	0.0149	52.4	0.1747
0.0012		0.0203	14.3	0.1611
0.0000	0.0013	0.0019	8.93	0.0287
	0.0031	0.0414	5.32	
		0.0003	6.68	
	0.0188	0.0400	183.6	
		0.0053	1.36	
	0.0000	0.0004	4.28	
0.0005	0.0004	0.0033	1.59	0.0945
0.0000	0.0004	0.0012	3.53	0.0198
		0.0125	3.95	
0.0027	0.0035	0.0142	4.14	0.4398
0.0000	0.0001	0.0003	1.13	0.0635
0.0001	0.0003	0.0004	0.0183	0.0118
0.0001	0.0004	0.0038	2.37	0.0103
0.0000	0.0001	0.0005	0.2307	0.0035
0.0006	0.0024	0.0366	13.5	0.1083
0.0012	0.0049	0.0483	18.9	0.2037
0.0009	0.0066	0.0541	19.6	0.1539
0.0021	0.0170	0.0652	24.5	0.3549
0.0000	0.0002	0.0018	1.15	0.0050
0.0000	0.0001	0.0004	0.2124	0.0033
0.0059	0.0033	0.0167	4.76	0.9388
0.0002	0.0005	0.0011	0.3108	0.0320
0.0000	0.0015	0.0026	15.5	0.0761
0.0002	0.0006	0.0009	0.0441	0.0446
0.0683	0.0169	0.3152	102.9	10.3
0.0011	0.0011	0.0405	12.0	0.1591
0.1313	0.0262	0.4128	125.3	19.8
0.0337	0.0067	0.1310	40.5	5.09
0.0002	0.0001	0.0060	1.62	0.0256
0.0011	0.0005	0.0260	6.86	0.1698
0	0	0.0000	0.0000	0.0000
0.0017	0.0010	0.0102	2.15	0.2022

0.0044	0.0066	0.0416	14.8	0.7190
0.0062	0.0063	0.0909	32.4	0.9961
0.0025	0.0022	0.0117	13.1	0.3423
0.0156	0.0155	0.1811	76.7	2.45
0.0052	0.0053	0.0933	26.1	0.8140
0.0001	0.0006	0.0013	0.3847	0.0207
	0.0000	0.0003	0.1507	
		0.0021	6.32	
	0.0001	0.0009	3.81	

CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX
33.3	2,005.9	0.0177	0.0002	0.0007
	1.62	0.0000	0.0000	
	7.33	0.0000		
18.6	730.3	0.0021		0.0004
	0.0142	0.0000		
2.01	76.4	0.0002		0.0000
	2.24	0.0000		
6.51	245.7	0.0006		0.0001
	34.6	0.0011	0.0001	
0.3699	52.9	0.0001		0.0000
	14.5	0.0006	0.0000	
0.0618	9.02	0.0000		0.0000
0.4055	5.72	0.0001		0.0000
	6.68	0.0000		
5.24	188.8	0.0004		0.0001
	1.36	0.0001		
0.0005	4.28	0.0000		0.0000
	1.68	0.0000	0.0000	
0.0224	3.57	0.0000		0.0000
	3.95	0.0000		
	4.58	0.0000	0.0000	
0.0036	1.20	0.0000		0.0000
	0.0302	0.0000	0.0000	
	2.38	0.0000	0.0000	
	0.2342	0.0000	0.0000	
	13.6	0.0001	0.0000	
	19.1	0.0002	0.0000	
	19.8	0.0002	0.0000	
	24.9	0.0002	0.0000	
	1.15	0.0000	0.0000	
	0.2156	0.0000	0.0000	
	5.70	0.0000	0.0000	
	0.3428	0.0000	0.0000	
0.0990	15.7	0.0000		0.0000
	0.0887	0.0000	0.0000	
	113.2	0.0031	0.0000	
	12.1	0.0002	0.0000	
	145.1	0.0033	0.0001	
	45.6	0.0012	0.0000	
	1.64	0.0000	0.0000	
	7.03	0.0001	0.0000	
	0.0000	0	0	
	2.36	0.0000	0.0000	

	15.5	0.0002	0.0000	
	33.4	0.0004	0.0000	
	13.4	0.0001	0.0000	
	79.2	0.0022	0.0000	
	27.0	0.0004	0.0000	
	0.4054	0.0000	0.0000	
0.0004	0.1511	0.0000		0.0000
	6.32	0.0000		
0.0081	3.82	0.0000		0.0000

PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX
0.0186	0.0699	0.2936	0.3821	0.0168
0.0000	0.0000	0.0002	0.0003	0.0000
0.0000	0.0004	0.0017	0.0022	0.0000
0.0026	0.0323	0.1483	0.1831	0.0020
0.0000	0.0000	0.0000	0.0000	0.0000
0.0002	0.0028	0.0128	0.0159	0.0002
0.0000	0.0001	0.0004	0.0005	0.0000
0.0008	0.0089	0.0409	0.0506	0.0006
0.0012	0.0009	0.0056	0.0077	0.0011
0.0001	0.0005	0.0048	0.0054	0.0001
0.0006	0.0003	0.0025	0.0034	0.0006
0.0000	0.0001	0.0008	0.0009	0.0000
0.0001	0.0001	0.0004	0.0006	0.0001
0.0000	0.0002	0.0009	0.0011	0.0000
0.0005	0.0056	0.0259	0.0320	0.0004
0.0001	0.0000	0.0002	0.0003	0.0001
0.0000	0.0000	0.0004	0.0004	0.0000
0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0000	0.0003	0.0004	0.0000
0.0000	0	0	0.0000	0.0000
0.0000	0.0001	0.0036	0.0037	0.0000
0.0000	0.0000	0.0012	0.0012	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0005	0.0005	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0001	0.0002	0.0017	0.0020	0.0001
0.0002	0.0002	0.0026	0.0030	0.0002
0.0002	0.0003	0.0031	0.0036	0.0002
0.0002	0.0004	0.0039	0.0045	0.0002
0.0000	0.0000	0.0002	0.0003	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0007	0.0008	0.0000
0.0000	0.0000	0.0001	0.0001	0.0000
0.0000	0.0001	0.0014	0.0016	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0031	0.0039	0.0068	0.0138	0.0029
0.0002	0.0003	0.0006	0.0011	0.0002
0.0033	0.0048	0.0083	0.0164	0.0031
0.0012	0.0016	0.0027	0.0054	0.0012
0.0000	0.0001	0.0001	0.0002	0.0000
0.0001	0.0002	0.0004	0.0007	0.0001
0	0	0	0	0
0.0000	0.0001	0.0001	0.0002	0.0000

0.0002	0.0005	0.0008	0.0014	0.0002
0.0004	0.0008	0.0014	0.0026	0.0004
0.0001	0.0002	0.0003	0.0005	0.0001
0.0022	0.0030	0.0051	0.0102	0.0021
0.0004	0.0007	0.0012	0.0023	0.0004
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0004	0.0005	0.0000
0.0000	0.0000	0.0003	0.0003	0.0000

PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW
0.0002	0.0007	0.0176	0.0175	0.1258
0.0000		0.0000	0.0000	0.0001
		0.0000	0.0001	0.0007
	0.0004	0.0023	0.0081	0.0635
		0.0000	0.0000	0.0000
	0.0000	0.0002	0.0007	0.0055
		0.0000	0.0000	0.0002
	0.0001	0.0007	0.0022	0.0175
0.0001		0.0011	0.0002	0.0024
	0.0000	0.0001	0.0001	0.0021
0.0000		0.0006	0.0001	0.0011
	0.0000	0.0000	0.0000	0.0004
	0.0000	0.0001	0.0000	0.0002
		0.0000	0.0000	0.0004
	0.0001	0.0005	0.0014	0.0111
		0.0001	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0002
0.0000		0.0000	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001
		0.0000	0	0
0.0000		0.0000	0.0000	0.0015
	0.0000	0.0000	0.0000	0.0005
0.0000		0.0000	0.0000	0.0000
0.0000		0.0000	0.0000	0.0002
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0007
0.0000		0.0002	0.0001	0.0011
0.0000		0.0002	0.0001	0.0013
0.0000		0.0002	0.0001	0.0017
0.0000		0.0000	0.0000	0.0001
0.0000		0.0000	0.0000	0.0000
0.0000		0.0000	0.0000	0.0003
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0006
0.0000		0.0000	0.0000	0.0000
0.0000		0.0029	0.0010	0.0029
0.0000		0.0002	0.0001	0.0002
0.0000		0.0032	0.0012	0.0035
0.0000		0.0012	0.0004	0.0011
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0001	0.0002
0		0	0	0
0.0000		0.0000	0.0000	0.0000

0.0000		0.0002	0.0001	0.0003
0.0000		0.0004	0.0002	0.0006
0.0000		0.0001	0.0000	0.0001
0.0000		0.0021	0.0007	0.0022
0.0000		0.0004	0.0002	0.0005
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000
		0.0000	0.0000	0.0002
	0.0000	0.0000	0.0000	0.0001

PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX
0.1609	0.0190	0.0004	0.0004	0.0198
0.0001	0.0000	0.0000		0.0000
0.0009	0.0001			0.0001
0.0740	0.0071		0.0002	0.0073
0.0000	0.0000			0.0000
0.0064	0.0007		0.0000	0.0008
0.0002	0.0000			0.0000
0.0205	0.0024		0.0001	0.0025
0.0037	0.0003	0.0000		0.0003
0.0023	0.0005	0.0000	0.0000	0.0005
0.0017	0.0001	0.0000		0.0001
0.0004	0.0001	0.0000	0.0000	0.0001
0.0003	0.0001		0.0000	0.0001
0.0005	0.0001			0.0001
0.0130	0.0018		0.0001	0.0019
0.0002	0.0000			0.0000
0.0002	0.0000		0.0000	0.0000
0.0001	0.0000	0.0000		0.0000
0.0001	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000			0.0000
0.0016	0.0000	0.0000		0.0000
0.0005	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0009	0.0001	0.0000		0.0001
0.0013	0.0002	0.0000		0.0002
0.0016	0.0002	0.0000		0.0002
0.0020	0.0002	0.0000		0.0002
0.0001	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0003	0.0000	0.0000		0.0001
0.0000	0.0000	0.0000		0.0000
0.0007	0.0002	0.0000	0.0000	0.0002
0.0000	0.0000	0.0000		0.0000
0.0068	0.0010	0.0001		0.0011
0.0005	0.0001	0.0000		0.0001
0.0079	0.0012	0.0002		0.0014
0.0027	0.0004	0.0000		0.0004
0.0001	0.0000	0.0000		0.0000
0.0003	0.0001	0.0000		0.0001
0	0	0		0
0.0001	0.0000	0.0000		0.0000

0.0006	0.0001	0.0000		0.0001
0.0012	0.0003	0.0000		0.0003
0.0002	0.0001	0.0000		0.0001
0.0050	0.0007	0.0000		0.0008
0.0011	0.0002	0.0000		0.0003
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000			0.0000
0.0001	0.0000		0.0000	0.0000

Fuel_GAS	Fuel_DSL
143.3	60.3
	0.1461
	0.6593
78.1	
	0.0013
8.17	
	0.2016
26.3	
	3.12
5.65	
	1.31
0.9622	
0.7630	
	0.6009
20.2	
	0.1223
0.4561	
	0.1512
0.3811	
	0.3555
	0.4122
0.1283	
	0.0027
	0.2143
	0.0211
	1.22
	1.72
	1.78
	2.24
	0.1036
	0.0194
	0.5129
	0.0309
1.67	
	0.0080
	10.2
	1.09
	13.1
	4.10
	0.1477
	0.6324
	0.0000
	0.2120

	1.40
	3.00
	1.21
	7.13
	2.43
	0.0365
0.0166	
	0.7182
0.4067	

Planning Inventory Report
Date: 08/11/2020
Time: 14:44:25
EMFAC2017 Version: v1.0.2

Field Name	Pollutant	Units	Process
TOG_RUNEX	Total Organic Gases	Tons Per Day	Running Exhaust
TOG_IDLEX	Total Organic Gases	Tons Per Day	Idle Exhaust
TOG_STREX	Total Organic Gases	Tons Per Day	Start Exhaust
TOG_TOTEX	Total Organic Gases	Tons Per Day	Total Exhaust
TOG_DIURN	Total Organic Gases	Tons Per Day	Diurnal
TOG_HTSK	Total Organic Gases	Tons Per Day	Hot Soak
TOG_RUNLS	Total Organic Gases	Tons Per Day	Running Loss
TOG_RESTL	Total Organic Gases	Tons Per Day	Resting Loss
TOG_TOTAL	Total Organic Gases	Tons Per Day	Total
ROG_RUNEX	Reactive Organic Gases	Tons Per Day	Running Exhaust
ROG_IDLEX	Reactive Organic Gases	Tons Per Day	Idle Exhaust
ROG_STREX	Reactive Organic Gases	Tons Per Day	Start Exhaust
ROG_TOTEX	Reactive Organic Gases	Tons Per Day	Total Exhaust
ROG_DIURN	Reactive Organic Gases	Tons Per Day	Diurnal
ROG_HTSK	Reactive Organic Gases	Tons Per Day	Hot Soak
ROG_RUNLS	Reactive Organic Gases	Tons Per Day	Running Loss
ROG_RESTL	Reactive Organic Gases	Tons Per Day	Resting Loss
ROG_TOTAL	Reactive Organic Gases	Tons Per Day	Total
CO_RUNEX	Carbon Monoxide	Tons Per Day	Running Exhaust
CO_IDLEX	Carbon Monoxide	Tons Per Day	Idle Exhaust
CO_STREX	Carbon Monoxide	Tons Per Day	Start Exhaust
CO_TOTEX	Carbon Monoxide	Tons Per Day	Total
NOx_RUNEX	Nitrogen Dioxide	Tons Per Day	Running Exhaust
NOx_IDLEX	Nitrogen Dioxide	Tons Per Day	Idle Exhaust
NOx_STREX	Nitrogen Dioxide	Tons Per Day	Start Exhaust
NOx_TOTEX	Nitrogen Dioxide	Tons Per Day	Total
CO2_RUNEX	Carbon Dioxide	Tons Per Day	Running Exhaust
CO2_IDLEX	Carbon Dioxide	Tons Per Day	Idle Exhaust
CO2_STREX	Carbon Dioxide	Tons Per Day	Start Exhaust
CO2_TOTEX	Carbon Dioxide	Tons Per Day	Total
PM10_RUNEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Running Exhaust
PM10_IDLEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Idle Exhaust
PM10_STREX	Fine Particulate Matter (<10 microns)	Tons Per Day	Start Exhaust
PM10_TOTEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Total Exhaust
PM10_PMTW	Fine Particulate Matter (<10 microns)	Tons Per Day	Tire Wear
PM10_PMBW	Fine Particulate Matter (<10 microns)	Tons Per Day	Brake Wear
PM10_TOTAL	Fine Particulate Matter (<10 microns)	Tons Per Day	Total
PM2_5_RUNEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Running Exhaust
PM2_5_IDLEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Idle Exhaust
PM2_5_STREX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Start Exhaust
PM2_5_TOTEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total Exhaust
PM2_5_PMTW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Tire Wear
PM2_5_PMBW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Brake Wear

PM2_5_TOTAL	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total
SOx_RUNEX	Sulfur Oxides	Tons Per Day	Running Exhaust
SOx_IDLEX	Sulfur Oxides	Tons Per Day	Idle Exhaust
SOx_STREX	Sulfur Oxides	Tons Per Day	Start Exhaust
SOx_TOTEX	Sulfur Oxides	Tons Per Day	Total
Fuel_GAS	Fuel	1000s Gallons	Gasoline
Fuel_DSL	Fuel	1000s Gallons	Diesel

Area	Sub-Area	Cal. Year	Season
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual

Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual
Sub-Areas	Butte (SV)	2018	Annual

Veh_Tech	EMFAC2007 Category	Population
All Vehicles	All Vehicles	132,229.1
ALL OTHER BUSES - DSL	OBUS - DSL	31.7
LDA - DSL	LDA - DSL	696.1
LDA - GAS	LDA - GAS	54,493.2
LDT1 - DSL	LDT1 - DSL	18.0
LDT1 - GAS	LDT1 - GAS	7,493.0
LDT2 - DSL	LDT2 - DSL	75.2
LDT2 - GAS	LDT2 - GAS	27,314.9
LHD1 - DSL	LHDT1 - DSL	5,086.8
LHD1 - GAS	LHDT1 - GAS	3,094.1
LHD2 - DSL	LHDT2 - DSL	1,030.4
LHD2 - GAS	LHDT2 - GAS	294.5
MCY - GAS	MCY - GAS	4,799.3
MDV - DSL	MDV - DSL	432.7
MDV - GAS	MDV - GAS	22,826.6
MH - DSL	MH - DSL	233.8
MH - GAS	MH - GAS	778.7
MOTOR COACH - DSL	OBUS - DSL	6.29
OBUS - GAS	OBUS - GAS	82.9
PTO - DSL	HHDT - DSL	0
SBUS - DSL	SBUS - DSL	159.7
SBUS - GAS	SBUS - GAS	23.0
T6 AG - DSL	MHDT - DSL	22.2
T6 CAIRP HEAVY - DSL	MHDT - DSL	9.23
T6 CAIRP SMALL - DSL	MHDT - DSL	4.46
T6 INSTATE CONSTRUCTION HEAVY - DSL	MHDT - DSL	67.9
T6 INSTATE CONSTRUCTION SMALL - DSL	MHDT - DSL	138.4
T6 INSTATE HEAVY - DSL	MHDT - DSL	222.7
T6 INSTATE SMALL - DSL	MHDT - DSL	631.2
T6 OOS HEAVY - DSL	MHDT - DSL	5.13
T6 OOS SMALL - DSL	MHDT - DSL	2.80
T6 PUBLIC - DSL	MHDT - DSL	152.2
T6 UTILITY - DSL	MHDT - DSL	15.6
T6TS - GAS	MHDT - GAS	179.0
T7 AG - DSL	HHDT - DSL	15.1
T7 CAIRP - DSL	HHDT - DSL	320.7
T7 CAIRP CONSTRUCTION - DSL	HHDT - DSL	16.5
T7 NNOOS - DSL	HHDT - DSL	369.7
T7 NOOS - DSL	HHDT - DSL	126.2
T7 OTHER PORT - DSL	HHDT - DSL	4.40
T7 POAK - DSL	HHDT - DSL	17.8
T7 POLA - DSL	HHDT - DSL	0.0000
T7 PUBLIC - DSL	HHDT - DSL	138.4

T7 SINGLE - DSL	HHDT - DSL	117.7
T7 SINGLE CONSTRUCTION - DSL	HHDT - DSL	117.4
T7 SWCV - DSL	HHDT - DSL	73.3
T7 TRACTOR - DSL	HHDT - DSL	331.1
T7 TRACTOR CONSTRUCTION - DSL	HHDT - DSL	94.6
T7 UTILITY - DSL	HHDT - DSL	10.6
T7IS - GAS	HHDT - GAS	0.5862
UBUS - DSL	UBUS - DSL	29.1
UBUS - GAS	UBUS - GAS	24.4

VMT	Trips	TOG_RUNEX	TOG_IDLEX	TOG_STREX
4,705,417.2	689,306.7	0.6165	0.0198	0.4203
1,640.1	266.7	0.0013	0.0000	
25,940.9	3,181.2	0.0011		
1,986,288.0	250,001.3	0.0926		0.1402
291.2	58.6	0.0001		
255,846.6	33,230.6	0.0281		0.0276
3,260.6	361.8	0.0001		
935,034.6	122,118.4	0.0861		0.1106
184,706.7	63,985.4	0.0526	0.0007	
103,036.6	46,097.4	0.0318	0.0023	0.0126
40,410.2	12,961.5	0.0095	0.0001	
10,881.6	4,387.3	0.0016	0.0002	0.0009
33,902.6	9,598.7	0.1146		0.0243
19,429.9	2,074.0	0.0004		
757,351.6	101,968.9	0.0684		0.1016
2,189.3	23.4	0.0005		
6,199.9	77.9	0.0020		0.0000
789.3	91.9	0.0003	0.0001	
4,122.2	1,658.2	0.0012	0.0001	0.0004
1,458.4		0.0020		
4,937.8	1,843.4	0.0010	0.0001	
1,232.6	91.9	0.0009	0.0004	0.0001
265.1	97.6	0.0003	0.0000	
1,872.8	134.8	0.0002	0.0000	
236.3	65.1	0.0000	0.0000	
4,506.0	306.8	0.0041	0.0000	
6,873.9	625.7	0.0056	0.0000	
24,140.7	2,570.4	0.0176	0.0001	
29,619.5	7,284.4	0.0142	0.0001	
1,035.6	74.9	0.0001	0.0000	
149.9	40.9	0.0000	0.0000	
2,362.6	461.8	0.0003	0.0001	
261.1	179.3	0.0000	0.0000	
7,180.0	3,581.1	0.0045	0.0003	0.0020
168.4	66.4	0.0003	0.0001	
62,601.8	4,681.9	0.0094	0.0044	
3,236.7	74.6	0.0012	0.0000	
76,326.7	5,397.5	0.0115	0.0065	
24,594.0	1,842.3	0.0037	0.0022	
712.0	33.4	0.0003	0.0000	
1,901.0	135.3	0.0008	0.0001	
0.0001	0.0000	0	0	
2,810.9	419.9	0.0007	0.0002	

7,344.9	1,358.4	0.0067	0.0004	
8,029.7	530.7	0.0091	0.0003	
2,990.0	285.7	0.0001	0.0001	
45,907.6	4,204.5	0.0147	0.0008	
6,623.8	427.8	0.0075	0.0002	
215.0	121.7	0.0000	0.0000	
18.1	11.7	0.0000		0.0000
2,891.3	116.3	0.0075		
1,591.3	97.4	0.0001		0.0001

TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS	TOG_RESTL
1.06	0.1138	0.1702	0.5257	0.0755
0.0013				
0.0011				
0.2328	0.0354	0.0566	0.0980	0.0245
0.0001				
0.0556	0.0103	0.0141	0.0482	0.0065
0.0001				
0.1968	0.0292	0.0420	0.1432	0.0197
0.0533				
0.0467	0.0004	0.0129	0.0889	0.0002
0.0096				
0.0027	0.0000	0.0008	0.0065	0.0000
0.1388	0.0167	0.0121	0.0370	0.0090
0.0004				
0.1700	0.0214	0.0304	0.0974	0.0155
0.0005				
0.0020	0.0002	0.0000	0.0003	0.0001
0.0004				
0.0017	0.0000	0.0001	0.0010	0.0000
0.0020				
0.0011				
0.0013	0.0000	0.0000	0.0005	0.0000
0.0003				
0.0002				
0.0000				
0.0042				
0.0057				
0.0177				
0.0143				
0.0001				
0.0000				
0.0004				
0.0000				
0.0067	0.0000	0.0012	0.0047	0.0000
0.0004				
0.0137				
0.0012				
0.0180				
0.0059				
0.0003				
0.0008				
0				
0.0009				

0.0071				
0.0094				
0.0002				
0.0155				
0.0077				
0.0000				
0.0000	0.0000	0.0000	0.0000	0.0000
0.0075				
0.0001	0.0000	0.0000	0.0000	0.0000

TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX
1.94	0.4791	0.0168	0.3841	0.8800
0.0013	0.0011	0.0000		0.0011
0.0011	0.0009			0.0009
0.4474	0.0649		0.1281	0.1929
0.0001	0.0001			0.0001
0.1347	0.0207		0.0252	0.0458
0.0001	0.0001			0.0001
0.4309	0.0605		0.1011	0.1616
0.0533	0.0462	0.0006		0.0468
0.1491	0.0234	0.0016	0.0115	0.0365
0.0096	0.0083	0.0001		0.0084
0.0101	0.0011	0.0002	0.0008	0.0021
0.2136	0.0961		0.0223	0.1185
0.0004	0.0004			0.0004
0.3348	0.0504		0.0928	0.1433
0.0005	0.0004			0.0004
0.0027	0.0014		0.0000	0.0014
0.0004	0.0003	0.0000		0.0003
0.0028	0.0008	0.0001	0.0004	0.0013
0.0020	0.0017			0.0017
0.0011	0.0009	0.0001		0.0010
0.0019	0.0006	0.0002	0.0001	0.0009
0.0003	0.0003	0.0000		0.0003
0.0002	0.0001	0.0000		0.0001
0.0000	0.0000	0.0000		0.0000
0.0042	0.0036	0.0000		0.0036
0.0057	0.0050	0.0000		0.0050
0.0177	0.0155	0.0001		0.0156
0.0143	0.0124	0.0001		0.0125
0.0001	0.0001	0.0000		0.0001
0.0000	0.0000	0.0000		0.0000
0.0004	0.0003	0.0001		0.0003
0.0000	0.0000	0.0000		0.0000
0.0126	0.0033	0.0002	0.0018	0.0053
0.0004	0.0003	0.0001		0.0003
0.0137	0.0082	0.0039		0.0121
0.0012	0.0010	0.0000		0.0011
0.0180	0.0101	0.0057		0.0158
0.0059	0.0033	0.0019		0.0051
0.0003	0.0002	0.0000		0.0002
0.0008	0.0007	0.0001		0.0007
0	0	0		0
0.0009	0.0006	0.0002		0.0008

0.0071	0.0059	0.0003		0.0062
0.0094	0.0080	0.0003		0.0083
0.0002	0.0001	0.0001		0.0002
0.0155	0.0130	0.0007		0.0136
0.0077	0.0066	0.0002		0.0068
0.0000	0.0000	0.0000		0.0000
0.0001	0.0000		0.0000	0.0000
0.0075	0.0002			0.0002
0.0002	0.0000		0.0001	0.0001

ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_RESTL	ROG_TOTAL
0.1138	0.1702	0.5257	0.0755	1.77
				0.0011
				0.0009
0.0354	0.0566	0.0980	0.0245	0.4075
				0.0001
0.0103	0.0141	0.0482	0.0065	0.1249
				0.0001
0.0292	0.0420	0.1432	0.0197	0.3956
				0.0468
0.0004	0.0129	0.0889	0.0002	0.1389
				0.0084
0.0000	0.0008	0.0065	0.0000	0.0094
0.0167	0.0121	0.0370	0.0090	0.1932
				0.0004
0.0214	0.0304	0.0974	0.0155	0.3081
				0.0004
0.0002	0.0000	0.0003	0.0001	0.0021
				0.0003
0.0000	0.0001	0.0010	0.0000	0.0023
				0.0017
				0.0010
0.0000	0.0000	0.0005	0.0000	0.0015
				0.0003
				0.0001
				0.0000
				0.0036
				0.0050
				0.0156
				0.0125
				0.0001
				0.0000
				0.0003
				0.0000
0.0000	0.0012	0.0047	0.0000	0.0112
				0.0003
				0.0121
				0.0011
				0.0158
				0.0051
				0.0002
				0.0007
				0
				0.0008

				0.0062
				0.0083
				0.0002
				0.0136
				0.0068
				0.0000
0.0000	0.0000	0.0000	0.0000	0.0001
				0.0002
0.0000	0.0000	0.0000	0.0000	0.0001

CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX
9.67	0.1732	2.18	12.0	3.94
0.0028	0.0001		0.0029	0.0113
0.0098			0.0098	0.0084
2.78		0.7628	3.54	0.2363
0.0005			0.0005	0.0005
0.6887		0.1172	0.8059	0.0707
0.0007			0.0007	0.0007
2.31		0.5033	2.81	0.3095
0.2104	0.0051		0.2155	0.8794
0.4385	0.0126	0.1191	0.5702	0.0697
0.0384	0.0010		0.0394	0.1328
0.0214	0.0012	0.0106	0.0332	0.0054
0.8862		0.0931	0.9793	0.0447
0.0049			0.0049	0.0030
1.78		0.5348	2.31	0.2147
0.0016			0.0016	0.0161
0.0387		0.0003	0.0391	0.0075
0.0009	0.0004		0.0013	0.0055
0.0192	0.0005	0.0087	0.0283	0.0059
0.0063			0.0063	0.0210
0.0022	0.0008		0.0029	0.0600
0.0142	0.0019	0.0019	0.0180	0.0037
0.0006	0.0001		0.0007	0.0034
0.0005	0.0000		0.0005	0.0040
0.0001	0.0000		0.0001	0.0007
0.0068	0.0002		0.0070	0.0332
0.0103	0.0003		0.0106	0.0413
0.0379	0.0006		0.0385	0.1942
0.0335	0.0016		0.0351	0.1582
0.0003	0.0000		0.0003	0.0022
0.0001	0.0000		0.0001	0.0004
0.0006	0.0010		0.0017	0.0181
0.0000	0.0001		0.0001	0.0007
0.0758	0.0029	0.0246	0.1033	0.0127
0.0008	0.0002		0.0011	0.0033
0.0317	0.0425		0.0742	0.2779
0.0035	0.0003		0.0038	0.0204
0.0414	0.0637		0.1051	0.2837
0.0125	0.0208		0.0333	0.1091
0.0007	0.0001		0.0008	0.0049
0.0022	0.0005		0.0027	0.0141
0.0000	0		0.0000	0.0000
0.0019	0.0011		0.0030	0.0470

0.0187	0.0022		0.0209	0.0919
0.0181	0.0020		0.0201	0.0861
0.0002	0.0008		0.0010	0.0349
0.0458	0.0066		0.0524	0.3176
0.0152	0.0017		0.0169	0.0671
0.0001	0.0001		0.0002	0.0012
0.0010		0.0002	0.0012	0.0006
0.0523			0.0523	0.0022
0.0007		0.0009	0.0015	0.0006

NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX
0.2107	0.3409	4.49	2,391.6	33.2
0.0003	0.0002	0.0118	2.17	0.0238
		0.0084	6.59	
	0.0859	0.3223	646.1	
		0.0005	0.1393	
	0.0156	0.0864	96.5	
		0.0007	1.12	
	0.0846	0.3940	402.9	
0.0144		0.8938	119.2	0.7887
0.0001	0.0290	0.0988	118.0	0.3949
0.0029		0.1357	29.2	0.2555
0.0000	0.0027	0.0081	14.2	0.0436
	0.0029	0.0475	6.21	
		0.0030	8.79	
	0.0737	0.2884	383.3	
		0.0161	2.57	
	0.0000	0.0075	12.7	
0.0007	0.0001	0.0064	1.38	0.0782
0.0000	0.0007	0.0065	8.43	0.0343
		0.0210	3.49	
0.0089	0.0006	0.0695	6.51	0.6343
0.0000	0.0001	0.0038	1.22	0.0635
0.0003	0.0000	0.0037	0.3153	0.0157
0.0001	0.0001	0.0042	1.98	0.0066
0.0000	0.0001	0.0008	0.2647	0.0033
0.0006	0.0003	0.0341	6.36	0.0500
0.0012	0.0008	0.0434	9.67	0.1036
0.0021	0.0017	0.1981	29.9	0.1632
0.0056	0.0075	0.1713	36.9	0.4729
0.0000	0.0001	0.0023	1.10	0.0037
0.0000	0.0000	0.0005	0.1666	0.0020
0.0067	0.0006	0.0254	3.16	0.5678
0.0002	0.0003	0.0012	0.3161	0.0313
0.0000	0.0017	0.0144	14.5	0.1038
0.0004	0.0000	0.0038	0.3069	0.0280
0.0482	0.0081	0.3342	100.1	9.07
0.0004	0.0003	0.0211	6.56	0.0717
0.0616	0.0101	0.3555	117.5	12.0
0.0235	0.0032	0.1358	39.4	4.44
0.0001	0.0000	0.0050	1.47	0.0230
0.0010	0.0001	0.0152	3.99	0.1486
0	0	0.0000	0.0000	0.0000
0.0063	0.0006	0.0539	5.96	0.5165

0.0038	0.0016	0.0973	13.8	0.4298
0.0034	0.0011	0.0906	16.9	0.4011
0.0041	0.0006	0.0396	13.5	0.3409
0.0105	0.0043	0.3325	73.4	1.49
0.0028	0.0011	0.0709	14.0	0.3746
0.0002	0.0003	0.0017	0.4108	0.0209
	0.0000	0.0006	0.0407	
		0.0022	4.98	
	0.0001	0.0007	4.05	

CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX
40.4	2,465.3	0.0659	0.0010	0.0017
	2.20	0.0004	0.0000	
	6.59	0.0006		
15.7	661.7	0.0036		0.0007
	0.1393	0.0001		
2.46	98.9	0.0008		0.0001
	1.12	0.0001		
10.4	413.3	0.0022		0.0004
	120.0	0.0089	0.0002	
0.8279	119.2	0.0005		0.0000
	29.4	0.0015	0.0000	
0.0886	14.4	0.0000		0.0000
0.4655	6.68	0.0001		0.0001
	8.79	0.0002		
10.3	393.6	0.0016		0.0004
	2.57	0.0004		
0.0019	12.7	0.0000		0.0000
	1.46	0.0001	0.0000	
0.0389	8.50	0.0000		0.0000
	3.49	0.0007		
	7.14	0.0004	0.0000	
0.0036	1.29	0.0000		0.0000
	0.3309	0.0001	0.0000	
	1.99	0.0001	0.0000	
	0.2679	0.0000	0.0000	
	6.41	0.0012	0.0000	
	9.77	0.0015	0.0000	
	30.1	0.0071	0.0000	
	37.4	0.0054	0.0000	
	1.10	0.0001	0.0000	
	0.1686	0.0000	0.0000	
	3.72	0.0001	0.0000	
	0.3474	0.0000	0.0000	
0.1511	14.7	0.0000		0.0000
	0.3349	0.0001	0.0000	
	109.2	0.0047	0.0001	
	6.63	0.0002	0.0000	
	129.5	0.0066	0.0003	
	43.8	0.0019	0.0001	
	1.49	0.0000	0.0000	
	4.14	0.0001	0.0000	
	0.0000	0	0	
	6.48	0.0003	0.0000	

	14.2	0.0027	0.0000	
	17.3	0.0024	0.0000	
	13.8	0.0000	0.0000	
	74.9	0.0072	0.0000	
	14.4	0.0016	0.0000	
	0.4317	0.0000	0.0000	
0.0005	0.0412	0.0000		0.0000
	4.98	0.0000		
0.0086	4.06	0.0000		0.0000

PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX
0.0686	0.0503	0.2267	0.3456	0.0627
0.0004	0.0000	0.0002	0.0007	0.0004
0.0006	0.0002	0.0011	0.0019	0.0006
0.0043	0.0175	0.0805	0.1023	0.0034
0.0001	0.0000	0.0000	0.0001	0.0001
0.0010	0.0023	0.0104	0.0136	0.0007
0.0001	0.0000	0.0001	0.0002	0.0001
0.0026	0.0082	0.0379	0.0488	0.0021
0.0090	0.0024	0.0156	0.0270	0.0085
0.0005	0.0009	0.0087	0.0101	0.0004
0.0015	0.0005	0.0040	0.0060	0.0014
0.0000	0.0001	0.0011	0.0012	0.0000
0.0001	0.0001	0.0004	0.0007	0.0001
0.0002	0.0002	0.0008	0.0012	0.0002
0.0019	0.0067	0.0307	0.0393	0.0015
0.0004	0.0000	0.0003	0.0008	0.0004
0.0000	0.0001	0.0009	0.0010	0.0000
0.0001	0.0000	0.0001	0.0003	0.0001
0.0000	0.0001	0.0006	0.0007	0.0000
0.0007	0	0	0.0007	0.0007
0.0004	0.0001	0.0041	0.0046	0.0004
0.0000	0.0000	0.0010	0.0010	0.0000
0.0001	0.0000	0.0000	0.0002	0.0001
0.0001	0.0000	0.0003	0.0004	0.0001
0.0000	0.0000	0.0000	0.0001	0.0000
0.0012	0.0001	0.0006	0.0019	0.0011
0.0015	0.0001	0.0010	0.0026	0.0015
0.0071	0.0003	0.0035	0.0109	0.0068
0.0055	0.0004	0.0043	0.0101	0.0052
0.0001	0.0000	0.0001	0.0002	0.0001
0.0000	0.0000	0.0000	0.0000	0.0000
0.0001	0.0000	0.0003	0.0005	0.0001
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0010	0.0012	0.0000
0.0001	0.0000	0.0000	0.0002	0.0001
0.0049	0.0025	0.0043	0.0116	0.0045
0.0002	0.0001	0.0002	0.0006	0.0002
0.0069	0.0030	0.0052	0.0151	0.0063
0.0019	0.0010	0.0017	0.0046	0.0018
0.0000	0.0000	0.0000	0.0001	0.0000
0.0001	0.0001	0.0001	0.0003	0.0001
0	0	0	0	0
0.0003	0.0001	0.0002	0.0006	0.0003

0.0027	0.0003	0.0005	0.0035	0.0026
0.0024	0.0003	0.0005	0.0033	0.0023
0.0001	0.0001	0.0002	0.0004	0.0000
0.0072	0.0018	0.0031	0.0122	0.0069
0.0016	0.0003	0.0005	0.0023	0.0015
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0003	0.0004	0.0000
0.0000	0.0000	0.0002	0.0002	0.0000

PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW
0.0009	0.0015	0.0652	0.0126	0.0971
0.0000		0.0004	0.0000	0.0001
		0.0006	0.0001	0.0005
	0.0006	0.0040	0.0044	0.0345
		0.0001	0.0000	0.0000
	0.0001	0.0009	0.0006	0.0044
		0.0001	0.0000	0.0001
	0.0004	0.0024	0.0021	0.0162
0.0002		0.0086	0.0006	0.0067
	0.0000	0.0005	0.0002	0.0037
0.0000		0.0015	0.0001	0.0017
	0.0000	0.0000	0.0000	0.0005
	0.0000	0.0001	0.0000	0.0002
		0.0002	0.0000	0.0003
	0.0003	0.0018	0.0017	0.0131
		0.0004	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0004
0.0000		0.0001	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0003
		0.0007	0	0
0.0000		0.0004	0.0000	0.0017
	0.0000	0.0000	0.0000	0.0004
0.0000		0.0001	0.0000	0.0000
0.0000		0.0001	0.0000	0.0001
0.0000		0.0000	0.0000	0.0000
0.0000		0.0011	0.0000	0.0003
0.0000		0.0015	0.0000	0.0004
0.0000		0.0068	0.0001	0.0015
0.0000		0.0052	0.0001	0.0018
0.0000		0.0001	0.0000	0.0001
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0001
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0004
0.0000		0.0001	0.0000	0.0000
0.0001		0.0047	0.0006	0.0018
0.0000		0.0002	0.0000	0.0001
0.0003		0.0066	0.0008	0.0022
0.0001		0.0019	0.0002	0.0007
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0001
0		0	0	0
0.0000		0.0003	0.0000	0.0001

0.0000		0.0026	0.0001	0.0002
0.0000		0.0023	0.0001	0.0002
0.0000		0.0001	0.0000	0.0001
0.0000		0.0069	0.0005	0.0013
0.0000		0.0015	0.0001	0.0002
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000
		0.0000	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001

PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX
0.1750	0.0237	0.0003	0.0005	0.0245
0.0005	0.0000	0.0000		0.0000
0.0011	0.0001			0.0001
0.0428	0.0065		0.0002	0.0067
0.0001	0.0000			0.0000
0.0059	0.0010		0.0000	0.0010
0.0001	0.0000			0.0000
0.0207	0.0041		0.0001	0.0042
0.0159	0.0011	0.0000		0.0011
0.0044	0.0012	0.0000	0.0000	0.0012
0.0033	0.0003	0.0000		0.0003
0.0005	0.0001	0.0000	0.0000	0.0001
0.0003	0.0001		0.0000	0.0001
0.0006	0.0001			0.0001
0.0166	0.0039		0.0001	0.0040
0.0006	0.0000			0.0000
0.0004	0.0001		0.0000	0.0001
0.0002	0.0000	0.0000		0.0000
0.0003	0.0001	0.0000	0.0000	0.0001
0.0007	0.0000			0.0000
0.0022	0.0001	0.0000		0.0001
0.0004	0.0000	0.0000	0.0000	0.0000
0.0002	0.0000	0.0000		0.0000
0.0002	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0014	0.0001	0.0000		0.0001
0.0019	0.0001	0.0000		0.0001
0.0084	0.0003	0.0000		0.0003
0.0072	0.0004	0.0000		0.0004
0.0001	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0003	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0005	0.0001	0.0000	0.0000	0.0001
0.0001	0.0000	0.0000		0.0000
0.0071	0.0010	0.0001		0.0010
0.0004	0.0001	0.0000		0.0001
0.0096	0.0011	0.0001		0.0012
0.0028	0.0004	0.0000		0.0004
0.0001	0.0000	0.0000		0.0000
0.0002	0.0000	0.0000		0.0000
0	0	0		0
0.0004	0.0001	0.0000		0.0001

0.0029	0.0001	0.0000		0.0001
0.0026	0.0002	0.0000		0.0002
0.0002	0.0001	0.0000		0.0001
0.0087	0.0007	0.0000		0.0007
0.0018	0.0001	0.0000		0.0001
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000			0.0000
0.0001	0.0000		0.0000	0.0000

Fuel_GAS	Fuel_DSL
188.4	64.5
	0.1977
	0.5927
71.1	
	0.0125
10.7	
	0.1009
44.5	
	10.8
12.8	
	2.65
1.54	
0.9184	
	0.7912
42.3	
	0.2313
1.36	
	0.1314
0.9104	
	0.3138
	0.6429
0.1407	
	0.0298
	0.1792
	0.0241
	0.5771
	0.8797
	2.71
	3.36
	0.0994
	0.0152
	0.3351
	0.0313
1.59	
	0.0301
	9.83
	0.5969
	11.7
	3.94
	0.1342
	0.3724
	0.0000
	0.5830

	1.28
	1.56
	1.25
	6.74
	1.30
	0.0389
0.0046	
	0.5210
0.4321	

Planning Inventory Report
Date: 08/11/2020
Time: 14:57:43
EMFAC2017 Version: v1.0.2

Field Name	Pollutant	Units	Process
TOG_RUNEX	Total Organic Gases	Tons Per Day	Running Exhaust
TOG_IDLEX	Total Organic Gases	Tons Per Day	Idle Exhaust
TOG_STREX	Total Organic Gases	Tons Per Day	Start Exhaust
TOG_TOTEX	Total Organic Gases	Tons Per Day	Total Exhaust
TOG_DIURN	Total Organic Gases	Tons Per Day	Diurnal
TOG_HTSK	Total Organic Gases	Tons Per Day	Hot Soak
TOG_RUNLS	Total Organic Gases	Tons Per Day	Running Loss
TOG_RESTL	Total Organic Gases	Tons Per Day	Resting Loss
TOG_TOTAL	Total Organic Gases	Tons Per Day	Total
ROG_RUNEX	Reactive Organic Gases	Tons Per Day	Running Exhaust
ROG_IDLEX	Reactive Organic Gases	Tons Per Day	Idle Exhaust
ROG_STREX	Reactive Organic Gases	Tons Per Day	Start Exhaust
ROG_TOTEX	Reactive Organic Gases	Tons Per Day	Total Exhaust
ROG_DIURN	Reactive Organic Gases	Tons Per Day	Diurnal
ROG_HTSK	Reactive Organic Gases	Tons Per Day	Hot Soak
ROG_RUNLS	Reactive Organic Gases	Tons Per Day	Running Loss
ROG_RESTL	Reactive Organic Gases	Tons Per Day	Resting Loss
ROG_TOTAL	Reactive Organic Gases	Tons Per Day	Total
CO_RUNEX	Carbon Monoxide	Tons Per Day	Running Exhaust
CO_IDLEX	Carbon Monoxide	Tons Per Day	Idle Exhaust
CO_STREX	Carbon Monoxide	Tons Per Day	Start Exhaust
CO_TOTEX	Carbon Monoxide	Tons Per Day	Total
NOx_RUNEX	Nitrogen Dioxide	Tons Per Day	Running Exhaust
NOx_IDLEX	Nitrogen Dioxide	Tons Per Day	Idle Exhaust
NOx_STREX	Nitrogen Dioxide	Tons Per Day	Start Exhaust
NOx_TOTEX	Nitrogen Dioxide	Tons Per Day	Total
CO2_RUNEX	Carbon Dioxide	Tons Per Day	Running Exhaust
CO2_IDLEX	Carbon Dioxide	Tons Per Day	Idle Exhaust
CO2_STREX	Carbon Dioxide	Tons Per Day	Start Exhaust
CO2_TOTEX	Carbon Dioxide	Tons Per Day	Total
PM10_RUNEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Running Exhaust
PM10_IDLEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Idle Exhaust
PM10_STREX	Fine Particulate Matter (<10 microns)	Tons Per Day	Start Exhaust
PM10_TOTEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Total Exhaust
PM10_PMTW	Fine Particulate Matter (<10 microns)	Tons Per Day	Tire Wear
PM10_PMBW	Fine Particulate Matter (<10 microns)	Tons Per Day	Brake Wear
PM10_TOTAL	Fine Particulate Matter (<10 microns)	Tons Per Day	Total
PM2_5_RUNEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Running Exhaust
PM2_5_IDLEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Idle Exhaust
PM2_5_STREX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Start Exhaust
PM2_5_TOTEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total Exhaust
PM2_5_PMTW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Tire Wear
PM2_5_PMBW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Brake Wear

PM2_5_TOTAL	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total
SOx_RUNEX	Sulfur Oxides	Tons Per Day	Running Exhaust
SOx_IDLEX	Sulfur Oxides	Tons Per Day	Idle Exhaust
SOx_STREX	Sulfur Oxides	Tons Per Day	Start Exhaust
SOx_TOTEX	Sulfur Oxides	Tons Per Day	Total
Fuel_GAS	Fuel	1000s Gallons	Gasoline
Fuel_DSL	Fuel	1000s Gallons	Diesel

Area	Sub-Area	Cal. Year	Season
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual

Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual

Veh_Tech	EMFAC2007 Category	Population
All Vehicles	All Vehicles	175,612.6
ALL OTHER BUSES - DSL	OBUS - DSL	31.2
LDA - DSL	LDA - DSL	1,192.9
LDA - GAS	LDA - GAS	101,294.5
LDT1 - DSL	LDT1 - DSL	1.26
LDT1 - GAS	LDT1 - GAS	9,097.6
LDT2 - DSL	LDT2 - DSL	271.5
LDT2 - GAS	LDT2 - GAS	29,259.8
LHD1 - DSL	LHDT1 - DSL	2,021.5
LHD1 - GAS	LHDT1 - GAS	1,584.7
LHD2 - DSL	LHDT2 - DSL	751.0
LHD2 - GAS	LHDT2 - GAS	228.6
MCY - GAS	MCY - GAS	4,618.0
MDV - DSL	MDV - DSL	636.2
MDV - GAS	MDV - GAS	19,145.1
MH - DSL	MH - DSL	160.5
MH - GAS	MH - GAS	251.8
MOTOR COACH - DSL	OBUS - DSL	9.54
OBUS - GAS	OBUS - GAS	54.0
PTO - DSL	HHDT - DSL	0
SBUS - DSL	SBUS - DSL	133.9
SBUS - GAS	SBUS - GAS	28.0
T6 AG - DSL	MHDT - DSL	15.8
T6 CAIRP HEAVY - DSL	MHDT - DSL	18.5
T6 CAIRP SMALL - DSL	MHDT - DSL	6.33
T6 INSTATE CONSTRUCTION HEAVY - DSL	MHDT - DSL	175.6
T6 INSTATE CONSTRUCTION SMALL - DSL	MHDT - DSL	352.9
T6 INSTATE HEAVY - DSL	MHDT - DSL	242.8
T6 INSTATE SMALL - DSL	MHDT - DSL	607.1
T6 OOS HEAVY - DSL	MHDT - DSL	8.91
T6 OOS SMALL - DSL	MHDT - DSL	5.87
T6 PUBLIC - DSL	MHDT - DSL	308.0
T6 UTILITY - DSL	MHDT - DSL	20.9
T6TS - GAS	MHDT - GAS	175.4
T7 AG - DSL	HHDT - DSL	18.9
T7 CAIRP - DSL	HHDT - DSL	455.8
T7 CAIRP CONSTRUCTION - DSL	HHDT - DSL	46.3
T7 NNOOS - DSL	HHDT - DSL	706.3
T7 NOOS - DSL	HHDT - DSL	181.2
T7 OTHER PORT - DSL	HHDT - DSL	7.30
T7 POAK - DSL	HHDT - DSL	30.4
T7 POLA - DSL	HHDT - DSL	0.0000
T7 PUBLIC - DSL	HHDT - DSL	64.7

T7 SINGLE - DSL	HHDT - DSL	140.9
T7 SINGLE CONSTRUCTION - DSL	HHDT - DSL	269.4
T7 SWCV - DSL	HHDT - DSL	98.6
T7 TRACTOR - DSL	HHDT - DSL	576.2
T7 TRACTOR CONSTRUCTION - DSL	HHDT - DSL	225.8
T7 UTILITY - DSL	HHDT - DSL	13.9
T7IS - GAS	HHDT - GAS	0.6609
UBUS - DSL	UBUS - DSL	36.0
UBUS - GAS	UBUS - GAS	30.2

VMT	Trips	TOG_RUNEX	TOG_IDLEX	TOG_STREX
6,216,654.5	863,214.9	0.1465	0.0261	0.1060
1,523.7	262.2	0.0000	0.0000	
41,493.0	5,524.6	0.0002		
3,548,108.9	469,285.3	0.0104		0.0417
41.3	5.63	0.0000		
306,934.6	41,345.1	0.0012		0.0044
9,566.8	1,261.4	0.0001		
979,255.2	133,091.5	0.0058		0.0199
64,567.7	25,428.0	0.0115	0.0003	
55,054.1	23,609.9	0.0007	0.0008	0.0021
24,189.2	9,446.4	0.0043	0.0001	
8,259.4	3,405.9	0.0001	0.0001	0.0002
26,740.6	9,235.9	0.0814		0.0209
21,613.8	2,900.9	0.0001		
619,112.8	85,569.7	0.0039		0.0158
1,342.9	16.1	0.0002		
2,604.0	25.2	0.0001		0.0000
1,177.7	139.2	0.0000	0.0000	
2,145.8	1,080.9	0.0001	0.0001	0.0002
2,188.8		0.0001		
4,261.6	1,544.9	0.0001	0.0000	
1,390.0	112.2	0.0000	0.0005	0.0000
15.3	69.4	0.0000	0.0000	
3,087.3	270.7	0.0000	0.0000	
270.8	92.4	0.0000	0.0000	
11,510.2	793.8	0.0002	0.0000	
17,558.6	1,595.5	0.0003	0.0000	
20,969.7	2,802.3	0.0004	0.0000	
26,478.0	7,006.2	0.0003	0.0000	
1,492.3	130.1	0.0000	0.0000	
249.0	85.8	0.0000	0.0000	
4,796.9	934.1	0.0001	0.0001	
349.3	240.9	0.0000	0.0000	
9,725.4	3,508.5	0.0002	0.0003	0.0006
24.1	83.0	0.0000	0.0000	
96,435.5	6,655.0	0.0024	0.0060	
8,267.9	209.3	0.0004	0.0001	
117,594.0	10,312.5	0.0028	0.0115	
37,899.1	2,645.1	0.0009	0.0029	
1,242.0	55.5	0.0000	0.0000	
5,258.2	231.0	0.0002	0.0001	
0.0002	0.0000	0	0	
1,312.8	196.4	0.0001	0.0001	

11,023.1	1,626.2	0.0003	0.0004	
20,511.1	1,218.0	0.0008	0.0005	
4,020.9	384.6	0.0001	0.0002	
72,140.8	7,318.4	0.0017	0.0014	
16,919.8	1,020.7	0.0008	0.0005	
282.7	160.4	0.0000	0.0000	
89.8	13.2	0.0000		0.0000
3,585.0	144.2	0.0141		
1,973.1	120.8	0.0001		0.0001

TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS	TOG_RESTL
0.2787	0.0468	0.0608	0.1973	0.0345
0.0000				
0.0002				
0.0522	0.0116	0.0231	0.0839	0.0099
0.0000				
0.0056	0.0019	0.0030	0.0115	0.0016
0.0001				
0.0257	0.0085	0.0111	0.0400	0.0075
0.0118				
0.0036	0.0001	0.0028	0.0140	0.0000
0.0044				
0.0004	0.0000	0.0002	0.0013	0.0000
0.1023	0.0161	0.0096	0.0136	0.0077
0.0001				
0.0197	0.0086	0.0107	0.0313	0.0077
0.0002				
0.0001	0.0000	0.0000	0.0000	0.0000
0.0001				
0.0004	0.0000	0.0001	0.0007	0.0000
0.0001				
0.0002				
0.0005	0.0000	0.0000	0.0001	0.0000
0.0000				
0.0000				
0.0000				
0.0003				
0.0003				
0.0004				
0.0003				
0.0000				
0.0000				
0.0002				
0.0000				
0.0011	0.0000	0.0002	0.0010	0.0000
0.0000				
0.0084				
0.0005				
0.0142				
0.0039				
0.0001				
0.0003				
0				
0.0002				

0.0007				
0.0014				
0.0003				
0.0030				
0.0012				
0.0000				
0.0000	0.0000	0.0000	0.0000	0.0000
0.0141				
0.0001	0.0000	0.0000	0.0000	0.0000

TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX
0.6181	0.1058	0.0226	0.0970	0.2253
0.0000	0.0000	0.0000		0.0000
0.0002	0.0002			0.0002
0.1807	0.0072		0.0381	0.0453
0.0000	0.0000			0.0000
0.0236	0.0008		0.0040	0.0049
0.0001	0.0001			0.0001
0.0927	0.0040		0.0182	0.0222
0.0118	0.0101	0.0002		0.0103
0.0206	0.0005	0.0006	0.0019	0.0030
0.0044	0.0037	0.0001		0.0038
0.0019	0.0001	0.0001	0.0002	0.0003
0.1492	0.0651		0.0192	0.0843
0.0001	0.0001			0.0001
0.0780	0.0027		0.0144	0.0171
0.0002	0.0002			0.0002
0.0001	0.0000		0.0000	0.0000
0.0001	0.0000	0.0000		0.0001
0.0011	0.0001	0.0000	0.0002	0.0003
0.0001	0.0001			0.0001
0.0002	0.0001	0.0000		0.0001
0.0006	0.0000	0.0003	0.0000	0.0004
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0003	0.0002	0.0000		0.0002
0.0003	0.0003	0.0000		0.0003
0.0004	0.0003	0.0000		0.0003
0.0003	0.0003	0.0000		0.0003
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0001	0.0001		0.0002
0.0000	0.0000	0.0000		0.0000
0.0023	0.0001	0.0002	0.0006	0.0009
0.0000	0.0000	0.0000		0.0000
0.0084	0.0021	0.0052		0.0074
0.0005	0.0003	0.0001		0.0004
0.0142	0.0024	0.0101		0.0125
0.0039	0.0008	0.0026		0.0034
0.0001	0.0000	0.0000		0.0001
0.0003	0.0002	0.0001		0.0003
0	0	0		0
0.0002	0.0001	0.0001		0.0002

0.0007	0.0003	0.0003		0.0006
0.0014	0.0007	0.0005		0.0012
0.0003	0.0001	0.0002		0.0003
0.0030	0.0015	0.0012		0.0027
0.0012	0.0007	0.0004		0.0011
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0141	0.0002			0.0002
0.0002	0.0000		0.0001	0.0001

ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_RESTL	ROG_TOTAL
0.0468	0.0608	0.1973	0.0345	0.5647
				0.0000
				0.0002
0.0116	0.0231	0.0839	0.0099	0.1738
				0.0000
0.0019	0.0030	0.0115	0.0016	0.0229
				0.0001
0.0085	0.0111	0.0400	0.0075	0.0892
				0.0103
0.0001	0.0028	0.0140	0.0000	0.0199
				0.0038
0.0000	0.0002	0.0013	0.0000	0.0018
0.0161	0.0096	0.0136	0.0077	0.1312
				0.0001
0.0086	0.0107	0.0313	0.0077	0.0754
				0.0002
0.0000	0.0000	0.0000	0.0000	0.0001
				0.0001
0.0000	0.0001	0.0007	0.0000	0.0010
				0.0001
				0.0001
0.0000	0.0000	0.0001	0.0000	0.0005
				0.0000
				0.0000
				0.0000
				0.0002
				0.0003
				0.0003
				0.0003
				0.0000
				0.0000
				0.0002
				0.0000
0.0000	0.0002	0.0010	0.0000	0.0021
				0.0000
				0.0074
				0.0004
				0.0125
				0.0034
				0.0001
				0.0003
				0
				0.0002

				0.0006
				0.0012
				0.0003
				0.0027
				0.0011
				0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
				0.0002
0.0000	0.0000	0.0000	0.0000	0.0002

CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX
3.11	0.3320	1.45	4.89	1.39
0.0002	0.0001		0.0003	0.0036
0.0055			0.0055	0.0005
1.35		0.7356	2.09	0.0680
0.0000			0.0000	0.0000
0.1266		0.0699	0.1965	0.0068
0.0012			0.0012	0.0003
0.4848		0.2884	0.7732	0.0255
0.0495	0.0020		0.0515	0.0529
0.0104	0.0066	0.0370	0.0539	0.0038
0.0182	0.0008		0.0189	0.0181
0.0014	0.0010	0.0052	0.0076	0.0005
0.5233		0.0943	0.6175	0.0337
0.0031			0.0031	0.0003
0.3086		0.2016	0.5102	0.0183
0.0005			0.0005	0.0050
0.0006		0.0001	0.0006	0.0004
0.0002	0.0006		0.0008	0.0023
0.0018	0.0003	0.0040	0.0061	0.0006
0.0010			0.0010	0.0118
0.0006	0.0016		0.0022	0.0075
0.0003	0.0025	0.0009	0.0037	0.0002
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000		0.0003	0.0031
0.0000	0.0000		0.0000	0.0003
0.0026	0.0004		0.0030	0.0319
0.0036	0.0008		0.0044	0.0401
0.0028	0.0005		0.0034	0.0442
0.0030	0.0014		0.0044	0.0437
0.0001	0.0000		0.0001	0.0015
0.0000	0.0000		0.0000	0.0003
0.0006	0.0036		0.0043	0.0072
0.0000	0.0001		0.0002	0.0004
0.0023	0.0030	0.0114	0.0167	0.0010
0.0000	0.0002		0.0002	0.0001
0.0197	0.0775		0.0971	0.2181
0.0045	0.0012		0.0057	0.0365
0.0225	0.1490		0.1715	0.2421
0.0077	0.0382		0.0460	0.0859
0.0006	0.0002		0.0008	0.0054
0.0024	0.0013		0.0037	0.0232
0	0		0.0000	0.0000
0.0005	0.0011		0.0016	0.0072

0.0028	0.0050		0.0078	0.0290
0.0097	0.0070		0.0167	0.0745
0.0003	0.0023		0.0026	0.0066
0.0126	0.0176		0.0302	0.1422
0.0095	0.0059		0.0154	0.0787
0.0001	0.0001		0.0002	0.0005
0.0029		0.0001	0.0030	0.0003
0.1047			0.1047	0.0020
0.0008		0.0011	0.0019	0.0007

NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX
0.2644	0.2454	1.90	1,905.1	42.2
0.0001	0.0006	0.0043	1.55	0.0191
		0.0005	7.10	
	0.0608	0.1288	713.6	
		0.0000	0.0138	
	0.0060	0.0128	74.2	
		0.0003	2.17	
	0.0208	0.0464	238.0	
0.0034		0.0563	33.3	0.2636
0.0000	0.0095	0.0133	50.8	0.1693
0.0012		0.0193	13.9	0.1562
0.0000	0.0012	0.0017	8.66	0.0278
	0.0027	0.0364	5.16	
		0.0003	6.47	
	0.0162	0.0345	181.9	
		0.0050	1.32	
	0.0000	0.0004	4.15	
0.0005	0.0003	0.0032	1.54	0.0900
0.0000	0.0004	0.0010	3.42	0.0192
		0.0118	3.83	
0.0025	0.0034	0.0134	4.01	0.4213
0.0000	0.0001	0.0003	1.09	0.0616
0.0000	0.0003	0.0004	0.0177	0.0113
0.0001	0.0004	0.0036	2.30	0.0098
0.0000	0.0001	0.0004	0.2237	0.0034
0.0006	0.0023	0.0348	13.0	0.1029
0.0011	0.0047	0.0459	18.3	0.1935
0.0008	0.0064	0.0514	19.0	0.1467
0.0019	0.0165	0.0621	23.8	0.3372
0.0000	0.0002	0.0017	1.11	0.0047
0.0000	0.0001	0.0004	0.2059	0.0031
0.0054	0.0032	0.0157	4.62	0.8946
0.0002	0.0005	0.0011	0.3013	0.0304
0.0000	0.0013	0.0024	15.0	0.0792
0.0002	0.0006	0.0009	0.0428	0.0424
0.0620	0.0164	0.2965	99.8	9.81
0.0010	0.0011	0.0385	11.6	0.1515
0.1192	0.0254	0.3866	121.5	18.9
0.0306	0.0065	0.1230	39.2	4.84
0.0002	0.0001	0.0057	1.57	0.0243
0.0010	0.0005	0.0246	6.65	0.1617
0	0	0.0000	0.0000	0.0000
0.0016	0.0009	0.0097	2.09	0.1975

0.0040	0.0064	0.0394	14.3	0.6850
0.0056	0.0061	0.0862	31.4	0.9486
0.0023	0.0022	0.0111	12.7	0.3294
0.0141	0.0151	0.1714	74.4	2.34
0.0047	0.0051	0.0885	25.3	0.7752
0.0001	0.0006	0.0012	0.3730	0.0197
	0.0000	0.0003	0.1461	
		0.0020	6.13	
	0.0001	0.0008	3.69	

CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX
32.3	1,979.6	0.0171	0.0002	0.0007
	1.57	0.0000	0.0000	
	7.10	0.0000		
18.0	731.6	0.0021		0.0004
	0.0138	0.0000		
1.95	76.1	0.0002		0.0000
	2.17	0.0000		
6.31	244.3	0.0006		0.0001
	33.6	0.0011	0.0001	
0.3586	51.3	0.0001		0.0000
	14.1	0.0006	0.0000	
0.0599	8.75	0.0000		0.0000
0.3931	5.55	0.0001		0.0000
	6.47	0.0000		
5.08	187.0	0.0004		0.0001
	1.32	0.0001		
0.0005	4.15	0.0000		0.0000
	1.63	0.0000	0.0000	
0.0217	3.46	0.0000		0.0000
	3.83	0.0000		
	4.43	0.0000	0.0000	
0.0035	1.16	0.0000		0.0000
	0.0290	0.0000	0.0000	
	2.31	0.0000	0.0000	
	0.2270	0.0000	0.0000	
	13.1	0.0001	0.0000	
	18.5	0.0002	0.0000	
	19.2	0.0002	0.0000	
	24.1	0.0002	0.0000	
	1.12	0.0000	0.0000	
	0.2090	0.0000	0.0000	
	5.51	0.0000	0.0000	
	0.3317	0.0000	0.0000	
0.0960	15.2	0.0000		0.0000
	0.0852	0.0000	0.0000	
	109.6	0.0030	0.0000	
	11.7	0.0002	0.0000	
	140.4	0.0032	0.0000	
	44.1	0.0012	0.0000	
	1.59	0.0000	0.0000	
	6.81	0.0001	0.0000	
	0.0000	0	0	
	2.29	0.0000	0.0000	

	15.0	0.0002	0.0000	
	32.3	0.0004	0.0000	
	13.0	0.0001	0.0000	
	76.7	0.0021	0.0000	
	26.1	0.0004	0.0000	
	0.3927	0.0000	0.0000	
0.0004	0.1465	0.0000		0.0000
	6.13	0.0000		
0.0078	3.70	0.0000		0.0000

PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX
0.0180	0.0678	0.2846	0.3704	0.0162
0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0004	0.0017	0.0021	0.0000
0.0025	0.0313	0.1437	0.1775	0.0019
0.0000	0.0000	0.0000	0.0000	0.0000
0.0002	0.0027	0.0124	0.0154	0.0002
0.0000	0.0001	0.0004	0.0005	0.0000
0.0008	0.0086	0.0397	0.0491	0.0006
0.0011	0.0009	0.0054	0.0074	0.0010
0.0001	0.0005	0.0046	0.0053	0.0001
0.0006	0.0003	0.0024	0.0033	0.0005
0.0000	0.0001	0.0008	0.0009	0.0000
0.0001	0.0001	0.0003	0.0006	0.0001
0.0000	0.0002	0.0009	0.0011	0.0000
0.0005	0.0055	0.0251	0.0310	0.0004
0.0001	0.0000	0.0002	0.0003	0.0001
0.0000	0.0000	0.0004	0.0004	0.0000
0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0000	0.0003	0.0003	0.0000
0.0000	0	0	0.0000	0.0000
0.0000	0.0001	0.0035	0.0036	0.0000
0.0000	0.0000	0.0011	0.0012	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0004	0.0005	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0001	0.0002	0.0017	0.0019	0.0001
0.0002	0.0002	0.0025	0.0029	0.0002
0.0002	0.0003	0.0030	0.0035	0.0002
0.0002	0.0004	0.0038	0.0044	0.0002
0.0000	0.0000	0.0002	0.0003	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0007	0.0008	0.0000
0.0000	0.0000	0.0001	0.0001	0.0000
0.0000	0.0001	0.0014	0.0015	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0030	0.0038	0.0066	0.0134	0.0028
0.0002	0.0003	0.0006	0.0011	0.0002
0.0032	0.0047	0.0080	0.0159	0.0030
0.0012	0.0015	0.0026	0.0053	0.0011
0.0000	0.0000	0.0001	0.0002	0.0000
0.0001	0.0002	0.0004	0.0007	0.0001
0	0	0	0	0
0.0000	0.0001	0.0001	0.0002	0.0000

0.0002	0.0004	0.0008	0.0014	0.0002
0.0004	0.0008	0.0014	0.0026	0.0003
0.0001	0.0002	0.0003	0.0005	0.0001
0.0021	0.0029	0.0049	0.0099	0.0020
0.0004	0.0007	0.0012	0.0022	0.0004
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0004	0.0005	0.0000
0.0000	0.0000	0.0003	0.0003	0.0000

PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW
0.0002	0.0006	0.0171	0.0169	0.1220
0.0000		0.0000	0.0000	0.0001
		0.0000	0.0001	0.0007
	0.0004	0.0023	0.0078	0.0616
		0.0000	0.0000	0.0000
	0.0000	0.0002	0.0007	0.0053
		0.0000	0.0000	0.0002
	0.0001	0.0007	0.0022	0.0170
0.0001		0.0011	0.0002	0.0023
	0.0000	0.0001	0.0001	0.0020
0.0000		0.0006	0.0001	0.0010
	0.0000	0.0000	0.0000	0.0003
	0.0000	0.0001	0.0000	0.0001
		0.0000	0.0000	0.0004
	0.0001	0.0004	0.0014	0.0107
		0.0001	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0002
0.0000		0.0000	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001
		0.0000	0	0
0.0000		0.0000	0.0000	0.0015
	0.0000	0.0000	0.0000	0.0005
0.0000		0.0000	0.0000	0.0000
0.0000		0.0000	0.0000	0.0002
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0007
0.0000		0.0002	0.0001	0.0011
0.0000		0.0002	0.0001	0.0013
0.0000		0.0002	0.0001	0.0016
0.0000		0.0000	0.0000	0.0001
0.0000		0.0000	0.0000	0.0000
0.0000		0.0000	0.0000	0.0003
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0006
0.0000		0.0000	0.0000	0.0000
0.0000		0.0029	0.0010	0.0028
0.0000		0.0002	0.0001	0.0002
0.0000		0.0031	0.0012	0.0034
0.0000		0.0011	0.0004	0.0011
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0001	0.0002
0		0	0	0
0.0000		0.0000	0.0000	0.0000

0.0000		0.0002	0.0001	0.0003
0.0000		0.0003	0.0002	0.0006
0.0000		0.0001	0.0000	0.0001
0.0000		0.0020	0.0007	0.0021
0.0000		0.0004	0.0002	0.0005
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000
		0.0000	0.0000	0.0002
	0.0000	0.0000	0.0000	0.0001

PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX
0.1560	0.0188	0.0004	0.0003	0.0195
0.0001	0.0000	0.0000		0.0000
0.0009	0.0001			0.0001
0.0717	0.0071		0.0002	0.0073
0.0000	0.0000			0.0000
0.0062	0.0007		0.0000	0.0008
0.0002	0.0000			0.0000
0.0199	0.0024		0.0001	0.0025
0.0036	0.0003	0.0000		0.0003
0.0022	0.0005	0.0000	0.0000	0.0005
0.0017	0.0001	0.0000		0.0001
0.0004	0.0001	0.0000	0.0000	0.0001
0.0003	0.0001		0.0000	0.0001
0.0004	0.0001			0.0001
0.0126	0.0018		0.0001	0.0019
0.0002	0.0000			0.0000
0.0002	0.0000		0.0000	0.0000
0.0001	0.0000	0.0000		0.0000
0.0001	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000			0.0000
0.0016	0.0000	0.0000		0.0000
0.0005	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0009	0.0001	0.0000		0.0001
0.0013	0.0002	0.0000		0.0002
0.0016	0.0002	0.0000		0.0002
0.0019	0.0002	0.0000		0.0002
0.0001	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0003	0.0000	0.0000		0.0001
0.0000	0.0000	0.0000		0.0000
0.0006	0.0002	0.0000	0.0000	0.0002
0.0000	0.0000	0.0000		0.0000
0.0066	0.0010	0.0001		0.0010
0.0005	0.0001	0.0000		0.0001
0.0077	0.0012	0.0002		0.0013
0.0026	0.0004	0.0000		0.0004
0.0001	0.0000	0.0000		0.0000
0.0003	0.0001	0.0000		0.0001
0	0	0		0
0.0001	0.0000	0.0000		0.0000

0.0006	0.0001	0.0000		0.0001
0.0011	0.0003	0.0000		0.0003
0.0002	0.0001	0.0000		0.0001
0.0049	0.0007	0.0000		0.0007
0.0011	0.0002	0.0000		0.0002
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000			0.0000
0.0001	0.0000		0.0000	0.0000

Fuel_GAS	Fuel_DSL
142.7	58.4
	0.1417
	0.6392
78.3	
	0.0012
8.14	
	0.1955
26.2	
	3.02
5.48	
	1.27
0.9328	
0.7263	
	0.5826
20.0	
	0.1186
0.4422	
	0.1464
0.3694	
	0.3447
	0.3991
0.1243	
	0.0026
	0.2078
	0.0204
	1.18
	1.66
	1.72
	2.17
	0.1004
	0.0188
	0.4959
	0.0299
1.62	
	0.0077
	9.86
	1.06
	12.6
	3.97
	0.1432
	0.6129
	0.0000
	0.2057

	1.35
	2.91
	1.17
	6.91
	2.35
	0.0353
0.0161	
	0.6963
0.3942	

Planning Inventory Report
Date: 08/11/2020
Time: 15:10:40
EMFAC2017 Version: v1.0.2

Field Name	Pollutant	Units	Process
TOG_RUNEX	Total Organic Gases	Tons Per Day	Running Exhaust
TOG_IDLEX	Total Organic Gases	Tons Per Day	Idle Exhaust
TOG_STREX	Total Organic Gases	Tons Per Day	Start Exhaust
TOG_TOTEX	Total Organic Gases	Tons Per Day	Total Exhaust
TOG_DIURN	Total Organic Gases	Tons Per Day	Diurnal
TOG_HTSK	Total Organic Gases	Tons Per Day	Hot Soak
TOG_RUNLS	Total Organic Gases	Tons Per Day	Running Loss
TOG_RESTL	Total Organic Gases	Tons Per Day	Resting Loss
TOG_TOTAL	Total Organic Gases	Tons Per Day	Total
ROG_RUNEX	Reactive Organic Gases	Tons Per Day	Running Exhaust
ROG_IDLEX	Reactive Organic Gases	Tons Per Day	Idle Exhaust
ROG_STREX	Reactive Organic Gases	Tons Per Day	Start Exhaust
ROG_TOTEX	Reactive Organic Gases	Tons Per Day	Total Exhaust
ROG_DIURN	Reactive Organic Gases	Tons Per Day	Diurnal
ROG_HTSK	Reactive Organic Gases	Tons Per Day	Hot Soak
ROG_RUNLS	Reactive Organic Gases	Tons Per Day	Running Loss
ROG_RESTL	Reactive Organic Gases	Tons Per Day	Resting Loss
ROG_TOTAL	Reactive Organic Gases	Tons Per Day	Total
CO_RUNEX	Carbon Monoxide	Tons Per Day	Running Exhaust
CO_IDLEX	Carbon Monoxide	Tons Per Day	Idle Exhaust
CO_STREX	Carbon Monoxide	Tons Per Day	Start Exhaust
CO_TOTEX	Carbon Monoxide	Tons Per Day	Total
NOx_RUNEX	Nitrogen Dioxide	Tons Per Day	Running Exhaust
NOx_IDLEX	Nitrogen Dioxide	Tons Per Day	Idle Exhaust
NOx_STREX	Nitrogen Dioxide	Tons Per Day	Start Exhaust
NOx_TOTEX	Nitrogen Dioxide	Tons Per Day	Total
CO2_RUNEX	Carbon Dioxide	Tons Per Day	Running Exhaust
CO2_IDLEX	Carbon Dioxide	Tons Per Day	Idle Exhaust
CO2_STREX	Carbon Dioxide	Tons Per Day	Start Exhaust
CO2_TOTEX	Carbon Dioxide	Tons Per Day	Total
PM10_RUNEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Running Exhaust
PM10_IDLEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Idle Exhaust
PM10_STREX	Fine Particulate Matter (<10 microns)	Tons Per Day	Start Exhaust
PM10_TOTEX	Fine Particulate Matter (<10 microns)	Tons Per Day	Total Exhaust
PM10_PMTW	Fine Particulate Matter (<10 microns)	Tons Per Day	Tire Wear
PM10_PMBW	Fine Particulate Matter (<10 microns)	Tons Per Day	Brake Wear
PM10_TOTAL	Fine Particulate Matter (<10 microns)	Tons Per Day	Total
PM2_5_RUNEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Running Exhaust
PM2_5_IDLEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Idle Exhaust
PM2_5_STREX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Start Exhaust
PM2_5_TOTEX	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total Exhaust
PM2_5_PMTW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Tire Wear
PM2_5_PMBW	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Brake Wear

PM2_5_TOTAL	Fine Particulate Matter (<2.5 microns)	Tons Per Day	Total
SOx_RUNEX	Sulfur Oxides	Tons Per Day	Running Exhaust
SOx_IDLEX	Sulfur Oxides	Tons Per Day	Idle Exhaust
SOx_STREX	Sulfur Oxides	Tons Per Day	Start Exhaust
SOx_TOTEX	Sulfur Oxides	Tons Per Day	Total
Fuel_GAS	Fuel	1000s Gallons	Gasoline
Fuel_DSL	Fuel	1000s Gallons	Diesel

Area	Sub-Area	Cal. Year	Season
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual

Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual
Sub-Areas	Butte (SV)	2040	Annual

Veh_Tech	EMFAC2007 Category	Population
All Vehicles	All Vehicles	150,631.5
ALL OTHER BUSES - DSL	OBUS - DSL	26.8
LDA - DSL	LDA - DSL	1,023.2
LDA - GAS	LDA - GAS	86,885.2
LDT1 - DSL	LDT1 - DSL	1.08
LDT1 - GAS	LDT1 - GAS	7,803.4
LDT2 - DSL	LDT2 - DSL	232.8
LDT2 - GAS	LDT2 - GAS	25,097.5
LHD1 - DSL	LHDT1 - DSL	1,733.9
LHD1 - GAS	LHDT1 - GAS	1,359.3
LHD2 - DSL	LHDT2 - DSL	644.2
LHD2 - GAS	LHDT2 - GAS	196.1
MCY - GAS	MCY - GAS	3,961.0
MDV - DSL	MDV - DSL	545.7
MDV - GAS	MDV - GAS	16,421.7
MH - DSL	MH - DSL	137.7
MH - GAS	MH - GAS	216.0
MOTOR COACH - DSL	OBUS - DSL	8.18
OBUS - GAS	OBUS - GAS	46.3
PTO - DSL	HHDT - DSL	0
SBUS - DSL	SBUS - DSL	114.8
SBUS - GAS	SBUS - GAS	24.1
T6 AG - DSL	MHDT - DSL	13.5
T6 CAIRP HEAVY - DSL	MHDT - DSL	15.9
T6 CAIRP SMALL - DSL	MHDT - DSL	5.43
T6 INSTATE CONSTRUCTION HEAVY - DSL	MHDT - DSL	150.6
T6 INSTATE CONSTRUCTION SMALL - DSL	MHDT - DSL	302.7
T6 INSTATE HEAVY - DSL	MHDT - DSL	208.3
T6 INSTATE SMALL - DSL	MHDT - DSL	520.8
T6 OOS HEAVY - DSL	MHDT - DSL	7.64
T6 OOS SMALL - DSL	MHDT - DSL	5.04
T6 PUBLIC - DSL	MHDT - DSL	264.2
T6 UTILITY - DSL	MHDT - DSL	18.0
T6TS - GAS	MHDT - GAS	150.4
T7 AG - DSL	HHDT - DSL	16.2
T7 CAIRP - DSL	HHDT - DSL	391.0
T7 CAIRP CONSTRUCTION - DSL	HHDT - DSL	39.7
T7 NNOOS - DSL	HHDT - DSL	605.9
T7 NOOS - DSL	HHDT - DSL	155.4
T7 OTHER PORT - DSL	HHDT - DSL	6.26
T7 POAK - DSL	HHDT - DSL	26.1
T7 POLA - DSL	HHDT - DSL	0.0000
T7 PUBLIC - DSL	HHDT - DSL	55.5

T7 SINGLE - DSL	HHDT - DSL	120.9
T7 SINGLE CONSTRUCTION - DSL	HHDT - DSL	231.1
T7 SWCV - DSL	HHDT - DSL	84.6
T7 TRACTOR - DSL	HHDT - DSL	494.3
T7 TRACTOR CONSTRUCTION - DSL	HHDT - DSL	193.7
T7 UTILITY - DSL	HHDT - DSL	12.0
T7IS - GAS	HHDT - GAS	0.5669
UBUS - DSL	UBUS - DSL	30.9
UBUS - GAS	UBUS - GAS	25.9

VMT	Trips	TOG_RUNEX	TOG_IDLEX	TOG_STREX
5,332,326.9	740,421.4	0.1256	0.0224	0.0910
1,306.9	224.9	0.0000	0.0000	
35,590.6	4,738.7	0.0002		
3,043,385.6	402,528.8	0.0089		0.0358
35.4	4.83	0.0000		
263,272.7	35,463.7	0.0010		0.0038
8,205.9	1,081.9	0.0001		
839,954.8	114,159.0	0.0049		0.0171
55,382.8	21,810.8	0.0098	0.0002	
47,222.5	20,251.4	0.0006	0.0007	0.0018
20,748.2	8,102.6	0.0036	0.0001	
7,084.5	2,921.4	0.0001	0.0001	0.0002
22,936.8	7,922.1	0.0698		0.0179
18,539.2	2,488.3	0.0001		
531,043.2	73,397.3	0.0033		0.0136
1,151.8	13.8	0.0001		
2,233.6	21.6	0.0000		0.0000
1,010.2	119.4	0.0000	0.0000	
1,840.5	927.1	0.0001	0.0001	0.0002
1,877.4		0.0001		
3,655.4	1,325.2	0.0001	0.0000	
1,192.2	96.2	0.0000	0.0004	0.0000
13.1	59.5	0.0000	0.0000	
2,648.2	232.2	0.0000	0.0000	
232.3	79.3	0.0000	0.0000	
9,872.8	680.9	0.0002	0.0000	
15,060.9	1,368.5	0.0003	0.0000	
17,986.7	2,403.6	0.0003	0.0000	
22,711.5	6,009.6	0.0003	0.0000	
1,280.0	111.6	0.0000	0.0000	
213.6	73.6	0.0000	0.0000	
4,114.5	801.3	0.0001	0.0001	
299.7	206.6	0.0000	0.0000	
8,341.9	3,009.4	0.0002	0.0002	0.0006
20.7	71.2	0.0000	0.0000	
82,717.5	5,708.4	0.0021	0.0051	
7,091.8	179.5	0.0003	0.0001	
100,866.1	8,845.5	0.0024	0.0098	
32,507.9	2,268.9	0.0008	0.0025	
1,065.3	47.6	0.0000	0.0000	
4,510.2	198.2	0.0002	0.0001	
0.0002	0.0000	0	0	
1,126.0	168.4	0.0001	0.0001	

9,455.1	1,394.8	0.0003	0.0003	
17,593.3	1,044.7	0.0007	0.0005	
3,448.9	329.9	0.0001	0.0002	
61,878.7	6,277.3	0.0014	0.0012	
14,513.0	875.5	0.0007	0.0004	
242.5	137.6	0.0000	0.0000	
77.0	11.3	0.0000		0.0000
3,075.1	123.6	0.0121		
1,692.5	103.6	0.0001		0.0001

TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS	TOG_RESTL
0.2389	0.0402	0.0522	0.1692	0.0296
0.0000				
0.0002				
0.0447	0.0100	0.0198	0.0720	0.0085
0.0000				
0.0048	0.0016	0.0026	0.0098	0.0014
0.0001				
0.0220	0.0073	0.0095	0.0343	0.0064
0.0101				
0.0031	0.0001	0.0024	0.0120	0.0000
0.0037				
0.0003	0.0000	0.0002	0.0011	0.0000
0.0877	0.0138	0.0082	0.0116	0.0066
0.0001				
0.0169	0.0074	0.0091	0.0269	0.0066
0.0001				
0.0000	0.0000	0.0000	0.0000	0.0000
0.0001				
0.0003	0.0000	0.0001	0.0006	0.0000
0.0001				
0.0001				
0.0005	0.0000	0.0000	0.0001	0.0000
0.0000				
0.0000				
0.0000				
0.0002				
0.0003				
0.0003				
0.0003				
0.0000				
0.0000				
0.0001				
0.0000				
0.0010	0.0000	0.0002	0.0008	0.0000
0.0000				
0.0072				
0.0004				
0.0122				
0.0033				
0.0001				
0.0003				
0				
0.0002				

0.0006				
0.0012				
0.0003				
0.0026				
0.0011				
0.0000				
0.0000	0.0000	0.0000	0.0000	0.0000
0.0121				
0.0001	0.0000	0.0000	0.0000	0.0000

TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX
0.5300	0.0906	0.0193	0.0832	0.1932
0.0000	0.0000	0.0000		0.0000
0.0002	0.0002			0.0002
0.1549	0.0061		0.0327	0.0388
0.0000	0.0000			0.0000
0.0203	0.0007		0.0035	0.0042
0.0001	0.0001			0.0001
0.0795	0.0034		0.0156	0.0190
0.0101	0.0086	0.0002		0.0089
0.0176	0.0004	0.0005	0.0016	0.0025
0.0037	0.0032	0.0001		0.0033
0.0016	0.0001	0.0001	0.0002	0.0003
0.1280	0.0558		0.0165	0.0723
0.0001	0.0001			0.0001
0.0669	0.0023		0.0124	0.0147
0.0001	0.0001			0.0001
0.0001	0.0000		0.0000	0.0000
0.0001	0.0000	0.0000		0.0001
0.0010	0.0001	0.0000	0.0002	0.0003
0.0001	0.0001			0.0001
0.0001	0.0001	0.0000		0.0001
0.0005	0.0000	0.0003	0.0000	0.0003
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0002	0.0000		0.0002
0.0003	0.0002	0.0000		0.0003
0.0003	0.0003	0.0000		0.0003
0.0003	0.0002	0.0000		0.0003
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0001	0.0001	0.0001		0.0001
0.0000	0.0000	0.0000		0.0000
0.0020	0.0001	0.0002	0.0005	0.0008
0.0000	0.0000	0.0000		0.0000
0.0072	0.0018	0.0045		0.0063
0.0004	0.0003	0.0001		0.0003
0.0122	0.0021	0.0086		0.0107
0.0033	0.0007	0.0022		0.0029
0.0001	0.0000	0.0000		0.0000
0.0003	0.0001	0.0001		0.0002
0	0	0		0
0.0002	0.0001	0.0001		0.0002

0.0006	0.0002	0.0003		0.0005
0.0012	0.0006	0.0004		0.0010
0.0003	0.0001	0.0001		0.0002
0.0026	0.0013	0.0010		0.0023
0.0011	0.0006	0.0003		0.0009
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0121	0.0002			0.0002
0.0002	0.0000		0.0001	0.0001

ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_RESTL	ROG_TOTAL
0.0402	0.0522	0.1692	0.0296	0.4843
				0.0000
				0.0002
0.0100	0.0198	0.0720	0.0085	0.1490
				0.0000
0.0016	0.0026	0.0098	0.0014	0.0196
				0.0001
0.0073	0.0095	0.0343	0.0064	0.0765
				0.0089
0.0001	0.0024	0.0120	0.0000	0.0171
				0.0033
0.0000	0.0002	0.0011	0.0000	0.0016
0.0138	0.0082	0.0116	0.0066	0.1126
				0.0001
0.0074	0.0091	0.0269	0.0066	0.0646
				0.0001
0.0000	0.0000	0.0000	0.0000	0.0001
				0.0001
0.0000	0.0001	0.0006	0.0000	0.0009
				0.0001
				0.0001
0.0000	0.0000	0.0001	0.0000	0.0004
				0.0000
				0.0000
				0.0000
				0.0002
				0.0003
				0.0003
				0.0003
				0.0000
				0.0000
				0.0001
				0.0000
0.0000	0.0002	0.0008	0.0000	0.0018
				0.0000
				0.0063
				0.0003
				0.0107
				0.0029
				0.0000
				0.0002
				0
				0.0002

				0.0005
				0.0010
				0.0002
				0.0023
				0.0009
				0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
				0.0002
0.0000	0.0000	0.0000	0.0000	0.0001

CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX
2.67	0.2848	1.24	4.20	1.19
0.0002	0.0001		0.0003	0.0031
0.0047			0.0047	0.0004
1.17		0.6310	1.80	0.0582
0.0000			0.0000	0.0000
0.1090		0.0600	0.1690	0.0058
0.0011			0.0011	0.0002
0.4175		0.2474	0.6649	0.0219
0.0425	0.0017		0.0442	0.0454
0.0089	0.0057	0.0317	0.0463	0.0032
0.0156	0.0006		0.0162	0.0156
0.0012	0.0008	0.0045	0.0065	0.0004
0.4488		0.0809	0.5297	0.0289
0.0026			0.0026	0.0003
0.2658		0.1729	0.4387	0.0157
0.0004			0.0004	0.0043
0.0005		0.0001	0.0006	0.0003
0.0002	0.0005		0.0007	0.0020
0.0016	0.0003	0.0034	0.0053	0.0005
0.0009			0.0009	0.0101
0.0005	0.0014		0.0019	0.0064
0.0003	0.0022	0.0007	0.0032	0.0002
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000		0.0002	0.0027
0.0000	0.0000		0.0000	0.0002
0.0023	0.0003		0.0026	0.0273
0.0031	0.0007		0.0038	0.0344
0.0024	0.0005		0.0029	0.0379
0.0026	0.0012		0.0038	0.0375
0.0001	0.0000		0.0001	0.0013
0.0000	0.0000		0.0000	0.0002
0.0005	0.0031		0.0036	0.0061
0.0000	0.0001		0.0001	0.0003
0.0020	0.0025	0.0098	0.0143	0.0009
0.0000	0.0002		0.0002	0.0001
0.0169	0.0664		0.0833	0.1871
0.0038	0.0010		0.0049	0.0313
0.0193	0.1278		0.1471	0.2076
0.0066	0.0328		0.0394	0.0737
0.0005	0.0002		0.0007	0.0046
0.0021	0.0011		0.0032	0.0199
0	0		0.0000	0.0000
0.0004	0.0009		0.0013	0.0062

0.0024	0.0043		0.0067	0.0248
0.0084	0.0060		0.0144	0.0639
0.0003	0.0019		0.0022	0.0057
0.0108	0.0151		0.0259	0.1220
0.0082	0.0050		0.0132	0.0675
0.0001	0.0001		0.0002	0.0005
0.0025		0.0001	0.0026	0.0003
0.0898			0.0898	0.0017
0.0007		0.0009	0.0016	0.0006

NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX
0.2268	0.2105	1.63	1,631.8	36.2
0.0001	0.0005	0.0037	1.33	0.0164
		0.0004	6.05	
	0.0521	0.1104	610.8	
		0.0000	0.0117	
	0.0052	0.0110	63.5	
		0.0002	1.85	
	0.0179	0.0397	203.7	
0.0029		0.0483	28.6	0.2261
0.0000	0.0082	0.0114	43.6	0.1453
0.0010		0.0166	11.9	0.1340
0.0000	0.0010	0.0014	7.43	0.0239
	0.0023	0.0312	4.42	
		0.0003	5.52	
	0.0139	0.0296	155.7	
		0.0043	1.13	
	0.0000	0.0003	3.56	
0.0004	0.0003	0.0027	1.32	0.0772
0.0000	0.0003	0.0009	2.93	0.0164
		0.0101	3.29	
0.0021	0.0029	0.0115	3.44	0.3614
0.0000	0.0001	0.0002	0.9392	0.0528
0.0000	0.0003	0.0003	0.0152	0.0097
0.0001	0.0003	0.0031	1.97	0.0084
0.0000	0.0001	0.0004	0.1919	0.0029
0.0005	0.0020	0.0298	11.2	0.0883
0.0010	0.0041	0.0394	15.7	0.1660
0.0007	0.0055	0.0441	16.3	0.1259
0.0016	0.0142	0.0533	20.4	0.2892
0.0000	0.0002	0.0015	0.9528	0.0040
0.0000	0.0001	0.0003	0.1766	0.0027
0.0046	0.0027	0.0135	3.96	0.7673
0.0002	0.0004	0.0009	0.2585	0.0261
0.0000	0.0011	0.0020	12.9	0.0680
0.0002	0.0005	0.0008	0.0367	0.0364
0.0531	0.0141	0.2543	85.6	8.41
0.0008	0.0009	0.0330	9.94	0.1299
0.1022	0.0218	0.3316	104.2	16.2
0.0262	0.0056	0.1055	33.7	4.15
0.0001	0.0001	0.0049	1.34	0.0209
0.0009	0.0004	0.0211	5.70	0.1387
0	0	0.0000	0.0000	0.0000
0.0014	0.0008	0.0083	1.79	0.1694

0.0034	0.0055	0.0338	12.3	0.5876
0.0048	0.0052	0.0739	26.9	0.8137
0.0020	0.0019	0.0095	10.9	0.2825
0.0121	0.0129	0.1470	63.8	2.00
0.0040	0.0044	0.0759	21.7	0.6649
0.0001	0.0005	0.0011	0.3199	0.0169
	0.0000	0.0003	0.1253	
		0.0017	5.26	
	0.0001	0.0007	3.17	

CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX
27.7	1,695.7	0.0147	0.0002	0.0006
	1.35	0.0000	0.0000	
	6.05	0.0000		
15.5	626.2	0.0018		0.0004
	0.0117	0.0000		
1.67	65.2	0.0002		0.0000
	1.85	0.0000		
5.41	209.1	0.0005		0.0001
	28.8	0.0009	0.0001	
0.3076	44.0	0.0001		0.0000
	12.1	0.0005	0.0000	
0.0514	7.50	0.0000		0.0000
0.3372	4.76	0.0001		0.0000
	5.52	0.0000		
4.36	160.1	0.0003		0.0001
	1.13	0.0001		
0.0004	3.56	0.0000		0.0000
	1.40	0.0000	0.0000	
0.0186	2.97	0.0000		0.0000
	3.29	0.0000		
	3.80	0.0000	0.0000	
0.0030	0.9950	0.0000		0.0000
	0.0249	0.0000	0.0000	
	1.98	0.0000	0.0000	
	0.1947	0.0000	0.0000	
	11.3	0.0001	0.0000	
	15.8	0.0001	0.0000	
	16.4	0.0002	0.0000	
	20.7	0.0002	0.0000	
	0.9568	0.0000	0.0000	
	0.1793	0.0000	0.0000	
	4.73	0.0000	0.0000	
	0.2845	0.0000	0.0000	
0.0823	13.1	0.0000		0.0000
	0.0731	0.0000	0.0000	
	94.0	0.0025	0.0000	
	10.1	0.0002	0.0000	
	120.4	0.0027	0.0000	
	37.8	0.0010	0.0000	
	1.36	0.0000	0.0000	
	5.84	0.0001	0.0000	
	0.0000	0	0	
	1.96	0.0000	0.0000	

	12.9	0.0002	0.0000	
	27.7	0.0003	0.0000	
	11.2	0.0001	0.0000	
	65.8	0.0018	0.0000	
	22.4	0.0004	0.0000	
	0.3368	0.0000	0.0000	
0.0003	0.1257	0.0000		0.0000
	5.26	0.0000		
0.0067	3.17	0.0000		0.0000

PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX
0.0154	0.0581	0.2441	0.3177	0.0139
0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0003	0.0014	0.0018	0.0000
0.0021	0.0268	0.1233	0.1522	0.0016
0.0000	0.0000	0.0000	0.0000	0.0000
0.0002	0.0023	0.0107	0.0132	0.0002
0.0000	0.0001	0.0003	0.0004	0.0000
0.0006	0.0074	0.0340	0.0421	0.0005
0.0010	0.0007	0.0047	0.0064	0.0009
0.0001	0.0004	0.0040	0.0045	0.0001
0.0005	0.0003	0.0020	0.0028	0.0005
0.0000	0.0001	0.0007	0.0008	0.0000
0.0001	0.0001	0.0003	0.0005	0.0001
0.0000	0.0002	0.0008	0.0009	0.0000
0.0004	0.0047	0.0215	0.0266	0.0003
0.0001	0.0000	0.0002	0.0003	0.0001
0.0000	0.0000	0.0003	0.0004	0.0000
0.0000	0.0000	0.0001	0.0002	0.0000
0.0000	0.0000	0.0003	0.0003	0.0000
0.0000	0	0	0.0000	0.0000
0.0000	0.0000	0.0030	0.0031	0.0000
0.0000	0.0000	0.0010	0.0010	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0004	0.0004	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0001	0.0001	0.0014	0.0017	0.0001
0.0001	0.0002	0.0022	0.0025	0.0001
0.0002	0.0002	0.0026	0.0030	0.0002
0.0002	0.0003	0.0033	0.0037	0.0002
0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0006	0.0007	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0012	0.0013	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0026	0.0033	0.0056	0.0115	0.0024
0.0002	0.0003	0.0005	0.0009	0.0002
0.0028	0.0040	0.0069	0.0136	0.0026
0.0010	0.0013	0.0022	0.0045	0.0010
0.0000	0.0000	0.0001	0.0001	0.0000
0.0001	0.0002	0.0003	0.0006	0.0001
0	0	0	0	0
0.0000	0.0000	0.0001	0.0001	0.0000

0.0002	0.0004	0.0006	0.0012	0.0001
0.0003	0.0007	0.0012	0.0022	0.0003
0.0001	0.0001	0.0002	0.0004	0.0001
0.0018	0.0025	0.0042	0.0085	0.0018
0.0004	0.0006	0.0010	0.0019	0.0003
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0003	0.0004	0.0000
0.0000	0.0000	0.0002	0.0003	0.0000

PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW
0.0001	0.0006	0.0146	0.0145	0.1046
0.0000		0.0000	0.0000	0.0001
		0.0000	0.0001	0.0006
	0.0003	0.0019	0.0067	0.0528
		0.0000	0.0000	0.0000
	0.0000	0.0002	0.0006	0.0046
		0.0000	0.0000	0.0001
	0.0001	0.0006	0.0019	0.0146
0.0000		0.0009	0.0002	0.0020
	0.0000	0.0001	0.0001	0.0017
0.0000		0.0005	0.0001	0.0009
	0.0000	0.0000	0.0000	0.0003
	0.0000	0.0001	0.0000	0.0001
		0.0000	0.0000	0.0003
	0.0001	0.0004	0.0012	0.0092
		0.0001	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001
0.0000		0.0000	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001
		0.0000	0	0
0.0000		0.0000	0.0000	0.0013
	0.0000	0.0000	0.0000	0.0004
0.0000		0.0000	0.0000	0.0000
0.0000		0.0000	0.0000	0.0002
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0006
0.0000		0.0001	0.0000	0.0009
0.0000		0.0002	0.0001	0.0011
0.0000		0.0002	0.0001	0.0014
0.0000		0.0000	0.0000	0.0001
0.0000		0.0000	0.0000	0.0000
0.0000		0.0000	0.0000	0.0003
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0005
0.0000		0.0000	0.0000	0.0000
0.0000		0.0024	0.0008	0.0024
0.0000		0.0002	0.0001	0.0002
0.0000		0.0026	0.0010	0.0029
0.0000		0.0010	0.0003	0.0009
0.0000		0.0000	0.0000	0.0000
0.0000		0.0001	0.0000	0.0001
0		0	0	0
0.0000		0.0000	0.0000	0.0000

0.0000		0.0001	0.0001	0.0003
0.0000		0.0003	0.0002	0.0005
0.0000		0.0001	0.0000	0.0001
0.0000		0.0018	0.0006	0.0018
0.0000		0.0003	0.0001	0.0004
0.0000		0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000
		0.0000	0.0000	0.0001
	0.0000	0.0000	0.0000	0.0001

PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX
0.1338	0.0161	0.0003	0.0003	0.0167
0.0001	0.0000	0.0000		0.0000
0.0007	0.0001			0.0001
0.0615	0.0061		0.0002	0.0063
0.0000	0.0000			0.0000
0.0053	0.0006		0.0000	0.0007
0.0002	0.0000			0.0000
0.0170	0.0020		0.0001	0.0021
0.0031	0.0003	0.0000		0.0003
0.0019	0.0004	0.0000	0.0000	0.0004
0.0014	0.0001	0.0000		0.0001
0.0003	0.0001	0.0000	0.0000	0.0001
0.0002	0.0001		0.0000	0.0001
0.0004	0.0001			0.0001
0.0108	0.0016		0.0000	0.0016
0.0002	0.0000			0.0000
0.0001	0.0000		0.0000	0.0000
0.0001	0.0000	0.0000		0.0000
0.0001	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000			0.0000
0.0013	0.0000	0.0000		0.0000
0.0004	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000		0.0000
0.0002	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0008	0.0001	0.0000		0.0001
0.0011	0.0001	0.0000		0.0002
0.0014	0.0002	0.0000		0.0002
0.0016	0.0002	0.0000		0.0002
0.0001	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0003	0.0000	0.0000		0.0000
0.0000	0.0000	0.0000		0.0000
0.0006	0.0001	0.0000	0.0000	0.0001
0.0000	0.0000	0.0000		0.0000
0.0057	0.0008	0.0001		0.0009
0.0004	0.0001	0.0000		0.0001
0.0066	0.0010	0.0002		0.0011
0.0022	0.0003	0.0000		0.0004
0.0001	0.0000	0.0000		0.0000
0.0003	0.0001	0.0000		0.0001
0	0	0		0
0.0001	0.0000	0.0000		0.0000

0.0005	0.0001	0.0000		0.0001
0.0010	0.0003	0.0000		0.0003
0.0002	0.0001	0.0000		0.0001
0.0042	0.0006	0.0000		0.0006
0.0009	0.0002	0.0000		0.0002
0.0000	0.0000	0.0000		0.0000
0.0000	0.0000		0.0000	0.0000
0.0002	0.0000			0.0000
0.0001	0.0000		0.0000	0.0000

Fuel_GAS	Fuel_DSL
122.1	50.1
	0.1215
	0.5445
67.0	
	0.0011
6.97	
	0.1665
22.4	
	2.59
4.70	
	1.09
0.8001	
0.6230	
	0.4964
17.1	
	0.1017
0.3793	
	0.1256
0.3169	
	0.2957
	0.3424
0.1066	
	0.0022
	0.1782
	0.0175
	1.01
	1.43
	1.48
	1.86
	0.0861
	0.0161
	0.4254
	0.0256
1.39	
	0.0066
	8.46
	0.9067
	10.8
	3.40
	0.1228
	0.5257
	0.0000
	0.1764

	1.16
	2.50
	1.01
	5.92
	2.02
	0.0303
0.0138	
	0.5973
0.3382	

SB375 Report
Date: 08/12/2020
Time: 09:24:31
EMFAC2017 Version: v1.0.2

Field Name	Pollutant	Units	Process
CO2_RUNEX	Carbon Dioxide	Tons Per Day	Running Exhaust
CO2_IDLEX	Carbon Dioxide	Tons Per Day	Idle Exhaust
CO2_STREX	Carbon Dioxide	Tons Per Day	Start Exhaust
CO2_TOTEX	Carbon Dioxide	Tons Per Day	Total
Fuel_GAS	Fuel	1000s Gallons	Gasoline
Fuel_DSL	Fuel	1000s Gallons	Diesel

Area	Sub-Area	Cal. Year	Season
Sub-Areas	Butte (SV)	2020	Annual
Sub-Areas	Butte (SV)	2020	Annual
Sub-Areas	Butte (SV)	2020	Annual
Sub-Areas	Butte (SV)	2020	Annual
Sub-Areas	Butte (SV)	2020	Annual
Sub-Areas	Butte (SV)	2020	Annual
Sub-Areas	Butte (SV)	2020	Annual
Sub-Areas	Butte (SV)	2020	Annual
Sub-Areas	Butte (SV)	2020	Annual

Veh_Tech	EMFAC2007 Category	Population
All Vehicles	All Vehicles	103,578.9
LDA - DSL	LDA - DSL	686.4
LDA - GAS	LDA - GAS	51,939.6
LDT1 - DSL	LDT1 - DSL	13.1
LDT1 - GAS	LDT1 - GAS	6,716.8
LDT2 - DSL	LDT2 - DSL	88.4
LDT2 - GAS	LDT2 - GAS	24,010.1
MDV - DSL	MDV - DSL	428.0
MDV - GAS	MDV - GAS	19,696.6

VMT	Trips	CO2_RUNEX	CO2_IDLEX	CO2_STREX
3,709,315.1	470,323.8	1,542.7	0	37.4
25,892.7	3,149.1	7.38		
1,948,343.0	239,922.6	689.4		16.1
205.0	41.4	0.0990		
234,112.6	29,959.0	95.7		2.35
3,831.2	426.2	1.59		
830,908.8	107,337.4	384.5		9.64
18,382.9	2,031.9	9.86		
647,639.0	87,456.2	354.2		9.35

CO2_TOTEX	Fuel_GAS	Fuel_DSL
1,580.1	167.5	1.70
7.38		0.6644
705.5	75.6	
0.0990		0.0089
98.1	10.5	
1.59		0.1432
394.2	42.4	
9.86		0.8874
363.5	39.0	

SB375 Report
Date: 08/12/2020
Time: 11:04:09
EMFAC2017 Version: v1.0.2

Field Name	Pollutant	Units	Process
CO2_RUNEX	Carbon Dioxide	Tons Per Day	Running Exhaust
CO2_IDLEX	Carbon Dioxide	Tons Per Day	Idle Exhaust
CO2_STREX	Carbon Dioxide	Tons Per Day	Start Exhaust
CO2_TOTEX	Carbon Dioxide	Tons Per Day	Total
Fuel_GAS	Fuel	1000s Gallons	Gasoline
Fuel_DSL	Fuel	1000s Gallons	Diesel

Area	Sub-Area	Cal. Year	Season
Sub-Areas	Butte (SV)	2035	Annual
Sub-Areas	Butte (SV)	2035	Annual
Sub-Areas	Butte (SV)	2035	Annual
Sub-Areas	Butte (SV)	2035	Annual
Sub-Areas	Butte (SV)	2035	Annual
Sub-Areas	Butte (SV)	2035	Annual
Sub-Areas	Butte (SV)	2035	Annual
Sub-Areas	Butte (SV)	2035	Annual
Sub-Areas	Butte (SV)	2035	Annual

Veh_Tech	EMFAC2007 Category	Population
All Vehicles	All Vehicles	130,852.4
LDA - DSL	LDA - DSL	968.8
LDA - GAS	LDA - GAS	80,834.7
LDT1 - DSL	LDT1 - DSL	1.04
LDT1 - GAS	LDT1 - GAS	7,521.6
LDT2 - DSL	LDT2 - DSL	211.6
LDT2 - GAS	LDT2 - GAS	24,404.1
MDV - DSL	MDV - DSL	537.6
MDV - GAS	MDV - GAS	16,372.8

VMT	Trips	CO2_RUNEX	CO2_IDLEX	CO2_STREX
4,593,191.4	600,975.0	1,794.1	0	44.1
34,542.4	4,496.0	9.72		
2,906,323.6	375,649.0	1,005.5		24.4
34.4	4.63	0.0184		
256,907.3	34,094.6	103.6		2.61
7,766.6	992.1	3.22		
833,179.5	110,509.2	372.5		9.48
18,520.8	2,456.2	9.96		
535,917.0	72,773.2	289.6		7.64

CO2_TOTEX	Fuel_GAS	Fuel_DSL
1,838.2	194.0	2.06
9.72		0.8751
1,029.9	110.1	
0.0184		0.0017
106.2	11.3	
3.22		0.2896
382.0	40.8	
9.96		0.8967
297.2	31.8	

Area	Sub-Area	Cal. Year	Season	Veh_Tech	EMFAC2007 Category
Sub-Areas	Butte (SV)	2005	Annual	All Vehicles	All Vehicles
Sub-Areas	Butte (SV)	2005	Annual	LDA - DSL	LDA - DSL
Sub-Areas	Butte (SV)	2005	Annual	LDA - GAS	LDA - GAS
Sub-Areas	Butte (SV)	2005	Annual	LDT1 - DSL	LDT1 - DSL
Sub-Areas	Butte (SV)	2005	Annual	LDT1 - GAS	LDT1 - GAS
Sub-Areas	Butte (SV)	2005	Annual	LDT2 - DSL	LDT2 - DSL
Sub-Areas	Butte (SV)	2005	Annual	LDT2 - GAS	LDT2 - GAS
Sub-Areas	Butte (SV)	2005	Annual	MDV - DSL	MDV - DSL
Sub-Areas	Butte (SV)	2005	Annual	MDV - GAS	MDV - GAS

Population	VMT	Trips	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CO2_TOTEX
114,593.1	3,831,740.0	706,813.0	1,793.5	0	72.3	1,865.8
484.2	12,108.7	2,811.6	4.61			4.61
57,610.8	1,865,361.4	356,342.1	702.0		29.8	731.8
50.0	1,077.8	286.4	0.4887			0.4887
9,113.9	251,422.9	51,814.1	110.7		5.94	116.7
4.10	87.6	23.5	0.0470			0.0470
27,881.5	950,533.0	173,203.4	493.8		19.6	513.4
131.1	2,513.8	747.6	1.74			1.74
19,317.5	748,634.9	121,584.3	480.1		16.9	497.0

Fuel_GAS	Fuel_DSL
202.6	0.6195
	0.4146
79.7	
	0.0440
13.4	
	0.0042
55.8	
	0.1567
53.6	

Area	Sub-Area	Cal. Year	Season	Veh_Tech	EMFAC2007 Category
Sub-Areas	Butte (SV)	2020	Annual	All Vehicles	All Vehicles
Sub-Areas	Butte (SV)	2020	Annual	LDA - DSL	LDA - DSL
Sub-Areas	Butte (SV)	2020	Annual	LDA - GAS	LDA - GAS
Sub-Areas	Butte (SV)	2020	Annual	LDT1 - DSL	LDT1 - DSL
Sub-Areas	Butte (SV)	2020	Annual	LDT1 - GAS	LDT1 - GAS
Sub-Areas	Butte (SV)	2020	Annual	LDT2 - DSL	LDT2 - DSL
Sub-Areas	Butte (SV)	2020	Annual	LDT2 - GAS	LDT2 - GAS
Sub-Areas	Butte (SV)	2020	Annual	MDV - DSL	MDV - DSL
Sub-Areas	Butte (SV)	2020	Annual	MDV - GAS	MDV - GAS

Population	VMT	Trips	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CO2_TOTEX
92,458.9	3,671,049.5	570,939.1	1,642.1	0	55.3	1,697.4
626.6	25,731.8	3,831.5	9.47			9.47
52,013.5	2,151,109.3	325,700.0	804.6		26.4	831.0
16.1	312.3	70.3	0.1412			0.1412
4,210.6	154,428.3	25,038.3	67.0		2.34	69.3
26.5	1,255.2	165.5	0.6240			0.6240
19,854.7	790,217.4	121,320.0	404.1		13.4	417.6
186.9	8,349.3	1,132.7	5.39			5.39
15,523.9	539,646.0	93,680.9	350.7		13.2	363.9

Fuel_GAS	Fuel_DSL
180.4	1.41
	0.8519
89.0	
	0.0127
7.48	
	0.0562
44.8	
	0.4850
39.2	

Area	Sub-Area	Cal. Year	Season	Veh_Tech	EMFAC2007 Category
Sub-Areas	Butte (SV)	2035	Annual	All Vehicles	All Vehicles
Sub-Areas	Butte (SV)	2035	Annual	LDA - DSL	LDA - DSL
Sub-Areas	Butte (SV)	2035	Annual	LDA - GAS	LDA - GAS
Sub-Areas	Butte (SV)	2035	Annual	LDT1 - DSL	LDT1 - DSL
Sub-Areas	Butte (SV)	2035	Annual	LDT1 - GAS	LDT1 - GAS
Sub-Areas	Butte (SV)	2035	Annual	LDT2 - DSL	LDT2 - DSL
Sub-Areas	Butte (SV)	2035	Annual	LDT2 - GAS	LDT2 - GAS
Sub-Areas	Butte (SV)	2035	Annual	MDV - DSL	MDV - DSL
Sub-Areas	Butte (SV)	2035	Annual	MDV - GAS	MDV - GAS

Population	VMT	Trips	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CO2_TOTEX
121,125.5	4,520,626.6	755,511.0	1,955.3	0	69.8	2,025.2
959.8	35,770.3	6,055.2	13.2			13.2
81,748.7	3,036,919.4	514,227.1	1,144.6		42.0	1,186.6
1.92	74.9	11.8	0.0320			0.0320
3,493.3	135,589.0	21,525.8	59.5		2.05	61.6
46.3	1,864.0	292.4	0.9291			0.9291
22,186.6	865,093.0	137,798.7	444.3		15.3	459.6
294.5	11,650.5	1,848.6	7.53			7.53
12,394.4	433,665.5	73,751.4	285.2		10.5	295.7

Fuel_GAS	Fuel_DSL
214.0	1.95
	1.19
126.7	
	0.0029
6.58	
	0.0836
49.1	
	0.6781
31.6	

		2020 RTP (New Model)			
Year	**2005**	**2018 (Base)**	**2020**	**2035**	**2040**
Population[1]	208,322	222,378	223,157	251,863	259,524
Housing	85,478	99,353	86,929	111,339	115,235
Jobs (Non-Farm)	73,400	83,921	83,452	89,071	92,188
VMT (w/o X-X)	4,710,611	4,705,417	4,343,919	5,181,813	5,332,327
VMT per Capita (SB 375)	22.61	21.16	19.47	20.57	20.55
% Change from 2005		-6.42%	-13.91%	-9.01%	-9.13%
EMFAC 2014					
SB 375 CO2 per Capita (lbs/day) EMFAC 2014	17.91	16.63	15.21	16.08	16.07
% Change from 2005		-7%	-15%	-10%	-10%
** Regional Target (CARB)*			-6%	-7%	

* Targets are expressed as a percent change in per capita passenger vehicle greenhouse gas emissions relative to 2005

[1] Excludes group quarters population

Appendix C

Biological Resources Background Information

Habitats in the Plan Area

Tree Dominated Habitats

Subalpine Conifer

Subalpine Conifer habitat type is found in the extreme northeast corner of Butte County. This habitat type is composed of open structure evergreen forests at high elevations and typically occupies extremely harsh environments. Mountain hemlock *(Tsuga mertensiana)*, western white pine *(Pinus monticola)*, lodgepole pine (Pinus contorta), and whitebark pine (Pinus albicaulis) are tree species that typify this habitat type. Soils are generally thin and of low quality coarse sand, gravel, volcanic debris, and rocks derived from decomposing parent material. Most stands of subalpine conifer are on dry, well-drained soils. Precipitation averages 30 to 50 inches and heavy snow cover is usual. Mean summer high temperatures generally do not exceed 65 degrees Fahrenheit (F) and killing frosts are possible during all months. Intense winds are also characteristic of this habitat. These harsh conditions typically support fewer species than any other major forest type in the State.

Red Fir

Red Fir habitat type is found in the extreme northeast corner of Butte County and occurs from approximately 6,000 to 9,000 feet (ft) in elevation. This habitat type is typified by even-aged groups of red fir (*Abies magnifica*) trees. Red Fir habitat is found on frigid soils of very wet sites. Annual precipitation ranges from 40 to 50 inches per year, primarily as snow that forms packs up to 15 feet in winter. Summers are dry, limiting tree growth to seasonally available soil moisture. Red fir habitat provides food and cover to many species and is considered a very important habitat for goshawk (*Accipiter gentilis*), blue grouse (*Dendragapus fuliginosus*), great gray owl (*Strix nebulosa*), red fox (*Vulpes vulpes*), American marten (*Martes americana*), and wolverine (*Gulo gulo*).

Lodgepole Pine

Lodgepole Pine habitat type is found in the extreme northeast corner of Butte County and occurs above 5,900 feet in elevation. It is typically found above the red fir habitat type and below other subalpine conifer habitats. Lodgepole pine habitat typically forms open stands of similarly sized trees with a sparse understory. Lodgepole pine is commonly associated with meadows and it typically occupies areas with seasonally wet soils. Annual precipitation in the Lodgepole Pine zone averages from 30 to 40 inches annually, mostly as snow. The growing season is short, averaging 2 to 3 months. Lodgepole pine habitat generally has low species richness.

Sierran Mixed Conifer

Sierran Mixed Conifer habitat is found on the eastern edge of Butte County in the higher elevations. It is typified by white fir (*Abies concolor*), Douglas fir (*Pseudotsuga menziesii*), ponderosa pine (*Pinus ponderosa*), sugar pine (*Pinus lambertiana*), incense cedar (*Calocedrus decurrens*), and California black oak (*Quercus kelloggii*). This habitat type is found in varied soils, ranging from deep to shallow. Serpentine soils, found primarily in the northern mixed conifer zone, support a number of endemic plants. Fissures and cracks in granitic parent material often support forest growth, even where soil development is shallow. Temperatures range from 40 to 96 degrees F in summer and 10 to 60 degrees F in winter, and decrease with elevation. Precipitation ranges from 30 to 90 inches per year, from October to May, with increasing snowfall as elevation increases. Sierran Mixed Conifer is extremely important

habitat for many sensitive species, such as California spotted owl (*Strix occidentalis occidentalis*), bald eagle (*Haliaeetus leucocephalus*), peregrine falcon (*Falco peregrinus*), fisher (*Martes pennanti*), and American marten.

White Fir

White Fir habitat type is found at mid to high elevations in northern and northeastern Butte County. This habitat type is fairly monotypic, and is composed of an average of 80 percent white fir trees. Soils are coarse textured, well-drained, have poorly developed profiles, are often rocky, and are cold, with mean annual temperatures from 32 to 50 degrees F. Cooler north- and east-facing slopes are the most common sites where White Fir habitat occurs throughout the State. Precipitation is between 30 to 70 inches, mostly in the form of snow. Almost all precipitation falls between October and May. Wildlife habitat quality increases, mostly in the form of snag trees, as the maturity of these forests increases. White fir is the preferred tree species for many forest-dwelling insect-gleaning songbirds.

Douglas Fir

Douglas Fir habitat type is found in eastern Butte County in the mid to higher elevations. Douglas fir, tanoak (*Notholithocarpus desniflorus*), and ponderosa pine typify the canopy of this habitat type. The Douglas Fir habitat type is typically found in areas with hot, dry summers and cool, mild, wet winters. Temperatures range from 57 to 72 degrees F in the summer to 32 to 46 degrees F in the winter. Annual precipitation varies from 24 to 27 inches, with generally less than 15 percent falling during summer. Topography is characterized by rugged, deeply dissected terrain and steep slopes, especially toward the south. The Douglas Fir habitat type supports a wide variety of wildlife species, many considered sensitive, threatened, or endangered.

Jeffrey Pine

Jeffrey Pine habitat type occurs in the extreme northeast corner of Butte County at high elevations. Tree species typically found in the Jeffrey Pine habitat type are Jeffrey pine (*Pinus jeffreyi*), ponderosa pine, and sugar pine. The tolerance of Jeffrey pine to low temperatures allows the habitat type to occupy the borders of topographic frost pockets and high cold ridges. It is commonly found on soils developed from granite and lava flows, but can also develop as a type on ultramafic soils. Jeffrey pine is not restricted by aspect or slope. Jeffrey Pine habitat is intermediate in wildlife species richness between warmer forest at lower elevations, and colder forests at higher elevations. Jeffrey pine seeds are included in the diet of more wildlife species than any other genus besides oak.

Ponderosa Pine

Ponderosa Pine habitat type is found in eastern Butte County from mid to higher elevations. The canopy is typified by ponderosa pine, Jeffrey pine, and Douglas fir. Ponderosa Pine habitat type is found on all aspects, depending on soils and location within the local elevation range. Ponderosa Pine stands occur above Valley Oak Woodland, Blue Oak Woodland, Blue Oak-Foothill Pine, and below Mixed Conifer habitat types. Mean annual temperature is generally less than 55 degrees F and precipitation is greater than 33 inches. Less than one-third of the precipitation is snowfall. The Ponderosa Pine habitat type is sometimes a transitional or migratory habitat for deer and can be extremely important to deer nutrition in migration holding areas.

Eastside Pine

Eastside Pine habitat type is found at mid to high elevations in northern and northeastern Butte County. The canopy is typified by short to moderate height ponderosa pine, Jeffrey pine, and white fir. It occurs on coarse, well-drained basaltic soils in a drier, colder setting than the Ponderosa Pine habitat type. Eastside pine occupies an intermediate, less harsh environment than Jeffrey pine, which occurs above and intermingles with eastside pine. Large pine branches form good nesting substrates for large raptors. Eastside pine stands often form important migratory and winter range for deer. Higher elevation stands with grassy understories near water may be extremely important deer fawning areas and migratory holding areas.

Juniper

Juniper habitat type occurs at mid elevations in the foothills of Butte County. The canopy of the juniper habitat type is typified by western juniper (*Juniperus occidentalis*), white fir, and Jeffrey pine. Juniper habitat type occurs on ridges, slopes, alluvial fans, and valley bottoms on soils that are porous, rocky, coarse, sandy, or silty, and often very shallow. Juniper berries are an important food source for wintering birds.

Aspen

Aspen habitat type occurs at high elevations near seeps, streams, and meadows on eastern slopes in northeastern Butte County. The Aspen habitat type is dominated by quaking aspens (*Populus tremuloides*), with subdominant species such as willow species (*Salix* sp.), and black cottonwood (*Populus trichocarpa*). A high water table during the early part of the growing season is required, and their presence is an indicator of moist conditions. Sites with permanent high water tables are occupied by willows, with which aspens may form ecotones. Soils range from shallow stony soils and loamy sands, to heavy clays. Best development occurs on well-drained sandy to silt loam soils. The climate has rigorous, long winters with heavy snows and very cold temperatures. Mesic sites produce large numbers of insects that are a large food source of many migratory birds. Meadows associated with the Aspen habitat type provide important deer fawning areas.

Closed-Cone Pine-Cypress

Closed-Cone Pine-Cypress habitat type occurs in the extreme southeast corner of Butte County at mid to high elevations. More specifically, this habitat type occurs southeast of Lake Oroville. Macnab cypress (*Cupressus macnabiana*) occurs in low abundance in this habitat type when found in Butte County. This habitat type is dominated by pines such as knobcone pine (*Pinus attenuata*). It often occurs as “arboreal islands” within a matrix of chaparral or Montane Hardwood-Conifer or Mixed Conifer habitats. This habitat type is typically found on sites that are more rocky and infertile than the surrounding soils. Many stands are found on serpentine soils. Although typically found at low elevations due to the coastal distribution of much of this habitat type, interior stands may be found at elevations up to 6550 feet. Landforms are gentle to steep slopes where stands occur in interior California. Numerous wildlife species use this habitat type for feed and cover.

Montane Hardwood-Conifer

Montane Hardwood-Conifer habitat occurs over eastern Butte County and some of the western portions of northern Butte County. The closed canopy of this habitat type is typified by ponderosa pine, incense cedar, and California black oak. It generally occurs on coarse, well drained mesic soils, in mountainous terrain with narrow valleys. Slopes average approximately 57 percent with all aspects encountered.

Winters are cool and wet; summers are hot and dry. Northern California Montane Hardwood-Conifer sites have less rainfall and fog than Redwood or Mixed Conifer habitats. Average rainfall is 25 to 65 inches, with some fog. The Montane Hardwood-Conifer habitat type provides valuable wildlife habitat for cavity nesting birds, as well as an abundant food source from masting hardwoods.

Montane Hardwood

Montane Hardwood habitat occurs over eastern Butte County and some of the western portions of northern Butte County. The canopy of this habitat type is dominated by canyon live oak (*Quercus chrysolepis*), California black oak, and Oregon white oak (*Quercus garryana*). It is found on a wide range of slopes, especially those that are moderate to steep. Soils are for the most part rocky, alluvial, coarse textured, poorly developed, and well drained. Soil depth ranges from shallow to deep. Summer temperatures vary between 68 and 77 degrees F and in winter vary from 37 to 45 degrees F. Animal species characteristic of the Montane Hardwood habitat include disseminators of acorns, such as the acorn woodpecker (*Melanerpes formicivorus*), and other species that utilize acorns as a major food source (e.g. dusky-footed woodrat [*Neotoma fuscipes*], black bear [*Ursus americanus*], and mule deer [*Odocoileus hemionus*]). Many species of amphibians and reptiles are found on the forest floor in Montane Hardwood habitat.

Blue Oak Woodland

Blue Oak Woodland habitat type occurs in the foothills of Butte County. The canopy of this habitat type possesses a scattered overstory dominated by blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizeni*), and California buckeye (*Aesculus californica*). It is usually associated with shallow, rocky, infertile, well-drained soils from a variety of parent materials. The climate is Mediterranean, with mild wet winters and hot dry summers. Average annual precipitation varies from 20 to 40 inches over most of the range, although extremes are noted from 10 to 60 inches. Mean temperatures range from 75 to 96 degrees F in summer and 29 to 42 degrees F in winter. Blue Oak Woodland habitat is important for cavity nesting birds, as well as the many species that forage on the acorns of these trees.

Valley Oak Woodland

Valley Oak Woodland habitat type occurs in the western portion of Butte County in low elevations. This habitat type occurs in a wide range of physiographic settings but is best developed on deep, well-drained alluvial soils, usually in valley bottoms. Valley oak (*Quercus lobata*) trees dominate the canopy of this habitat type. Other trees associated with the Valley Oak Woodland habitat in the Central Valley include California sycamore (*Platanus racemosa*), interior live oak, and blue oak. Most large, healthy valley oaks are probably rooted down to permanent water supplies. Valley Oak Woodlands are associated with a Mediterranean climate; mild, wet winters and hot, dry summers. These woodlands provide food and cover for many species of wildlife.

Blue Oak-Foothill Pine

Blue Oak-Foothill Pine habitat type occurs in the mid elevation foothills of Butte County. This habitat type is typically diverse in structure both vertically and horizontally. The canopy is typically composed of blue oak, foothill pine, and interior live oak. Blue Oak-Foothill Pine is associated with a Mediterranean climate with hot, dry summers and cool, wet winters. Most precipitation falls as rain from November through April, averaging 20 to 40 inches within the primary range of blue oak. The frost-free growing season ranges from 150 to 300 days, with winter temperatures averaging 30 degrees F and summer temperatures averaging 90 degrees F. Soils are from a variety of generally well-drained parent materials,

ranging from gravelly loam to stony clay loam, with soils commonly rich in rock fragments. This habitat type is used by a large variety of wildlife species, although no species is totally dependent on it for breeding, feeding, or cover.

Eucalyptus

Eucalyptus habitat type occurs in low elevations of western Butte County. Both blue gum eucalyptus (*Eucalyptus globulus*) and red gum eucalyptus (*Eucalyptus camaldulensis*) have been extensively planted throughout the state since their introduction in 1856, with large-scale planting operations beginning in 1870. As such, they are found in locations with highly variable site characteristics. Generally, they are found on relatively flat or gently rolling terrain, occasionally in the foothills. Climatic conditions are typically referred to as Mediterranean, characterized by hot, dry summers and cool, mild winters. Precipitation ranges from approximately 12 to 24 inches. Eucalyptus demonstrates the ability to withstand many temperature conditions, with the exception of prolonged cold or freezing weather. Eucalyptus trees are important as roosts, perches, and nest sites for a number of bird species, particularly raptors. Hummingbirds use the nectaries of eucalyptus as a significant food source.

Montane Riparian

Montane Riparian habitat type is found in high elevations of eastern Butte County. This habitat type is found associated with montane lakes, ponds, seeps, bogs and meadows as well as rivers, streams and springs. Water may be permanent or ephemeral. The canopy is dominated by black cottonwood, bigleaf maple (*Acer macrophyllum*), and white alder (*Alnus rhombifolia*). The growing season extends from spring until late fall, becoming shorter at higher elevations. Most tree species flower in early spring before leafing out. Riparian habitats offer exceptionally high value for many wildlife species by providing water, thermal cover, migration corridors, and diverse nesting and feeding opportunities.

Valley-Foothill Riparian

Valley-Foothill Riparian habitat type occurs in the low elevation of western Butte County. The canopy of this habitat is typified by cottonwood species, sycamore, and valley oak. This habitat type is found in valleys bordered by sloping alluvial fans, slightly dissected terraces, and lower foothills. They are generally associated with low-velocity flows, flood plains, and gentle topography. Valleys provide deep alluvial soils and a high water table. The substrate is coarse, gravelly or rocky soils more or less permanently moist, but probably well aerated. Frost and short periods of freezing occur in winter (200 to 350 frost-free days). This habitat type is located within areas featuring a Mediterranean climate; characterized by hot, dry summers and mild, wet winters. Mean temperatures range from 75 to 102 degrees F in the summer to 29 to 44 degrees F in the winter. Average precipitation ranges from 6 to 30 inches, with little or no snow. The Valley-Foothill Riparian habitat type provides significant sources of food, water, migration and dispersal corridors, and escape, nesting, and thermal cover for an abundance of wildlife.

Shrub Dominated Habitats

Low Sage

Low Sage habitat type occurs in the high elevations of north and northeastern Butte County. The shrub layer is relatively spread out and consists of low sagebrush (*Artemisia arbuscula*), black sagebrush (*Artemisia nova*), and rubber rabbitbrush (*Ericameria nauseosa*). The habitat occurs in areas with cold, harsh winters and hot, dry summers. Precipitation generally ranges from 8 to 18 inches, falling mostly as

snow from December through March. Stands of low sagebrush are usually found on shallow soils with impaired drainage in the transition zone between the wetter bottom and open timber on the mountainsides. The type also occurs on terraces with hardpan or heavy clay soils. In mosaics formed with bitterbrush (*Purshia tridentata*), low sagebrush occurs on harsher sites with shallow, well-drained soils, and bitterbrush occupies areas with deeper soils. The clay-rich soils yield much of their snowmelt as runoff, making them very important watershed areas. Low Sage habitat tends to lose its snow cover earlier in spring than surrounding habitats; thus it provides an especially important source of new, green forage for mule deer.

Bitterbrush

Bitterbrush habitat type occurs in the extreme northeast corner of Butte County at high elevation. The habitat type is dominated by bitterbrush, big sagebrush (*Artemisia tridentata*), and rubber rabbitbrush. Overstory species are often ponderosa or Jeffrey pine, lodgepole pine, or western juniper. Bitterbrush habitat is found on flats and slopes with deep, well-drained, rapidly permeable soils having a slightly acidic reaction (pH 6.0 to 7.0). Precipitation in Bitterbrush habitat varies from about 12 to 35 inches and is in the form of mostly snow in the winter. Summers are warm and winters are very cold in Bitterbrush habitat. Basins and lowlands that have restricted drainage or alkali give way to low sagebrush, silver sagebrush, or one of the more moisture-tolerant species. Bitterbrush is highly digestible and its leaves and twigs are favored by mule deer. Many bird species will eat the seeds or the insects that are commonly feeding on bitterbrush.

Sagebrush

Sagebrush habitat type occurs at middle and high elevations in northern and northeastern Butte County. Sagebrush habitat type is often composed of large, discontinuous stands of big sagebrush. Some other species found within Sagebrush habitat are rabbitbrush, horsebrush (*Tetradymia canescens*), and gooseberry (*Ribes uva-crispa*). At high elevations Sagebrush habitat intergrades with Ponderosa Pine and Aspen habitat types. This habitat type is important summer grounds for mule deer and is used by a wide variety of bird and mammal species.

Montane Chaparral

Montane Chaparral habitat type is found from mid to high elevations in eastern Butte County. In the northern portion of the state, Montane Chaparral is found from 3000 to 9000 feet in elevation. Montane Chaparral can be found on shallow to deep soils on all exposures and from gentle to relatively steep slopes. Montane Chaparral is typified by ceanothus species, manzanita species (*Arctostaphylus* sp.), and bitter cherry (*Prunus emarginata*). It may dominate on more xeric sites, but occurs locally throughout the coniferous forest zone. Generally, the climatic conditions are like that associated with the coniferous forest zone; cold winter temperatures with substantial precipitation. Summers are typically hot and dry. Rodents, deer, birds, and other herbivores often make extensive use of chaparral. It provides seeds, fruits, insects, protection from predators and climate, as well as singing, roosting and nesting sites.

Mixed Chaparral

Mixed Chaparral habitat type occurs at mid to high elevations in eastern Butte County. This habitat type is commonly comprised of scrub oak (*Quercus berberidifolia*), ceanothus species, and manzanita species. It occurs on all aspects, but at lower elevations it is generally found on north-facing slopes. Generally, it occurs on steep slopes and ridges with relatively thin, well -drained soils. Soils can be rocky, sandy, gravelly, or heavy. Mixed Chaparral habitat occurs within Mediterranean climates characterized by cool,

wet winters and hot, dry summers. Total rainfall is 15 to 25 inches, with less than 20 percent falling during the summer. Wildlife management considerations usually focus on selecting alternative fire management treatments. This habitat type is similar to Chamise-Redshank Chaparral.

Chamise-Redshank Chaparral

Chamise-Redshank Chaparral habitat type is found at mid to high elevations in eastern Butte County. Fire is the main component influencing Chamise-Redshank Chapparral habitat structure. This habitat type is found in a Mediterranean climate; rainfall is 15 to 25 inches, less than 20 percent of total precipitation falls in summer, and winters are mild. The predominant land forms are steep slopes and ridges. Chamise (*Adenostoma fasciculatum*) is the dominant species with redshank (*Persicaria maculosa*), and Ceanothus species as the subdominant species. Chamise-dominated stands are most common on south- and west-facing slopes; redshank is found on all aspects. Soils are usually thin with little accumulation of organic material. Chamise may be a dominant shrub on some serpentine sites.

Herbaceous Dominated Habitats

Annual Grassland

Annual Grassland habitat type is found over the entirety of Butte County. It is typically dominated by wild oats (*Avena fatua*), soft chess (*Bromus hordeaceus*), and other brome species. This habitat type occurs mostly on flat plains to gently rolling foothills, often as the understory to valley oak woodlands. Climatic conditions are typically Mediterranean, with cool, wet winters and dry, hot summers. The length of the frost-free season averages 250 to 300 days. Many wildlife species use Annual Grasslands for foraging, but some require special habitat features such as cliffs, caves, ponds, or habitats with woody plants for breeding, resting, and escape cover.

Perennial Grassland

Perennial Grassland habitat type occurs over the entirety of Butte County. California oatgrass (*Danthonia californica*), Pacific hairgrass (*Deschampsia cespitosa*), and sweet vernalgrass (*Anthoxanthum odoratum*) are typical species found in Perennial Grassland. This habitat type typically occurs on ridges and south-facing slopes, alternating with forest and scrub in the valleys and on north-facing slopes. Historically, factors that have affected Perennial Grassland habitat include the introduction of non-native annual plant species, increased grazing pressure, elimination of frequent fires, and cultivation. Perennial Grassland habitats are most often found on Mollisols. Perennial grasslands are most productive in wetter and cooler conditions and provide optimal habitat for many species of wildlife.

Wet Meadow

Wet Meadow habitat type occurs in mid to high elevations in eastern Butte County. Dominant species in the Wet Meadow habitat type include sedge species (*Carex* sp.), rush species (*Juncus* sp.), and hairgrass species (*Deschampsia* sp.). This habitat type occurs where water is at or near the surface most of the growing season. Hydrologically, they occupy lotic, sunken concave, and hanging sites. They frequently occur on rather steep slopes, and downstream runoff is the main output flow. Surface flows, although constant, are usually no more than 0.4 inches deep. Various mammals, frogs, waterfowl, and blackbirds often use Wet Meadow habitat.

Fresh Emergent Wetland

Fresh Emergent Wetland habitat type has the potential to occur over the entirety of Butte County. Fresh Emergent Wetland is characterized by erect, rooted herbaceous hydrophytes. Dominant vegetation is generally perennial monocots. This habitat type occurs on virtually all exposures and slopes, provided a basin or depression is saturated or at least periodically flooded. They are most common on level to gently rolling topography. They are found in various depressions or at the edge of rivers or lakes. Soils are predominantly silt and clay, although coarser sediments and organic material may be intermixed. In some areas organic soils (peat) may constitute the primary growth medium. Climatic conditions are highly variable and range from the extreme summer heat to winter temperatures well below freezing. Fresh Emergent Wetlands are among the most productive wildlife habitats in California. Fresh Emergent Wetlands function as a filtering and purifying system for much of the State's water.

Pasture

Pasture habitat type is found in the valley, or western portion, of Butte County. Pastures often contain Bermuda grass (*Cynodon dactylon*), perennial ryegrass (*Festuca perennis*), and tall fescue *(Festuca arundinacea*). They are planted on flat and gently rolling terrain. Climate influences the length of growing season. For example, pastures at higher elevations, or in the north, have a shorter growing season. Pastures are used by a variety of wildlife depending upon geographic area and types of adjacent habitats. Ground-nesting birds use pastures if adequate residual vegetation is present at the onset of the nesting season.

Aquatic Habitats

Riverine

Riverine habitat type is found across Butte County wherever rivers and streams are found. Water moss (*Fontinalis antipyretica*), algae, and duckweed (*Lemna* sp.) are often the dominant aquatic plants found in the Riverine habitat type. Riverine habitats are also found contiguous to Lacustrine and Fresh Emergent Wetland habitats. This habitat requires intermittent or continually running water generally originating at some elevated source, such as a spring or lake. Velocity generally declines at progressively lower altitudes, and the volume of water increases until the enlarged body of water finally becomes sluggish. Over this transition from a rapid, surging stream to a slow, sluggish river, water temperature and turbidity will tend to increase, dissolved oxygen will decrease and the bottom will change from rocky to muddy. Many sensitive, threatened, and endangered aquatic species utilize Riverine habitats. Bird species use the Riverine habitat type extensively, as well as mammals such as river otter (*Lontra canadensis*), mink (*Neovison vison*), muskrat (*Ondatra zibethicus*), and beaver (*Castor canadensis*).

Lacustrine

Lacustrine habitat type is found across Butte County wherever there are inland depressions or dammed riverine channels containing standing water. Typical species found in the Lacustrine habitat type are plankton, duckweed, yellow pond-lily (*Nuphar lutea*), and American white water-lily (*Nymphaea odorata*). These habitats may occur in association with any terrestrial habitats, Riverine or Fresh Emergent Wetlands. They may vary from small ponds less than one hectare to large areas covering several square kilometers. Depth can vary from a few centimeters to hundreds of meters. Typical lacustrine habitats include permanently flooded lakes and reservoirs, intermittent lakes and ponds (including vernal pools) so shallow that rooted plants can grow over the bottom. Most permanent

lacustrine systems support fish life; intermittent types usually do not. Many species of wildlife congregate at Lacustrine habitats and utilize them for reproduction, food, water, and cover.

Developed Habitats

Dryland Grain Crops

Dryland Grain Crops habitat type occurs in the lowlands of western Butte County. Cereal rye (*Secale cereale*), barley (*Hordeum vulgare*), and wheat (*Triticum aestivum*) are typical crops farmed in the Dryland Grain Crops habitat type. They are often located on flat to gently rolling terrain. When flat terrain is put into crop production, it usually is leveled to facilitate irrigation. Rolling terrain is either dry farmed or irrigated by sprinklers. Soils often dictate the crops grown. Barley can grow on poor quality soils, such as saline or alkaline soils. Climate also influences the types of crops grown. Grain crops have reduced wildlife habitat richness and diversity in these areas. Small mammals, some birds, and raptors will forage in this habitat type.

Irrigated Grain Crops

Irrigated Grain Crops habitat type occurs in the lowlands of western Butte County. Corn (*Zea mays*), dry beans, and safflower (*Carthamus tinctorius*) are typical crops farmed in the Irrigated Grain Crops habitat type. They are often located on flat to gently rolling terrain. When flat terrain is put into crop production, it usually is leveled to facilitate irrigation. Rolling terrain is either dry farmed or irrigated by sprinklers. Soils often dictate the crops grown. Corn requires better soils than barley, which can grow on poor quality soils, such as saline and alkaline soils. Rice (*Oryza* sp.) and barley can do well on clay soils not suitable for other crops. Leaching can remove contaminants in areas of high salt or alkali levels, making the soils highly productive. Climate also influences the types of crops grown. Irrigated grain and seed crops are established on the State's most fertile soils, which historically supported an abundance of wildlife unequalled in other sites. Croplands have greatly reduced the wildlife habitat richness and diversity in California. Small mammals, some birds, and raptors will forage in this habitat type.

Irrigated Hayfield

Irrigated Hayfield habitat type occurs in the valley, or western portion of Butte County. It occurs in variable climates, from hot and dry, to cool and wet, to cold and snowy. Irrigated hayfield requires relatively flat topography that allows irrigation or water-spreading. Soils are highly variable but usually more than 1 meter (3.3 feet) deep and often of alluvial origin. Alfalfa (*Medicago sativa*) and hay are crops typically farmed in the Irrigated Hayfield habitat type. This habitat provides a high quality seasonal resource for many birds, mammals, and snakes. However, where harvesting is constant, reproduction values for ground-nesting species are reduced to zero. If rotational cropland is adjacent, this habitat can provide cover during seasonal disking and planting on the rotated fields.

Irrigated Row and Field Crops

Irrigated Row and Field Crops habitat type occurs in the valley, or the western portion of Butte County. Tomatoes, cotton, and lettuce are typical crops farmed on the Irrigated Row and Field Crops habitat type. They are often located on flat to gently rolling terrain. When flat terrain is put into crop production, it usually is leveled to facilitate irrigation. Rolling terrain is either dry farmed or irrigated by sprinklers. Soils often dictate the crops grown. Cotton and sugar beets can grow on poor quality and alkaline soils. These soils are not suited for many row and field crops unless leaching of salts is practiced. Leaching can remove contaminants in areas of high salt or alkali levels, making the soils highly

productive. Climate also influences the types of crops grown. Row and field crops are established on the State's most fertile soils, which historically supported an abundance of wildlife unequalled in other areas. Croplands have greatly reduced the wildlife habitat richness and diversity in California. Small mammals, some birds, and raptors will forage in this habitat type. Monoculture often results in very low species richness in this habitat type.

Rice

Rice habitat type occurs in the valley, or western portion of Butte County. It is usually located on flat terrain. When flat terrain is put into rice production, it usually is leveled to facilitate irrigation. Rice can grow on poor quality soils. Rice and barley can grow well on clay soils not suitable for other crops. Leaching or flushing can remove contaminants in areas of high salt or alkali levels, making the soils more productive, which has occurred throughout the Sacramento Valley. Rice fields are supportive of many types of waterfowl, shorebirds, and raptors. They offer foraging opportunities in the form of waste grain and migration refugia.

Deciduous Orchard

Deciduous Orchard habitat type can be found on flat alluvial soils in the valley floors of Butte County, in rolling foothill areas, or on relatively steep slopes. Though some deciduous orchards are non-irrigated, most are irrigated. Some flat soils are flood irrigated, but many deciduous orchards are sprinkler irrigated. Large numbers of orchards are irrigated by drip or trickle irrigation systems. Most deciduous orchards are in valley or foothill areas, with a few, such as, apples and pears, up to 3000 feet in elevation. Typical crops farmed in this habitat type include almonds, walnuts, plums, and pistachios. Many birds and small mammals forage on the crops, but rarely nest due to human disturbance. Monoculture often results in very low species richness in this habitat type.

Evergreen Orchard

Evergreen Orchard habitat type can be found on flat alluvial soils in the valley floors in southwest Butte County. All are irrigated. Some flat soils are flood irrigated, such as with dates, but most evergreen orchards are sprinkler irrigated. Large numbers of orchards are irrigated by drip or trickle irrigation systems. Most evergreen orchards are in valley or foothill areas. Except for olive, most evergreen orchard trees are not very frost tolerant. Oranges and lemons are crops typically farmed in the Evergreen Orchard habitat type. Many birds and small mammals forage on the crops, but rarely nest due to human disturbance. Monoculture often results in very low species richness in this habitat type.

Vineyard habitat

Vineyard habitat type can be found on flat alluvial soils in the valley floors in western Butte County. All vineyards are irrigated, with most being sprinkler irrigated. Large numbers of vineyards are irrigated by drip or trickle irrigation systems. Most vineyards are located in valley or foothill areas. Common crops farmed in vineyards are grapes, kiwi, and blackberries. Many birds and small mammals forage on the crops, but rarely nest due to continuous human disturbances. Monoculture often results in very low species richness in this habitat type.

Urban

Urban habitat type is not limited to any particular physical setting. It occurs anywhere in Butte County where there is human development or cities. Three Urban categories relevant to wildlife are distinguished: downtown, urban residential, and suburbia. The heavily developed downtown is usually

at the center, followed by concentric zones of urban residential and suburbs. There is a progression outward from the city center of decreasing development and increasing vegetative cover. Species richness and diversity is extremely low in Urban habitat. The structure of urban vegetation varies, with five types of vegetative structure defined: tree grove, street strip, shade tree/lawn, lawn, and shrub cover. A distinguishing feature of the urban wildlife habitat is the mixture of native and exotic species. Plants typical to an urban setting include ornamental trees, grass lawns, and hedges.

Non-vegetated Habitat

Barren

Barren habitat type is defined by the absence of vegetation. Any habitat with less than 2% total vegetation cover by herbaceous, desert, or non-wildland species and less than 10% cover by tree or shrub species is defined as Barren. The physical settings for permanently barren habitat represent extreme environments for vegetation. An extremely hot or cold climate, a near-vertical slope, an impermeable substrate, constant disturbance by either human or natural forces, or a soil either lacking in organic matter or excessively saline can each contribute to a habitat being inhospitable to plants. Barren habitat type usually consists of rock, gravel, and soil and provides little to no wildlife habitat. Some ground-nesting species, such as killdeer (*Charadrius vociferous*), may nest in Barren habitat. Cliffs are important habitat for peregrine falcon eyries.

Wetlands in the Plan Area

Canals

Butte County contains a network of manmade waterways that transport water through the County for use in irrigation. Western Canal, Cherokee Canal, and Main Drainage Canal are the predominate canals in the County.

Wetlands.

Wetlands are regarded as important biological resources, both because of their rarity and because they serve a variety of functional values. Several types of wetlands exist in Butte County, including freshwater marshes, vernal pools, and riparian wetlands.

Vernal Pools.

These seasonal wetlands are small depressions that fill with water during the winter, gradually drying during the spring and becoming completely dry in the summer. These pools are found in only a few places in the world outside of California. Vernal pool vegetation is comprised of plant species that begin their growth as aquatic or semi-aquatic plants and transition to a dryland environment as the pool dries. Most vernal pool plants are annual herbs. Special-status species supported by vernal pools in Butte County include vernal pool fairy shrimp (*Branchinecta lynchi*) and the federally and State endangered Butte County meadowfoam (*Limnanthes floccosa ssp. californica*). In addition to vernal pools, several areas within Butte County contain wetlands mapped by the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) (USFWS, 2016c). A general description of each of the classifications is provided below. Of those wetland types mapped by the NWI, freshwater emergent wetland, riverine and lacustrine habitats are also mapped by the CWHR.

Fresh Emergent Wetlands

Fresh emergent wetlands include all non-tidal waters dominated by emergent herbaceous plant species, mosses, and/or lichens. Wetlands of this type are also low in salinity. Wetlands that lack vegetation can be included in this class if they are less than 20 acres, do not have an active wave-formed or bedrock shoreline feature, and have a low water depth less than 6.6 feet. This wetland type is also mapped by the CWHR. Fresh emergent wetlands are characterized by erect, rooted herbaceous hydrophytes. Dominant vegetation is generally perennial monocots. All emergent wetlands are flooded frequently, enough so that the roots of the vegetation prosper in an anaerobic environment. The vegetation may vary in size from small clumps to vast areas covering several kilometers. The acreage of fresh emergent wetlands in California has decreased dramatically since the turn of the century due to drainage and conversion to other uses, primarily agriculture.

Freshwater Forested/Shrub Wetlands

Freshwater forested/shrub wetlands include non-tidal waters that are dominated by trees and shrubs, with emergent herbaceous plants, mosses and/or lichens. Wetlands that lack vegetation can be included in this classification if they also exhibit the same criteria as described for freshwater emergent wetlands. The vegetation found in freshwater forested/shrub wetlands is generally dominated by woody vegetation such as shrubs and trees.

Freshwater Ponds

Freshwater ponds include non-tidal waters with vegetative cover along its edges such as trees, shrubs, emergent herbaceous plants, mosses, and/or lichens. Freshwater ponds can be man-made or natural and typically consist of an area of standing water with variable amounts of shoreline. These wetlands and deepwater habitats are dominated by plants that grow on or below the surface of the water. This wetland type is also mapped by the CWHR and categorized as lacustrine habitat that includes vernal pools. Vernal pools predominate in the alluvial valleys and flat volcanic deposits in the western portions of the county, principally on soils underlain by hardpan.

Lakes

Lakes are a lacustrine system that includes wetlands and deepwater habitats that are located in a topographic depression or dammed river channel. These areas tend to be greater than 20 acres. Vegetation cover within this habitat is generally less than 30 percent and often occurs in the form of emergent or surface vegetation. Substrates are composed of at least 25 percent cover of particles smaller than stones. This wetland type is also mapped by the CWHR and categorized as lacustrine habitat that also includes vernal pool complexes. Prominent reservoirs include Lake Oroville and the Thermalito Forebay and Afterbay.

Riverine

Riverine habitats are systems that includes all wetlands and deepwater habitats contained in natural or artificial channels that contain periodically or continuously flowing water. These systems may also form a connecting link between two bodies of standing water. Substrates generally consist of rock, cobble, gravel, or sand. The Sacramento River and its primary tributaries— Feather River, Butte Creek and Big Chico Creek —are the major riverine systems in Butte County.

Watersheds

Big Chico Creek Watershed

Big Chico Creek originates from a series of springs that flow off of the Sierra Mountains to form a main channel near Butte Meadows. This watercourse flows 45 miles from its origin, crossing portions of Butte and Tehama counties, to its confluence with the Sacramento River. The Big Chico Creek watershed also encompasses three smaller drainages to the north: Sycamore, Mud, and Rock Creeks.

Sycamore Creek is a tributary to Mud Creek. Rock Creek originates to the north of Sycamore Creek and drains the north side of Cohasset Ridge, flowing 28 miles before it joins Mud Creek. Mud Creek drains off of Cohasset Ridge to the south, flowing 26 miles to its confluence with Big Chico Creek.

Butte Creek Watershed

Butte Creek originates in the Lassen National Forest at over 7,000 feet. Butte Creek travels through canyons in the northwestern region of Butte County, entering the valley floor near Chico. The northern Sierra Nevada mountain range and southern Cascade mountain ranges make up the mountainous region of the watershed, while a portion of the watershed lies within the Sacramento Valley. Once Butte Creek enters the valley region of the watershed near Chico, it travels approximately 45 miles before it enters the Sacramento River. Levees were constructed along Butte Creek in the 1950's by the United States Army Corps of Engineers (USACE). These levees extend for over 14 miles along the Butte Creek channel.

Cherokee Watershed

Cherokee Canal, which was originally constructed to protect agricultural land from mining de bris, now serves as an irrigation drainage canal. Dry Creek becomes Cherokee Canal northeast of Richvale. Gold Run and Cottonwood Creek join the Cherokee Canal upstream of the Richvale Road crossing. Cherokee Canal enters Butte Creek near the southwestern corner of Butte County, south of Highway 162.

Feather River/Lower Honcut Creek Watershed

The Feather River flows through the Oroville Dam southward before merging with the Yuba River at Marysville and Yuba City, and eventually the Sacramento River. Dry Creek is located within the City of Oroville and contains three tributaries that converge within the City of Oroville. Wyman Ravine, which originates south of the City of Oroville, drains the southern portion of the watershed and flows into Honcut Creek. The north, middle, and south Honcut Creeks drain both the Lake Oroville/Upper Feather River watershed and the Feather River/Lower Honcut Creek watershed. The south fork of Honcut Creek forms the southern border of Butte County.

Lake Oroville/Upper Feather River Watershed

The North Fork of the Feather River originates in northern California in the Lassen Volcanic National Park. It flows south into Lake Oroville, where it joins the south and middle forks of the Feather River. Oroville Dam, constructed in 1968, houses six power generation units and four additional units in the Thermalito Power Plant. The Thermalito Forebay and Afterbay are holding reservoirs, located downstream of Lake Oroville, that allow water released from Lake Oroville to generate power during established peak periods and to be pumped back into the lake during off - peak periods. Other smaller creeks in the watershed flow into Lake Oroville, including Cirby and Concow Creeks, which converge before flowing into the Concow Reservoir.

Little Chico Creek Watershed

Little Chico Creek originates on the northwestern boundary of the Butte Creek watershed and flows through canyons before reaching the City of Chico. Before Little Chico Creek enters the City of Chico urban area, it passes a diversion structure constructed in the 1960's, which is intended to divert high flow from Little Chico Creek into Butte Creek. Little Chico Creek flows through the City of Chico before entering the valley, at which point it disperses through numerous waterways within the region.

Pine Creek Watershed

The Pine Creek watershed is located in the northeastern section of Butte County. Pine Creek, Rock Creek, and Keefer Slough, drain part of the northern region of the Big Chico Creek watershed and eventually drain into the Sacramento River.

Wildlife Movement Corridors

Salmon and Steelhead Trout Fisheries

Salmon and steelhead trout are anadromous fish species that are present in the Bay Delta and San Joaquin and Sacramento River Basins. Anadromous fish are born in freshwater rivers and streams and then migrate to the Pacific Ocean to grow and mature before returning to their place of origin to spawn. The San Joaquin and Sacramento River system produces most of the Chinook salmon and a large percentage of the steelhead trout in California.

Anadromous fish resources once flourished naturally in the San Joaquin and Sacramento River system, but as a result of habitat destruction from water storage and diversion projects, mining, sedimentation, and bank degradation, anadromous fish species populations have steeply declined. The San Joaquin and Sacramento River system historically supported steelhead trout and four distinct spawning runs of Chinook salmon: fall, late-fall, winter, and spring runs. These salmon runs have declined since the late 1800s and are now characterized as episodic. The Central Valley steelhead was federally listed as threatened in 2003. The fall/late fall run salmon is a federal and state species of concern, and a candidate species for federal listing. The spring-run Chinook salmon population is listed as threatened by both federal and state agencies. Winter-run Chinook salmon population is listed as a federally and state endangered species. Populations of Central Valley Steelhead and Chinook salmon are supported by hatcheries within the San Joaquin and Sacramento River Basin.

Water remaining behind the dams by the start of the spawning run in October is often warmed by summer heat. Warm water and low water elevation are harmful to most coldwater anadromous fish species. Riparian vegetation is critical for the maintenance of high-quality fish habitat as it provides cover, controls temperature, stabilizes stream banks, provides food, and buffers streams from erosion and impacts of adjacent land uses. Riparian vegetation also affects stream depth, current velocity, and substrate composition. The decline of riparian vegetation communities in California is a factor contributing to the loss of high-quality fish habitat.

Feather River State Hatchery

The Feather River is one of two major tributaries of the Sacramento River. Chinook salmon spawn in ten riffles in the low flow section of the Feather River below Oroville Dam. However, as few as 40 percent of the salmon eggs survive in this reach because there are too many adults spawning this limited area. The Feather River State Hatchery was constructed to mitigate the loss of salmonid habitat attributed to the construction of Oroville Dam; an impassable barrier to anadromous fish.

The Feather River State Hatchery is located in the City of Oroville and operated by the CDFW. This hatchery produced its first fry in 1968. The main hatchery houses the spawning operation and incubators. The facility can accommodate 9,000 adult salmon, 2,000 adult steelhead, 20 million eggs, and 9.6 million fingerlings.

At the base of the fish barrier dam, salmon and steelhead enter and climb the ladder to the hatchery gathering tank. During their spawning runs, the fish can be seen through special viewing windows as they climb the fish ladder to reach the hatchery. Spring-run salmon begin arriving in June, while steelhead and fall-run salmon arrive from September through November. Eggs are taken from the fish and fertilized, incubated, and hatched. The small fish, called fry, are transferred to rearing tanks where they are kept until large enough to put into the river. From the river, they move to the ocean and then later migrate back to their birth waters.

Butte Creek

Butte Creek supports the largest remaining wild spring-run Chinook salmon in California. This creek and its tributaries also support small populations of steelhead trout and late fall-run Chinook salmon. The fisheries in Butte Creek have several known problems including inadequate fish passage over diversion dams, unblocked drains that attract and strand fish, and poor water quality. Temperatures in the Upper Butte Creek are at the upper limit of salmonid tolerance, which can result in mortality of over-summering adults.

Big Chico Creek

Fall-run Chinook salmon have historically been the most abundant salmonid species present in Big Chico Creek, but have since declined and are rarely observed. Big Chico Creek also supports small, non-sustaining populations of spring-run Chinook salmon, as well as small populations of steelhead trout and late fall-run salmon.

The decline of salmon and steelhead populations has been attributed to limited access to the upper watershed. Access is limited by intermittent flows in Lindo Channel, poor fish passage at the One Mile Recreation Area of Bidwell Park, and inadequate fish passage at the Five Mile Diversion Dam and Iron Canyon.

Migratory Deer

Deer species present in Butte County include both resident and migratory populations. Although Columbian black-tailed deer (*Odocoileus hemionus columbianus*) is not recognized as a special-status species, preserving deer habitat and migration corridors is of concern to the CDFW in many foothill and mountainous regions of California currently experiencing urbanization.

In 1983, the Butte County Board of Supervisors created the Butte County Deer Herd Study Panel to study ways to maintain herd populations and to reduce the impacts of development on migratory deer. The goals of the Study Panel were to identify important migratory deer habitats, protect migratory deer from adverse impacts from development, and to develop policies and implementation measures that would protect deer herds.

As part of the Butte County General Plan 2030 planning process, the Study Panel, in coordination with CDFW, developed overlay maps that illustrate summer and winter ranges and migration corridors, General Plan land uses, parcel sizes, transportation corridors, and suitable development sites. CDFW is responsible for identifying impacted deer winter range where development may continue with

mitigation measures, deer winter range in need of protection, and mitigation measures to offset loss of habitat.

Deer populations migrate to lower elevations during the winter in response to the lack of food at higher elevations during months when snow is abundant. Most of the deer habitat in Butte County is winter range, which extends from the valley floor to nearly 4,000 feet. The critical winter range generally extends from 1,000 to 3,000 feet.

Deer migration occurs a result of annual weather patterns. The first winter storms of the year will initiate herd migrations to a lower elevations. The herds will generally hold as high as possible until the first major snowstorm forces the deer to migrate lower. The deer migration reverses in late winter to early spring when weather conditions begin to warm and the snow begins to melt at higher elevations.

Three separate migratory deer herds, East Tehama, Bucks Mountain, and Mooretown, occupy the eastern foothills and mountains in Butte County and depend on these areas for all or part of their habitat requirements. Deer that remain in a restricted area on a year-round basis are considered resident populations. Resident deer herds that occur within the county include the Camp Beale and Sacramento Valley herds. Resident deer herds share the winter ranges with all of the migratory herd populations.

Eastern Tehama Deer Herd

The Eastern Tehama deer herd is the largest migratory deer herd in the county and is considered the most extensive range in the state. The range includes portions of Tehama, Plumas, Lassen, Shasta, and Butte counties. Winter range is approximately 520,000 acres; migratory and summer ranges total approximately 920,000 acres and migration routes to and from seasonal ranges are the longest in the state, covering a distance of 50 to 100 miles. Approximately 40 percent of the critical winter range for the Eastern Tehama deer herd in Butte County has been severely impacted due to residential encroachment since the mid 1960s.

Bucks Mountain Deer Herd

The Bucks Mountain deer herd range extends from eastern Butte County to western Plumas County. The winter range includes approximately 200,000 acres and the migratory/summer ranges include approximately 265,000 acres. An estimated 28 percent of the critical winter range for the Bucks Mountain deer herd in Butte County has been lost to residential encroachment since the mid-1960s.

Mooretown Deer Herd

The Mooretown deer herd occupies a range extending from the southern boundary of the Bucks Mountain deer herd into northwestern Sierra and northeastern Yuba counties. The winter range includes approximately 232,000 acres and the migratory and summer ranges include approximately 217,000 acres. An estimated 50 percent of the critical winter range for the Mooretown deer herd in Butte County has been lost to residential encroachment since the mid-1960s.

Special Status Species and Sensitive Communities

Table 1 Special-Status Plant Species Known to Occur or with Potential to Occur within Butte County

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CRPR	Habitat Requirements
Clarkia mildrediae ssp. mildrediae Mildred's clarkia	FS/— G3T3/S3 1B.3	BP: May – August. Cismontane woodland and lower montane coniferous forest.
Agrostis hendersonii Henderson's bent grass	—/— G2Q/S2 3.2	Blooming Period (BP): April – May. Occurs in mesic valley/foothill grassland and vernal pools.
Allium jepsonii Jepson's onion	FS/— G2/S2 1B.2	BP: April – August. Cismontane woodland, lower montane coniferous forest, and chaparral.
Astragalus tener var. ferrisiae Ferris' milk-vetch	FS/— G2T1/S1 1B.1	BP: April - May. Meadows, seeps, valley and foothill grassland, and wetlands.
Atriplex cordulata var. cordulata Heartscale	FS/— G3T2/S2 1B.2	BP: April - October. Chenopod scrub, meadows, seeps, and valley and foothill grasslands.
Atriplex minuscula Lesser saltscale	—/— G2/S2 1B.1	BP: May – October. Alkali playa, chenopod scrub, valley and foothill grasslands.
Atriplex subtilis Subtle orache	FS/— G1/S1 1B.2	BP: June - October. Valley and foothill grasslands.
Balsamorhiza macrolepis Big-scale balsamroot	FS/— G2/S2 1B.2	BP: March - June. Cismontane woodland, chaparral, valley and foothill grasslands.
Betula glandulosa Dwarf resin birch	—/— G5/S2	BP: May –June. Occurs almost always under natural conditions in wetlands.

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CRPR	Habitat Requirements
	2B.2	
Botrychium ascendens Upswept moonwort	FS/— G3/S2 2B.3	BP: July - August. Lower montane coniferous forest.
Botrychium crenulatum Scalloped moonwort	FS/— G3/S2 2B.2	BP: June - September. Bog and fen, lower montane coniferous forest, marshes and swamps, meadows, seeps, and wetlands.
Botrychium minganense Mingan moonwort	FS/— G4G5/S2 2B.2	BP: July - September. Lower montane coniferous forest.
Botrychium montanum Western goblin	FS/— G3/S2 2B.1	BP: July - September. Lower montane coniferous forest, meadows, seeps, and upper montane coniferous forests.
Brasenia schreberi Watershield	—/— G5/S3 2B.3	BP: June - September. Marshes, swamps, and wetlands.
California macrophylla Round-leaved filaree	FS/— G3/S3 1B.2	BP: March - May. Cismontane woodland, valley and foothill grasslands.
Campylopodiella stenocarpa Flagella-like atractylocarpus	—/— G5/S1 2B.2	BP: N/A (moss). Cismontane woodland
Cardamine pachystigma var. dissectifolia Dissected-leaved toothwort	—/— G3G5T2Q/S2 1B.2	BP: February – May. Chaparral, lower montane coniferous forest usually serpentinite, rocky.
Cares cyrtostachya Sierra arching sedge	—/— G2G3/S2S3	BP: May – August. Lower montane coniferous forest (mesic), meadows and seeps, marshes and swamps, and riparian forest (margins).

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CRPR	Habitat Requirements
	1B.2	
Carex limosa Mud sedge	—/— G5/S3 2B.2	BP: June – August. Bog and fen, freshwater marsh, lower montane coniferous forest, swamps, meadow and seep, upper montane coniferous forest, and wetlands.
Castilleja rubicundula ssp. rubicundula Pink creamsacs	FS/— G5T2/S2 1B.2	BP: May – August. Chaparral, meadow and seep, chaparral, valley and foothill grasslands.
Centromadia parryi ssp. parryi Pappose tarplant	FS/— G3/S2 1B.2	BP: May – November. Chaparral, coastal prairie, meadows and seeps, marshes and swamps (coastal salt), valley and foothill grassland (vernally mesic).
Chlorogalum grandiflorum Red Hills soaproot	—/— G2/S2 1B.2	BP: May – June. Chaparral, cismontane woodland and lower montane coniferous forest.
Clarkia gracilis ssp. albicaulis White-stemmed clarkia	FS/— G5T2/S2 1B.2	BP: May – July. Chaparral and cismontane woodland.
Clarkia mosquinii Mosquin's clarkia	FS/— G2/S2 1B.1	BP: May – September. Cismontane woodland and lower montane coniferous forest.
Cuscuta obtusiflora var.glandulosa Peruvian dodder	—/— G5T4T5/SH 2B.2	BP: June –October. Freshwater, marshes and swamps.
Delphinium recurvatum Recurved larkspur	FS/— G3/S3 1B.2	BP: March – June. Chenopod scrub, cismontane woodland, valley and foothill grassland.
Drosera anglica English sundew	—/— G5/S2	BP: July – October. Marshes and swamps (freshwater).

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CRPR	Habitat Requirements
	2B.3	
Eremogone cliftonii Clifton's eremogone	FS/— G3/S3 1B.3	BP: April – September. Chaparral, lower montane coniferous forest and upper montane coniferous forest.
Eriogonum umbellatum var. ahartii Ahart's buckwheat	FS/— G5T3/S3 1B.2	BP: June - September. Cismontane woodland and chaparral.
Euphorbia hooveri Hoover's spurge	FT/— G2/S2 1B.2	BP: July - October. Valley and foothill grassland, vernal pools and wetlands.
Fissidens pauperculus Minute pocket moss	FS/— G3/S2 1B.2	BP: N/A (moss). Coniferous forests and clay soils along stream banks.
Fritillaria eastwoodiae Butte County fritillary	FS/— G3Q/S3 3.2	BP: March - June. Chaparral, cismontane woodland, and lower montane coniferous forest.
Fritillaria pluriflora Adobe-lily	FS/— G2G3/S2S3 1B.2	BP: February - April. Chaparral, cismontane woodland, valley and foothill grassland.
Heteranthera dubia Water star-grass	—/— G5/S1 2B.2	BP: July – October. Requires a pH of 7 or higher, usually in slightly eutrophic waters. Marshes and swamps (alkaline, still or slow-moving water).
Hibiscus lasiocarpos var. occidentalis Woolly rose-mallow	—/— G5T2/S2 1B.2	BP: June - September. Freshwater marsh, swamps, and wetlands.
Imperata brevifolia California satintail	—/— G3/S3 2B.1	BP: September - May. Chaparral, coastal scrub, meadow and seep, mojavean desert scrub, riparian forest and wetlands.

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CRPR	Habitat Requirements
Juncus leiospermus var. ahartii Ahart's dwarf rush	—/— G2T1/S1 1B.2	BP: March - May. Vernal pools and wetlands.
Juncus leiospermus var. leiospermus Red Bluff dwarf rush	FS/— G2T2/S2 1B.1	BP: March - June. Chaparral, cismontane woodland valley and foothill grassland, vernal pool and wetlands.
Lagophylla dichotoma Forked hare-leaf	—/— G1/S1 1B.1	BP: April – May. Cismontane woodland, valley and foothill grassland.
Lewisia cantelovii Cantelow's lewisia	FS/— G3/S3 1B.2	BP: May - October. Broadleaved upland forest, chaparral, cismontane woodland, and lower montane coniferous forest.
Lewisia cantelovii Hutchison's lewisia	—/— G3G4T3Q/S3 3.2	BP: April – August. Upper montane coniferous forest, openings, ridge tops.
Limnanthes floccosa ssp. californica Butte County meadowfoam	FE/SE G4T1/S1 1B.1	BP: March - May. Valley and foothill grassland, vernal pool and wetlands.
Monardella venosa Veiny monardella	FS/— G1/S1 1B.1	BP: May - July. Cismontane woodland, valley and foothill grasslands.
Orcuttia pilosa Hairy Orcutt grass	FE/SE G1/S1 1B.1	BP: May - September. Vernal pools and wetlands.
Orcuttia tenuis Slender Orcutt grass	FT/SE G2/S2 1B.1	BP: May - October. Valley and foothill grassland, vernal pools and wetlands.

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CRPR	Habitat Requirements
Packera eurycephala var. lewisrosei Lewis Rose's ragwort	FS/— G4T2/S2 1B.2	BP: March - September. Chaparral, cismontane woodland, and lower montane coniferous forest.
Paronychia ahartii Ahart's paronychia	FS/— G3/S3 1B.1	BP: February - June. Cismontane woodland, valley and foothill grassland, vernal pools and wetlands.
Penstemon personatus Closed-throated beardtongue	FS/— G2/S2 1B.2	BP: June - October. Chaparral, lower montane coniferous forest and upper montane coniferous forest.
Poa sierra Sierra blue grass	FS/— G3/S3 1B.3	BP: April - June. Lower montane coniferous forest.
Puccinellia simplex California alkali grass	—/— G2G3/S2S3 1B.2	BP: March – May. Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools.
Rhamnus alnifolia Alder buckthorn	—/— G5/S3 2B.2	BP: May – July. Lower montane coniferous forest, meadows and seeps, riparian scrub, upper montane coniferous forest.
Rhynchospora californica California beaked-rush	FS/— G1/S1 1B.1	BP: March - May. Freshwater marsh, marshes and swamps, meadows, seeps and wetlands.
Rhynchospora capitellata Brownish beaked-rush	—/— G5/S1 2B.2	BP: July - August. Lower montane coniferous forest, marshes and swamps, meadows, seeps, upper montane coniferous forest and wetlands.
Rupertia hallii Hall's rupertia	FS/— G2G3/S2S3 1B.2	BP: June - September. Cismontane woodland and lower montane coniferous forest.

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CRPR	Habitat Requirements
Sagittaria sanfordii Sanford's arrowhead	FS/— G3/S3 1B.2	BP: May - November. Marshes, swamps and wetlands.
Schoenoplectus subterminalis Water bulrush	—/— G4G5/S3 2B.3	BP: June - September. Marshes, swamps and wetlands.
Sedum albomarginatum Feather River stonecrop	FS/— G2/S2 1B.2	BP: May - June. Chaparral and lower montane coniferous forest.
Senecio layneae Layne's ragwort	FT/— G4/S2 1B.2	BP: April - August. Chaparral and cismontane woodland.
Sidalcea robusta Butte County checkerbloom	FS/— G2/S2 1B.2	BP: April - June. Chaparral and cismontane woodlands.
Silene occidentalis ssp. Longistipitata Long-stiped campion	FS/— G4T2Q/S2 1B.2	BP: June – August. Chaparral, lower montane coniferous forest and upper montane coniferous forest.
Stellaria longifolia Long-leaved starwort	—/— G5/S2 2B.2	BP: May - August. Meadows, seeps, riparian woodlands and wetlands.
Stuckenia filiformis ssp. alpina Slender-leaved pondweed	—/— G5T5/S3 2B.2	BP: May - July. Meadows, seeps, and wetlands.
Trifolium jokerstii Butte County golden clover	FS/— G2/S2 1B.2	BP: March - May. Valley and foothill grassland, vernal pools and wetlands.

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CRPR	Habitat Requirements
Tuctoria greenei Greene's tuctoria	FE/SR G1/S1 1B.1	BP: May - September. Valley and foothill grassland, vernal pools and wetlands.
Utricularia intermedia Flat-leaved bladderwort	—/— G5/S3 2B.2	BP: July - August. Bog, fen, marsh, swamp, meadow, seep and wetlands.
Wolffia brasiliensis Brazilian watermeal	—/— G5/S1 2B.3	BP: April - December. Marshes, swamps and wetlands.

Sources: USFWS IPaC (Butte County, 2016), CNDDB Rarefind v5 (Butte County, 2016),and CNPS (Butte County, 2016)

FE = Federally Endangered SE = State Endangered

FT = Federally Threatened ST = State Threatened

FC = Federal Candidate Species SC = State Candidate Species

FS = Federally Sensitive (BLM, USFS) SS = State Sensitive (CDF)

SSC = State Species of Special Concern

FP = Fully Protected

CRPR 1B = Rare or Endangered in California or elsewhere

CRPR 2 = Rare or Endangered in California, more common elsewhere

CRPR 3 = More information is needed

0.1 =Seriously Threatened

0.2 = Fairly Threatened

0.3 = Not very Threatened

G-Rank/S-Rank = Global Rank and State Rank as per CNDDB RareFind 5.

Table 2 Special-Status Animal Species Known to Occur or with Potential to Occur within Butte County

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CDFW	Habitat Requirements
Mammals		
Antrozous pallidus Pallid bat	FS/— G5/S3 SSC	Deserts, grasslands, shrublands, woodlands, and forest. Most common in open, dry, habitats with rocky area for roosting. Roost must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.
Aplodontia rufa californica Sierra Nevada mountain beaver	—/— G5T3T4/S2S3 SSC	Dense growth of small deciduous trees & shrubs, wet soil, & abundance of forbs in the Sierra Nevada & east slope. Needs dense understory for food & cover. Burrows into soft soil. Needs abundant supply of water.
Corynorhinus townsendii Townsend's big-eared bat	FS/SC G3G4/S2S3 SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls & ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.
Eumops perotis Western mastiff bat	FS/— G5/S3S4 SSC	Many open habitats, including conifer and deciduous woodlands, grassland, and chaparral. Roosts in crevices in cliff faces and high buildings.
Lasiurus blossevillii Western red bat	FS/— G5/S3 SSC	Occupies cismontane woodland, lower montane coniferous forest, riparian forests and riparian woodlands. Roosts primarily in broadleafed trees.
Myotis evotis Long-eared myotis	FS/— G5/S3 —	Found in all brush, woodland & forest habitats from sea level to about 9000 feet. Prefers coniferous woodlands & forests. Nursery colonies in buildings, crevices, spaces under bark, & snags. Caves used primarily as night roosts.
Myotis thysanodes Fringed myotis	FS/— G4/S3 —	In a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood & hardwood-conifer. Uses caves, mines, buildings or crevices for maternity colonies and roosts.
Myotis yumanensis Yuma myotis	FS/— G5/S4 —	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CDFW	Habitat Requirements
Pekania pennanti Fisher – West Coast DPS	FC(FT),FS/— G5T2T3Q/S2S3 SSC	Intermediate to large-tree stages of coniferous forests & deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs & rocky areas for cover & denning. Needs large areas of mature, dense forest.
Taxidea taxus American badger	—/— G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils & open, uncultivated ground. Preys on burrowing rodents.
Vulpes vulpes necator Sierra Nevada red fox	FS/ST G5T1T2/S1 —	Restricted to alpine and subalpine habitats of the Sierra Nevada, above 4500 feet elevation. Lassen Volcanic National Park is the major population center for the subspecies.
Birds		
Accipiter gentilis Northern goshawk	FS/SS G5/S3 SSC	Within, and in vicinity of, coniferous forest. Uses old nests, and maintains alternate sites. Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.
Agelaius tricolor Tricolored blackbird	FS/SC G2G3/S1S2 SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few miles of the colony.
Aquila chrysaetos Golden eagle	FS/— G5/S3 FP	Rolling foothills, mountain areas, sage-juniper flats, & desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.
Asio flammeus Short-eared owl	—/— G5/S3 SSC	Open, treeless areas with elevated sites for perches and dense vegetation for roosting and nesting.
Asio otus Long-eared owl	—/— G5/S3 SSC	Dense riparian and live oak thickets near meadow edges, and nearby woodland and forest habitats; also found in dense conifer stands at higher elevations.

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CDFW	Habitat Requirements
Athene cunicularia hypugaea Western burrowing owl	—/— G4/S3 SSC	Grasslands and ruderal habitats where ground squirrel burrows are available for nesting.
Buteo swainsoni Swainson's hawk	FS/ST G5/S3 —	Agricultural fields, annual grasslands, sage-juniper flats, & desert. The bird is attracted to haying, mowing, and plowing operations, which provide opportunistic foraging on small mammals and grasshoppers.
Circus cyaneus Northern harrier	—/— G4/S3 SSC	Forages in marshes, grasslands, and ruderal habitats; nests in extensive marshes and wet fields.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FS,FT/SE G5T2T3/S1 —	Riparian forest nester along the broad, lower flood-bottoms of larger river systems. Nests in riparian forests of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.
Cypseloides niger Black swift	—/— G4/S2 SSC	Breeding habitat is associated with water. Most often nests on high cliff faces, either above the ocean surf or behind or next to waterfalls.
Dendroica petechia Yellow warbler	—/— G5/S3S4 SSC	Breeds in riparian woodlands, particularly those dominated by willows and cottonwoods.
Elanus leucurus White-tailed kite	—/— G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes often next to deciduous woodlands
Empidonax traillii Willow flycatcher	FS/SE G5/S1S2 —	Inhabits extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters.
Falco peregrinus anatum American peregrine falcon	—/SS G4T4/S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CDFW	Habitat Requirements
Grus Canadensis tabida Greater sandhill crane	FS/ST G5T4/S2 FP	Found in fresh emergent wetlands and wet meadows. Nests in wetland habitats in northeastern California; winters in the Central Valley. Prefers grain fields within 4 miles of a shallow body of water used as a communal roost site; irrigated pasture used as loafing sites.
Haliaeetus leucocephalus Bald eagle	FS/SE,SS G5/S2 —	Ocean shore, lake margins, & rivers for both nesting & wintering. Most nests within 1 mile of water. Nests in large, old growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.
Icteria virens Yellow-breasted chat	—/— G5/S3 SSC	Breeds in riparian habitats having dense understory vegetation, such as willow and blackberry.
Ixobrychus exilis Least bittern	—/— G5/S2 SSC	Colonial nester in marshlands and borders of ponds and reservoirs which provide ample cover. Nests usually placed low in tules, over water.
Lanius ludovicianus Loggerhead shrike	—/— G4/S4 SSC	Forages in open grassland habitats throughout the Central Valley of California. Nests in shrubs and trees.
Latterallus jamaicensis coturniculus California black rail	FS/ST G3G4T1/S1 SSC,FP	Densely vegetated wetlands and marshes with a perennial water source. Needs water depths of about 1 inch that do not fluctuate during the year & dense vegetation for nesting habitat.
Riparia riparia Bank swallow	FS/ST G5/S2 —	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.
Strix occidentalis occidentalis California spotted owl	FS/— G3T3/S3 SSC	Mixed conifer forest, often with an understory of black oaks & other deciduous hardwoods. Most often found in deep-shaded canyons, on north-facing slopes, and within 300 meters of water.
Reptiles		

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CDFW	Habitat Requirements
Emys marmorata Western pond turtle	FS/— G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, below 6000 feet elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 kilometers from water for egg laying.
Phrynosoma blainvillii Blainville's horned lizard	FS/— G3G4/S3S4 SSC	Occurs in sandy soils in valley foothill hardwood, coniferous, and riparian habitats, as well as pine-cypress, juniper, and annual grassland habitats (sea level - 8,000 ft elevation).
Thamnophis gigas Giant garter snake	FT/ST G2/S2 —	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes ponds, sloughs, small lakes, and there associated uplands (sea level - 400 ft elevation).
Amphibians		
Rana aurora draytonii California red-legged frog	FT/— G2G3/S2S3 SSC	Semi-permanent or permanent water at least 2 feet deep, bordered by emergent or riparian vegetation, and upland grassland, forest or scrub habitats for refugia and dispersal.
Rana boylii Foothill yellow-legged frog – Feather River clade	FS/ST G3/S3 SSC	Partly shaded, shallow streams & riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg laying. Need at least 15 weeks to attain metamorphosis.
Rana cascadae Cascades frog	FS/— G3G4/S3 SSC	Found throughout the Cascade Range in streams, lakes, and associated riparian habitat between 2,250 and 8,000 feet elevation.
Rana sierrae Sierra Nevada yellow-legged frog	FE/ST G1/S1 SSC	Rocky streams within canyons, slow moving waters, alpine ponds, lakes and meadow streams (1,000 - over 12,000 ft elevation).
Spea hammondii Western spadefoot toad	FS/— G3/S3 SSC	Grasslands and, occasionally, valley-foothill hardwood woodlands; vernal pools or similar ephemeral pools required for breeding.
Fish		

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CDFW	Habitat Requirements
Acipenser medirostris Green sturgeon – Southern DPS	FT/— G3/S1S2 SSC	This DPS includes green sturgeon that spawn in rivers south of the Eel River, including the Sacramento River. Preferred spawning substrate is large cobble, but can range from clean sand to bedrock.
Acipenser transmontanus White sturgeon	—/— G4/S2 SSC	Live in estuaries of large rivers, moving into freshwater to spawn. Most abundant in brackish portions of estuaries. Can be found in the Sacramento River and its larger tributaries.
Lampetra ayresi River lamprey	—/— G4/S3 SSC	An anadromous fish found in rivers from San Francisco Bay watershed north to Alaska. Suitable habitat in the Sacramento River below Keswick dam.
Mylopharodon conocephalus Hardhead	—/— G3/S3 SSC	Found in both small to large streams in low to mid-elevations in the Sacramento, San Joaquin, and Klamath rivers and their tributaries.
Oncorhynchus mykiss irideus Steelhead – Central Valley DPS	FT/— G5/S2 —	Spawn and rear in Sacramento River and its tributaries. Requires cool, swift, shallow water; clean, loose gravel for spawning; and runs and suitable large pools in which to rear and over-summer.
Oncorhynchus tshawytscha Chinook salmon – Sacramento River winter-run ESU	FE/SE G5/S1 —	Spawn and rear in main-stem Sacramento River. Require cool year-round water temperatures, since spawning occurs during the summer. Requires deep pools and riffles, and clean gravel and cobble substrate to spawn.
Oncorhynchus tshawytscha Chinook salmon – Central Valley spring-run ESU	FT/ST G5/S1 —	Spawn and rear in main-stem Sacramento River and suitable perennial tributaries. Require cool year-round water temperatures and deep pools for over-summering habitat. Spawn in riffles with gravel and cobble substrate.
Oncorhynchus tshawytscha Chinook salmon – Central Valley fall/late fall-run ESU	—/— G5/S2 SSC	Spawn and rear in main-stem Sacramento River and suitable perennial tributaries. Requires cool water temperatures for spawning, egg-incubation and juvenile rearing. Spawn in riffles with gravel and cobble.

Scientific Name Common Name	Status Fed/State Global Rank/ State Rank CDFW	Habitat Requirements
Pogonichthys macrolepidotus Sacramento splittail	—/— G3/S3 SSC	Shallow, dead-end sloughs with submerged vegetation.
Invertebrates		
Branchinecta conservation Conservancy fairy shrimp	FE/— G1/S1 —	Valley and foothill grassland, vernal pools and wetlands.
Branchinecta lynchi Vernal pool fairy shrimp	FT/— G3/S3 —	Lives in vernal pools, swales, and ephemeral freshwater habitats.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT/— G3/S2 —	Elderberry shrubs associated with riparian forests that occur along rivers and streams in the Sacramento Valley and foothills.
Lepidurus packardi Vernal pool tadpole shrimp	FE/— G3/S2S3 —	Lives in vernal pools, swales, and ephemeral freshwater habitats.
Bombus occidentalis Western bumble bee	FS/SC(SE) G2G3/S1 —	Generalist foragers that require plants that bloom and provide adequate nectar and pollen throughout the colony's flight period from as early as February to late November. Nesting habitat is typically underground, such as in old animal burrows.

Sources: USFWS IPaC (2020), CNDDB Rarefind v5 (2020), and CNPS (2020)

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Local Jurisdictions General Plan Goals and Policies

Table 3 Local General Plan Goals, Objectives, Policies, Actions and Implementation Measures

Butte County	
Goal COS-6	Engage in cooperative planning efforts to protect biological resources
Policy COS-P6.1	The County shall coordinate with applicable federal, State, regional and local agencies on natural resources and habitat planning.
Action COS-A6.1	Continue to work with the Butte County Association of Governments and the five municipalities to develop and implement the Butte Regional Habitat Conservation Plan and Natural Community Conservation Plan, and subsequently update it as necessary.
Action COS-A6.2	Work with Butte Creek Canyon residents and local groups toward adopting a planning strategy for a Butte Creek Canyon overlay. The purpose of the planning strategy is to facilitate the protection and preservation of the historical and ecological foundation of Butte Creek Canyon, including the survival of salmon, steelhead and other sensitive plants and animals such as the East Tehama Deer Herd, preservation of historical sites and ecological preserves, and the optimum balance of recreation and residential use.
Goal COS-7	Conserve and enhance habitat for protected species and sensitive biological communities.
Policy COS-P7.1	Conservation easements that protect habitat areas, habitat corridors and sensitive biological resources shall be promoted.
Policy COS-P7.2	Clustered development patterns shall be encouraged in order to conserve habitat for protected species and biological resources.
Policy COS-P7.3	Creeks shall be maintained in their natural state whenever possible, and creeks and floodways shall be allowed to function as natural flood protection features during storms.*
Policy COS-P7.4	New development projects shall mitigate their impacts in habitat areas for protected species through on- or off-site habitat restoration, clustering of development, and/or project design and through the provisions of the Butte Regional Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP) within the HCP/NCCP Planning Area, upon the future adoption of the HCP/NCCP.*
Policy COS-P7.5	No new development projects shall occur in wetlands or within significant riparian habitats, except within the Butte Regional Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP) Planning Area where such development is consistent with the conditions of the HCP/NCCP, upon the future adoption of the HCP/NCCP.*
Policy COS-P7.6	New development projects shall include setbacks and buffers along riparian corridors and adjacent to habitat for protected species, except where permitted in the Butte Regional Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP) Planning Area and where such development is consistent with the conditions of the HCP/NCCP, upon the future adoption of the HCP/NCCP.*
Policy COS-P7.7	Construction barrier fencing shall be installed around sensitive resources on or adjacent to construction sites. Fencing shall be installed prior to construction activities and maintained throughout the construction period.*
Policy COS-P7.8	Where sensitive on-site biological resources have been identified, construction employees operating equipment or engaged in any development-associated activities involving vegetation removal or ground disturbing activities in sensitive resource areas shall be trained by a qualified biologist and/or botanist who will provide information on the on-site biological resources (sensitive natural communities, special status plant and wildlife habitats, nests of special-status birds, etc.), avoidance of invasive plant introduction and spread, and the penalties for not complying with biological mitigation requirements and other State and federal regulations.*
Policy COS-P7.9	A biologist shall be retained to conduct construction monitoring in and adjacent to all habitats for protected species when construction is taking place near such habitat areas.*

Policy COS-P7.10	Long-term recovery plans for areas affected by wildfire shall incorporate native species and enhance wildlife habitat.
Policy COS-P7.11	The County shall work with the military to ensure that land uses under the Military Operations Areas (MOAs) encourage the fulfillment of the County's biological resource protection goals.
Action COS-A7.1	Develop and provide incentives to developers to conserve and maintain important habitat areas and sensitive biological resources.
Action COS-A7.2	Develop a set of guidelines for evaluating development project impacts to habitat in locations outside of the approved Butte Regional Habitat Conservation Plan and Natural Community Conservation Plan Planning Area, as well as for requiring specific mitigations for impacts that are identified
Action COS-A7.3	Establish a mitigation bank program for impacts to habitats for protected species, such as oak woodlands, riparian woodlands and wetlands, in locations outside of the approved Butte Regional Habitat Conservation Plan and Natural Community Conservation Plan Planning Area, using mitigation fees on new development projects as a funding mechanism.
Action COS-A7.4	Seek funding to conduct a study to develop an approach to protecting significant specimen trees and tree groves
Goal COS-8	Maintain and promote native vegetation
Policy COS-P8.1	Native plant species shall be protected and planting and regeneration of native plant species shall be encouraged, wherever possible, in undisturbed portions of development sites.
Policy COS-P8.2	New landscaping shall promote the use of xeriscape and native tree and plant species, including those valued for traditional Native American cultural uses.
Policy COS-P8.3	Native plants shall be used wherever possible on County owned and -controlled property.
Policy COS-P8.4	Introduction or spread of invasive plant species during construction of development projects shall be avoided by minimizing surface disturbance; seeding and mulching disturbed areas with certified weed-free native mixes; and using native, noninvasive species in erosion control plantings.*
Goal COS-9	Protect identified special-status plant and animal species.
Policy COS-P9.1	A biological resources assessment shall be required for any proposed development project where special-status species or critical habitat may be present. Assessments shall be carried out under the direction of Butte County. Additional focused surveys shall be conducted during the appropriate season if necessary. Upon adoption of the Butte Regional Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP), assessment requirements of the HCP/NCCP shall be implemented for development projects within the HCP/NCCP area.*
Policy COS-P9.2	If special-status plant or animal species are found to be located within a development site, proponents of the project shall engage in consultation with the appropriate federal, State and regional agencies and mitigate project impacts in accordance with State and federal law. Upon adoption of the Butte Regional Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP), mitigation requirements of the HCP/NCCP shall be implemented for development projects within the HCP/NCCP area. Examples of mitigation may include:* a. Design the proposed project to avoid and minimize impacts. b. Restrict construction to specific seasons based on project specific special-status species issues (e.g. minimizing impacts to special-status nesting birds by constructing outside of the nesting season). c. Confine construction disturbance to the minimum area necessary to complete the work. d. Mitigate for the loss of special-status species by purchasing credits at an approved conservation bank (if a bank exists for the species in question), funding restoration or habitat improvement projects at existing preserves in Butte County, or purchasing or donating mitigation lands of substantially similar habitat. e. Maintain a minimum 100-foot buffer on each side of all riparian corridors, creeks and streams for special-status and common wildlife. f. Establish setbacks from the outer edge of special-status species habitat areas. g. Construct barriers to prevent compaction damage by foot or vehicular traffic.
Goal COS-10	Facilitate the survival of deer herds in winter and critical winter migratory deer herd ranges.

Policy COS-P10.1	Clustered development projects that are designed to accommodate herd migration patterns shall be allowed and encouraged, with remaining areas protected under conservation easements, within the Winter and Critical Winter Deer Herd Migration Area Overlays in order to protect migratory deer herd ranges.
Action COS-A10.1	Coordinate with the California Department of Fish and Game to monitor the effects of development on migratory deer herds.
Action COS-A10.2	Seek funding for and conduct more detailed studies about deer herd migration, and use those studies to update the Deer Herd Migration Area Overlay if needed.
City of Chico	
Goal OS-1	Protect and conserve native species and habitats. •
Policy OS-1.1	Preserve native species and habitat through land use planning, cooperation, and collaboration.
Action OS-1.1.1	Direct development to appropriate locations consistent with the Land Use Diagram, and protect and preserve areas designated Open Space and areas that contain sensitive habitat and species.
Action OS-1.1.2	Actively participate in regional conservation planning efforts, in particular the Butte County Habitat Conservation Plan process, sponsored by the Butte County Association of Governments, which seeks the preservation of habitat areas needed for the ongoing viability of native species.
Action OS-1.1.3	In support of AB 32, work with the Butte County Association of Governments to implement the Sustainable Community Strategy (SB 375), which directs smart-growth development to urbanized areas.
Action OS-1.1.4	Consult with conservation groups to identify sites and projects for fund-raising and volunteer participation in public education, enhancement, maintenance, and protection of natural resources within the City's Sphere of Influence.
Action OS-1.1.5	Prioritize efforts to remove nonnative species within Bidwell Park and other City greenways, and condition new development adjacent to Bidwell Park and greenways to protect native species and habitat from the introduction of invasive species.
Policy OS-1.2	Protect special-status plant and animal species, including their habitats, in compliance with all applicable state, federal and other laws and regulations.
Action OS-1.2.1–	Ensure that project-related biological impacts are considered and mitigated, and require applicants to obtain all necessary local, state and federal permits for projects that may affect special status species or their habitat.
Policy OS-1.3	Reduce excessive nighttime light and glare.
Action OS-1.3.1	Consider adoption of a Dark Sky ordinance.
Action OS-1.3.2	Seek community cooperation to reduce existing light pollution.
Goal OS-2:	Connect the community with a network of protected and maintained open space and creekside greenways to build knowledge and appreciation of these resources.
Policy OS-2.1	Continue acquisition, management, and maintenance of open space to protect habitat and promote public access.
Action OS-2.1.1	Develop and adopt an Open Space and Greenways Master Plan that catalogues the City's open space land holdings, ensures that management and maintenance programs are in place, identifies longterm funding, coordinates with other public and private open space holdings, and prioritizes additional open space acquisitions, dedications, and easements to enhance connectivity, protect resources, and facilitate public access and circulation.

Action OS-2.1.2	Pursue outside funding sources for open space acquisition, management, maintenance, and restoration.
Policy OS-2.2	Expand creekside greenway areas for open space and additional pedestrian/bicycle routes.
Action OS-2.2.1	Continue collecting fees for creekside greenway acquisition, and purchase properties as opportunities arise.
Action OS-2.2.2	Seek easements and dedications along the City's creeks to expand the greenway system.
Policy OS-2.3	Support public access to publicly held foothill areas for non-intensive recreational purposes, where appropriate.
Policy OS-2.4	Preserve the foothills as a natural backdrop to the urban form.
Action OS-2.4.1	Require visual simulations for foothill development to assess viewshed impacts.
Action OS-2.4.2	Update City's Design Guidelines Manual to address viewshed issues associated with foothill development.
Policy OS-2.5	Preserve and enhance Chico's creeks and riparian corridors as open space for their aesthetic, drainage, habitat, flood control, and water quality values.
Action OS-2.5.1	Consistent with the City's Municipal Code, require a minimum 25-foot setback from the top of creek banks to development and associated above ground infrastructure as a part of project review, and seek to acquire an additional 75 feet. In addition, require a larger setback where necessary to mitigate environmental impacts.
Policy OS-2.6	Protect oak woodlands as open space for sensitive species and habitat.
City of Gridley	
Goal 5:	To protect wildlife habitats, including those that could support sensitive species, as the City grows.
Policy 5.1	New developments shall use techniques, such as buffers, setbacks, and clustering of development to protect wetlands, riparian corridors, vernal pools, and sensitive species.
Policy 5.2	New development shall preserve open space corridors alongside agricultural drainage ditches.
Policy 5.3	The City will have former agricultural drainage ditches improved or restored in a way that avoids or improves habitat value and maintains or improves wetland function.
Policy 5.4	The City will condition new development, as necessary, to reduce erosion, siltation, and mitigate impacts to wetland, riverine, and riparian habitats.
Policy 5.5	New developments shall preserve and plant native or naturalized vegetation and avoid the introduction of invasive exotic species.
Policy 5.6	The City will require compliance with state and federal laws concerning special status species.
Policy 5.7	The City will ensure consistency of new development with applicable portions of the Butte County Habitat Conservation Plan and Natural Communities Conservation Plan.
Policy 5.8	The City will explore opportunities to use mitigation fees from regional habitat preservation programs to restore agricultural ditches.
Policy 5.9	The City will continue to collaborate with the California Department of Fish and Game and the United States Fish and Wildlife Service, as appropriate, to ensure the protection and preservation of special-status species and their habitats within the Gridley Planning Area.

Implementation Strategy 5.1	The City will require plant and animal surveys and mitigation prior to new development, as necessary, for projects subject to CEQA compliance. The City will consult with state and federal resource agencies and BCAG to identify priority habitats and special status species locations, identify survey requirements, and establish mitigation ratios. In particular, the City will focus on valley elderberry shrub locations, raptor- and migratory bird nests, Swainson's hawk nesting areas and foraging habitat, potential giant garter snake habitat, and potential wetlands, riverine, and riparian habitats. The City's survey and mitigation requirements will be consistent with guidance from the California Department of Fish and Game, the U.S. Fish and Wildlife Service, the California Native Plant Society, and the U.S. Army Corps of Engineers and the Butte County Habitat Conservation Plan and Natural Communities Conservation Plan (HCP/NCCP), as appropriate.
Implementation Strategy 5.2	The City will communicate with BCAG and other participants in the HCP/NCCP process to encourage use of regional mitigation fees for restoration of agricultural ditches in the Gridley area. Conservation Implementation Strategy 5.3 The City will update or adopt a new drainage master plan following adoption of the 2030 General Plan to implement drainage policies within the Planned Growth Area. In coordination with this effort, the City of Gridley will engage with the California Department of Fish and Game, the Regional Water Quality Control Board, the Army Corps of Engineers, and the US Fish and Wildlife Service to ensure that the appropriate biological and wetland related objectives are incorporated into the City's natural drainage approach. The City will communicate with regional, state, and federal resource agencies to ensure ease of permitting for the City's natural drainage and low impact development approach for the Planned Growth Area. The City will consult with relevant agencies to develop a streamlined permit process that ensures the feasibility of the City's stormwater best management practices.
Goal 1:	To create high-quality, functional open space corridors
Policy 1.6	Existing vegetation in open space corridors should be preserved, where it could provide ongoing habitat benefits or stormwater filtering. Noxious weeds, invasive species, and unhealthy plants can be removed, as well as vegetation posing an issue for public health or safety.
Policy 1.7	Newly planted landscaping in open space corridors shall be selected and designed to enhance habitat, provide aesthetic value, filter pollutants out of, and slow down stormwater runoff, and minimize ongoing landscape maintenance and watering.
Implementation Strategy 1.1	Following the adoption of the 2030 General Plan, the City will update the existing or prepare a new drainage master plan to address the Planned Growth Area. The drainage master plan will be designed to move away from individual site drainage requirements to an areawide approach for the Planned Growth Area, consistent with the General Plan. Although the focus for the natural drainage system is on the Planned Growth Area, the City will look for opportunities to expand these concepts into the existing developed City, also. The drainage master plan will be designed to handle specified storm events and deliver pre-development flows to the reclamation districts under post-development conditions. Construction of the Planned Growth Area stormwater management system will be phased in a way that provides adequate drainage as the area builds out. Temporary detention facilities may be necessary. The drainage master plan will emphasize the use of drainage swales to convey runoff although piping may be used in combination with swales, as appropriate, in the Planned Growth Area. The drainage master plan will be coordinated with the location of future parks so that excess stormwater can be detained and infiltrated within open playfield areas. Linear open space corridors themselves may also be designed to detain and infiltrate stormwater runoff. Preservation and restoration of agricultural drainage ditches should consider habitat value, sensitive species, and water quality objectives (see the Conservation Element). The City will explore whether mitigation fees through regional habitat conservation planning or grants from other government agencies could be made available to fund restoration elements of the City's open space strategy. The drainage master plan will be coordinated with a Nexus Fee Study to allow fair-share contribution to drainage improvements. The Nexus Fee Study should consider efficiencies created through co-location of linear parkland, trails, drainage, and buffering. Drainage fees should be structured to provide incentives for use of low impact development stormwater management best practices (see also the Conservation Element). The City will revise the Subdivision Ordinance, as necessary, to implement the drainage approach in the 2030 General Plan (and as reflected in the master drainage plan). Fenced-off, single-use detention basins will be prohibited.

City of Biggs	
Goal CR-3:	Protect and conserve sensitive habitats suitable for special-status species.
Goal CR-4:	Protect and enhance existing riparian habitat.
Goal S-3:	Protect and conserve sensitive habitats suitable for special-status species.
Policy S-3.1	Applicants for projects that have the potential to negatively affect special-status species shall conduct a biological resources assessment and identify design solutions that avoid such impacts. If adverse impacts cannot be avoided, they should be mitigated as prescribed by the appropriate state or federal agency.
Policy S-3.2	Actively participate in and support regional conservation planning efforts such as the Butte Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP) sponsored by the Butte County Association of Governments (BCAG) to protect habitats and species and streamline permitting requirements and timelines.
Goal S-4:	Protect and enhance existing riparian habitat.
Policy S-4.1	Require new development to make all reasonable efforts to minimize and avoid the loss of federally and state-protected wetlands. If loss is unavoidable, require the applicant to mitigate the loss in accordance with federal and state law.
Policy S-4.2	Promote the establishment of open space reserves along riparian corridors for habitat protection and enhancement as well as community connectivity and open space.
Action S-4.2.1	Pursue the development of a linear parkway and recreation corridor along Hamilton Slough in the southwestern portion of the city and require new development adjacent to the slough to dedicate sufficient land for this intent. Include components of habitat preservation and public recreation, as well as maintain functions of storm water and irrigation water transport.
City of Oroville	
Goal OPS-8	Preserve and protect all special-status species, species that are candidates for federal or State listing, State species of special concern, and CNPS listed plant species.
Policy P8.1	Require a biological assessment of any proposed project site where federally-, or State-listed species or critical habitat may be present.
Policy P8.2	Require a habitat-based site assessment during the project design area. If potential habitat for special-status plant or animal species is identified, additional focused surveys may need to be conducted during the appropriate season.
Policy P8.3	Require agency consultation for proposed projects for which there is the potential to impact federal or State-listed species, or other appropriate agency assistance for non-listed special-status species.
Policy P8.4	Require proposed trail projects that have the potential to impact special-status species to coordinate trail planning and development with habitat preservation efforts.
Policy P8.5	Make information available to interested parties concerning the presence and condition of special-status species.

Policy P8.6	If special-status plant or animal species are found to be located within a development site, the developer shall mitigate project impacts in accordance with State and federal law. Examples of mitigation may include: • Redesign the proposed project to avoid and minimize impacts. • Restrict construction to specific seasons based on project specific special-status species issues (e.g. minimizing impacts to special-status nesting birds by constructing outside of the nesting season). • Confine construction disturbance to the minimum area necessary to complete the work. • Mitigate for the loss of special-status species by purchasing credits at an approved conservation bank (if a bank exists for the species in question), funding restoration or habitat improvement projects at existing preserves in Butte County, or purchasing or donating mitigation lands. • Maintain a minimum 100-foot buffer on each side of all riparian corridors, creeks and streams for special-status and common wildlife. Ruddy Creek would be an example of where this applies. • Establish setbacks from the outer edge of special-status species habitat areas. • Prohibit livestock grazing or drainage into the setback of special-status species habitat areas. • Construction of barriers to prevent compaction damage by foot or vehicular traffic.
Action A8.1	Work with BCAG to develop a regional Habitat Conservation Plan and Natural Community Conservation Plan and database, and subsequently update it as necessary, for the management and protection of sensitive biological resources such as wetlands, riparian corridors, and critical habitat areas. The plan should be developed in cooperation with the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, and local interest groups, and should address all known critical habitat areas, special-status plant populations, wildlife movement corridors specifically including deer migration routes, and should prioritize areas for management and protection that are likely to be impacted by development.
Action A8.2	Prepare and maintain an updated list of State and federally listed, threatened, and endangered species and species that are candidates for listing known or suspected to occur in the City of Oroville and its immediate vicinity, as well as other special status species identified by the California Department of Fish and Wildlife and the Mt. Lassen Chapter of the California Native Plant Society. This list should be monitored and updated every two years.
Action A8.3	Develop a set of guidelines for preservation of special-status species, including, if it is found to be feasible, a tiered approach that would prioritize protection of State and federally listed species. Such an approach may include identification of appropriate buffers for preservation of species identified on a development site, and appropriate avoidance and mitigation measures for special-status species determined to be affected by a proposed development.
Goal OPS-9	Protect areas of significant wildlife habitat and sensitive biological resources to maintain biodiversity among plant and animal species in the City of Oroville and the surrounding area.
Policy P9.1	Encourage the Department of Water Resources and Department of Fish and Wildlife to manage and maintain the Oroville Wildlife Refuge for multiple uses, while protecting property values on land adjacent to the refuge.
Policy P9.2	Minimize loss of wetland value or acreage consistent with the needs of wildlife and humans, to the extent practicable and as regulated by State and federal law.

Policy P9.3	Work with Butte County and the Department of Fish and Wildlife to support the protection of migratory and resident deer herds in the Planning Area, by preserving habitat and movement corridors.
Policy P9.4	Develop a program to preserve wildlife corridors that includes designing and constructing freeway and arterial street undercrossing areas at locations that currently serve as wildlife corridors.
Policy P9.5	Require the preparation of a site-specific tree management and preservation report by a certified arborist or urban forester for development proposals on sites that contain significant oak woodlands and related habitat. This report shall include recommendations for the retention of healthy mature trees wherever feasible and promote the concept of oak regeneration corridors within project design.
Policy P9.6	Protect sensitive plant and wildlife habitat from destruction and intrusion by incompatible land uses where appropriate. All efforts to protect sensitive habitats should consider: • Sensitive habitat and movement corridors in the areas adjacent to development sites, as well as on the development site itself. • Prevention of habitat fragmentation and loss of habitat connectivity. • Use of appropriate protection measures for sensitive habitat areas such as non-disturbance easements and open space zoning. • On-site or off-site habitat restoration as a potential mitigation, with a no net loss of habitat policy. • Potential mitigation or elimination of impacts through mandatory clustering of development, and/or project redesign.
Policy P9.7	Protect native plant species in undisturbed portions of a development site and use native species for replanting in disturbed portions of the project site.
Policy P9.8	Support efforts to eradicate invasive and noxious weeds and vegetation on public and private property.
Policy P9.9	Monitor the on-going health of sensitive habitat resources in Oroville and ensure the continued effectiveness of General Plan policies intended to protect, preserve and enhance these resources.
Policy P9.10	Encourage the coordinated design of large projects to preserve on-site open space, cluster development (where feasible) and conserve natural communities and/or habitat for special-status species that have been identified in proposed project areas.
Policy P9.11	Utilize native plant species to landscape public open space areas to promote the unique local flora of the region and provide habitat for local species.
Policy P9.12	Preserve orchards, woodlands, and wetlands by clustering development in locations where the land supports fewer natural resources, and infrastructure is in or is close to the project site. Actions
Policy A9.1	Work with Butte County to coordinate the maintenance of open space and habitat preservation at or near South Table Mountain.
Policy A9.2	Work to create and establish a mitigation bank designed to offset development impacts on wetlands.

Policy A9.3	Develop a plan to enhance individual oaks, oak woodlands and other native tree groups throughout the Planning Area. The plan will provide options for the management of oaks and other tree resources.
Policy A9.4	Develop guidelines and an education strategy for property owners about issues concerning development near or adjacent to sensitive communities or habitats that support special-status species. The guidelines should clearly define the range of activities allowed within buffer areas adjacent to sensitive habitats.
Policy A9.5	Develop a Greenway Program to preserve and connect wildlife and sensitive habitat corridors.
Goal OPS-10	Protect riparian, riverine, and open water habitats.
Policy P10.1	Require an appropriately sized buffer or setback, as determined by a qualified biologist, on each side of a riparian corridor creeks, stream, wetland, or pond. Development shall be prohibite within established setback areas for these riparian corridors, creeks, stream, wetland, ponds, and waterways.
Policy P10.2	Support a multi-use concept for riparian corridors that incorporates open space, aesthetic, habitat and wildlife corridor values, while addressing social, cultural, flood control, and recreation needs.
Policy P10.3	Encourage the Department of Water Resources to maintain water levels in State Water Project facilities, including Lake Oroville, to optimize protection of fisheries and other biotic resources, preserve open water as open space, and maximize recreational opportunities per the Department of Water Resources Bulletin 117-6, while also allowing for power generation, flood control and water supply.
Policy P10.4	Work with the Department of Water Resources and Department of Fish and Wildlife to ensure the ongoing operation of the Feather River Fish Hatchery.
Policy P10.5	Work with the Department of Fish and Wildlife and Department of Water Resources to ensure the preservation and enhancement of species of resident and anadromous fish along the Feather River, in Lake Oroville, and throughout the Planning Area.
Policy P10.6	Support removal or relocation of levees on the west side of the Feather River south of Oro Dam Boulevard as a means to enhance habitat in and around the Oroville Wildlife Refuge.
Policy P10.7	Work with the Oroville Mosquito Abatement District and the Butte County Mosquito Abatement District to ensure that preservation, pre-planning and design of water features is coordinated with acceptable disease vector control measures.
Policy P10.8	Consider the effects of mosquito abatement measures on other aquatic species and minimize these effects where known special- status species occur.
Action A10.1	Search for and acquire State, federal, foundation, and private funding to preserve, promote, restore, protect and enhance riparian corridors throughout the Planning Area.
Action A10.2	Continuously monitor the Department of Water Resources' compliance with its Federal Energy Regulatory Commission licensing agreements.
Town of Paradise	
Goal OCEG-5	Preserve the natural beauty and rural charm of Paradise

Goal OCEG-6	Preserve and protect naturally sensitive areas, and significant natural features in Paradise such as trees, views, stream courses, wildlife habitat and clean air.
Policy OCEP-13	Existing large trees of historic and/or cultural significance should be protected to the best of the town's ability. Trees so identified should only be removed as a last resort.
Policy OCEP-14	Reforestation and maintenance of trees shall be encouraged along road corridors.
Policy OCEP-15	Existing, significantly important natural habitat areas having high value for birds and other wildlife should be preserved for future generations through careful land use planning and public participation.
Policy OCEP-16	Ares fisheries shall be protected, and the cooperation of responsible agencies shall be sought to assure minimum stream flow and restore fisheries.
Policy OCEP-17	Where feasible, limit new development within the secondary planning area to designated development zones as established by the Department of Fish and Game to protect deer herd migration routes.
Policy OCEP-24	Stream courses identified and designated as significantly important shall be carefully protected from the impacts of land use development, both within and outside the town limits.
Policy OCEP-26	Natural riparian vegetation along creeks should be protected.
Policy OCEP-27	Protective land use designations and zoning classifications should be established for sensitive lands such as areas of resource production, steep canyons and stream corridors, and areas of significant natural resource value.
Implementation OCEI-8	Identify and map significantly important permanent and intermittent stream courses and drainage areas in the planning area on the Land Use Constraints Diagram and develop standards for their protection, including appropriate setbacks.
Implementation OCEI-9	Establish open space, resource conservation, or lmv density rural residential zoning on sensitive (environmentally constrained) lands, such as areas of resource production, stream corridors and slopes greater than thirty percent
Implementation OCEI-12	Amend the tree ordinance to assure that its administration and enforcement will help sustain and enhance the present forested setting of Paradise, and to assure that trees are only removed as a last resort. Establish a mitigation program for tree removal.
Implementation OCEI-14	Require significantly important natural areas with high wildlife value to be set aside and preserved during land use development.
Implementation OCEI-16	Acquire conservation easements on important agricultural lands as funds are available to do so.

Appendix D

Vehicle Miles Traveled Estimates

FEHR PEERS

MEMORANDUM

Date: June 24, 2020

To: Brian Lasagna, BCAG

From: Mike Wallace, Ronald Milam & David Robinson, Fehr & Peers

Subject: Quantification of VMT Reductions Strategies Memo

RS18-3710

This memorandum contains a quantification of strategies related to reducing Vehicle Miles Traveled (VMT) including transportation demand management (TDM) and pricing for the scenarios evaluated as part of the air quality conformity and RTP/SCS. This information can be used to evaluate related greenhouse gas (GHG) reductions, the air quality conformity determination, and the RTP/SCS EIR.

Scenario Definition

The scenarios quantified and reported in this memo are described below.

- 2018 Base: the base year land use and transportation system for the model used for validation against 2018 counts (pre- Camp Fire) and travel behavior based on 2012 California Household Travel Survey (CHTS)
- 2020 Base: year 2020 forecast (post- Camp Fire) based on the 2020 RTP land use with 2020 RTP programed transportation projects
- 2030 Base: year 2030 forecast based on the 2020 RTP land use with2020 RTP programed transportation projects
- 2035 Base: year 2035 forecast based on the 2020 RTP land use with 2020 RTP programed transportation projects
- 2040 Project: year 2040 forecast based on the 2020 RTP land use with 2020 RTP programed transportation projects
- 2040 No Project: year 2040 forecast based on the adopted 2016 RTP land use with 2016 adopted transportation projects
- 2040 Unconstrained: year 2040 forecast based on the 2020 RTP land use with all of the 2020 RTP transportation projects including those that were not programed or funded.
- 2040 Environmentally Superior: year 2040 forecast based on the 2020 RTP land use with all of the active transportation projects and transit headways at half of Project headway (with a minimum of 15 minutes)

- 2040 Environmentally Superior with TDM: year 2040 forecast based on the 2020 RTP land use with all of the active transportation projects, transit headways at half of Project headway (with a minimum of 15 minutes), and parking costs 20% higher than existing (in areas with existing paid parking).

Land Use Summary

After the 2018 Base Year, the Camp Fire destroyed much of Paradise and displaced residents and employment. As a result, the 2020 land use has a much higher occupancy rate than 2018 and is more distributed within existing communities. After 2020, development in Paradise is forecast to return at a high rate, with more single family residential dwelling units (DUs) than previously planned. Due to the immediate housing need, the redevelopment is expected to be at a high rate until 2035 and then slow down slightly between 2035 and 2040. The summary of land use for each of the 2020 RTP scenarios is summarized in **Table 1** with the full details attached to this memo.

Table 1: Summary of 2020 RTP/SCS Land Use by Scenario Year

Land Use	2018	2020	2030	2035	2040
Population	227,621	228,694	248,313	258,113	265,964
Residential Total	90,962	80,843	98,497	103,545	107,169
Single Family (SF_DU)	55,279	48,635	60,278	64,200	65,980
Multi-Family (MF_DU)	23,864	22,656	26,161	27,925	29,496
Mobile Home (MH_DU)	11,819	9,552	12,058	11,420	11,694
Total Jobs	81,093	82,661	80,904	89,093	91,957

VMT Summary

After implementing the model scenarios with the transportation and land use development, the VMT and VMT per Capita were calculated. **Table 2** summarizes the VMT traveling completely within Butte County (VMT w/o XX), VMT associated with trips traveling through Butte County (XX VMT), percentage of VMT traveling through Butte County (% of XX trips), total VMT on roadways within Butte County (Total with XX), total population for the scenario, and VMT related to trips completely within Butte County per capita. The VMT per Capita is a proxy for the SB 375 metric of GHG based on VMT within Butte County which was used in the target setting. The VMT per capita decreases from 2018 to 2020 due to the higher occupancy and density of development without having a substantial amount of development in Paradise. As Paradise recovers, the VMT per capita increases with the 2040 scenario being slightly lower than the 2018 base year. The 2040 No Project has a much higher population since the forecast was pre-Camp Fire and had more of the development in Paradise than the 2020 RTP, resulting in a higher total VMT but a slightly lower VMT per Capita. The No Project being higher in total VMT and lower in VMT per Capita is reasonable given higher density of the No Project being forecast before the Camp Fire. Both Environmentally Superior scenarios result in similar VMT and VMT per Capita due to the minimal locations

that have parking pricing, the only difference between the scenarios. The highest VMT per Capita of the 2040 scenarios is the Unconstrained scenario, which is expected due to its increased focus on auto travel and expanded roadway infrastructure projects.

The VMT by speed bin used for GHG and air quality conformity can be found attached to this memo.

Table 2: VMT Summary for 2020 RTP Scenarios

Scenario	VMT (w/o X-X Trips)	XX VMT	Total (w/ X-X Trips)	% of X-X Trips	Population	VMT per Capita
2018 Base	4,705,417	164,146	4,869,563	3.4%	227,621	20.7
2020 Base	4,343,919	164,153	4,508,072	3.6%	228,694	19.0
2030 Base	4,883,463	169,430	5,052,893	3.4%	248,313	19.7
2035 Base	5,181,813	181,958	5,363,771	3.4%	258,113	20.1
2040 Project	5,332,327	195,390	5,527,717	3.5%	265,964	20.0
2040 No Project	6,216,655	195,396	6,412,051	3.0%	319,342	19.5
2040 Unconstrained	5,356,425	195,390	5,551,815	3.5%	265,964	20.1
2040 Environmentally Superior	5,303,598	195,390	5,498,988	3.6%	265,964	19.9
2040 Environmentally Superior (with TDM)	5,294,261	195,390	5,489,651	3.6%	265,964	19.9

Highway and Freeway Congestion

The revised State Transportation Improvement Program (STIP) guidelines for evaluating congestion are based on highways and freeways operating at or below 35 mph during the AM or PM peak periods. Congestion will be used for the RTP/SCS EIR for each of the scenarios. Based on the travel model for each of the scenarios, there are no scenarios that have highways or freeways at or below 35 mph during the AM or PM peak periods.

Next Steps

This memo will be reviewed by BCAG staff and the EIR consultant team to determine which scenarios to include in the 2020 RTP/SCS EIR. BCAG staff will then use the VMT by speed bin results to evaluate SB 375 target compliance and air quality conformity. The contents of this memo will be incorporated into the overall model development report to document the inputs and results of the model scenarios.

Land Use Summary

Land Use	Units	2018			2020			2030			2035			2040		
		Total	Occupied	Ratio	Total	Occupied	Ratio	Total	Occupied	Ratio	Total	Occupied	Ratio	Total	Occupied	Ratio
Population	People	227,621	227,621	1.00	228,694	228,694	1.00	248,313	248,313	1.00	258,113	258,113	1.00	265,964	265,964	1.00
Residential		99,353	90,962	0.92	86,929	80,843	0.93	105,916	98,497	0.93	111,339	103,545	0.93	115,270	107,169	0.93
Single Family (SF_DU)	DU	60,596	55,279	0.91	52,992	48,635	0.92	65,271	60,278	0.92	68,765	64,200	0.93	71,446	65,980	0.92
Multi-Family (MF_DU)	DU	25,661	23,864	0.93	24,323	22,656	0.93	27,538	26,161	0.95	30,167	27,925	0.93	31,113	29,496	0.95
Mobile Home (MH_DU	DU	13,096	11,819	0.90	9,614	9,552	0.99	13,107	12,058	0.92	12,407	11,420	0.92	12,710	11,694	0.92
Non-Residential																
Retail	KSF	13,769	11,949	0.87	12,816	11,772	0.92	13,915	11,272	0.81	15,995	13,012	0.81	16,117	13,729	0.85
Regional Retail	KSF	1,005	895	0.89	1,005	925	0.92	1,091	895	0.82	1,139	934	0.82	1,174	975	0.83
Industrial	KSF	15,027	12,367	0.82	15,657	14,297	0.91	17,000	13,430	0.79	17,053	13,631	0.80	17,538	14,014	0.80
Office	KSF	8,062	7,014	0.87	7,782	7,143	0.92	8,450	6,929	0.82	9,329	7,748	0.83	9,449	7,880	0.83
Medical Office	KSF	2,552	2,229	0.87	2,414	2,216	0.92	2,621	2,149	0.82	2,936	2,425	0.83	2,972	2,459	0.83
Public	KSF	2,311	2,311	1.00	2,246	2,246	1.00	2,439	2,439	1.00	2,598	2,598	1.00	2,710	2,710	1.00
Hospitals (HOSP_KSF)	KSF	1,159	1,159	1.00	966	966	1.00	1,049	1,049	1.00	1,272	1,272	1.00	1,320	1,320	1.00
Hotels (HOTEL_RMS)	Rooms	2,095	2,095	1.00	2,188	2,188	1.00	2,376	2,376	1.00	2,450	2,450	1.00	2,450	2,450	1.00
Park (PARK_AC)	Acres	16,500	16,500	1.00	16,578	16,578	1.00	18,000	18,000	1.00	18,710	18,710	1.00	19,279	19,279	1.00
Casino (CASINO_SLT)	Slots	12,950	12,950	1.00	13,011	13,011	1.00	14,127	14,127	1.00	14,685	14,685	1.00	15,129	15,129	1.00
University (UNIV_STU)	Students	1,848	1,848	1.00	1,857	1,857	1.00	2,016	2,016	1.00	2,096	2,096	1.00	2,159	2,159	1.00
Butte College (CC_STU	Students	1,178	1,178	1.00	1,184	1,184	1.00	1,286	1,286	1.00	1,336	1,336	1.00	1,377	1,377	1.00
Schools (K12_STU)	Students	2,687	2,687	1.00	2,614	2,614	1.00	2,892	2,892	1.00	2,923	2,923	1.00	2,930	2,930	1.00
Retail	Jobs	27,538	23,898	0.87	25,632	23,544	0.92	27,831	22,543	0.81	31,990	26,024	0.81	32,234	27,458	0.85
Regional Retail	Jobs	2,010	1,790	0.89	2,010	1,850	0.92	2,182	1,790	0.82	2,278	1,868	0.82	2,348	1,950	0.83
Industrial	Jobs	16,697	13,741	0.82	17,397	15,886	0.91	18,889	14,922	0.79	18,948	15,146	0.80	19,487	15,571	0.80
Office	Jobs	24,806	21,582	0.87	23,945	21,978	0.92	25,999	21,319	0.82	28,705	23,840	0.83	29,074	24,246	0.83
Medical Office	Jobs	7,852	6,858	0.87	7,428	6,818	0.92	8,065	6,613	0.82	9,034	7,462	0.83	9,145	7,566	0.83
University (UNIV_STU)	Jobs	1,848	1,848	1.00	1,857	1,857	1.00	2,016	2,016	1.00	2,096	2,096	1.00	2,159	2,159	1.00
Butte College (CC_STU	Jobs	1,178	1,178	1.00	1,184	1,184	1.00	1,286	1,286	1.00	1,336	1,336	1.00	1,377	1,377	1.00
Schools (K12_STU)	Jobs	2,687	2,687	1.00	2,614	2,614	1.00	2,892	2,892	1.00	2,923	2,923	1.00	2,930	2,930	1.00
Public	Jobs	3,555	3,555	1.00	3,455	3,455	1.00	3,752	3,752	1.00	3,997	3,997	1.00	4,169	4,169	1.00
Hospitals (HOSP_KSF)	Jobs	3,118	3,118	1.00	2,599	2,599	1.00	2,821	2,821	1.00	3,422	3,422	1.00	3,551	3,551	1.00
Hotels (HOTEL_RMS)	Jobs	838	838	1.00	875	875	1.00	950	950	1.00	980	980	1.00	980	980	1.00
Persons per Household		2.29	2.50		2.63	2.83		2.34	2.52		2.32	2.49		2.31	2.48	
Jobs per dwelling unit																
Total *		0.93	0.89		1.02	1.02		0.91	0.82		0.95	0.86		0.93	0.86	
Retail		0.30	0.28		0.32	0.31		0.28	0.25		0.31	0.27		0.30	0.27	
Non-Retail		0.63	0.61		0.71	0.71		0.63	0.57		0.64	0.59		0.63	0.58	
College/University		0.03	0.03		0.03	0.04		0.03	0.03		0.03	0.03		0.03	0.03	
K-12		0.03	0.03		0.03	0.03		0.03	0.03		0.03	0.03		0.03	0.03	

* Jobs per dwelling units on assumptions worksheets are based on total DUs and non-Aggriculture employees

Butte County Daily VMT Summary By Speed Bin									
Speed Bin	2018	2020	2030	2035	2040 Project	2040 No Project	2040 Unconstrained	2040 Environmentally Superior	2040 Environmentally Superior (with TDM)
0 - 5	438	394	1,884	1,980	2,351	1,359	2,347	2,351	2,349
5 - 10	9,628	9,210	8,532	8,905	8,956	10,978	8,990	8,957	8,954
10 - 15	7,845	1,352	7,751	15,727	8,649	8,198	7,854	8,076	8,057
15 - 20	51,135	27,109	41,749	48,156	51,069	60,799	34,569	51,223	50,326
20 - 25	320,083	298,946	351,346	361,426	374,073	447,849	371,470	371,411	371,706
25 - 30	85,319	80,203	86,224	90,330	100,859	102,294	86,377	100,153	99,770
30 - 35	1,041,924	889,159	1,059,805	1,116,167	1,121,834	1,331,362	1,088,341	1,111,496	1,109,424
35 - 40	121,707	135,858	120,224	127,427	133,573	158,787	128,149	134,140	133,926
40 - 45	671,693	589,758	666,805	702,054	714,922	826,816	723,260	709,329	708,309
45 - 50	178,044	161,178	166,547	175,925	180,978	223,824	225,093	181,588	181,638
50 - 55	441,137	389,787	392,845	416,563	425,444	481,229	423,670	424,209	423,510
55 - 60	49,368	36,762	37,929	23,746	24,172	362,700	88,497	24,161	24,133
60 - 65	1,727,096	1,724,202	1,941,822	2,093,408	2,185,444	2,200,462	2,167,807	2,176,504	2,172,160
65 - 70	0	0	0	0	0	0	0	0	0
70 - 75	0	0	0	0	0	0	0	0	0
>75	0	0	0	0	0	0	0	0	0
VMT (w/o X-X Trips)	4,705,417	4,343,919	4,883,463	5,181,813	5,332,327	6,216,655	5,356,425	5,303,598	5,294,261
XX VMT	164,146	164,153	169,430	181,958	195,390	195,396	195,390	195,390	195,390
Total (w/ X-X Trips)	4,869,563	4,508,072	5,052,893	5,363,771	5,527,717	6,412,051	5,551,815	5,498,988	5,489,651
% of X-X Trips	3.4%	3.6%	3.4%	3.4%	3.5%	3.0%	3.5%	3.6%	3.6%
Population	227,621	228,694	248,313	258,113	265,964	319,342	265,964	265,964	265,964
VMT per Capita	20.7	19.0	19.7	20.1	20.0	19.5	20.1	19.9	19.9