



**INITIAL STUDY/ STATE CEQA
GUIDELINES SECTION 15183 ANALYSIS
FOR THE
CITYWIDE ROADWAY & TRANSPORTATION
MASTER PLAN UPDATE PROJECT**

August 2022

Prepared For:

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SECTION 1.0 INTRODUCTION

This Initial Study provides an analysis of the proposed Roadway and Transportation Master Plan Update Project (proposed Project). The proposed Citywide Roadway and Transportation Master Plan Update (TMP Update) builds upon the goals and objectives as defined in the City's General Plan Circulation Element (February 2011) and the Sustainable Action Plan (February 2011). While the City's General Plan is based upon a future Horizon Year of 2025, the TMP looks to a Horizon Year of 2042 to provide the maximum possible infrastructure planning and be consistent with the planned San Joaquin Council of Governments (SJCOG) Travel Demand update. The TMP Update provides a complete review of the City's existing transportation system and is intended to serve as a comprehensive planning document to identify and implement required improvements to the roadway system. Additionally, the TMP Update can serve as the baseline for incorporating expansion or accommodating future development, consistent with the City's General Plan. The TMP Update is described in greater detail below under Section 3.0: Project Description. **Figure 1-1: Regional Location Map** depicts the City and surrounding area, **Figure 1-2: Tracy City Limit and Sphere of Influence** depicts the City's SOI and TMP Update Study Area, and **Figure 1-3: USGS Topographic Map** depicts the USGS 7.5-minute topographical Tracy quadrangle area.

The proposed TMP Update is consistent with the development assumptions in the General Plan. Thus, as described in greater detail below, this Initial Study/State CEQA Guidelines Section 15183 Analysis is limited to analyzing only those significant impacts effects associated with implementation of the TMP that are not addressed in the General Plan EIR or were not known at the time the General Plan EIR was prepared.

The City has chosen to refer to the level of analysis in the TMP Update as a "Tier 1" evaluation, in which overall planning objectives, goals, and policies, are defined and required "backbone" infrastructure is identified and sized to serve buildout of the City's General Plan. A "Tier 2" evaluation, including evaluation of required onsite infrastructure to meet the needs of specific proposed development projects and phasing of recommended buildout improvements, will be initiated at a later date on a project-by-project basis and is not included in the TMP Update. Thus, the analysis contained herein is focused on the Tier 1 evaluation, and is broad in its consideration of environmental effects.

The recommendations in the TMP Update are limited to the identification of facility improvements at a Master Plan level and do not necessarily include all required onsite infrastructure, nor constitute design of improvements. Subsequent detailed design is required to determine the exact layout and final locations of the proposed transportation infrastructure improvements. Further, while the TMP Update provides detailed recommendations of seemingly "specific" improvements, it must be emphasized that these are preliminary "Tier 1" recommendations based on qualitative assessment and preliminary engineering design (only) and as a result do not as of yet, have the specific identified project details and in many instances specific identified project locations necessary for a meaningful evaluation of potential environmental impacts.

Because the TMP Update is a policy document prepared to implement the objectives and actions identified in the General Plan and Sustainability Action Plan, it does not propose the construction or operation of transportation infrastructure projects at this time. Consequently, adoption of the TMP

Update would not directly result in the construction and operation of infrastructure that could have negative environmental effects. Notwithstanding, the TMP Update recommends capital improvements or other applicable measures needed to address deficiencies and/or support buildout conditions identified by the City's General Plan and its adoption would indirectly facilitate the construction and operation of transportation infrastructure that could result in negative environmental effects. Nonetheless, because specific project details are not available at this time, additional future environmental review would be required on a project-by-project basis, as transportation infrastructure projects come forward. This future environmental review would be necessary to analyze and disclose any site-specific impacts the infrastructure identified by the TMP Update might have on the environmental resources identified by the CEQA Guidelines. Nonetheless, as stated above, the analysis in this Initial Study/CEQA Guidelines Section 15183 Analysis is focused on the Tier 1 evaluation, and is thus, broad and general in its consideration of environmental effects.



SOURCE: USGS, 2022

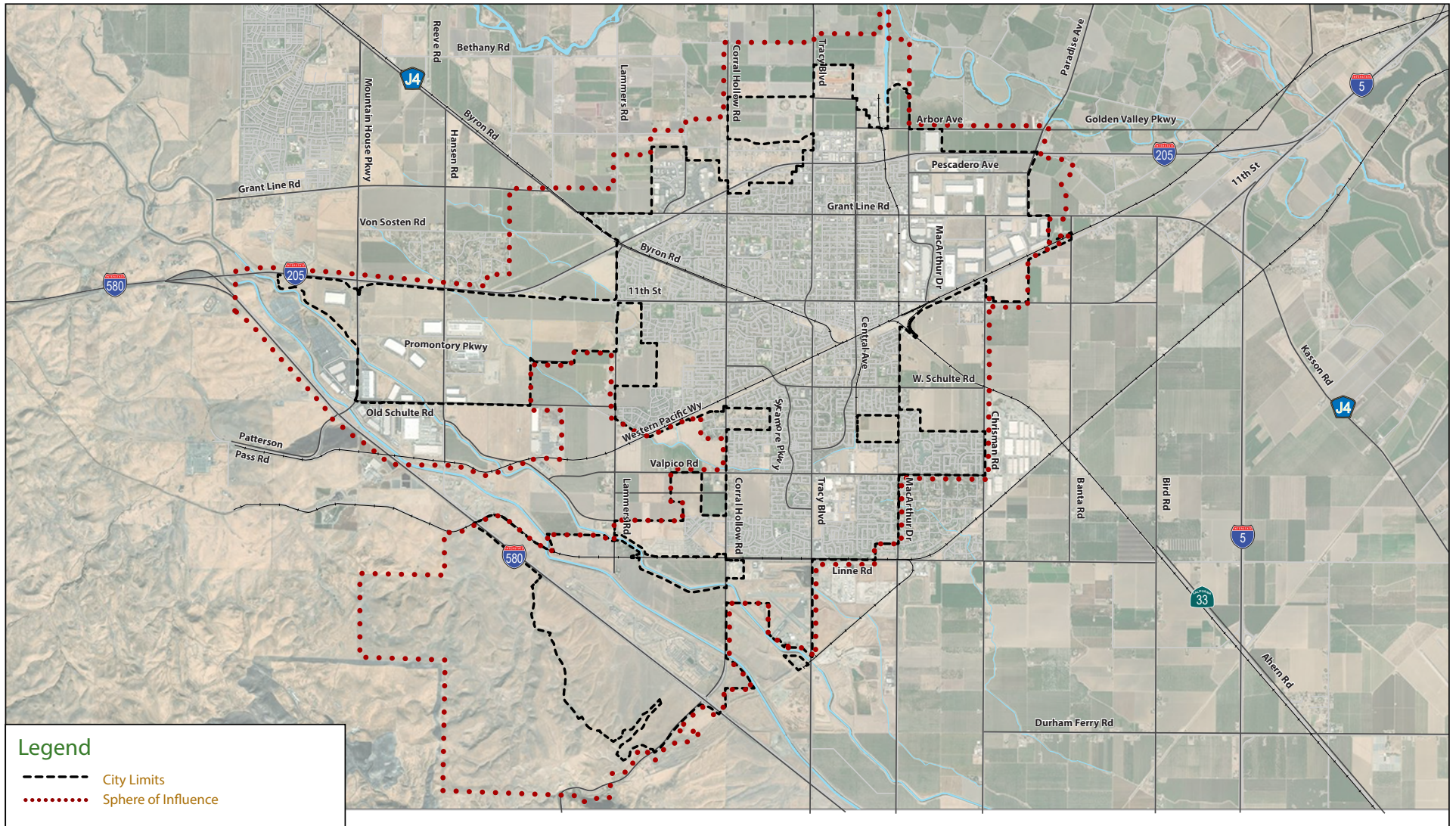
Figure 1-1: Regional Location

TMP Update
Initial Study



Not to scale

Kimley»Horn



SOURCE: City of Tracy, 2022

Figure 1-2: Tracy City Limit and Sphere of Influence

TMP Update
Initial Study



Not to scale

Kimley»Horn

California Environmental Quality Act

This Initial Study has been prepared in accordance with the provisions of the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] §§ 21000 et seq.); the State CEQA Guidelines (Title 14, California Code of Regulations [CCR] §§ 15000 et seq.); and the rules, regulations, and procedures for implementing CEQA as set forth by the City of Tracy (City).

CEQA Section 21094(a)(1)(2)

According to § 21094(a)(1)(2), a subsequent project that is consistent with the following:

- (1) a program, plan, policy, or ordinance for which an Environmental Impact Report (EIR) was prepared and certified; and,
- (2) applicable local land use plans and zoning

may rely on the analysis contained within the previously certified EIR prepared for the program, plan, policy, or ordinance and need not conduct new or additional analysis for those effects that were either:

- (1) avoided or mitigated by the certified EIR; or,
- (2) were sufficiently examined by the certified EIR to enable those effects to be mitigated or avoided by site-specific revisions; the imposition of conditions; or, by other means in connection with approval of the subsequent project.

State CEQA Guidelines Section 15183

Section 15183 of the State CEQA Guidelines, enables public agencies to streamline the environmental review of subsequent projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified by limiting its examination of environmental effects which are peculiar to the project or its site.

In approving a project meeting the requirements of this section, a public agency shall limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis:

- (1) Are peculiar to the project or the parcel on which the project would be located;
- (2) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent;
- (3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action; or,
- (4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.

Based on the analysis and evaluation provided in this Initial Study, the proposed TMP Update is consistent with the development assumptions in the General Plan. Thus, as described in greater detail below, this Initial Study/State CEQA Guidelines Section 15183 analysis is limited to analyzing only those significant effects associated with implementation of the TMP Update that are not addressed in the General Plan EIR or were not known at the time the General Plan EIR was prepared, consistent with the provisions of State CEQA Guidelines Section 15183, as described above.

SECTION 2.0 INCORPORATION BY REFERENCE

The City of Tracy General Plan Final EIR (State Clearinghouse No. 2008092006) has been cited and incorporated by reference into this Initial Study/State CEQA Guidelines Section 15183 Analysis, in accordance with Section 15150 of the State CEQA Guidelines, as a means of reducing the redundancy and length of this environmental document. The City of Tracy General Plan Final EIR is available for public review at the City of Tracy Planning Division, located at 333 Civic Center Plaza, Tracy, CA 95376, and online at the City of Tracy website: <https://www.cityoftracy.org/our-city/departments/planning/general-plan-zoning-ordinance>. This document is hereby incorporated by reference into this Initial Study/State CEQA Guidelines 15183 Analysis.

City of Tracy General Plan Final EIR (State Clearinghouse No. 2008092006)

The General Plan EIR assesses the potential environmental consequences of adoption and implementation of the City of Tracy General Plan and Sustainability Action Plan. The assessment is designed to inform City of Tracy decision-makers, other responsible agencies, and the public-at-large of the nature of the General Plan and Sustainability Action Plan and their effects on the environment. The General Plan EIR has been prepared in accordance with and in fulfillment of CEQA requirements. The General Plan EIR consists of the Draft EIR, the Final EIR, and its various amendments and supplements.

The General Plan EIR is a Program EIR. As a Program EIR, the General Plan EIR is not project-specific and does not evaluate the impacts of specific projects that may be proposed under the General Plan. Such projects would require separate environmental review to secure the necessary discretionary development permits. While subsequent environmental review may be tiered off the General Plan EIR, the General Plan EIR is not intended to address impacts of individual projects.

General Plan EIR Project Description

The City approved an update to the General Plan on February 1, 2011. The General Plan provides a vision for the future and establishes a framework for how the City of Tracy should grow and change over the next two decades. The General Plan establishes goals, objectives, policies, and actions to guide this change in a desired direction. The General Plan presents existing conditions in the City, including physical, social, cultural, and environmental resources and opportunities. The General Plan looks at trends, issues, and concerns that affect the region.

The purpose of the General Plan is to act as the principal policy and planning document for guiding future conservation, enhancement, and development in the City. It represents the basic policy direction of the City of Tracy City Council on basic community values, ideals, and aspirations to govern a shared environment through 2025. The General Plan addresses all aspects of development including land use, transportation, housing, economic development, public facilities, infrastructure, and open spaces, among other topics. In addition, it articulates a vision for the City's long-term physical form and development. It also brings a deliberate overall direction to the day-to-day decisions of the City Council, its commissions, and City staff.

The City of Tracy General Plan is guided by a vision statement and is comprised of nine separate “elements” that set goals, objectives, policies, and actions for a given subject. The goals, objectives, policies, and actions provide guidance to the City on how to accommodate growth and manage its resources over the next 20 years. The goals, objectives, policies, and actions in each element are derived from a number of sources, including the 1993 General Plan, the background information collected for the General Plan Update, discussions with the City Council and Planning Commission, public workshops, and meetings with property owners. Many of the recommendations from the Tracy Tomorrow 2000 final report are also brought forward into the General Plan. In addition to the goals, objectives, policies, and actions, each element contains background information that describes current conditions in the City of Tracy relative to the subject of the element.

Five of these elements cover six topics required by State law, while the remaining four elements have been prepared by the City to meet local needs and concerns. Some elements also have additional sections that are specific to them. For example, the Land Use Element contains a series of land use designations that guide overall development in the City and the Circulation Element contains information on the network and hierarchy of streets in the City.

The elements that form the General Plan Update are briefly described below:

Land Use Element. The required Land Use Element designates all lands within the City for a specific use such as residential, office, commercial, industry, open space, recreation, or public uses. The Land Use Element provides policy direction for each land use category, and also provides overall land use policies for the City. **Figure 2-1: General Plan Land Use** depicts the City’s current Land Use Map.

Community Character Element. The Community Character Element is not required by State law. However, due to the importance of maintaining and enhancing the City of Tracy’s hometown feel and the related importance of urban design for the City, this optional element has been included.

Economic Development Element. This optional element contains goals, objectives, policies, and actions to encourage the development of desired economic activities throughout the City. The information in this element is derived from the City’s Economic Development Strategy prepared in 2002.

Circulation Element. This required element specifies the general location and extent of existing major streets, level of service, transit facilities, and bicycle and pedestrian network. As required by law, all facilities in the Circulation Element are correlated with the land uses foreseen in the Land Use Element.

Open Space and Conservation Element. The Open Space Element and the Conservation Element are required under State law and are combined in this General Plan. Issues addressed include the preservation of open space and agricultural land, the conservation, development, and utilization of natural resources, and the provision of parks and recreational facilities. Open space goals for public health and safety are covered in the Safety Element.

Public Facilities and Services Element. This optional element covers a wide range of topics related to the provision of public services and infrastructure in the City. Topics covered include law enforcement, fire protection, schools, public buildings, solid waste, and the provision of water, wastewater, and stormwater infrastructure.

Safety Element. State law requires the development of a Safety Element to protect the community from risks associated with the effects of flooding, seismic and other geologic hazards, and wildland fires.

Noise Element. This required element addresses noise in the community and analyzes and quantifies current and projected noise levels from a variety of sources, such as traffic, industry, rail, and the airport. The Noise Element includes goals, objectives, policies, and actions to address current and foreseeable noise issues.

Air Quality Element. This element, which is required for all jurisdictions in the San Joaquin Air Pollution Control District, outlines goals, objectives, policies, and actions to mitigate the air pollution impacts of land use, the transportation system, and other activities that occur in the City of Tracy.

In addition, the City prepared a Housing Element under a separate cover. The Housing Element addresses existing and projected housing demand and establishes goals, objectives, policies, and actions to assist the City in implementing the plan in accordance with other General Plan policies. It is not included with the remainder of the General Plan because it was prepared under a separate timeline and under detailed State criteria.

The Sustainability Action Plan is a detailed, long-range strategy to achieve sustainability in the sectors of greenhouse gas (GHG) emissions, energy, transportation, land use, solid waste, water, agriculture and open space, biological resources, air quality, public health, and economic development. Implementation of the Sustainability Action Plan is intended to support the State of California's emission reduction targets by guiding the City's actions to reduce its GHG emissions, conserve and protect natural resources, improve public health, promote economic vitality, and engage residents.

The Sustainability Action Plan establishes targets related to a variety of sustainability topics, and sets forth measures that will assist the City in reaching those goals. The Sustainability Action Plan sets a target of a 29 percent reduction of GHG emissions from 2020 Business As Usual (BAU) projected levels. GHG emissions in 2020 under BAU conditions are projected to be 1,748,970 metric tons carbon dioxide equivalent (MTCO₂e). The target therefore translates into a reduction of 507,201 MTCO₂e. Implementation of the Sustainability Action Plan is projected to reduce GHG emissions in the City of Tracy by between 382,422 and 486,115 MTCO₂e, which represents an achievement of between 75 and 96 percent of the overall target.

Environmental Effects

Under CEQA, a significant impact on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance.

Implementation of the General Plan and Sustainability Action Plan has the potential to generate 22 environmental impacts in a number of areas, including both plan level and cumulative impacts. Some of the impacts can be reduced to a less than significant level with mitigation measures, while others cannot and are considered significant and unavoidable.

A brief summary of the impacts identified is provided below.

Visual Resources (Aesthetics)

Despite General Plan policies to enhance “hometown feel” and preserve open space, development permitted under the General Plan for both 2025 and total buildout of the City limits and SOI would result in a significant and unavoidable impact on the existing visual identity and character of the City. Furthermore, in spite of General Plan policies to protect scenic resources, including those along state designated scenic highways for development projected through 2025, a significant and unavoidable impact would occur on scenic resources along the state designated scenic routes I-580 (between I-205 and I-5) and I-5 (south of I-205) at total buildout of the General Plan. In addition, a significant and unavoidable impact on scenic views from regional roadways would occur as a result of development projected for the 20-year development scenario and under total buildout of the City limits and SOI. However, General Plan objectives and policies would positively affect corridors and gateways and enhance the visual character of streetscapes throughout the City. Development permitted under the General Plan would increase levels of light and glare to a significant level resulting in adverse, but mitigable impacts on the visual quality of the City of Tracy.

Agricultural Resources

Despite General Plan policies to preserve agricultural lands, in addition to policies in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) and the City’s Agricultural Mitigation Fee Ordinance, development permitted under the General Plan would result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to urban uses. This is a significant and unavoidable impact. No additional mitigation is available. Moreover, despite policies in the General Plan to support and encourage preservation of Williamson Act lands and the voluntary nature of the Williamson Act program, total buildout of the City limits and SOI may result in the conversion of land under active contracts to urban uses. This is a significant and unavoidable impact. No additional mitigation is available. Finally, implementation of the General Plan would result in additional and incompatible urban development adjacent to agricultural uses, resulting in a significant and unavoidable impact associated with the conversion of additional farmland to urban uses.

Air Quality

As stated in the General Plan EIR, the air quality analysis relies on modeled traffic data that extends to the year 2030 and, thus, air quality impacts extend to that year as well. The General Plan and Sustainability Action Plan would not be consistent with applicable clean air planning efforts of the San Joaquin County Valley Air Pollution Control District (SJVAPCD), since vehicle miles traveled (VMT) that could occur under the proposed General Plan would exceed that projected by the San Joaquin Council of Governments

(SJCOG), which are used in projections for air quality planning. The projected growth could lead to an increase in the region's VMT beyond that anticipated in the SJCOG and SJVAPCD clean air planning efforts. Development in Tracy would contribute to the on-going air quality issues in the San Joaquin Valley Air Basin. Mitigation identified in the General Plan EIR would not reduce the impact to less than significant. However, the General Plan would be consistent with clean air transportation control measures of the SJVAPCD and SJCOG.

The General Plan does not provide adequate buffers between new or existing sources of toxic air contaminants and new or existing residences or sensitive receptors, requiring mitigation which was determined to reduce this impact to less than significant. General Plan policies work to ensure that the General Plan would have a less than significant impact on exposure to odors. Sensitive receptors would not be significantly impacted by carbon monoxide (CO) concentrations, resulting in a less than significant impact. Particulate matter from construction associated with development allowed under the General Plan would be a less than significant impact with the incorporation of construction air pollutant control measures recommended by the SJVAPCD. Construction exhaust emissions would be reduced to a less than significant impact with adherence to General Plan policies and SJVAPCD rules and regulations.

Biological Resources

Development allowed under the proposed General Plan does have the potential to significantly impact biological resources, but these potential impacts would be addressed through General Plan goals, objectives, and policies, resulting in less than significant impacts on biological resources.

Cultural Resources

The implementation of a combination of General Plan policies and guiding mechanisms would reduce potential impacts on historical resources to a less than significant level. However, undiscovered archaeological and paleontological sites, including human remains (especially in undeveloped areas), could be negatively impacted by development identified by the General Plan, requiring the implementation of mitigation measures identified in the General Plan EIR to reduce the potentially significant impact on archaeological and paleontological resources to a less than significant level.

Geology, Soils, and Seismic Hazards

Increased development proposed under the General Plan could increase the number of people and buildings exposed to geologic hazards. The General Plan Update includes a series of policies and actions within the Safety Element to minimize harm from geologic hazards and did not identify any significant impacts.

Greenhouse Gas Emissions

Although the General Plan and Sustainability Action Plan include many goals, policies, and measures that would reduce GHG emissions from projected BAU levels by 22 and 28 percent, the General Plan would not meet the SJVAPCD's threshold of a 29 percent reduction in GHG emissions from BAU projected emissions. Therefore, the proposed General Plan and Sustainability Action Plan would result in a

significant GHG emission impact. All feasible GHG emissions reduction measures were incorporated into the General Plan and Sustainability Action Plan; therefore, no additional mitigation would be feasible, and the impact is considered significant and unavoidable.

Taken together, policies and actions from the General Plan in combination with Sustainability Action Plan policies would ensure adequate emergency preparedness to handle impacts associated with climate change. Therefore, the related impact would be less than significant.

Hazards and Hazardous Materials

Implementation of the General Plan would allow for the development of new residential, commercial, office, and industrial uses. This could increase the amount of hazardous materials used and wastes generated, as well as the number of people and structures exposed to these and other hazards. Implementation of a combination of Federal, State, and local policies and regulations, including policies and actions identified by the General Plan, would reduce the risk to less than significant.

Hydrology and Flooding

Some development would occur within the 100-year floodplain, within the 20-year planning horizon, and under total buildout of the General Plan. However, the implementation of the General Plan and its policies would reduce the potential impact associated with exposure to the 100-year flood plain to a less than significant level. Portions of the SOI have the potential to experience flooding from dam failure during the 20-year planning horizon of the General Plan and at total buildout, but the General Plan includes policies and actions that would reduce this risk to a less than significant level. Moreover, risk of dam failure is small, because the County continues to maintain the dam to withstand probable seismic activity. Development proposed under the General Plan is not anticipated to significantly alter existing drainage patterns or stream alignments, and there would not be a significant increase in storm water runoff or flooding, especially in light of General Plan policies and actions that are designed to mitigate such risk. The City of Tracy is at a low risk for seiche and tsunami and implementation of the General Plan is not expected to increase these risks. No new development is proposed in the hillsides, where there is a risk of mudflow. Thus, no impact associated with seiche, tsunami, or mudflow would be expected.

Land Use

No significant land use impacts were identified as a result of implementation of the General Plan and Sustainability Action Plan. The proposed General Plan and Sustainability Action Plan would not physically divide an established community with the implementation of policies identified in the General Plan, and due to the fact that the majority of development would occur on vacant land where no established community exists. Implementation of policies and actions in the proposed General Plan and Sustainability Action Plan and the LAFCO process would result in less than significant land use impacts related to conflicts with other plans, policies, and regulations applicable in the City of Tracy area. Furthermore, implementation of General Plan policies designed to minimize conflict and encourage an orderly land use pattern would ensure land use compatibility.

Mineral Resources

The policies in the General Plan would minimize potential land use conflicts between aggregate resource activities and other uses, and in general ensure that new development would not impact the future availability of mineral resources or mineral resource recovery sites. Therefore, this impact would be less than significant.

Noise

Despite General Plan policies and regulations, significant noise level increases (3 dBA Ldn or greater) associated with increased traffic would occur adjacent to existing noise sensitive uses along portions of I- 205, Grant Line Road, Schulte Road, Linne Road, Lammers Road, Corral Hollow Road, Tracy Boulevard, and MacArthur Drive. New roadways facilitated by the General Plan would also increase existing noise levels at receivers in the City of Tracy. This is a significant and unavoidable impact. No additional mitigation is available. Under the General Plan, new noise sensitive development is proposed throughout the City, and in some cases, in noisy areas. However, General Plan policies would adequately reduce this noise impact to a less than significant level. Additionally, development under the proposed General Plan would introduce new noise-generating sources adjacent to existing noise-sensitive areas and new noise-sensitive uses adjacent to existing noise-generating sources. Regardless, according to the General Plan EIR, General Plan policies would adequately reduce these impacts to a less than significant level. The General Plan EIR found that no significant impacts would occur with regard to airport noise, and noise associated with construction could be reduced to less than significant with the implementation of mitigation identified by the General Plan EIR.

Population, Employment, and Housing

While General Plan policies and other regulations would reduce impacts to future population and housing growth to the extent feasible for development projected through 2025, a significant and unavoidable impact would occur by inducing substantial population growth at total buildout of the General Plan. However, implementation of the General Plan and Sustainability Action Plan would not displace housing or populations, given that a majority of growth proposed in the General Plan would occur on vacant and agricultural land, growth is encouraged in existing neighborhoods and infill areas, and General Plan policies encourage the preservation and enhancement of the character of existing neighborhoods while specifically stating that new development should not physically divide established neighborhoods.

Traffic and Circulation

There would be a less than significant impact on local roadways with the implementation of roadway improvements identified in the General Plan EIR. Assuming the planned network improvements outlined in the General Plan EIR are implemented, the City's level of service standards would be maintained except at the Eleventh Street/Corral Hollow Road and Eleventh Street/Lammers Road intersections. In the case of the Eleventh Street/Corral Hollow Road intersection, General Plan Policy 2 under Objective CIR-1.3, which allows individual locations to fall below the City's level of service standards in instances where the construction of physical improvements would be infeasible or would conflict with the character of the

community, would apply, since this intersection is constrained to the point of not allowing for adequate at-grade improvements. Thus, the resulting level of service would not result in a significant impact. Further improvements at the Eleventh Street/Lammers Road intersection identified in the General Plan EIR would reduce impacts at this intersection to a less than significant level.

While the General Plan incorporates a range of features that work to help reduce the potential impact of future growth in the City on regional roadways, none of these approaches would reduce the potential impact to a less than significant level, so a significant and unavoidable impact on the following regional roadways would occur:

- I-205
- I-580
- I-5
- Patterson Pass Road
- Tesla Road

Regarding design feature hazards, bicycle and pedestrian safety, emergency vehicle access, parking capacity, conflicts with adopted regional policies and plans regarding alternative transportation and air traffic, implementation of existing regulations and goals, objectives, and policies included in the General Plan would ensure that significant impacts do not occur.

Community Services (Public Services)

Increases in population and development facilitated by the General Plan would increase the demand for the following community services: police protection, fire protection and emergency medical services, schools, solid waste disposal, and parks and recreational facilities. The General Plan EIR determined that the construction of new police and fire protection and emergency medical facilities, as well as schools and new individual park or recreation facilities to support the growth permitted under the General Plan, could not be determined at the first tier level of analysis conducted for the General Plan. Policies from the General Plan that are identified in other sections of the General Plan EIR also apply to any potential impacts associated with the construction and operation of these community service facilities. As specific community service facility projects are identified, additional second-tier environmental analysis would be completed pursuant to CEQA.

Infrastructure (Utilities and Service Systems)

Water

No significant water-related impacts were identified for development projected through 2025. However, despite policies in the Public Facilities Element of the General Plan, the General Plan EIR identified an insufficient secured water supply to serve projected development under total buildout of the General Plan. This is a significant and unavoidable impact of total buildout of the General Plan. No additional mitigation is available.

Wastewater

The City's existing wastewater treatment system is not designed to accommodate development projected under total buildout of the SOI, resulting in a significant impact. However, the General Plan EIR concluded that the specific environmental impact of constructing wastewater treatment facilities in the City limits and SOI could not be determined at that first-tier level of analysis, but as specific wastewater treatment expansion projects are identified, additional project specific, second-tier environmental analysis would be completed.

Stormwater

The policy direction identified in the General Plan, in addition to other regulatory requirements regarding stormwater management, ensure that the General Plan would not have a significant impact on storm drainage facilities. Regardless, development facilitated by the General Plan would increase stormwater runoff in the City and its SOI and result in the need to develop the stormwater collection system to satisfy future conditions and meet the needs of development identified by the General Plan. However, the General Plan EIR determined that the specific environmental impact of constructing new stormwater infrastructure in the City limits and SOI could not be determined at that first-tier level of analysis. As specific stormwater infrastructure expansion projects are identified, additional project specific, second-tier environmental analysis would be completed.

Alternatives to the Project

The General Plan EIR analyzed four alternatives to the General Plan. The following alternatives to the General Plan were considered in the EIR and are described in detail in Chapter 5 of the 2006 Draft General Plan EIR:

- No Project Alternative
- Concentrated Growth Alternative
- City Limits Alternative
- Existing SOI Alternative

As discussed in Chapter 5 of the 2006 Draft General Plan EIR, the Concentrated Growth Alternative is environmentally superior to both the General Plan and the other alternatives. This alternative would offer a substantial improvement with respect to visual quality, community character, and agriculture, although it would not avoid the significant and unavoidable impacts associated with those areas for the General Plan. The Concentrated Growth Alternative would also offer an insubstantial improvement with respect to land use; population, employment and housing; traffic and circulation; biology; infrastructure; hydrology and flooding; hazardous materials and other hazards; and air quality.

The City Limits Alternative is also environmentally superior to the General Plan, but on balance it is marginally inferior to the Concentrated Growth Alternative. As shown in Table 5-1 of the 2006 Draft General Plan EIR, the City Limits Alternative does not offer as much of an improvement as the

Concentrated Growth Alternative with respect to visual quality, and it also does not offer improvements with respect to land use, hazardous materials and hazards, and air quality.

The City of Tracy developed the General Plan to represent the best possible balance between on-going residential growth, development of employment areas, and open space and agricultural preservation. Although two of the alternatives each have the potential of substantially reducing significant impacts that have been identified in the General Plan EIR, overall the alternatives analysis shows that none of the alternatives would result in a level of improvement that would completely avoid a significant impact that is associated with the General Plan.

General Plan EIR Revisions and Updates

Since 2005, the General Plan and General Plan EIR have been revised and updated on several occasions as discussed below due to various proposed amendments and the City's preparation of a Sustainability Action Plan. Nonetheless, the City has certified the most recent General Plan EIR and adopted the most current General Plan on February 11, 2011. Thus, where appropriate and based on the provisions of § 15152 of the CEQA Guidelines, this Initial Study does tier off of and incorporates by reference the General Plan EIR regarding descriptions of environmental settings, future development-related growth, and cumulative impacts. The following provides the timeline for the sequence of revisions and updates to the City of Tracy General Plan EIR.

City of Tracy General Plan Draft EIR (October 4, 2005)

The original 2005 General Plan EIR evaluated the following 15 topics:

- | | |
|---------------------------------------|--|
| 1. Land Use | 9. Community Services |
| 2. Population, Employment and Housing | 10. Infrastructure |
| 3. Visual Quality | 11. Geology, Soils and Seismic Hazards |
| 4. Traffic and Circulation | 12. Hydrology and Flooding |
| 5. Cultural Resources | 13. Hazardous Materials |
| 6. Biological Resources | 14. Noise |
| 7. Agricultural Resources | 15. Air Quality |
| 8. Mineral Resources | |

City of Tracy General Plan Amendment to the Draft EIR (March 16, 2006)

An amendment to the General Plan in 2006 (2006 GPA) required the preparation of an Amendment to the Draft EIR. The 2006 City of Tracy General Plan Amendment to the Draft EIR contains a variety of revisions to the 2005 Draft EIR based on the amendments identified in the 2006 GPA. In particular, it was modified to include detailed discussions of impacts that would result from total buildout of the City limits and SOI under the proposed General Plan, in addition to the discussion of impacts during the initial 20-year

planning horizon. As such, the following topics identified and evaluated in the 2005 Draft EIR were reanalyzed in the 2006 Draft EIR as follows:

- Land Use,
- Population, Employment and Housing,
- Visual Quality,
- Biological Resources,
- Agricultural Resources,
- Community Services, and
- Infrastructure.

The following other topical areas evaluated in the 2005 General Plan EIR were evaluated under both the 20-year development scenario and at total buildout and thus, did not need to be updated in the 2006 EIR as they remained valid:

- Cultural Resources,
- Mineral Resources,
- Geology, Soils, and Seismic Hazards, and
- Hydrology and Flooding.

It should be noted that the detailed, quantitative analysis of potential impacts on traffic, noise, and air quality were based on the development projections for a 20-year period (2025) in both the 2005 and 2006 Draft EIRs. The traffic analysis was limited to the 20-year planning horizon in part because significant speculation regarding regional growth and funding for transportation improvements would be required to model the total buildout year under the proposed General Plan. The noise and air quality analysis is also limited to the 20-year planning horizon because they are based on the modeling results of the traffic analysis.

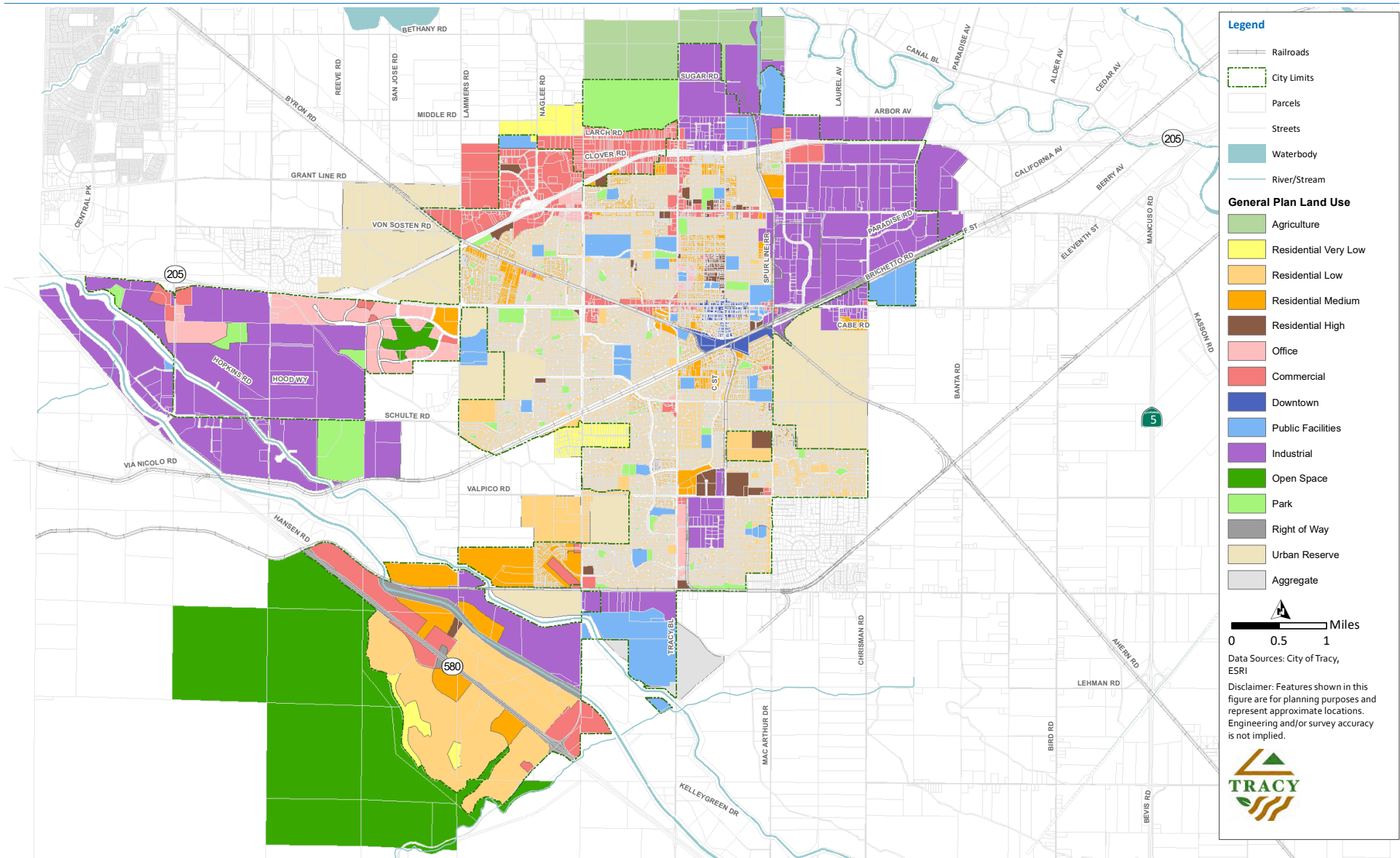
City of Tracy General Plan Draft Supplemental EIR (July 22, 2010)

In 2010, the City prepared the City of Tracy General Plan Draft Supplemental EIR (2010 SEIR) in response to another General Plan Amendment and the preparation of its Sustainability Action Plan. The 2010 SEIR contains only those environmental analysis chapters for which the findings of the 2006 General Plan Draft EIR would change as a result of the General Plan Amendment. As a result, the issues addressed in that SEIR include the following:

- Land Use
- Population, Employment and Housing
- Traffic and Circulation
- Noise
- Air Quality
- GHG Emissions

In the 2010 SEIR, the traffic, noise, and air quality analyses extend to a 2030 horizon because the traffic modeling, which also affects the air quality and noise analyses, is based on the SJCOG regional travel demand model, which at that time had been updated to 2030. The land use, population, employment, and housing analyses were evaluated under a 20-year development scenario and at total buildout in the 2010 General Plan EIR.

Thus, the various General Plan EIRs (2005, 2006, and 2010) have each evaluated the "buildout" condition for specific issue areas, as described above, but none have evaluated the buildout condition for traffic, noise, and air quality as it is generally held that modeling of traffic and associated air quality, GHG, and noise impacts much beyond a 20-year time period is inaccurate and unreliable.



SOURCE: City of Tracy, 2020

Figure 2-1: General Plan Land Use

TMP Update
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Not to scale

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SECTION 3.0 PROJECT DESCRIPTION

As described above, the proposed Project consists of updates to the City of Tracy's Transportation Master Plan (TMP). The updated TMP is a policy document prepared to implement the objectives and actions identified in the General Plan. The Project does not propose the construction or operation of infrastructure projects at this time. Consequently, adoption of the TMP Update would not directly result in the construction and operation of infrastructure that could have negative environmental effects. However, its adoption would indirectly facilitate the construction and operation of infrastructure or related supporting improvements that could result in negative environmental effects.

Project Summary

As described in Section 1.0 of this document, the City of Tracy's Roadway and Transportation Master Plan (TMP Update) is a comprehensive update to the City's 2012 Transportation Master Plan (2012 TMP). The TMP is the principal policy document for guiding the provision of adequate and efficient access to the City transportation system for all user groups (motorists, pedestrians, bicyclists, and transit users). The proposed TMP provides an inclusive review of the City's transportation system and identifies improvements and expansions to the existing system required to accommodate future growth anticipated to occur in the City based on the City of Tracy General Plan (General Plan). It should be noted, that while the current General Plan is based upon a future Horizon Year of 2025 conditions, the TMP looks to a Horizon Year of 2042 to be enable a long-term plan for future growth. This also creates consistency in infrastructure planning with the planned San Joaquin Council of Governments (SJCOG) Travel Demand Model update to Year 2042. The TMP builds upon the goals and objectives defined in the Circulation Element of the City's General Plan (February 2011) and the Sustainable Action Plan (SAP) (February 2011). The TMP incorporates various strategies, principles, and design elements that balance existing and future transportation infrastructure needs with a goal of providing safe access and use for all users.

The TMP Update provides guidance for the development of a transportation system aimed at addressing future transportation needs through extensive use of Complete Streets guidelines, Smart Growth principles and design elements, and Context-Sensitive Design. The TMP Update considers the function of transit (bus and rail), cycling, walking, private vehicle movement, goods and vehicle movement networks, for use by individuals and collectively. Accordingly, the TMP Update provides a complete review of the City's existing transportation system and serves as a blueprint planning document that can be utilized to identify and implement improvements to the overall transportation system to better serve all users. In addition, the TMP Update can serve as a baseline document in consideration of and to accommodate anticipated development consistent with the City's General Plan.

The TMP Update will guide the development of transportation infrastructure and services as growth occurs under the General Plan. While the General Plan Update and EIR forecasts traffic conditions to the year 2040, the TMP looks out another two years, to Horizon Year, to provide the maximum possible infrastructure planning. The Horizon Year was chosen because it is practically possible to estimate Tracy land use growth patterns to that year, and because the San Joaquin Council of Governments has updated its travel demand model to the year 2042. Note that neither the Year 2040 nor the Horizon Year forecasts represent full

build-out of all the development capacity in the General Plan areas, but rather, the residential and non-residential growth that is expected under the growth management ordinance (for residential uses) and based on market trends (for non-residential uses). The TMP Update also considers and takes guidance from the City's Sustainability Action Plan (SAP). The SAP includes feasible measures used to achieve sustainability and reduce GHG emissions. Guidance in the SAP includes policies to increase transit usage, improve traffic flow in the City, support the development of new bicycle and pedestrian facilities, and other land use policies that would reduce GHG emissions.

The road network system was designed in consideration of growth and to provide a comprehensive grid system of hierarchical streets that result in a well-connected City. This is done through a reduction of trip lengths, promoting non-motorized travel and reducing the per capita emission of greenhouse gases. Accordingly, the TMP Update was written to be responsive to anticipated future demands, by considering the historical growth, and using anticipated future growth, to determine the circulation system that is needed to ensure functionality and accommodate the future growth and future demands.

Development of the TMP Update

The TMP Update was drafted with close attention and consideration to the current transportation system, which includes three major freeways; several active rail lines; local and regional truck routes; arterial, collector, and residential streets; and bicycle, pedestrian, and transit facilities. The transportation system is a key element in maintaining growth and accommodating future development and the City is responsible for ensuring that the transportation system is providing adequate and efficient access for all modes as well as conforming to regional, county, state, and federal transportation system requirements and standards.

Between the years of 2005 and 2019, the City's population rose from approximately 79,000 residents to over 94,000. During a similar time period, the number of jobs more than doubled from roughly 16,000 to over 34,000. The TMP Update was developed using these past growth trends and anticipated future growth and projected development patterns. Use of Smart Growth and Complete Streets principles enabled development of the TMP Update in a comprehensive manner and informed the development of guidelines for design and implementation methodology. The following steps were used to develop the TMP:

Step 1: Existing Conditions Base Network: Capturing development that occurred between the 2012 TMP and 2019-2020.

Step 2: Forecast Horizon Year Conditions: The 2042 3-County SJCOG Travel Demand Model was updated to reflect 2019 Base Year Conditions and 2042 Horizon Year conditions. Sustainable land use and transportation strategies were incorporated; Updated Horizon Year and build-out land uses for each future service in the General Plan were obtained; Updated Horizon Year and buildout plan-line roadway networks (classification and number of lanes), based on the model link volume forecasts, incorporating the effects of the sustainability strategies were developed; and future intersection volumes were forecasted. Regional planning horizons typically extend 20 years into the future for land use and roadway planning. This update of the TMP will be consistent with the SJCOG Regional Transportation Plan. This consistency is extremely important for not only roadway planning but also for grant funding applications.

Step 3: Tracy VMT Analysis: CEQA legislation (Senate Bill 743) requires the City of Tracy to use Vehicle Miles Traveled (VMT) as the measure of effectiveness to determine transportation impact. The Office of Planning and Research has issued guidance for implementation of the VMT requirement. This document calculates the VMT thresholds that will be used for determining Project impacts and appropriate mitigation. Mitigation will consist primarily of travel demand management (TDM) measures and development of multimodal infrastructure to reduce single occupancy vehicle (SOV) travel in Tracy.

Step 4: Assess Horizon Year Roadway Network Conditions: The results from Step 2 were used to evaluate each aspect of the transportation system (roadway and intersection capacity, bridges/canals/culverts, bicycle and pedestrian facilities, train crossings, truck facilities, park and ride facilities, and Intelligent Transportation Systems (ITS)).

Step 5: Identify Horizon Year Roadway Improvements: The results from Step 2 and Step 4 were used to identify whether roadways and intersections needed to be widened, whether adequate bicycle and pedestrian facilities were provided and what gaps were missing in the system. Railroad and bridges/canal/culvert crossings were examined to determine whether sufficient capacity was provided.

TMP Update Area

Development of the TMP Update also considered the City's regional location and existing roadway infrastructure within the City but also those connections to surrounding cities, counties, adjacent states, and large roadway and freeways to capture current conditions, limitations, and evaluate and plan for future needs. Within the region, Tracy is located within San Joaquin County (County), east of the Coastal Range that separates the San Joaquin Valley from the San Francisco Bay Area. The City is located in the southwest portion of the San Joaquin Valley and is approximately 50 miles east of the City of San Francisco and 68 miles south of the City of Sacramento. To the south and west San Joaquin County is bordered by Alameda County, approximately 2 miles away, and to the southeast and east is bordered by Stanislaus County approximately 6 miles away. The nearest urban areas are the cities of Lathrop and Manteca. The regional location of the City in relation to these interstates as well as other counties is shown in **Figure 1-1: Regional Location Map**.

The City is situated in a triangular shaped area that is formed by Interstate 5 (I-5), Interstate 205 (I-205), and Interstate 580 (I-580). These places the City in a unique location with access from three major interstates that provide not only regional access within the State this location provides the City with multiple access points for regional travel and distribution of goods to the west towards the San Francisco Bay Area along I- 580, to the north into Oregon and southern California along I-5.

Horizon Year Transportation Master Plan

The Horizon Year Transportation Master Plan section of the TMP Update presents recommendations to support the Horizon Year network as it relates to the railroad crossings, intersections, bicycle and pedestrian facilities, bridges and culverts, the roadway classification system, park and ride facilities, ITS facilities, and truck routing system. Recommended actions to support implementation of General Plan Circulation Element goals, policies, and objectives are included along with transportation strategies, principles, and design elements to work towards meeting sustainability and greenhouse gas emission reduction goals.

Further, smart growth design elements are also included in the TMP Update. A summary key TMP Update policy, infrastructure, and facilities recommendations is provided below. Refer to TMP Update Section 4.0 for a comprehensive overview of proposed improvements.

Policy Framework

The City of Tracy General Plan provides the foundation for the goals, objectives, policies and actions for the TMP. The TMP brings overlap with policies and goals regarding a “complete streets” policy, context-sensitive design, mode split targets, vehicle miles traveled (VMT) and per capita reduction goals. Further, the TMP builds upon and provides further clarification on specific policies and actions to meet the General Plan’s goals, objectives, policies, and actions regarding “complete streets”, context-sensitive design, mode split targets, vehicle miles travelled (VMT) and per capita VMT reduction goals. Specifically, the TMP addresses Circulation Element Goals 1 through 4:

- Goal CIR-1: A roadway system that provides access and mobility for all of Tracy’s residents and businesses while maintaining the quality of life in the community.
- Goal CIR-2: Adequate interregional access.
- Goal CIR-3: Safe and convenient bicycle and pedestrian travel as alternative modes of transportation in and around the city.
- Goal CIR-4: A balanced transportation system that encourages the use of public transit and high occupancy vehicles.

See TMP Section 4.2 for a comprehensive list of goals, objectives, policies and actions.

Sustainability Policies, Standards, and Performance Measures

The TMP considers methods and systems that can be incorporated to the transportation network to achieve a more sustainable transportation system and benefit the City, businesses, and its residents. These methods run the vertical range from physical roadway design elements, to planning document elements, to city policy shifts. The methods are categorized into four areas: transportation system operations (motorized and non-motorized transport), land use integration, performance measures, and transportation infrastructure.

Context Sensitive Design

In consideration of the above, and to enhance the sustainability, efficiency, and diversity of transportation choices, the proposed Project would include various design strategies to help meet sustainability and GHG reduction goals. Chief among these is the Complete Streets concept, discussed immediately below:

Complete Streets

Complete Streets integrates people and places in the planning, design, construction, operation, and maintenance of the transportation networks. The Complete Streets approach is used to improve public safety, and considers all modes of travel, local land use, economic growth, cultural design, and the natural environment. The City’s approach to Complete Streets is based on the guidelines and design

principles from the National Association of City Transportation Officials (NACTO) Urban Street Design Guide and is consistent with Caltrans policies and principles that require adoption of Complete Streets.

Accordingly, the TMP Update recommends a road network system that is designed to provide a comprehensive grid system of hierarchical streets that provides for a well-connected City, reduces trip lengths, promotes non-motorized travel, and reduces the per capita emission of greenhouse gases. Complete Streets form a comprehensive, integrated transportation network that supports sustainable and transit-oriented development that complement sustainable land use patterns while safely and comfortably meeting the needs of multi-modal users and minimizing adverse environmental effects. The TMP Update's recommended policy and infrastructure improvements aim to provide Complete Streets throughout the City by outlining a range of tools to support pedestrian, bicycle, and transit. Existing and future developments throughout the City would be required to implement these strategies, as applicable. A summary of recommended infrastructure is provided below.

Smart Growth

As part of the Complete Streets strategy, Smart Growth design elements also are proposed as part of the transportation system. Smart Growth Design Elements contain principles and uses, that are consistent sustainability goals and enhance the usability of Complete Streets strategies. These smart growth principles further facilitate and support sustainable provision of transportation infrastructure by incorporating uses that create additional opportunities for users and improve efficiency and create greater integration within the overall system

Facility and Infrastructure Recommendations

As discussed above, the TMP uses goals and policies and guidance from planning documents and best practices to develop a comprehensive plan that also is dynamic and flexible. Accordingly, the TMP provides guidance for the locations and types of improvements that can be revised as needed to adapt to the changing needs of the City and region. Future development as well as transportation improvements themselves will be guided by these policies related to use of City resources needed to implement projects and programs. Additional detail regarding how the policies more specifically address and what they require of bicycle/pedestrian circulation, roadway design/operation, traffic calming, access management, standards/design for park and ride facilities, and ITS is available in the TMP Update.

Bicycle Facilities

The TMP integrated elements of the City of Tracy Bicycle and Pedestrian Plan to develop a comprehensive bicycle and pedestrian system that helps ensure the transportation system is a multimodal network. The recommended plan includes modern safety improvements such as bicycle detection, colored bike lanes, bicycle racks and bicycle lockers and other design elements to enhance the bicycle. It should be noted that bicycle facilities will be provided on every proposed parkway (expressway), arterial and collector road network segments. Other anticipated elements include provision of bicycle facilities at new commercial and office development per new zoning standards. Transportation infrastructure that bicycle use difficult such as grade separations over/under railroad crossings, freeway crossings, river crossings, with be designed and

constructed as much as possible with pedestrian and bicycle facilities to enhance safe connectivity for bicycle use at these types of crossings. **Figure 3-1: Existing and Future Bikeway Network** provides an overview of recommended improvements throughout the TMP Study Area.

Pedestrian Facilities

Pedestrian facilities including paths and sidewalk are included to the transportation network for short trips and to provide foot-based connectivity between nearby uses. All pedestrian facilities would meet the American with Disabilities Act (ADA) requirements, including minimum grades, ramps and detectable surfaces at intersections and where walkways lead pedestrians onto traveled ways. Sidewalks are intended to make foot travel safer and convenient and reduce short vehicle trips. Pedestrian facilities are also considered in smart growth planning through establishment of walkability standards, and other measures to address spacing, and increase connectivity. **Figure 3-2: Existing and Future Sidewalks** provides an overview of recommended pedestrian facilities throughout the TMP Study Area.

Bridges and Culverts

Planning for the City's bridges and culvert crossings were integrated into the TMP Update to minimize traffic conflicts and preserve open space and preservation areas. Planning for bridge and culvert facilities is based on the planned circulation system at buildout conditions, long-range traffic forecasts, the need for separation of various transportation modes (cars/railroads), location of canals, rivers, and creeks, and open space/preservation areas. All projects related to bridge and culvert improvements, replacement, or new construction, would adhere to applicable design standards and would, as feasible, be designed to accommodate all users, including traffic from automobiles, buses, pedestrians, and bicyclists. **Figure 3-3: Existing and Future Bridges and Culverts** shows the existing and future Bridges and Culverts facilities.

Roadway Network Recommendations

The City's existing roadway network is the primary transportation system and serves a variety of vehicle types, including automobile, truck, transit, as well as bicycles and pedestrians. The TMP Update recognizes that many new developments are forecasted in the General Plan; however, existing areas are built out and roadways are constrained to their maximum right-of-way requirements, reducing the ability to implement smart growth and context-sensitive designs. Accordingly, the TMP Update documents the existing road hierarchy, functionality, operations, and typical cross sections. With consideration for existing and future conditions, the anticipated roadway network was developed in consultation with City staff and based on iterative Travel Demand Model runs.¹

Figure 3-4: Horizon Year Number of Lanes identifies recommended TMP Update lanes and roadway network. Relative to the Horizon Year network, this network upgrades certain roadways from collector to

¹ It is very important to note that the link-based volume to capacity (v/c) ratios provide a general guide to how the major roadway segments would function in the Horizon Year. A more accurate assessment of roadway capacity will be available when intersection turn movement forecasts are developed and service level calculations are performed, following this link-level forecasting step.

arterial classification and widens roadways where feasible (primarily in the western and northern development areas). This network does not provide sufficient capacity to serve the build-out land use plan and additional connecting roadways and roadway widenings would be needed to serve the traffic generated by new development and employment opportunities. However, **Figure 3-4** provides the recommended core facilities on which to plan for growth beyond Horizon Year levels. Further study will be necessary to plan for the Build-Out condition.

The TMP Update classifies the roadways and complements complete streets with the intent to make the existing street network work more efficiently and include new technology within the context-of sensitive design, mode split targets, VMT and per capita vehicle use reduction to improve traffic flow. The TMP Update includes a road hierarchy, describes anticipated cross sections and desired functionality for future operations. It should be noted that the design standards and roadway cross sections are guidelines for and future design may deviate from these guidelines on a case-by-case basis to accommodate site specific requirements. **Figure 3-5: Future Roadway Classifications** shows the locations and classifications of the future planned roadways. Roadway classifications are described below and the characteristics of specific cross sections is provided in **Table 3-1: Roadway Cross Section Characteristics**:

- **Parkways (Expressways)** - Expressways provide connections to regional roadways such as freeways and are usually designed to accommodate through traffic with limited access to adjacent land uses. For the Tracy TMP, the expressway roadway classification will be relabeled as a parkway. Class 1 bikeways are provided on all parkways.
- **Arterials (Major and Minor)** - Arterials are designed to carry traffic between neighborhoods, central business districts, and major destinations and have Class I bikeways. Arterials provide connections from collectors to parkways and freeway interchanges. Arterials generally serve high traffic volumes (up to 50,000 average daily trips for major arterials).
- **Collectors** - Collectors are smaller sized and undivided roadways (two lanes) that link residential roads with arterial roads and provide Class II bike lanes. Collector roads provide access to abutting land uses and to neighborhood streets. Collectors do not include driveways to residential properties.
- **Residential Streets and Alleys** - These roadways serve residential neighborhoods and emphasize multi-modal (pedestrians, bicyclists, and motorists) use. These roadways may provide one-way or two-way travel and may include parking on one side, both sides, or no parking.
- **Industrial Streets** - These roadways provide access to industrial and commercial uses and therefore require wider travel lanes to accommodate trucks and larger vehicles. Shoulders or two-way left turn lanes are provided. Standard 5-foot sidewalks are provided; however, bicycle facilities are typically not included.

Table 3-1: Roadway Cross Section Characteristics

Street Type	Right-of-Way	Lanes	Bike Facility	Sidewalk
Major Arterial	120'-164'	4 to 8	Yes (Class I Bike Path)	Yes
Arterial	96'-130'	2 to 6	Yes (Class I Bike Path)	Yes
Collector	61'-85'	2	Yes (Class II Bike Lane)	Yes
Residential/Alley	22'-57'	1-2	No	Yes (2 lanes only)
Industrial	71'-73'	2	No	Yes

Intelligent Transportation Systems

The Intelligent Transportation System (ITS) planning was included to integrate into the TMP Update to develop a comprehensive overview of the development and deployment of the City of Tracy's proposed ITS Infrastructure. Where applicable, ITS infrastructure would be tied into existing infrastructure and new roadways and other facilities to increase efficiency.

ITS Vision and Strategies are intended to benefit the residents of the City with a multi-modal transportation system using traffic information provide effective and efficient timing of the provision of services and linking of utilities. The intent is to manage traffic and make adjustments at intersections and roadways to improve safety and efficient travel. The ITS system would use the communication network and install advanced transportation management systems (ATMS), Advanced Traveler Information Systems (ATIS), and system integration.

The recommended ITS improvements would be based on but not limited to existing and future systems, future land uses, and existing as well as future technologies that can add to the safety and efficiency of the systems. The final configuration also will be considered based the requirements and coordination with other agencies such as Caltrans, and operational and maintenance requirements. **Figure 3-6: Horizon Year Transportation System Infrastructure** shows a conceptualized diagram of these improvements.

Truck Routes

The TMP Update identifies existing City truck routes and considers enhanced pavement structure, accommodates design, and noise impacts relative to land use development. The location of future truck routes is based on the planned circulation system at buildout conditions, long-range traffic forecasts, the need to designate roadways for enhanced design elements, and consideration of land use development and sensitive land uses. There are three distinct truck routes within the City, and these include STAA Route; Through Truck Route; and Local Truck Route. **Figure 3-7: Future Truck Routes** identifies future truck routes in the City.

Transportation Demand Management

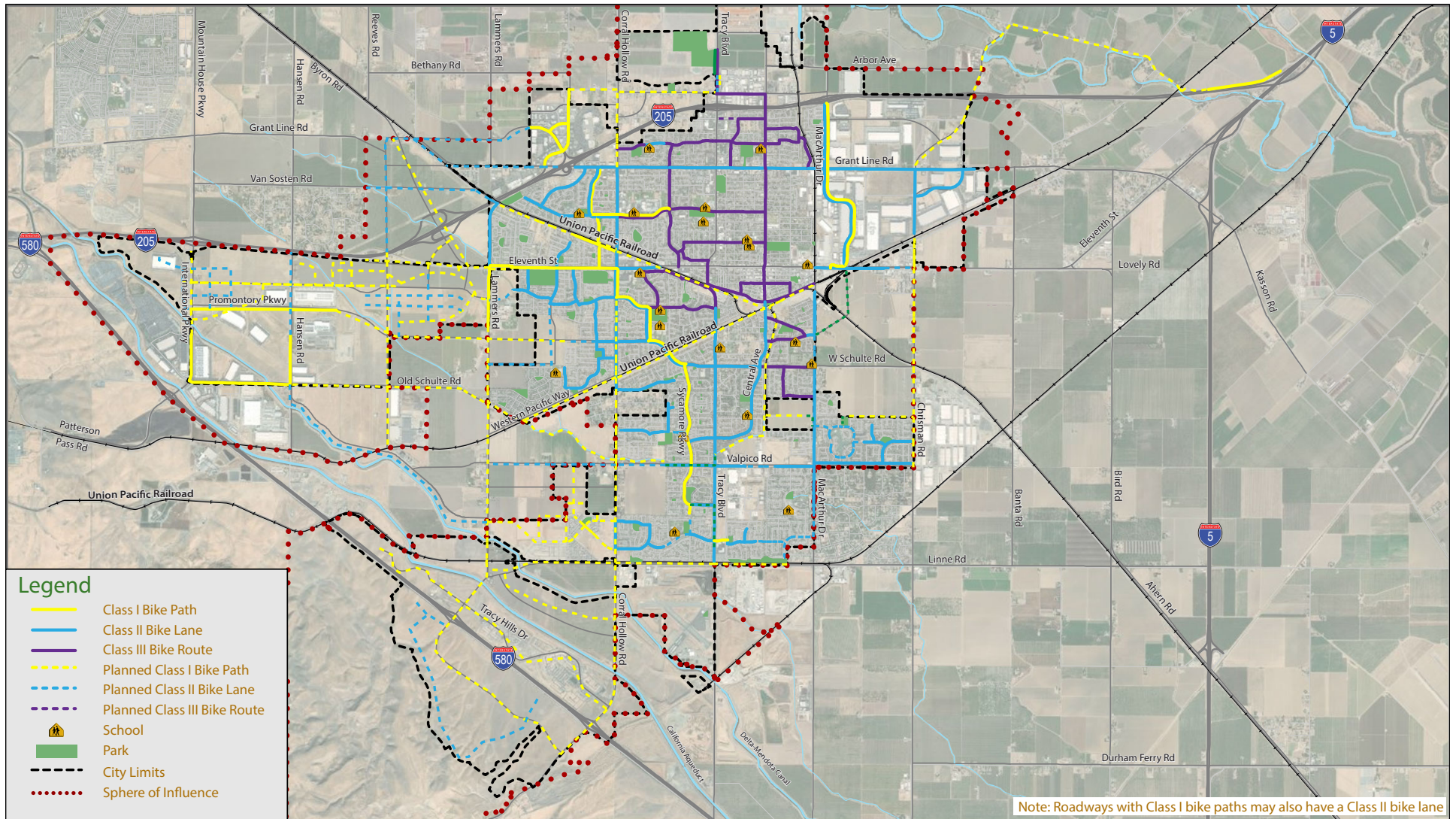
The TMP Update Transportation Demand Management (TDM) Plan contains strategies, measures, and incentives to encourage residents and employees to use other alternatives to driving alone. TDM measures encourage a shift to other modes of travel, boost economic efficiency of the transportation infrastructure, improve air quality, save energy, and reduce traffic congestion. The TDM measures contains in the

TMP Update are intended to help the City achieve the trip reduction and greenhouse gas emission targets outlined in the city's Sustainability Action Plan. It should be noted that the City TDM program tiers off the SJCOG TDM Plan. TDM measures fall into one of three incentive categories including Financial Incentives (e.g., roadway pricing, parking cash out, and transit passes), System Incentives (e.g., HOV lanes and bicycle facilities), and Demand Incentives (e.g., rideshare programs, telecommuting, and bike sharing).

Transit Facilities

Future roadway capacity for private vehicle travel will be severely constrained and the City is encouraging a shift from private vehicle trips to the public system to ensure future mobility. This is due to the anticipated substantial growth that is anticipated in the western, southern, and eastern portions of the city. Tracy also is anticipated to be a hub for local and regional transit connections including the Valley Link rail service and expansion of internal and external bus services. This growth will add new residents and employees and result in new and increased demand for transit services. As part of future planning efforts, a detailed service plan will have to be developed based on future travel demand. This would be done outside the scope of this project and would address the provision of infrastructure that cannot be determined until Specific Plans and tentative maps for the individual developers are submitted. Driveway access, walkability, connection to sidewalks and bicycle facilities will be detailed at that point. **Figure 3-8: Long Term Transit Service Plan** identifies the City's planned transit system.

To encourage a balanced transportation system that encourages the use of public transit and high occupancy vehicles the City has adopted goals and policies. Among these is the goal that all existing and future roadways must consider transit improvements, and roadways as appropriate are to be designated transit priority roadways. This would require property owners along these roadways to provide improvements to the transit infrastructure system when new or redevelopment is proposed. Improvements would consist of providing right-of-way, when warranted and in coordination with the City or appropriate agencies, at the far side of intersections and at development driveways to accommodate sheltered bus turnouts. Transit services will be linked with the ITS system and integrated with parallel services.



SOURCE: City of Tracy, 2022

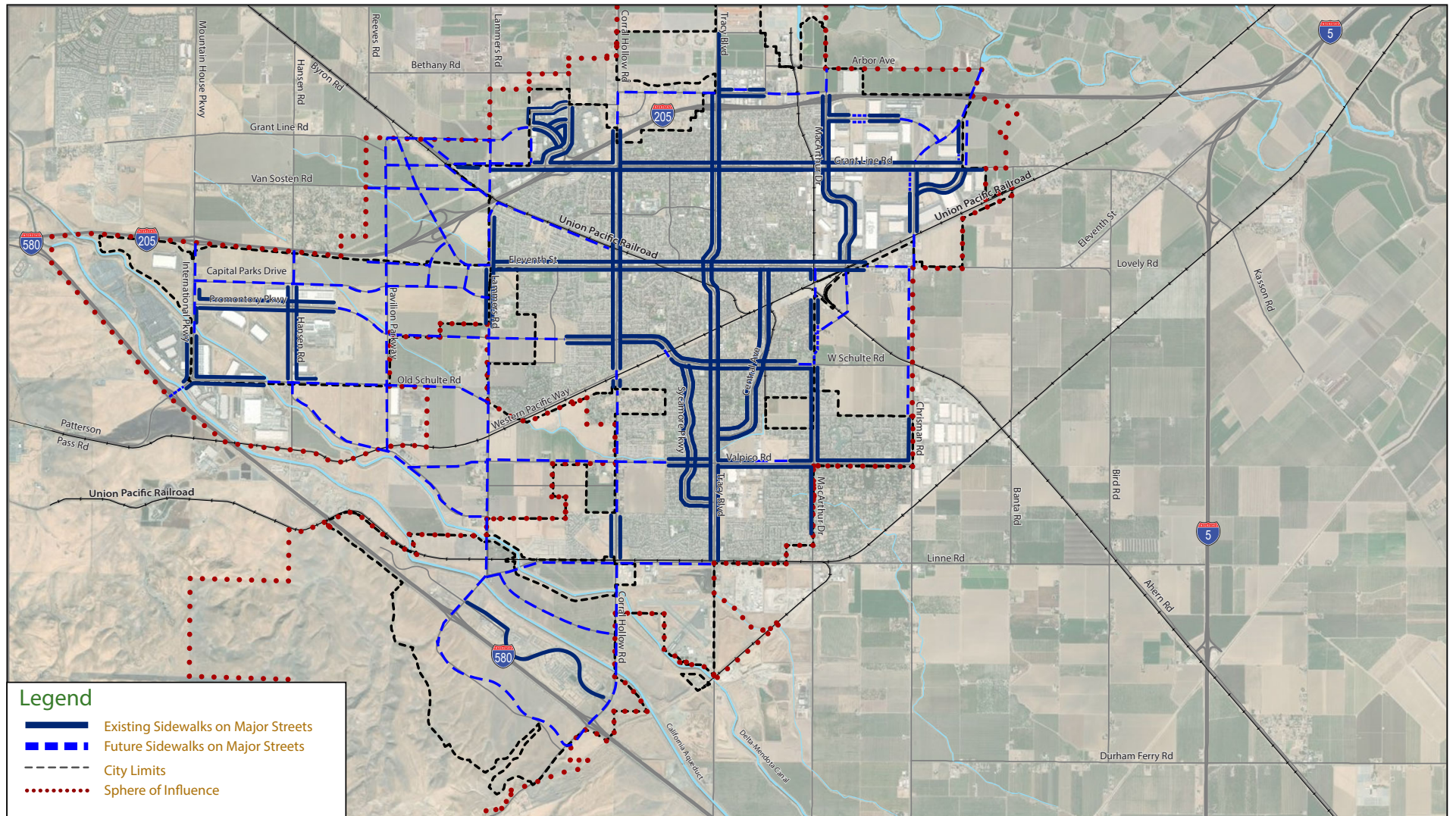
Figure 3-1: Existing and Future Bikeway Network

TMP Update
Initial Study



Not to scale

Kimley»Horn



SOURCE: City of Tracy, 2022

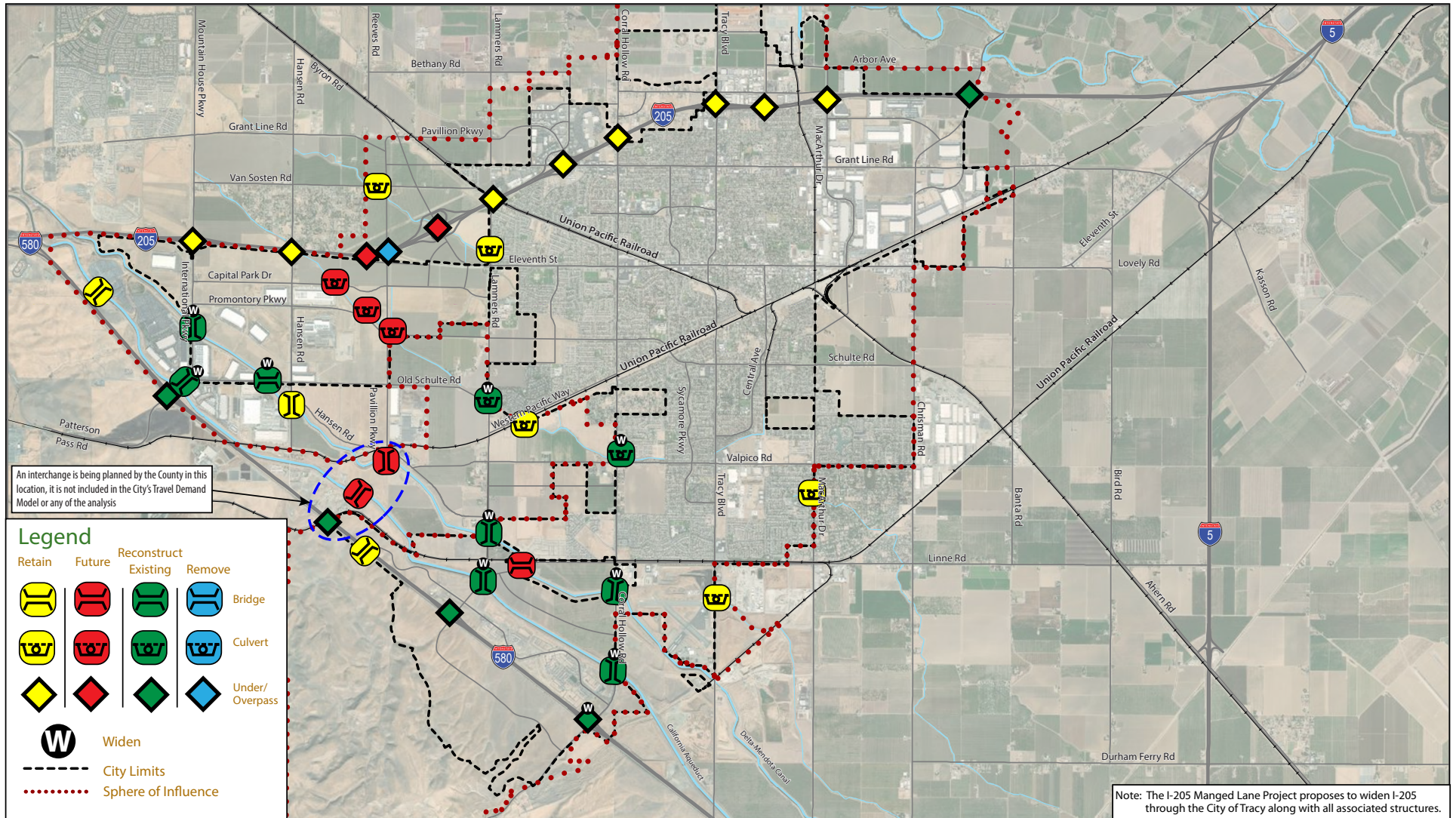
Figure 3-2: Existing and Future Sidewalks

TMP Update
Initial Study



Not to scale

Kimley»Horn



SOURCE: City of Tracy, 2022

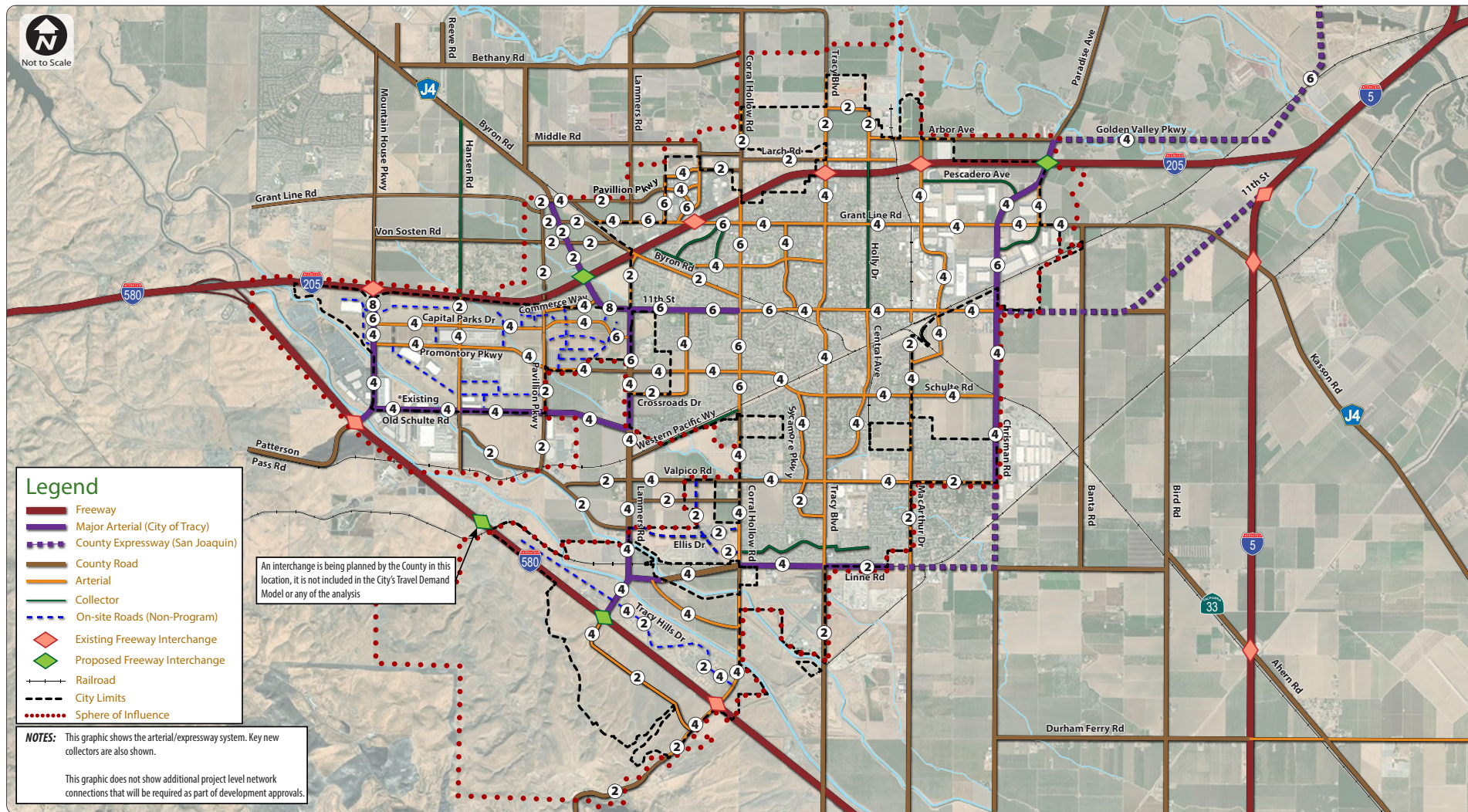
Figure 3-3: Existing and Future Bridges and Culverts

TMP Update
Initial Study



Not to scale

Kimley»Horn



SOURCE: City of Tracy, 2022

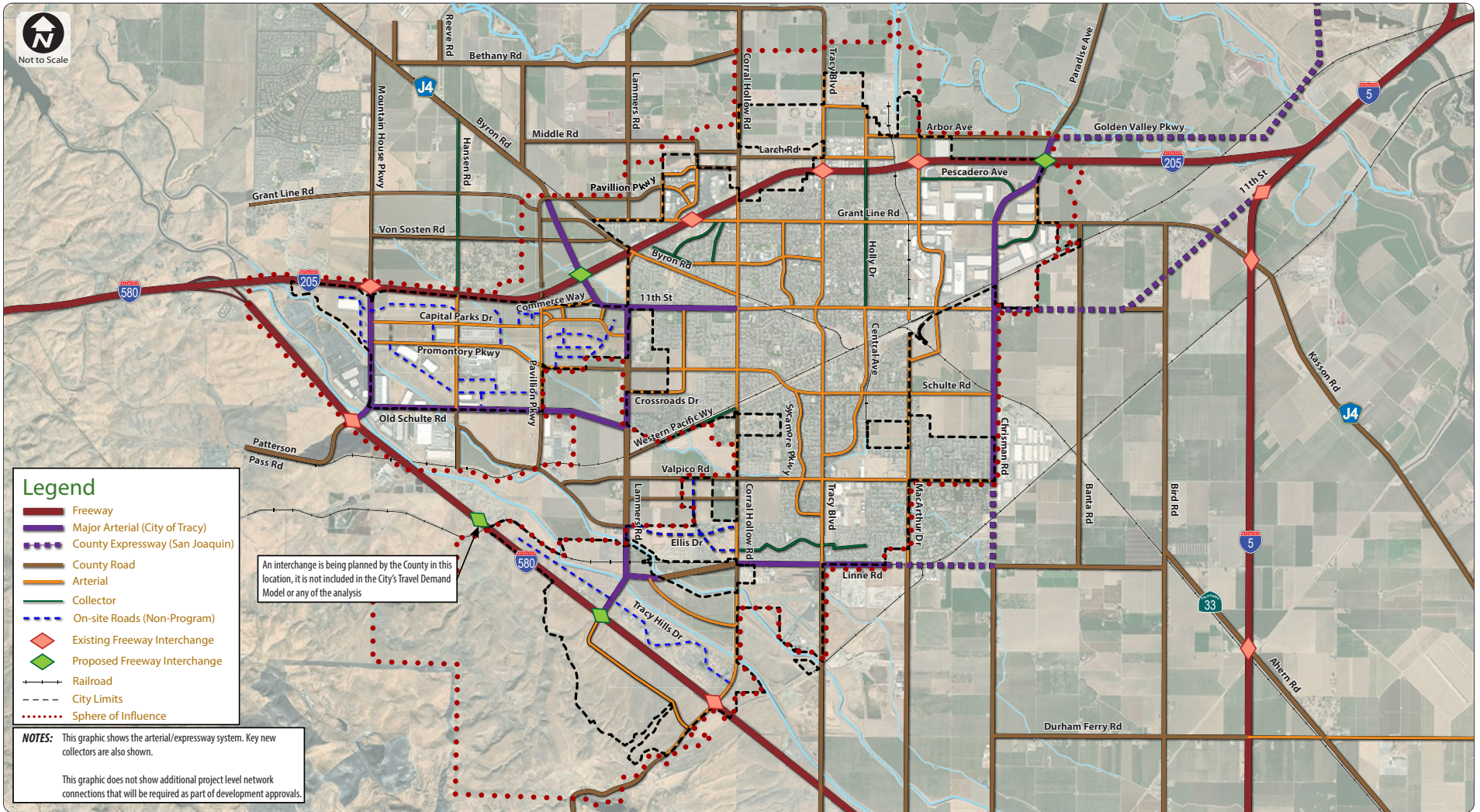
Figure 3-4: Horizon Year Number of Lanes

TMP Update
Initial Study



Not to scale

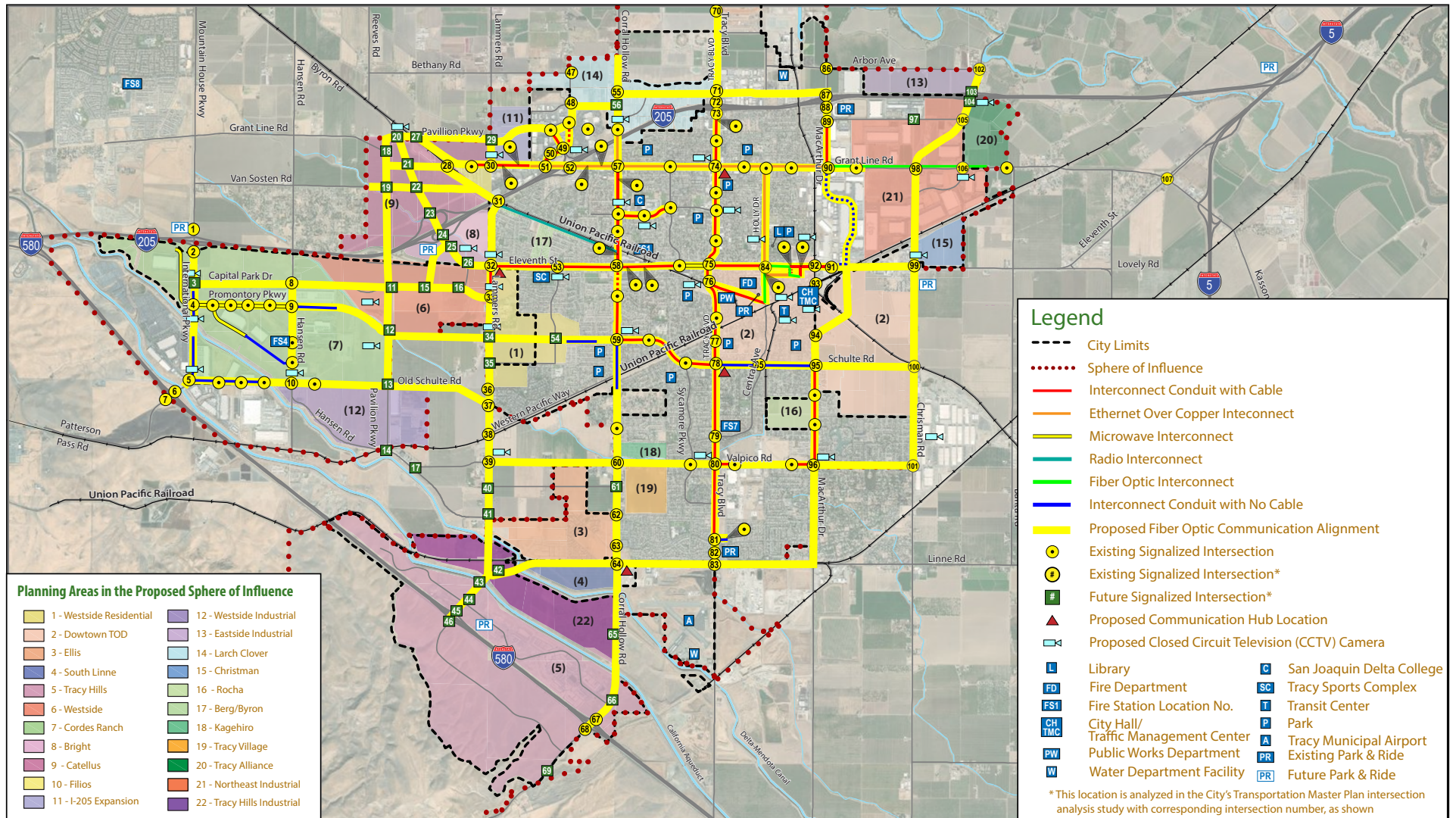
Kimley»Horn



SOURCE: City of Tracy, 2022

Figure 3-5: Future Roadway Classifications

TMP Update
Initial Study



SOURCE: City of Tracy, 2022

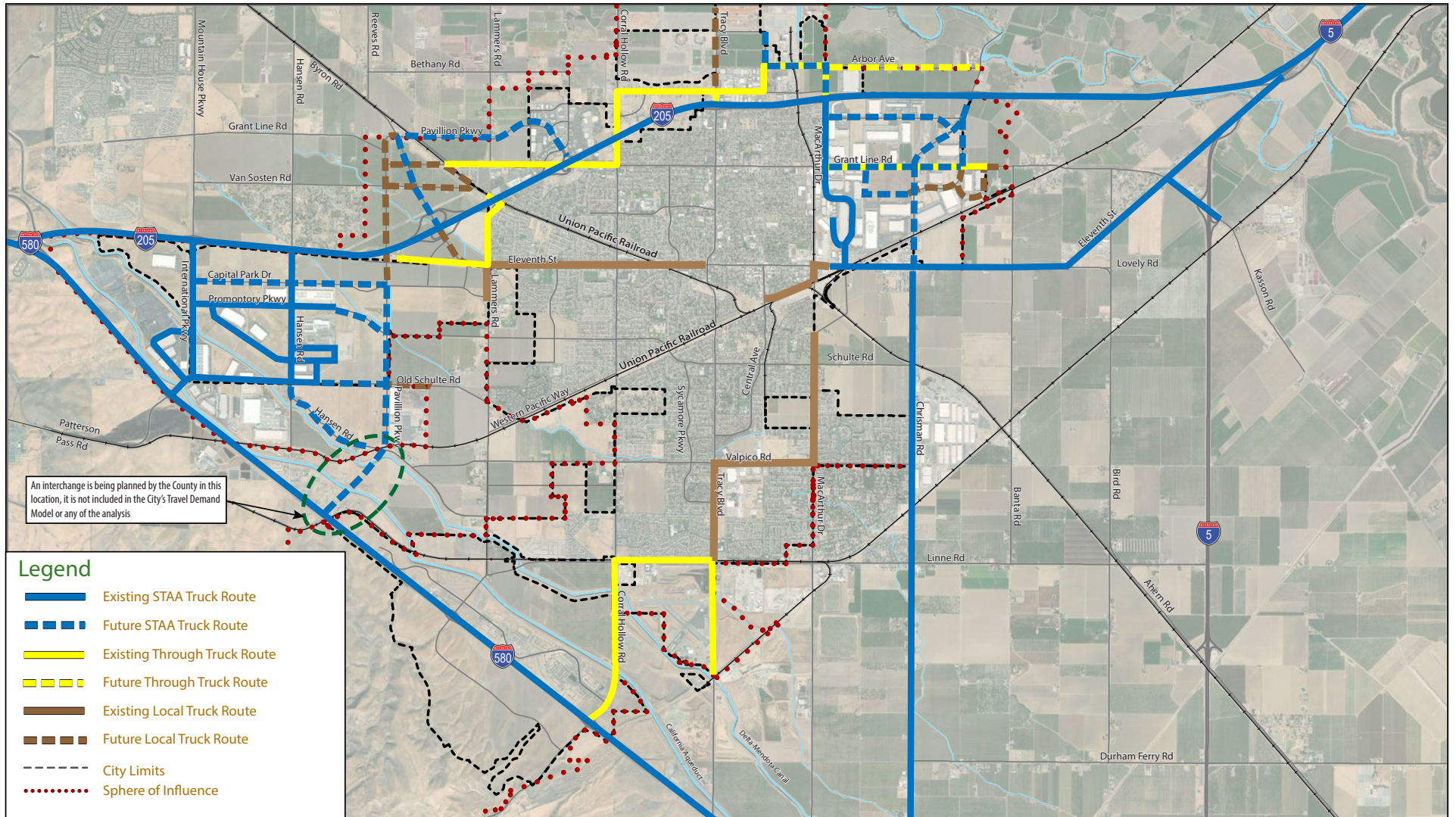
Figure 3-6: Horizon Year Transportation System Infrastructure

TMP Update
Initial Study



Not to scale

Kimley»Horn



SOURCE: City of Tracy, 2022

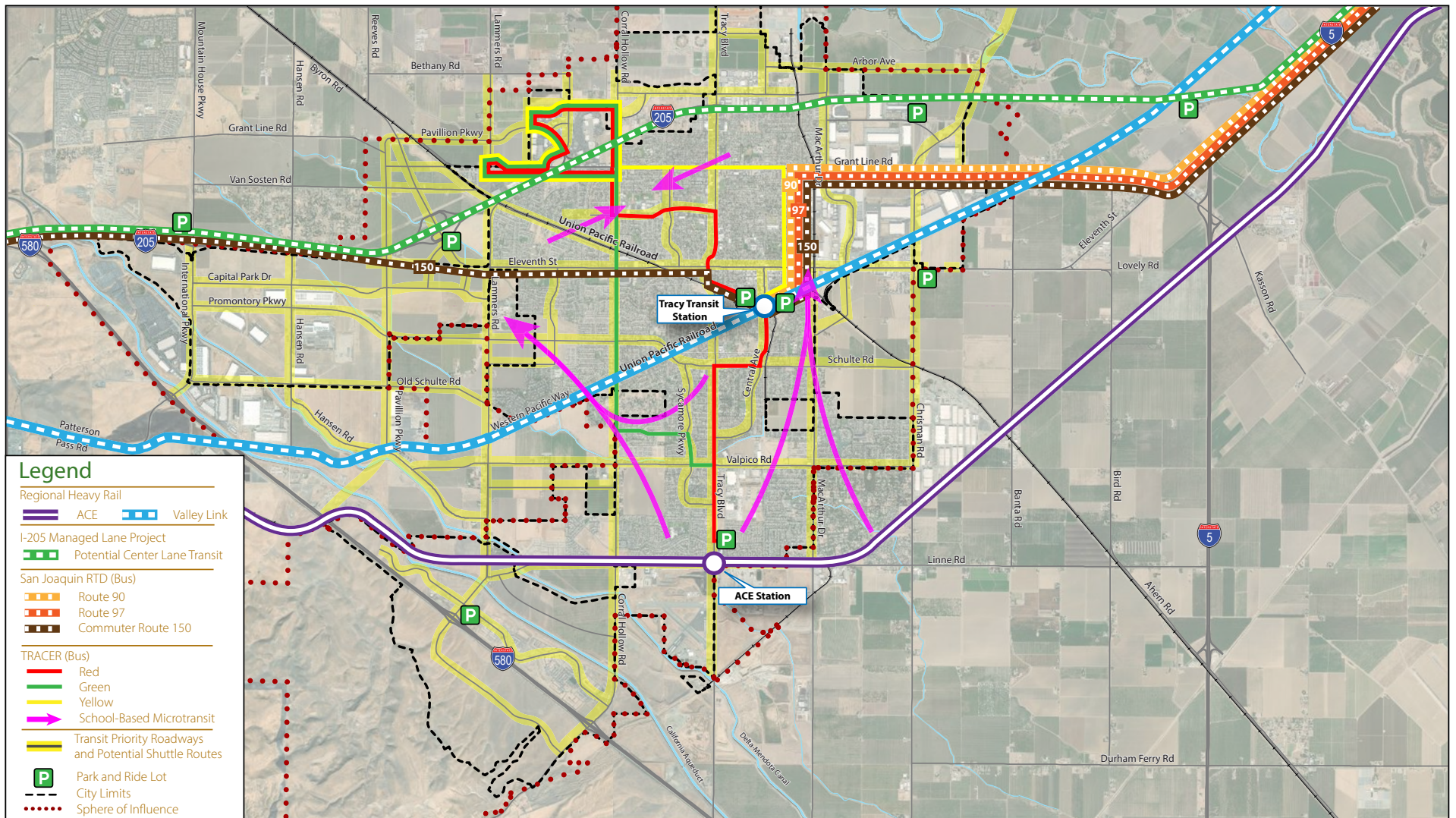
Figure 3-7: Future Truck Routes

TMP Update
Initial Study



Not to scale

Kimley»Horn



SOURCE: City of Tracy, 2022

Figure 3-8: Long Term Transit Service Plan

TMP Update
Initial Study



Not to scale

Kimley»Horn

SECTION 4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below are potentially affected by this Project, involving at least one mitigation measure as indicated by the checklist on the following pages.

<input type="checkbox"/>	Aesthetics	<input checked="" type="checkbox"/>	Agricultural and Forestry Resources	<input checked="" type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input checked="" type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Energy
<input checked="" type="checkbox"/>	Geology and Soils	<input type="checkbox"/>	Greenhouse Gas Emissions	<input checked="" type="checkbox"/>	Hazards and Hazardous Materials
<input checked="" type="checkbox"/>	Hydrology and Water Quality	<input type="checkbox"/>	Land Use and Planning	<input type="checkbox"/>	Mineral Resources
<input checked="" type="checkbox"/>	Noise	<input type="checkbox"/>	Population and Housing	<input checked="" type="checkbox"/>	Public Services
<input type="checkbox"/>	Recreation	<input checked="" type="checkbox"/>	Transportation	<input checked="" type="checkbox"/>	Tribal Cultural Resources
<input type="checkbox"/>	Utilities and Service Systems	<input checked="" type="checkbox"/>	Wildfire	<input checked="" type="checkbox"/>	Mandatory Findings of Significance

SECTION 5.0 DETERMINATION

On the basis of this evaluation:

- ☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed Project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- ☒ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature:

William Dean, Assistant Director of Development Services

Date:

8/30/22

SECTION 6.0 ENVIRONMENTAL EVALUATION

This section evaluates the potential environmental effects of the proposed Project using the environmental checklist from the State *CEQA Guidelines* as amended. The definitions of the response column headings include:

- A. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant after the implementation of feasible mitigation measures. The impact may warrant additional analysis within a Subsequent or Supplemental EIR.
- B. “Less than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measure has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.”
- C. “Less Than Significant Impact” applies where the project creates no significant impacts, only Less than Significant Impacts and no mitigation is required.
- D. “No Impact” applies where the project does not create an impact in that category.

I. AESTHETICS

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic building along a State-designated scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the Project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. Most of the visual resources within the City are associated with the open space and agricultural resources of the surrounding area and are a valued local asset for the community. The following scenic resources in the General Plan that contribute to the area's heritage:

- Views of the Diablo Range. Rising from the southwest portion of the City and its SOI, this range extends from near sea level to 1,652 feet and provides a visual barrier between the Central Valley and the San Francisco Bay Area. Generally, the eastern slopes visible from Tracy have not been developed and contain sporadic tree groupings.
- Natural landscapes surrounding the Paradise Cut, Old River and Tom Paine Sloughs. Located on the north side of the City and its SOI, these landscapes are represented streamside vegetation that provide visual contrasts as they run through the relatively flat agricultural lands.
- Expansive Agricultural Lands. The land surrounding the City contains agricultural lands that are used for row crops and grazing.
- Hillside Areas. Hillside areas, located on the south-western side of the City to the west of I-580, including in the Tracy Hills Specific Plan area, are a visual amenity for residents of the City and travelers on I-580
- Electricity-generating Windfarms. Located on the ridgetops west of the City and close to the Altamont Pass, the windfarms are visible from Tracy on clear days.

Implementation of improvements identified in the TMP Update would involve construction of new infrastructure and ongoing operation of these facilities, which have the potential to impact scenic resources and the overall visual character and quality of some areas within the City and SOI. During short-term construction activities, viewsheds may be temporarily altered by site disturbance, vegetation removal, and the placement of construction equipment, signage and warning markers. However, construction impacts would be temporary in nature and, therefore, would be less than significant.

With the exception of grade-separated railroad crossings, and overpasses and bridges, the majority of improvements identified in the TMP Update would occur at ground level within existing rights-of-way and would not alter view sheds. While the construction of above-ground infrastructure has the potential to change the appearance of some areas, long distance views of scenic resources would not be significantly altered because proposed improvements would not introduce structures that are substantially different than those already existing in the area of the improvements and would not block views. Therefore, impacts to scenic vistas would be less than significant.

Threshold (b) Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

Less Than Significant Impact. Interstate 580 (I-580) is a state-designated scenic highway that stretches approximately 15 miles from I-5 to State Route 205 within the City. Implementation of improvements identified in the TMP Update would involve construction and operation of infrastructure in the vicinity of I-580, including two new freeway interchanges and a park and ride facility. Short-term construction activities and ongoing operation of these improvements have the potential to alter views within the I-580 corridor. During short-term construction activities, view may be temporarily altered by site disturbance, vegetation removal, and the placement of construction equipment, signage and warning markers. However, construction impacts would be temporary in nature and, therefore, would be less than significant.

As discussed in the General Plan EIR, despite General Plan policies to protect scenic resources, including those along state designated scenic highways, a significant and unavoidable impact would occur with regards to scenic resources along state scenic routes at General Plan buildout. The TMP Update does not propose direct construction of transportation facilities, but provides capacity for future infrastructure improvements. Potential aesthetic impacts would be site-specific and would require evaluation on a case-by-case basis at the project level when future development is proposed. Construction of infrastructure recommended by the TMP Update would be required incorporate aesthetic treatments and landscaping to reduce visual impacts. Distant views of scenic resources from I-580 would not be significantly altered by these features as they would be designed and integrated with the highway system or located immediately adjacent to it. For these reasons, impacts would not be any greater than those identified in the General Plan EIR and impacts associated with the proposed TMP Update would be less than significant.

Threshold (c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. As noted in the General Plan EIR, accommodating all the growth beyond the 20-year planning horizon of the proposed General Plan would convert all (or nearly all) of the undeveloped land in the City limits and SOI to urban uses, thereby altering the overall visual and aesthetic resources in the City, resulting in a significant and unavoidable impact on the existing visual identity and character of the City. Because the infrastructure identified by the TMP Update would accommodate growth envisioned for the City by the General Plan buildout, development of infrastructure facilitated by the TMP Update would not result in any greater impacts on the existing visual identity and character of the City than those identified by the General Plan EIR for this resource. Regarding the potential for the recommended improvements to substantially degrade the existing visual character or quality of their sites and surroundings, refer to Response I (a), above. Impacts would be less than significant.

Additionally, the TMP Update outlines the concept of complete streets and the design criteria for streetscape features which include tools that would serve to improve the visual character of the streets and their surroundings. These tools include:

- **Benches and Shaded Areas for Pedestrians.** This can provide pedestrians with areas to rest and reduced effect of heat to increase pedestrian comfort. Structures can also be made visually pleasing or artistic to increase the attractiveness.
- **Green Streets.** Areas along sidewalks or medians that are planted with vegetation and designed to capture, treat, slow, and infiltrate storm water runoff. They can also act as a traffic calming measures when installed in bulb-outs and improve the aesthetics of an area.
- **Landscaped Areas.** These areas provide sustainability and livability benefits along roadways. Landscaped areas can encourage bicycling walking, and transit use by providing shade and improve the quality of public space by reducing traveler stress.

Projects facilitated by the TMP Update would comply with the City's Civil Engineering and Construction Guidelines, Urban Design Guidelines, Architectural Design Guidelines, Sustainability Measures, Engineering Design & Construction Standards. Accordingly, following compliance with the established regulatory framework and Master Plan design tools, the Project would not conflict with applicable zoning or regulations governing scenic quality. Impacts would be less than significant.

Threshold (d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. Future infrastructure improvements facilitated by the TMP Update would potentially create new sources of light and glare. During construction, job sites would require security lighting potentially creating a new short-term light source. Long term operational impacts could include light

and glare from new street lighting and traffic signals. Both short-term construction and long-term sources of light and glare could adversely affect day or nighttime views in the area.

City Standard Plan #154 establishes minimum requirements for light illumination but does not have regulations limiting glare. The General Plan EIR determined that the amount of new development envisioned for the City during the General Plan's 20-year development scenario and total buildout scenario would increase light and glare in the City, but adherence to General Plan Policy P5 under Objective CC-1.1, which requires that lighting on private and public property be designed to provide safe and adequate lighting while minimizing light spillage to adjacent properties, would reduce potential impacts to less than significant. Given that the infrastructure identified by the TMP Update would be necessary to support the buildout development scenario analyzed in the General Plan EIR, impacts associated with the TMP Update would not be expected to be any greater than those identified by the General Plan EIR. Further, future infrastructure projects would comply with Title 10.08.4000 of the Tracy Municipal Code which requires that site plans and architectural design include exterior lighting and devices. Adherence to required City lighting standards would reduce potential impacts to less than significant and no mitigation is required.

Cumulative Impacts

The potential aesthetic impacts related to views, aesthetics, and light and glare are site specific. While impacts are minimized through compliance with City standards, General Plan policies and the City's development review process, impacts related to aesthetics across the City considered cumulatively significant and unavoidable in the General Plan EIR. As identified in the General Plan EIR, the General Plan buildout would change the visual aspect of and views from, to, and across the City, add new development to viewsheds, bring urban development to a rural and agricultural area, resulting in cumulatively considerable contributions to significant impacts on scenic vistas, scenic resources within a State scenic highway, and visual character.

As discussed above, the proposed Project would not cause a new aesthetic impact to occur, nor an increase in the severity of an aesthetic impact previously disclosed in the General Plan EIR. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

II. AGRICULTURAL AND FORESTRY RESOURCES

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less Than Significant with Mitigation Incorporated. According to the General Plan, there are a total of 41,087 acres of land identified as Prime Farmland, Unique Farmland, Farmland of Statewide Importance and Farmland of Local Importance within the City and its SOI. Of this amount, 4,890 acres are located within

the City limits, 7,072 acres are within the SOI outside the City limits, and 29,125 acres are in the City, outside the SOI. Farmland along the I-580 corridor and the south side of the City is designated as Farmland of Local Importance, which is defined as land of importance to the local economy. It is not anticipated that improvements proposed as part of the TMP Update would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. The majority of proposed improvements would occur within existing public rights-of-way, private land, or undeveloped land. Therefore, impacts would be less than significant.

As discussed in the General Plan EIR, the City currently uses several regulatory tools for the protection of agricultural resources, including its participation in the SJMSCP and an Agricultural Mitigation Fee Ordinance that is used to collect in-lieu fees for impacts from development on agricultural land. These funds will eventually be utilized for the purchase of conservation easements on agricultural lands. A majority of improvements proposed as part of the TMP Update would occur within existing public rights-of-way or on private land proposed for development. Therefore, it is unlikely that proposed improvements would conflict with existing zoning for agricultural use, or a Williamson Act contract. Impacts would be less than significant.

For facilities that would occur within land designated as Agriculture (roadway improvements, and bicycle, pedestrian, and transit facilities, bridges and culverts) the following would apply. As discussed in the General Plan EIR, the City currently uses several regulatory tools for the protection of agricultural resources, including its participation in the SJMSCP and an Agricultural Mitigation Fee Ordinance that is used to collect in-lieu fees for impacts from development on agricultural land. These funds will eventually be utilized for the purchase of conservation easements on agricultural lands. Future storm drainage infrastructure projects proposed on agricultural land would be subject to these regulatory requirements. More specifically, any new transportation facilities proposed in existing agricultural areas would be required to comply with the requirements of the City's Agricultural Mitigation Fee Ordinance to reduce any potential conversion of farmland to less than significant, as identified below in Mitigation Measure AG-1.

Mitigation Measure AG-1: Prior to issuance of grading permits for any new storm drainage infrastructure projects proposed on agricultural land, the City shall pay the appropriate Agricultural Mitigation Fee, in accordance with Chapter 13.28 of the Tracy Municipal Code.

With implementation of the above mitigation measure, the potential impacts associated with conversion of farmland to non-agricultural uses would be less than significant. This would not be a new specific impact or a substantial increase in the severity of an impact that was identified in the General Plan EIR.

Threshold (b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less Than Significant Impact. According to the General Plan EIR, despite policies in the General Plan to support and encourage preservation of Williamson Act lands and the voluntary nature of the Williamson Act program, total buildout of the City and its SOI may result in the significant and unavoidable conversion of approximately 3,867 acres of land under Williamson Act contracts to urban uses. The City does not anticipate that improvements proposed as part of the TMP Update would conflict with existing zoning for agricultural use, or a Williamson Act contract as the majority of improvements would occur within existing

public rights-of-way or on private land proposed for development. A less than significant impact would occur.

Threshold (c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. No land located within the SOI or City limits is currently classified as forest land, timberland, or timberland zoned for production. Therefore, infrastructure projects facilitated by the TMP Update would not conflict with existing zoning or cause rezoning of any such land. As such, no impact would result.

Threshold (d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. Refer to Response II(c), above.

Threshold (e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less Than Significant Impact. As described in the General Plan EIR, in spite of County and City policies to help minimize conflicts between agricultural and urban uses and reduce pressure for additional conversion of agricultural land to non-agricultural use, development envisioned by the General Plan at total buildout would result in additional and incompatible urban development adjacent to agricultural uses. This is a significant and unavoidable impact of implementation of the General Plan.

A majority of improvements proposed as part of the TMP Update would occur within existing public rights-of-way or on private land proposed for development. Therefore, it is unlikely that proposed improvements would conflict with existing zoning for agricultural use, or a Williamson Act contract. A less than significant impact would occur.

Cumulative Impacts

The TMP Update identifies the transportation infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Because of this, implementation of the TMP Update would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to agricultural resources to occur, nor an increase in the severity of an impact related to agricultural resources previously disclosed in the General Plan EIR, with implementation of the mitigation measure discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

III. AIR QUALITY

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The City of Tracy lies within the northern portion of the San Joaquin Valley Air Basin (SJVAB). The San Joaquin Valley Air Pollution Control District (SJVAPCD) has jurisdiction over most air quality matters in the SJVAB and is tasked with implementing programs and regulations required by the federal and State Clean Air Acts. If a project is found to interfere with the region's ability to comply with federal and State air quality standards, local governments then need to consider project modifications or provide mitigation measures to eliminate the inconsistency of the project plans. In order for a project to be considered "consistent" with the latest Air Quality Plan (AQP), the project must be consistent with the goals, objectives, and assumptions in the respective plan to achieve federal and State air quality standards. Additionally, both construction-related and long-term emissions are required to be quantified and compared to the SJVAPCD significance thresholds.

The transportation infrastructure and improvements identified by the TMP Update would accommodate the anticipated growth from General Plan buildout and recent changes in land use development patterns. Thus, the infrastructure improvements identified by the TMP Update would not result in greater vehicle emissions than was anticipated in the General Plan EIR. As such, the TMP would not conflict with SJVAPCD AQPs. According to the *Tracy TMP and Induced Demand Analysis* (Kimley-Horn, 2022), VMT in the City would be reduced by approximately 70,744 VMT with implementation of the TMP and would also result in a net decrease in long-term mobile air emissions. TMP Update implementation would not be expected to result

in any greater impacts than identified in the General Plan EIR. Therefore, the Project would not impact the implementation of any applicable air quality plan and no impact would occur.

Threshold (b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant With Mitigation Incorporated. Air quality emissions would be generated during operation and construction of the proposed Project. Because of the region's non-attainment status for ozone and PM_{2.5}, if project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and NO_x) or PM_{2.5} would exceed the SJVAPCD's significance thresholds, then the proposed Project uses would be considered to conflict with the attainment plans². Discussion of construction and operational-related air quality impacts is provided below.

Construction

Construction activities are a source of fugitive dust (PM₁₀) that may have a substantial, although temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working within the area of individual infrastructure projects. Fugitive dust emissions are associated with land clearing, excavation, cut and fill, and truck travel on unpaved roadways. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions.

Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from construction sites, emissions produced at the sites as the equipment is used, and emissions from trucks transporting materials to and from the sites. Emitted pollutants would include carbon monoxide (CO), reactive organic gasses (ROG), nitrogen dioxide (NO_x), sulfur dioxide (SO_x), and coarse particulate matter (PM₁₀). Standard SJVAPCD regulations such as maintaining all construction equipment in proper tune and shutting down equipment when not in use for extended periods of time would be required.

Control measures are required and enforced by the SJVAPCD under Regulations IV and VIII. The SJVAPCD considers construction-related emissions from all projects in this region to be mitigated to a less than significant level if SJVAPCD-recommended PM₁₀ fugitive dust rules and equipment exhaust emissions controls are implemented. The proposed Project would be required to comply with all applicable measures from SJVAPCD, including Rules 4201, 4202, and 8011 through 8071.

The TMP Update identifies the transportation infrastructure and improvements necessary to ensure that City facilities could accommodate future growth anticipated to occur in the City based on the General Plan. A specific buildout schedule for the identified transportation infrastructure and improvements has not yet been developed because individual construction would occur as needed. Implementation of proposed components of the TMP Update would be dependent on increased transportation demands within the City limits and SOI. Nonetheless, **Table 6-1: Representative Scenario Project Unmitigated Construction Criteria**

² San Joaquin Valley Air Pollution Control District. *About the District*. Retrieved from <https://ww2.valleyair.org/about/>.

Pollutant Emissions, below shows the construction emissions results for a representative transportation improvement project that may occur as a result of the TMP Update.

Table 6-1: Representative Scenario Project Unmitigated Construction Criteria Pollutant Emissions						
Year	Pollutant (maximum tons per year)¹					
	ROG	NO_x	CO	PM₁₀	PM_{2.5}	SO_x
2023	0.20	2.11	1.96	0.24	0.11	0.00
SJVAPCD Significance Threshold ²	10	10	100	15	15	27
Exceed SJVAPCD Threshold?	No	No	No	No	No	No
1. Emissions were calculated using Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model (RCEM), Version 9.0.0. PM10 and PM2.5 estimates assume that one water truck is used for dust control measures. 2. The representative project includes the construction of a new interchange at the intersection of I-205 and Paradise Avenue, as shown in the TMP Figure 4.21: Recommended CMP Network. 3. San Joaquin Valley Air Pollution Control District, Air Quality Thresholds of Significance – Criteria Pollutants, March 2015. Source: Refer to the RCEM outputs provided in Appendix A, Air Quality and Greenhouse Gas Modeling Data.						

The results of the emissions modeling were compared with the SJVAPCD thresholds of significance for criteria pollutant emissions (see **Table 6-1**). The modeled results indicate that construction emissions from the representative project from the TMP Update would not considerably increase any of the criteria pollutants for which the project region is non-attainment. However, future implementation of improvements identified in the TMP Update shall require implementation of Mitigation Measure AQ-1 as described below to ensure construction emissions do not result in short-term construction impacts regarding air quality. Implementation of this measure will ensure short-term construction emissions for individual projects from the infrastructure identified by the TMP Update would be less than significant.

Mitigation Measure AQ-1: Prior to the issuance of grading permits the contractor for individual infrastructure improvement projects shall submit a construction emission plan to demonstrate to the City of Tracy that demonstrates how construction activities would comply with the following emissions control measures:

- Properly and routinely maintain all construction equipment, as recommended by manufacturer's manuals, to control exhaust emissions.
- Shut down equipment when not in use for extended periods of time, to reduce exhaust emissions associated with idling engines.
- Encourage ride-sharing and use of transit transportation for construction employees commuting to the individual sites.
- Use electric equipment for construction whenever possible in lieu of fossil fuel-fired equipment.
- Curtail construction during periods of high ambient pollutant concentrations.
- Construction equipment shall operate no longer than eight cumulative hours per day.

- All construction vehicles shall be equipped with proper emission control equipment and kept in good and proper running order to reduce NO_x emissions.
- On-Road and Off-Road diesel equipment shall use aqueous diesel fuel if permitted under manufacturer's guidelines.
- On-Road and Off-Road diesel equipment shall use diesel particulate filters if permitted under manufacturer's guidelines.
- On-Road and Off-Road diesel equipment shall use cooled exhaust gas recirculation (EGR) if permitted under manufacturer's guidelines.
- Use of Caterpillar pre-chamber diesel engines or equivalent shall be utilized if economic and available to reduce NO_x emissions.
- All construction activities within the individual sites shall be discontinued during the first stage smog alerts.
- Construction and grading activities shall not be allowed during first stage ozone alerts. First stage ozone alerts are declared when the ozone level exceeds 0.20 ppm (1-hour average).

Operations

Long-term operational emissions would be generated by induced VMT demand as a result of the buildout of the TMP Update transportation improvements. Operations would primarily involve mobile source emissions from automobiles, trucks, and buses utilizing the City's roadway network. As shown in **Table 6-2: TMP Update Operational Air Emissions**, short-term (i.e., Existing Plus Project) operational emissions associated with transportation improvements from the TMP Update would result in a minimal net increase of air emissions and would not exceed the SJVAPCD thresholds of significance for criteria pollutants. In addition, implementation of the TMP would result in a net decrease in emissions for all criteria pollutants under long-term (Cumulative Plus Project) conditions. Therefore, the Project would help improve air quality in the City and is not be expected to result in any greater impacts than identified in the General Plan EIR. Impacts would be less than significant in this regard.

Table 6-2: TMP Update Operational Air Emissions						
Scenario ²	Net Emissions (tons per year) ¹					
	Carbon Monoxide (CO)	Reactive Organic Gases (ROGs)	Nitrogen Oxide (NO _x)	Sulfur Dioxide (SO _x)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Short-Term ³ (Ex+PP – Ex+NP)	8.17	0.20	1.95	0.03	0.04	0.03
Long-Term ⁴ (C+PP – C+NP)	-13.83	-0.19	-2.89	-0.08	-0.06	-0.06
SJVAPCD Significance Threshold ⁵	100	10	10	27	15	15
Exceed SJVAPCD Threshold?	No	No	No	No	No	No

1. Emissions calculated using emissions factors from the CARB EMFAC2021 Model.
 2. Ex = Existing; PP = Project; NP = No Project; C = Cumulative
 3. Per the *Tracy TMP and Induced Demand Analysis* (Kimley-Horn, 2022), there would be a net increase of 21,666 VMT under short-term conditions.
 4. Per the *Tracy TMP and Induced Demand Analysis* (Kimley-Horn, 2022), there would be a net decrease of 70,744 VMT under long-term conditions.
 5. San Joaquin Valley Air Pollution Control District, *Air Quality Thresholds of Significance – Criteria Pollutants*, March 2015.
- Source: Refer to Appendix A, *Air Quality and Greenhouse Gas Modeling Data*.

Threshold (c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact with Mitigation. Sensitive receptors (i.e., children, senior citizens, and acutely or chronically ill people) are more susceptible to the effects of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, playgrounds, childcare centers, hospitals, convalescent homes, and retirement homes. Development of transportation facilities facilitated by the TMP Update could result in pollutant emissions from short-term construction activities. However, these emissions would be temporary in nature and would cease upon construction completion. In addition, implementation of Mitigation Measure AQ 1 would ensure that short-term construction pollutant concentration impacts are less than significant to sensitive receptors.

During operations, the infrastructure identified by the TMP Update (e.g. highway improvements, interchanges, bicycle and pedestrian circulation, transit facilities, truck routes) would not be expected to expose sensitive receptors to substantial pollutant concentrations as this equipment and infrastructure does not typically emit substantial amounts of noxious or hazardous pollutants. Thus, the improvements identified by the TMP Update, in compliance with the General Plan and applicable federal, State, and local regulations impacts would be expected to result in less than significant impacts in this regard.

Threshold (d) Would the project result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Less Than Significant Impact. Construction activities may generate detectable odors from heavy-duty equipment exhaust. Odors associated with diesel and gasoline fumes would occur during the construction phase and may affect residents in the vicinity of individual projects. However, these odors would be temporary in nature and would cease upon the completion of construction.

Transportation infrastructure generally does not emit substantial amounts of odorous pollutants. Further, the infrastructure identified by the TMP Update would be consistent with applicable standards and requirements to reduce odors. Thus, during the operational phase, the transportation infrastructure identified by the TMP Update would not be anticipated to create objectionable odors in and of itself that could affect a substantial number of people. Consequently, during operation, impacts would be less than significant.

Cumulative Impacts

A project that has a significant impact on air quality with regard to emissions of PM₁₀, PM_{2.5}, NO_x and/or ROG_s as determined above would have a significant cumulative effect. In the event direct impacts from a project are less than significant, a project may still have a cumulatively considerable impact on air quality if

the emissions from the project, in combination with the emissions from other proposed, or reasonably foreseeable future projects are in excess of screening levels identified above, and the project's contribution accounts for more than an insignificant proportion of the cumulative total emissions. With regard to past and present projects, the background ambient air quality, as measured at the monitoring stations maintained and operated by the SJVAPCD, reflects the concentrations of pollutants from existing sources. Past and present project impacts are therefore included in the background ambient air quality data.

As discussed above, the proposed Project would not cause a new air quality impact to occur, nor an increase in the severity of an air quality impact previously disclosed in the General Plan EIR, with implementation of Mitigation Measure AQ 1, which would be expected to reduce the severity of the impact to a less than significant level. Therefore, air quality impacts would not be greater than those previously analyzed. The proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

IV. BIOLOGICAL RESOURCES

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated. The recommended transportation infrastructure improvements are within City and its SOI, which are within the jurisdictional boundaries of the San Joaquin County Multi-Species Conservation and Open Space Plan (SJMSCP). The City of Tracy is an eligible SJMSCP participant. The SJMSCP outlines mitigation measures for species and habitats known or likely to occur in the region. Covered species were reviewed prior to a reconnaissance field survey and cross referenced with California Natural Diversity Data Base (CNDDB) records to refine a targeted list of sites that were sampled. Particular attention was given to federally and/or state-listed species, plants considered rare by the California Native Plant Society (CNPS 2010, 2012), protected wildlife, and wildlife species of special concern.

The following ten federal and State endangered and threatened plant and wildlife species have the potential to occur on one or more of the proposed City of Tracy long-term master plans Project sites: large-flowered fiddleneck, Conservancy fairy shrimp, longhorn fairy shrimp, vernal pool fairy shrimp, valley elderberry longhorn beetle, California tiger salamander, California red legged frog, giant garter snake, Swainson's hawk, and San Joaquin kit fox. "Take" of one or more of these species could occur during construction of infrastructure facilities throughout the proposed Project area, and would constitute a significant impact under CEQA. However, implementation of the following mitigation measures would facilitate compliance with the SJMSCP and reduce impacts on these species to a less than significant level.

Mitigation Measure BIO-1: -construction surveys shall be conducted by the City (as project proponent) prior to any project-related activities that may impact special status-species identified in Table BIO 1-1 (as per section 5.2.2.1 through 5.2.2.5 of the SJMSCP, Appendix I). If construction activities would result in impacts to any of these species, the mitigation measures specified for that particular species and habitat within Table BIO 1-1 and Table BIO 1-2 shall be implemented.

Table BIO 1-1: Incidental Take Minimization Measures – FESA and CESA Species		
Species	Status	Incidental Take Minimization Measures
Large-flowered fiddleneck (<i>Amsinckia grandiflora</i>)	FE, SE, CNPS 1B.1	Pre-construction surveys will need to be performed as detailed in Section 5.2.2.1(A, B, and D) and 5.2.2.2 through 5.2.2.5 of the SJMSCP. If large-flowered fiddleneck is found, the SJMSCP requires complete avoidance of plant populations onsite in accordance with the identified measures in Section 5.5.2.1 and 5.5.9(F).
Conservancy fairy shrimp (<i>Branchinecta conservatio</i>)	FE	Delay construction until pools are dry, collect and store soil samples, and conduct pre-construction surveys, as described in Section 5.2.4.4 of the SJMSCP.
Longhorn fairy shrimp (<i>Branchinecta longiantenna</i>)	FE	Delay construction until pools are dry, collect and store soil samples, and conduct pre-construction surveys, as described in Section 5.2.4.4 of the SJMSCP.
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT	Delay construction until pools are dry, collect and store soil samples, as described in Section 5.2.4.4 of the SJMSCP.
Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	FT	Survey site for presence of elderberry shrubs; if elderberry shrubs present, implement measures in Section 5.2.4.25 of the SJMSCP.
California tiger salamander (<i>Ambystoma californiense</i>)	FT, ST	Project implementation could be delayed due to species lengthy presence/ absence surveys at sites indicated. See Sections 5.2.4.5 and 5.2.4.6 of the SJMSCP.
California red-legged frog (<i>Rana draytonii</i>)	FT, CSSC	Establish a 300-foot setback around occupied habitat, as described in Section 5.2.4.7 of the SJMSCP.
Swainson's hawk (<i>Buteo swainsoni</i>)	ST	Retention of nest trees or removal of such trees between September 1 and February 15, as detailed in Section 5.2.4.11 of the SJMSCP.

Table BIO 1-1: Incidental Take Minimization Measures – FESA and CESA Species

Species	Status	Incidental Take Minimization Measures
Giant garter snake (<i>Thamnophis gigas</i>)	FT, ST	Full avoidance of giant garter snake known occupied habitat is required. Implement the nine avoidance and minimization measures detailed in Section 5.2.4.25 of the SJMSCP.
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	FE, ST	Pre-construction surveys prior to commencement of ground disturbance for projects located in the Southwest Zone or Southwest/Central transition Zone, as detailed in Section 5.2.4.1 of the SJMSCP.

Source: City of Tracy Parks Master Plans (New Developments), Citywide Public Facilities Master Plan, Citywide Public Safety Master Plan Update Draft Initial Study. RBF Consulting, February 2013.

Table BIO 1-2: SJMSCP Compensation Ratios

Habitat type converted from open space use	Required Compensation Ratio	Description
Agricultural Habitat Lands	1:1	One acre of preserve acquired, enhanced and managed in perpetuity for each acre of habitat converted from Open Space use.
Natural Lands - Non-Wetlands (e.g., oak woodlands)	3:1	Three acres of preserve acquired, enhanced and managed in perpetuity for each acre of habitat converted from Open Space use.
Natural Lands - Vernal Pools within Vernal Pool Zone	2:1 Preservation plus 1:1 Creation (3:1 total)	Create one acre of habitat and preserve two acres of existing habitat for each acre converted from Open Space use resulting in three total acres of preserve. Preserves include both wetted surface area and upland grasslands surrounding vernal pools and protecting their watersheds. Creation component shall emphasize restoration of pre-existing vernal pools, wherever feasible.
Natural Lands - Wetlands Other than Vernal Pools	At least 1:1 Creation Plus 2:1 Preservation (3:1 total)	SJMSCP may: (1) create one acre habitat, preserve two existing acres of habitat; (2) create two acres habitat, preserve one acre existing habitat; or (3) create three acres of habitat, preserve zero acres of existing habitat. All options result in three acres of preserve.

Source: City of Tracy Parks Master Plans (New Developments), Citywide Public Facilities Master Plan, Citywide Public Safety Master Plan Update Draft Initial Study. RBF Consulting, February 2013.

Future infrastructure development facilitated by the TMP Update could have the potential to result in loss of habitat of federal and State endangered and threatened plant and wildlife species covered under the SJMSCP. However, implementation of the following mitigation measures would reduce impacts to these species to less than significant levels and fully comply with the SJMSCP.

Mitigation Measure BIO-2: *Incidental take minimization measures shall be completed per the requirements of the SJMSCP, as outlined in Table BIO 1-1, above. Implementation of these measures would reduce the potential of take of federal and state endangered and threatened wildlife species to less than significant levels and fully comply with the SJMSCP.*

Mitigation Measure BIO-3: *Under the SJMSCP, mitigation for loss of habitat of federal and state endangered and threatened plant and wildlife species allows for a fee based approach based on the habitat type that is to be converted from open space uses. The fee structure for 2022 is as follows, and updates annually:*

A. \$9,781 per acre for Conversion of Multi-Purpose Open Space Lands

B. \$19,561 per acre for Conversion of Agricultural Habitat Lands and Natural Lands (except for vernal pools)

C. \$174,040 per acre for the wetted surface area of vernal pools and \$80,453 per acre for the upland grasslands surrounding vernal pools. The SJMSCP assumes a 12 percent wetted surface area for vernal pool grasslands.

The following 23 state species of special concern, state fully protected, and other SJMSCP covered plant and wildlife species have the potential to occur on one or more of the proposed City of Tracy long-term master plans Project sites:

- | | |
|------------------------------------|--------------------------|
| • Slough thistle | • tricolored blackbird |
| • diamond-petaled California poppy | • short-eared owl |
| • showy golden madia | • northern harrier |
| • caper-fruited tropidocarpum | • white-tailed kite |
| • midvalley fairy shrimp | • California horned lark |
| • western spadefoot | • loggerhead shrike |
| • western pond turtle | • western mastiff bat |
| • San Joaquin coachwhip | • western red bat |
| • coast horned lizard | • long-eared myotis |
| • burrowing owl | • Yuma myotis |
| • Cooper's hawk | • American badger |
| • western grebe | |

While the TMP Update does not propose construction or operation of specific transportation infrastructure projects at this time, but facilitates future infrastructure development with the potential to impact one or more of these species. However, implementation of Mitigation Measure BIO-1 through BIO-3 above, in addition to the following mitigation measures would reduce impacts to these species to less than significant levels and fully comply with the SJMSCP:

Mitigation Measure BIO-4: Incidental take minimization measures shall be completed per the requirements of the SJMSCP, as outlined in Table BIO 1-3 below. Implementation of these measures would reduce the potential of injury or mortality of state species of special concern, state fully protected, and other SJMSCP-covered wildlife species to less than significant levels and fully comply with the SJMSCP.

Table BIO 1-3: Incidental Take Minimization Measures – CSSC, State Fully Protected and SJMSCP Covered Species		
Name	Status	Incidental Take Minimization Measures
Slough thistle (<i>Cirsium crassicaule</i>)	CNPS 1B.1	Pre-construction surveys shall be performed as detailed in Section 5.2.2.1(A, B, and D) and 5.2.2.2 through 5.2.2.5 of the SJMSCP. If slough thistle is found, complete avoidance of plant populations on site is required in accordance with the identified measures in Section 5.5.2.1 and 5.5.9(F).
Diamond-petaled California poppy (<i>Eschscholzia rhombipetala</i>)	CNPS 1B.1	Pre-construction surveys shall be performed as detailed in Section 5.2.2.1(A, B, and D) and 5.2.2.2 through 5.2.2.5 of the SJMSCP. If diamond-petaled California poppy is found, complete avoidance of plant populations on site is required in accordance with the identified measures in Section 5.5.2.1 and 5.5.9(F).
Showy golden madia (<i>Madia radiata</i>)	CNPS 1B.1	Pre-construction surveys shall be performed as detailed in Section 5.2.2.1(A, B, and D) and 5.2.2.2 through 5.2.2.5 of the SJMSCP. If showy golden madia is found, complete avoidance of plant populations on site is required in accordance with the identified measures in Section 5.5.2.1 and 5.5.9(F).
Caper-fruited tropidiocarpum (<i>Tropidiocarpum capparideum</i>)	CNPS 1B.1	Pre-construction surveys shall be performed as detailed in Section 5.2.2.1(A, B, and D) and 5.2.2.2 through 5.2.2.5 of the SJMSCP. If caper-fruited tropidiocarpum is found, Section 5.2.4.29C of the SJMSCP specifies acquisition or consultation measures required.
Midvalley fairy shrimp (<i>Branchinecta mesoallensis</i>)	SJMSCP	Delay construction until pools are dry, collect and store soil samples, as described in Section 5.2.4.4 of the SJMSCP.
Western spadefoot (<i>Spea hammondi</i>)	CSSC	Conduct species surveys in accordance with current Technical Advisory Committee (TAC)-approved protocol, as described in sections 5.2.4.5 and 5.2.4.6 of the SJMSCP.

Table BIO 1-3: Incidental Take Minimization Measures – CSSC, State Fully Protected and SJMSCP Covered Species

Name	Status	Incidental Take Minimization Measures
Western pond turtle (<i>Actinemys marmorata</i>)	CSSC	300-400 foot buffer area required from known nesting sites, as described in Section 5.2.4.10 of the SJMSCP.
San Joaquin coachwhip (whipsnake) (<i>Masticophis flagellum ruddocki</i>)	CSSC	Incidental take measures to be formulated by TAC if discovered on a project site, as described in Section 5.2.4.10 of the SJMSCP.
Coast (California) horned lizard (<i>Phrynosoma blainvillii</i>)	CSSC	Incidental take measures to be formulated by TAC if discovered on a project site, as described in Section 5.2.4.10 of the SJMSCP.
Burrowing owl (<i>Athene cunicularia</i>)	CSSC	Allow growth of vegetation onsite to a height of 36 inches prior to construction, disk site to prevent colonization by owls, or evict resident owls, if present, as detailed in Section 5.2.4.15 of the SJMSCP.
Cooper's hawk (<i>Accipiter cooperii</i>)	SJMSCP	Establish 100-foot setback from nesting areas, as described in Section 5.2.4.19 of the SJMSCP.
Western grebe (<i>Aechmophorus occidentalis</i>)	SJMSCP	Establish a 500-foot setback from nesting areas during the nesting season, as described in Section 5.2.4.17 of the SJMSCP.
Tricolored blackbird (<i>Agelaius tricolor</i>)	CSSC	Avoid breeding colonies whenever possible. Otherwise, establish a 500-foot buffer during the nesting season, as described in Section 5.2.4.16 of the SJMSCP.
Short-eared owl (<i>Asio flammeus</i>)	CSSC	Establish a 500-foot setback from nesting areas during the nesting season, as described in Section 5.2.4.17 of the SJMSCP.
Northern harrier (<i>Circus cyaneus</i>)	CSSC	Establish a 500-foot setback from nesting areas during the nesting season, as described in Section 5.2.4.17 of the SJMSCP.
White-tailed kite (<i>Elanus leucurus</i>)	SP	Conduct pre-construction surveys, as described in Section 5.2.4.19 of the SJMSCP.
California horned lark (<i>Eremophila alpestris actia</i>)	SJMSCP	Establish a 500-foot setback from nesting areas during the nesting season, as described in Section 5.2.4.17 of the SJMSCP.
Loggerhead shrike (<i>Lanius ludovicianus</i>)	CSSC	Establish a 100-foot setback from nesting areas, as described in Section 5.2.4.16 of the SJMSCP.
Western mastiff bat (<i>Eumops perotis californicus</i>)	CSSC	Remove colonial roosting trees only outside the nursery/hibernation season and only after dusk, as described in Section 5.2.4.28 of the SJMSCP.

Table BIO 1-3: Incidental Take Minimization Measures – CSSC, State Fully Protected and SJMSCP Covered Species

Name	Status	Incidental Take Minimization Measures
Western red bat (<i>Lasiurus blossevillei</i>)	CSSC	Remove colonial roosting trees only outside the nursery/hibernation season and only after dusk, as described in Section 5.2.4.28 of the SJMSCP.
Long-eared myotis (<i>Myotis evotis</i>)	SJMSCP	Remove colonial roosting trees only outside the nursery/hibernation season and only after dusk, as described in Section 5.2.4.28 of the SJMSCP.
Yuma myotis (<i>Myotis yumanensis</i>)	SJMSCP	Remove colonial roosting trees only outside the nursery/hibernation season and only after dusk, as described in Section 5.2.4.28 of the SJMSCP.
American badger (<i>Taxidea taxus</i>)	CSSC	Monitor occupied dens and destroy only when burrow is unoccupied; establish a 200-foot buffer around natal dens, as described in Section 5.2.4.26 of the SJMSCP.

Source: City of Tracy Parks Master Plans (New Developments), Citywide Public Facilities Master Plan, Citywide Public Safety Master Plan Update Draft Initial Study. RBF Consulting, February 2013.

The following plant species are not covered in the SJMSCP, but are tracked by the CNDDDB and CNPS:

- California androsace
- big tarplant
- round-leaved filaree
- Lemmon's jewelflower
- Parry's red tarplant
- gypsum-loving larkspur
- hogwallow starfish

These species could be directly affected by future construction of infrastructure facilities throughout the City and its SOI. Implementation of Mitigation Measure BIO-3 would reduce the potential impact on these species to a less than significant level. If any of the CNPS-listed plant species are found within or directly adjacent to the proposed work area, the Project proponent would implement Mitigation Measure BIO-5, which requires a species-specific determination of potential significance would be conducted for each plant species by a qualified plant ecologist to determine whether Project activities would result in the loss of:

- (a) suitable habitat for less than five percent of the known individual plants of the species documented as occurring within 50 miles of the impact location, if known; or,
- (b) less than five percent of the known populations of the species if the total number of individuals is unknown, then impacts would be deemed less than significant and no further mitigation measures would be required. This impact would be considered less than significant because regional

populations would remain abundant following Project implementation and the Project would not substantially reduce the number or range of these species.

If Project activities would result in loss of habitat for more than five percent populations or individuals of these species regionally documented as occurring within 50 miles of the impact location, the Project proponent would be required to implement Mitigation Measures BIO-6 and BIO-7.

It is likely that if found, impacts to small populations of List 4 species would be considered less than significant. These plant species are widely distributed, with many known, extant populations occurring in many counties. In other cases, the species are considered to be rarer but the amount of suitable habitat present on-site is limited, meaning that any potentially present populations are likely to be small in size and therefore impacts to these would likely also be less-than-significant. However, impacts to populations of more restricted, rare, or declining species are likely to be considered significant unless mitigated. Finally, for those species that have a potential to occur on-site as a large population due to the abundance of potentially suitable habitat on-site, impacts to a large population of so-called “watch-list” (i.e. CNPS List 3 and 4) species may be considered significant unless mitigated.

Mitigation Measure BIO-5: *TMP Update Project sites shall be surveyed for special status plant species in a year with rainfall totals within the normal range for the area. Surveys shall be floristic in nature and be conducted in accordance with the most current USFWS, CDFG, and CNPS guidelines. Surveys shall cover all areas intended for both development and compensatory mitigation.*

Mitigation Measure BIO-6: *Potentially significant impacts to special status plants shall be avoided to the extent feasible. In consultation with a plant ecologist, the project shall, to the extent feasible, be redesigned, constructed, and operated to reasonably avoid direct and indirect impacts to special status plant populations.*

Mitigation Measure BIO-7: *To compensate for permanent impacts to special-status plant species, habitat that is not already public land shall be preserved and managed in perpetuity at a 1:1 mitigation ratio (one acre preserved for each acre impacted). Impacts could include direct impacts resulting from loss of habitat or indirect impacts if a significant population or portion thereof is unable to be avoided. The preserved habitat for significantly impacted plant species shall be of equal or greater habitat quality to the impacted areas in terms of soil features, extent of disturbance, vegetation structure, and dominant species composition, and shall contain verified extant populations of the special-status species impacted. The permanent protection and management of mitigation lands shall be ensured through an appropriate mechanism, such as a conservation easement or fee title purchase. A conservation easement could be held by CDFG or an approved land management entity and shall be recorded within a time frame agreed upon by CDFG.*

The proposed infrastructure improvements facilitated by the TMP Update would have the potential to result in losses of habitat for state species of special concern, state fully protected, other SJMSCP-covered wildlife species, and CNPS listed plant species covered under the SJMSCP. Losses of habitat occupied by

any of these species could constitute a significant impact under CEQA. However, implementation of Mitigation Measures BIO-1 through BIO-7 would compensate for losses of habitat of state species of special concern, state fully protected, other SJMSCP-covered wildlife species, and CNPS listed plant species to less-than-significant levels and fully comply with the SJMSCP.

Threshold (b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated. Ephemeral drainages are located throughout the City and its SOI. These features, in addition to all canals, ditches, and other irrigation features may qualify as “waters of the state”, in which case, would be subject to regulation by the Regional Water Quality Control Board. The CDFG maintains a “no net loss” policy related to wetlands. Construction activities that impact areas defined as “wetlands” may be considered significant under CEQA. However, Mitigation Measure BIO-3 identified above and the following Mitigation Measure BIO-8 would reduce impacts to this habitat to a less than significant level.

Mitigation Measure BIO-8: *Pre-construction surveys shall be conducted prior to any project related activities that may encroach into regulated habitats or disturb native vegetation to identify significant impacts. If regulated habitats are impacted by project activities planned activities can either avoid these resources or work in conjunction with the regulatory agencies to minimize, mitigate, and permit the activities. A Streambed Alteration Agreement typically can be obtained within 90 days of submittal of a complete application, including a permit fee. Project activities that reduce the cross-sectional area of a stream and/or remove riparian and wetland vegetation require compensatory mitigation and monitoring. Moreover, CDFG agreements for projects in agricultural and native settings frequently include pre-construction surveys and reporting and construction monitoring to ensure protection of wildlife resources. Activities that result in impacts to waters of the state, may require that the project applicant file a Report of Waste Discharge with the Regional Board.*

Threshold (c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant with Mitigation Incorporated. A detailed wetland delineation was not conducted on any of the TMP Update Project sites. A review of the *United States Fish and Wildlife Service Wetlands Geodatabase* indicated the presence of several potential jurisdictional wetlands within the City and its SOI. However, the vernal pool habitat is isolated from other waters and ephemeral drainages are isolated, intermittent watercourses with no obvious hydrologic connection to any navigable or perennial surface water source or tributary. Therefore, these features would not likely be subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) under provisions of Section 404 of the Clean Water Act (1972) and Section 10 of the Rivers and Harbors Act (1899). The Delta Mendota Canal and the California Aqueduct may be subject to the jurisdiction of the USACE. Future infrastructure improvements could affect these canals. Therefore, while a majority of improvements proposed as part of the TMP Update would occur

within existing public rights-of-way or on private land proposed for development, projects would implement Mitigation Measure BIO-9 to reduce impacts to wetlands to less than significant.

Mitigation Measure BIO-9: Section 5.6 of the SJMSCP states that until such time that the Clean Water Act regional general permit or its equivalent is issued for coverage under the SJMSCP, acquisition of a Section 404 permit by the City (as project proponent) will continue to occur as required by existing regulations. Project proponents shall comply with all requirements for protecting federally protected wetlands.

Threshold (d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant with Mitigation Incorporated. Improvements that could affect nursery sites are addressed in impact discussions associated with take of federal and state endangered and threatened wildlife species and injury or mortality of state species of special concern, state fully protected, and other SJMSCP-covered wildlife species, above. Implementation of Mitigation Measures BIO-1 and BIO-3 would incorporate the implementation of the relevant incidental take minimization measures detailed in the SJMSCP. Implementation of Mitigation Measures BIO-1 and BIO-3 would similarly reduce impacts to nursery sites to less than significant and fully comply with the SJMSCP.

Threshold (e) Would the project conflict with any local policies or ordinances related to protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact. The City has a tree ordinance (Tracy Municipal Code [T.M.C.] (Chapter 7.08) that protects “street trees” planted within rights-of-way or planting easements. Any trees that would need to be removed for any improvements proposed as part of the TMP would be required to adhere to the rules and regulations set forth in Chapter 7.08 of the T.M.C. The proposed TMP Update would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Therefore, less than significant impacts would occur.

Threshold (f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less Than Significant with Mitigation Incorporated. The TMP Update Project area is comprised of the City and its SOI which are located within the jurisdiction of the SJMSCP. Implementation of Mitigation Measures BIO-1 through BIO-9 described above would ensure that any potential impacts to special-status species or habitats, which may be associated with TMP Update implementation, are addressed accordingly to the provisions of the SJMSCP. Therefore, the Project would not conflict with the provisions of an adopted habitat conservation plan, natural communities conservation plan, or other approved local, regional, or state habitat conservation plan, including the SJMSCP.

Cumulative Impacts

The TMP Update identifies the transportation infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. TMP Update implementation would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to biological resources to occur, nor an increase in the severity of a biological impact previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

V. CULTURAL RESOURCES

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

Less Than Significant with Mitigation Incorporated. Historic resources generally consist of buildings, structures, improvements, and remnants associated with a significant historic event or person(s) and/or represent a historically significant style, design, or achievement. Damage to or demolition of such resources is typically considered a significant impact. Direct impacts on historic resources can occur through their destruction or removal and indirect impacts can occur from a change in the setting of a historic resource.

No transportation infrastructure improvements are proposed in areas that currently contain known historic resources. However, during construction, unknown and/or undocumented historic resources may be uncovered. As a result, infrastructure project identified within the TMP Update, would be subject to Mitigation Measure CR-1, which identifies procedures related to historic resource assessment and preservation. Implement

Mitigation Measure CR-1: *In accordance with the requirements of Tracy General Plan Community Character Element Objective CC-3.1, Policy P4 and P5 if any resources are found during construction, all operations within the project area shall halt until an assessment can be made by a qualified archaeologist and Native American monitors regarding the presence of historic resources and the potential for adverse impacts on these resources. Any resources on public or private property shall be either preserved on their sites or adequately documented and conserved as a condition of removal. If any cultural resources are found unexpectedly during development, construction shall cease immediately until accurate study and conservation measures are implemented. Measures such as fencing the area immediately surrounding the find, establishing a buffer area, and demarcating the site as an “environmentally sensitive area,” could be implemented as part of a resource protection plan that shall be developed to ensure protection of the resource.*

Threshold (b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less Than Significant with Mitigation Incorporated. Archaeological sites are locations that contain resources associated with former human activities, and may contain human skeletal remains, waste from tool manufacture, tool concentrations, and/or discoloration or accumulation of soil or food remains. The City and its SOI contain known archaeological sites and likely contains undiscovered archaeological sites as well, particularly in undeveloped areas.

Construction activities associated with implementation of proposed TMP infrastructure may result in adverse effects on unknown archaeological sites. Implementation of Mitigation Measures CR-2 and CR-3 would reduce potential impacts to less than significant.

Mitigation Measure CR-2: Prior to the issuance of a grading permit for individual infrastructure projects, an archaeological resource monitoring plan shall be developed by a qualified archaeologist and submitted to the City for review and approval. This plan shall include a grading observation schedule to be maintained when grading occurs on and offsite in upper soils to identify and further evaluate cultural resources that may be discovered in the Project area. A qualified archaeologist and Native American monitors from culturally affiliated Native American Tribes shall be retained and invited, respective, to attend pregrade meetings and to monitor earth moving activities, including clearing, grubbing, cutting, and trenching at the site. The archaeologist and Native American monitors shall carefully inspect these areas to assess the potential for significant prehistoric or historic remains. If potential archaeological and historical resources are uncovered, the construction contractor shall cease grading operations in the vicinity of the find until further evaluation is undertaken to assess the discovery. Further subsurface investigation may be needed if the resource is determined unique or important for its prehistoric or historic information. Additional investigations will be conducted by a qualified archaeologist in consultation with Native American representative(s) from the culturally affiliated Native American Tribe(s).

Mitigation Measure CR-3: Prior to commencement of any ground disturbing activities, the Lead Archaeologist, in consultation with the Native American monitor(s) from culturally affiliated Native American Tribes, shall prepare Cultural Resources Sensitivity Training materials to be used in orientation program given to all personnel working on the proposed project. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the Project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

Threshold (c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact. Ground-disturbing activities, such as grading or excavation, have the potential to disturb human remains. If human remains are found, those remains would require proper treatment, in accordance with applicable laws. The Native American Graves Protection and Repatriation Act (NAGPRA) includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional and inadvertent discovery of Native American cultural items on federal and tribal lands, and penalties for noncompliance and illegal trafficking. California Public Resources Health and Safety Code § 7050.5-7055 describes the general provisions regarding human remains, including the requirements if any human remains are accidentally discovered during excavation of a site.

The General Plan EIR found that compliance with policies and guiding mechanisms identified in the General Plan would reduce any impacts on human remains associated with General Plan buildout to less than significant. As required by state law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission and consultation with the individual identified by the Native American Heritage Commission to be the “most likely descendant.” If human remains are found during excavation, excavation must stop in the vicinity of the find and any area that is reasonably suspected to overlie adjacent remains until the County Coroner has been called out, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with federal and state regulations, which detail the appropriate actions necessary in the event human remains are encountered, impacts would not be any greater than those identified in the General Plan EIR. Thus, the proposed TMP would result in less than significant impacts in this regard.

Cumulative Impacts

The TMP Update identifies transportation infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Accordingly, TMP Update implementation would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to cultural resources to occur, nor an increase in the severity of an impact related to cultural resources previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

VI. ENERGY

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. Construction of infrastructure recommended by the TMP Update would consume energy primarily from fuel consumed by construction vehicles and equipment. Fossil fuels used for construction vehicles and other equipment would be used during site clearing, grading, paving, and building construction. Fuel consumed during construction would be temporary in nature and would not represent a significant demand on available fuel. The recommended transportation infrastructure does not have unusual characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or State.

Additionally, Project-related design features and mitigation measures would provide fuel and energy reduction during construction. Following compliance with TMP Update Objective CIR-1.8, which aims to minimize transportation-related energy use and impacts on the environment, transportation improvements could reduce energy consumption through the implementation of fixtures such as LED and solar panels for traffic signs and streetlights. Further, although overall fuel and energy reductions are difficult to quantify, certain air quality emission reduction measures would reduce fuel and electricity use during construction of the TMP Update facilities. Mitigation Measure AQ-1 would reduce energy consumption by requiring the contractor to minimize equipment idling time. Additionally, all diesel-fueled construction vehicles would be required to meet the latest emissions standards. These measures would further reduce fuel and energy use during all stages of construction and avoid the wasteful, inefficient, or unnecessary consumption of fuel energy. Therefore, construction of the TMP Update facilities would not result in inefficient, wasteful, or unnecessary consumption of fuel energy as it would comply with relevant standards.

TMP Update implementation would not induce substantial growth and would not result in significant generation of construction or operational energy usage. During operation, energy consumption and maintenance for TMP Update infrastructure would involve the same usage and activities as the existing

highway improvements, interchanges, bicycle and pedestrian circulation, transit facilities, and truck routes. Further, operation of TMP Update infrastructure relating to active transportation would result in a net reduction of 70,744 VMT under long term conditions and no notable increase in fuel consumption would occur³. TMP Update infrastructure and equipment used to implement the infrastructure improvements would directly consume a minimal amount of energy and would comply with the State's most current energy efficiency standards. Therefore, operation of the TMP Update facilities and infrastructure would not result in inefficient, wasteful, or unnecessary consumption of fuel energy. Impacts would be less than significant in this regard.

Threshold (b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. As discussed above, the Project would not result in inefficient, wasteful, or unnecessary consumption of energy. Therefore, the Project would not conflict with or obstruct any State or local plans for renewable or energy efficiency. A less than significant impact would occur.

Cumulative Impacts

As discussed above, the proposed Project would not cause a new energy impact to occur, nor an increase in the severity of an energy impact previously identified in the General Plan EIR. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

³ Caltrans and the National Center for Sustainable Transportation (NCST), *California Induced Travel Calculator*, accessed December 15, 2021.

VII. GEOLOGY AND SOILS

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Less Than Significant. The California Geologic Survey does not list the City on its list of cities affected by Alquist Priolo Earthquake Fault Zones. Therefore, the probability of ground surface rupture associated with an Alquist-Priolo Fault is considered remote. For this reason, impacts associated with the proposed TMP Update would be less than significant.

ii.Strong seismic ground shaking?

Less Than Significant Impact with Mitigation Incorporated. The General Plan EIR identified potential risks associated with ground shaking and earthquake fault rupture in the southwest portion of the City and its SOI for developments within the buildout timeframe of the General Plan. Additionally, data from the State Department of Conservation and the U.S. Geological Survey indicate that there are six inactive faults in the City and its SOI (DOC, 2010). While the City has a low to moderate seismic history, it has the potential to experience ground shaking caused by seismic activity on nearby major active faults, which have historically been the source of earthquakes felt in Tracy.

The General Plan EIR analyzed the seismic ground shaking risks associated with buildout of the General Plan and found risks would be less than significant following compliance with the latest California Uniform Building Code (CBC) standards and policies identified in the General Plan. The infrastructure identified by the TMP Update would be required to comply with the latest CBC, as required by the City Municipal Code Section 9.04.030, which would reduce risks associated with seismic ground shaking to the maximum extent practicable. Additionally, TMP Update improvements would support General Plan buildout operations, and would not result in additional growth beyond General Plan assumptions. As such, the infrastructure identified by the TMP Update would be at no greater risk from seismic ground shaking than what was identified in the General Plan EIR.

Transportation infrastructure projects within the southwest portion of the City and its SOI would also be subject to Mitigation Measure GEO-1 which requires that geotechnical engineering studies be undertaken for any development in areas where potentially serious geologic risks exist the pursuant to General Plan Safety Element Policy Objective SA-1.1, P2.

Further, the TMP Update includes the State Highway Operation and Protection Program (SHOPP), which covers capital improvements that do not add capacity. Eligible projects include bridge preservation, bridge rehabilitation, and seismic restoration which would reduce potential adverse risks including loss, injury, or death, from rupture of a known earthquake fault. With implementation of Mitigation Measure GEO-1, a less than significant impact would occur.

Mitigation Measure GEO-1: In accordance with the requirements of Tracy General Plan Objective SA-1.1, Policy 1, potential for geological hazards shall be addressed in design-level geotechnical engineering investigations. The Development and Engineering Services Department shall ensure that all appropriate measures are implemented in order to reduce the risk of geological hazards prior to the issuance of a grading permit.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant with Mitigation Incorporated. The General Plan EIR states that the potential risk of liquefaction for developments in the General Plan buildout timeframe would be reduced to less than significant through the implementation of General Plan Safety Element Policy Objective SA-1.1, P2, which requires that geotechnical engineering studies be undertaken for any development in areas where potentially serious geologic risks exist. Given that the infrastructure identified by the TMP Update would be implemented during the total buildout development scenario outlined in the General Plan EIR, impacts associated with the TMP Update would not be expected to be any greater than those identified by the General Plan EIR. Notwithstanding, individual transportation infrastructure projects facilitated by the TMP Update would be required to implement General Plan Safety Element Policy Objective SA-1.1, P1, as identified in Mitigation Measure GEO-1 above, which would reduce the potential risk of liquefaction. Any potential impact from liquefaction is, therefore, considered to be less than significant with incorporation of Mitigation Measure GEO-1.

iv. Landslides?

Less Than Significant Impact. The General Plan EIR determined that buildout would not result in significant risk of landslides or ground failure, given the relatively flat nature of the City. However, limited potential for risk exists in the foothills and mountain terrain of the upland areas in the southwest and the potential for small scale slope failures along riverbanks also exists. The identified TMP Update facilities and infrastructure recommendations are necessary to accommodate the growth envisioned by the General Plan at buildout and are consistent with the timeframe analyzed by the General Plan EIR. Thus, the proposed Project would not be expected to result in any greater impacts than identified in the General Plan EIR. Therefore, less than significant impacts would occur.

Threshold (b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant with Mitigation Incorporated. As described by the General Plan EIR, the majority of Tracy is on flat land with little risk of erosion, but there is potential for the loss of topsoil with any development that occurs on hillsides because removal of vegetation can increase erosion. The General Plan EIR concluded that the implementation of the General Plan would not result in significant topsoil and erosion impacts.

Notwithstanding, future development of infrastructure, improvements and/or facilities identified within the TMP Updates could result in soil erosion or the loss of topsoil during construction. Erosion would be controlled using standard construction practices, based on a site-specific geotechnical study as required by Mitigation Measure GEO-1. Implementation of this measure would ensure that impacts associated with construction related soil erosion would be less than significant.

Threshold (c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less Than Significant with Mitigation Incorporated. Refer to responses VII (a)(ii-iv), above.

Threshold (d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant with Mitigation Incorporated. Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when wet or shrinking when dry. Expansion is a characteristic of clay type soils. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements.

The General Plan EIR identified that the City has a moderate to high risk for expansive soils, depending on the location and soil type. The General Plan EIR concluded that the risk for exposure to expansive soils would increase as a result of implementation of the General Plan, but that this risk could be mitigated to less than significant by compliance with General Plan policy Objective SA-1.1, P2, which requires geotechnical reports for all development proposed in areas with risk of geological hazard.

The transportation infrastructure improvements recommended by the TMP Update would support General Plan buildout and would be expected to result in no greater impacts than identified in the General Plan EIR. Individual projects would be required to comply with General Plan policy Objective SA-1.1, P2, as identified by Mitigation Measure GEO-1 and Mitigation Measure GEO-2, which requires that a certified geotechnical engineer be retained during construction activities, would ensure that soils are evaluated for expansive potential. Therefore, with implementation of Mitigation Measures GEO-1 and GEO-2, impacts would be less than significant.

Mitigation Measure GEO-2: During excavation activities, a certified geotechnical engineer shall be retained by the Project Applicant/future Project Applicants to evaluate subgrade soils for the extent of their expansive potential. For areas found to contain soft, potentially expansive clays, the soil shall be removed (i.e., over excavated) and/or stabilized prior to the placement and compaction of fill. Stabilization techniques include, but are not limited to, the placement of 18 inches of ½-inch to ¾-inch crushed rock over stabilization fabric (such as Mirafi 500X or equivalent), placement of larger, angular stabilization rock (1-inch to 3-inch, clean) and use of chemical treatments such as lime to reduce the soil's expansive potential. In addition, building construction alternatives, such as the use of alternative foundation types (i.e., post-tension, piles, etc.) versus end-bearing foundations, shall be considered and implemented where appropriate. Final techniques shall be: (a) developed by a certified geotechnical engineer or engineering geologist; and (b) reviewed and approved by the City prior to issuance of a grading permit.

Threshold (e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The projects recommended in the TMP Update do not include the use of septic tanks or alternative wastewater disposal systems. The need for wastewater disposal would not be required. Therefore, no impacts would occur in this regard.

Threshold (f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant with Mitigation Incorporated. Paleontological resources are the preserved fossilized remains of plants and animals. Fossils and traces of fossils are preserved in sedimentary rock units, particularly fine- to medium-grained marine, lake, and stream deposits, such as limestone, siltstone, sandstone, or shale, and in ancient soils (paleosols). They are also found in coarse-grained sediments, such as conglomerates or coarse alluvium sediments. Fossils are rarely preserved in igneous or metamorphic rock units. Fossils may occur throughout a sedimentary unit and, in fact, are more likely to be preserved subsurface, where they have not been damaged or destroyed by previous ground disturbance, amateur collecting, or natural causes such as erosion. In contrast, archaeological and historic resources are often recognized by surface evidence of their presence. Future construction of transportation infrastructure facilitated by the TMP Update may result in adverse effects on unknown paleontological resources. Implementation of Mitigation Measure GEO-3 would reduce this potential impact to less than significant. This impact would not be any greater of an impact than identified in the General Plan EIR.

Mitigation Measure GEO-3: *A trained paleontological monitor shall be present during individual project excavation activities greater than 5.0 feet in depth. Excavations below 5.0 feet have a high likelihood of encountering older alluvial wash deposits, which may contain paleontological resources. The monitoring for paleontological resources shall be conducted on a half-time basis, and on a full-time basis during excavation greater than 5.0 feet in depth. If paleontological resources are located during excavation, the monitoring program would change to full-time. The monitor shall be empowered to temporarily halt or redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. The monitor shall be equipped to rapidly remove any large fossil specimens encountered during excavation. During monitoring, samples shall be collected and processed to recover micro-vertebrate fossils. Processing shall include wet-screen washing and microscopic examination of the residual materials to identify small vertebrate remains.*

Cumulative Impacts

The TMP Update recommends transportation infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Accordingly, the TMP Update would not induce any additional or new growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact

related to geologic resources to occur, nor an increase in the severity of an impact related to geologic resources previously disclosed in the General Plan EIR, with compliance with General Policies and implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

VIII. GREENHOUSE GAS EMISSIONS

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns and precipitation. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), as well as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These “greenhouse” gases allow solar radiation (sunlight) into the Earth’s atmosphere, but prevent radiative heat from escaping; thus, warming the Earth’s atmosphere. GHG’s are emitted by both natural processes and human activities. Concentrations of GHG have increased in the atmosphere since the industrial revolution. Human activities that generate GHG emissions include combustion of fossil fuels (CO₂ and N₂O); natural gas generated from landfills, fermentation of manure and cattle farming (CH₄); and industrial processes such as nylon and nitric acid production (N₂O).

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the “cumulative radiative forcing effect of a gas over a specified time horizon resulting from the emission of a unit of mass of gas relative to a reference gas”. The reference gas for GWP is CO₂; therefore, CO₂ has a GWP factor of 1. The other main greenhouse gases that have been attributed to human activity include CH₄, which has a GWP factor of 21, and N₂O, which has a GWP factor of 310. When accounting for GHGs, all types of GHG emissions are expressed in terms of CO₂ equivalents (CO₂e) and are typically quantified in metric tons (MT) or million metric tons (MMT).

Assembly Bill (AB) 32, the California Global Warming Solutions Act, established a state goal of reducing GHG emissions to 1990 levels by the year 2020, which would require a reduction of approximately 29 percent from “business as usual” or forecasted emission levels. Senate Bill (SB) 97, a companion bill, directed the California Natural Resources Agency (Resources Agency) to certify and adopt guidelines for the mitigation of GHG or the effects of GHG emissions. SB 97 was the State Legislature’s directive to the Resources Agency to specifically establish that GHG emissions and their impacts are appropriate subjects for CEQA analysis.

Executive Order B-30-15, which was issued in April 2015, requires statewide GHG emissions to be reduced 40 percent below 1990 levels by 2030. SB 32 (SB 32), signed into law in September 2016, codifies the 2030

GHG reduction target in Executive Order B-30-15. SB 32 authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030 and to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions. With SB 32, the California Legislature passed companion legislation AB 197, which provided additional direction for developing an updated Scoping Plan. CARB released the second update to the Scoping Plan to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32 in November 2017.

Additionally, signed into Law in September 2018, SB 100 increased California's renewable electricity portfolio from 50 to 60 percent by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

Threshold (a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Given that the TMP Update proposes infrastructure improvements that would serve the growth envisioned by the General Plan at buildout, the Project is consistent with the total buildout timeframe analyzed by the General Plan EIR for GHG emissions. Accordingly, the infrastructure identified by the TMP Update is not expected to result in any greater GHG emission impacts than identified in the General Plan EIR. The TMP Update is a policy document, and as such, does not propose the construction or operation of transportation infrastructure at this time. Notwithstanding, TMP Update implementation would indirectly facilitate future construction of transportation infrastructure, improvements, and expansion within the City and its SOI.

As the TMP Update serves to meet General Plan buildout, implementation would not induce substantial growth and would not result in significant generation of construction or operational GHG emissions. Construction related GHG emissions would be temporary and would cease upon Project completion. During operation, the transportation infrastructure proposed by the TMP Update is not anticipated to generate substantial amounts of GHGs either directly or indirectly as the majority of the infrastructure (e.g. highway improvements, interchanges, bicycle and pedestrian circulation, transit facilities) do not rely on sources of GHG emitting inputs for their operation. As shown in **Table 6-3: TMP Update GHG Emissions**, implementation of transportation improvements from the TMP Update would result in a net increase of 21,666 VMT, and thus, an increase of operational GHG emissions. However, long-term conditions would result in a net decrease of 70,744 VMT and a net decrease in GHG emissions compared to a no project scenario. Therefore, the Project would be consistent with the State's GHG reduction goals and the General Plan EIR, and impacts would be less than significant.

Table 6-3: TMP Update GHG Emissions				
Scenario²	Annual Net GHG Emissions (MTCO₂e/Year)¹			
	CO₂	CH₄ (CO₂e)	N₂O (CO₂e)	Total Carbon Dioxide Equivalent (CO₂e)³
Short-Term ⁴ (Ex+PP – Ex+NP)	3,210	1.27	56.32	3,271
Long-Term ⁵ (C+PP – C+NP)	-7,860	-1.53	-130.03	-7,991

1. Emissions calculated using emissions factors from the CARB EMFAC2021 Model.
 2. Ex = Existing; PP = Project; NP = No Project; C = Cumulative
 3. Totals may be off due to rounding.
 4. Per the Tracy TMP and Induced Demand Analysis (Kimley-Horn, 2022), there would be a net increase of 21,666 VMT under short-term conditions.
 5. Per the Tracy TMP and Induced Demand Analysis (Kimley-Horn, 2022), there would be a net decrease of 70,744 VMT under long-term conditions.
- Source: Refer to Appendix A, *Air Quality and Greenhouse Gas Modeling Data*.

Threshold (b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The 2009 General Plan Draft Supplemental EIR found that although the General Plan and the City’s Sustainability Action Plan (SAP) include many goals, policies, and measures that would reduce the GHG emissions associated with buildout of the General Plan from projected business as usual (BAU) levels. The TMP Update proposes infrastructure improvements that would serve the built out condition of the City and its SOI as envisioned by the General Plan, consistent with the total buildout timeframe analyzed by the General Plan EIR for energy resources. Thus, the TMP Update is not expected to result in any greater GHG emission impacts than identified in the General Plan EIR. Further, the TMP Update is a policy document that does not propose the construction or operation of any transportation infrastructure at this time, although its implementation would indirectly facilitate the construction of transportation infrastructure. In addition, as shown in **Table 6-3**, buildout of the TMP Update would result in a long-term net decrease of approximately 7,991 MTCO₂e of carbon dioxide equivalent compared to a no project scenario.

Phasing of the various facilities identified by the TMP Update would be dependent on development and the need for additional transportation facilities. It is anticipated that these various facilities would be developed over time. The proposed TMP facilities would serve existing and planned development consistent with the General Plan. As described above, implementation of the TMP Update would not induce substantial growth and would not result in significant generation of construction or operational GHG emissions. As the TMP Update is consistent with the General Plan, neither master plan would conflict with the City’s Sustainability Action Plan. Therefore, the TMP Update would not conflict with applicable GHG, policies, and/or regulations. Less than significant impacts would result.

Cumulative Impacts

As discussed above, the proposed Project would not cause a new greenhouse gas impact to occur, nor a substantial increase in the severity of a greenhouse gas impact previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

IX. HAZARDS AND HAZARDOUS MATERIALS

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. Potential short-term impacts from future construction of infrastructure recommended by the TMP Update could involve the transport of debris material from grubbing and clearing lands and possibly the demolition of existing infrastructure, which may contain hazardous substances such as petroleum products that could be harmful if accidentally released during transport. However, this is unlikely, as recommended facilities, upgrades or modifications would primarily be sited on undeveloped land or within existing roadways/right of ways. In addition, clearing of Project sites would

be conducted during a relatively short time; thus, the transport of potentially hazardous material would not be “routine.” Additionally, the Project would be consistent with General Plan policy (Objective CIR-1.8, P1 and P2), which would require utilization of sustainable materials including non-toxic and bio-degradable materials for roadway projects and avoid potential impacts from hazardous materials.

The General Plan EIR found that the safety risk from the routine transport of hazardous materials in the City and its SOI would be less than significant due to a combination of General Plan policies and actions and existing federal and State regulation. The TMP Update would not result in any greater impacts than identified in the General Plan EIR, as the identified transportation infrastructure would accommodate growth envisioned by the General Plan within the total buildout timeframe analyzed by the General Plan EIR for this resource. As noted above, the TMP Update is a policy document and would not result in the construction or operation of specific infrastructure projects at this time, however, would indirectly facilitate the construction and operation of transportation infrastructure.

During Project operation, transport of hazardous material would occur on public roads and be subject to Occupational Health and Safety Standards Guidelines (Hazardous Waste Operations and Emergency Response Standard, Title 29 Code of Federal Regulations (CFR) Part 1910.120), as well as the Department of Toxic Substances Control (DTSC). Unless specifically exempted, hazardous waste transporters must comply with the California Highway Patrol Regulations; the California State Fire Marshal Regulations; and the U.S. Department of Transportation Regulations. In addition, hazardous waste transporters must comply with Division 20, Chapter 6.5, Article 6 and 13 of the California Health and Safety Code and the Title 22, Division 4.5, Chapter 13, of the California Code of Regulations, which are administered by DTSC (<http://www.dtsc.ca.gov/HazardousWaste/Transporters.html>). All of these regulations are designed to minimize the danger of hazardous materials being released and causing a significant hazard to the public or the environment.

It is not anticipated that chemicals would be used regularly and, therefore, be routinely transported. Following compliance with the established regulatory framework, impacts would be less than significant. No mitigation is required.

Threshold (b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant with Mitigation Incorporated. The General Plan EIR acknowledges two superfund sites in the City, in addition to areas in the City that have the potential to contain contamination in the buildings (such as asbestos), soil, or groundwater from past uses. According to the General Plan EIR, because no growth is planned on either superfund site through General Plan buildout, there would be no related impact. In addition, the General Plan EIR concluded that adherence to General Plan policy (Objective SA-4.1, P2), which requires developers to conduct the necessary level of environmental investigation prior to project approval, buildout of the General Plan involving redevelopment of areas with hazardous materials present would prevent significant accidental releases of hazardous materials.

The TMP Update identifies the infrastructure necessary to accommodate the transportation demands from growth envisioned by the General Plan at buildout. The recommended improvements identified in

the TMP Update would be within the same footprint analyzed in the General Plan EIR and would not result in any greater impacts than identified in the General Plan EIR. The TMP Update would indirectly facilitate the construction of transportation infrastructure. Construction of individual projects could potentially result in exposure to contaminated soil or groundwater from past uses. Implementation of future site-specific projects would be required to conduct the necessary level of environmental investigation prior to project approval, consistent with General Plan policy (Objective SA-4.1, P2), as described above as identified in Mitigation Measure HAZ-1 below. With compliance with the aforementioned policies and implementation of Mitigation Measure HAZ-1, the proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts would be less than significant with mitigation incorporated.

Mitigation Measure HAZ-1: *In accordance with the requirements of Tracy General Plan policy (Objective SA-4.1, P2), potential for significant accidental releases of hazardous materials shall be addressed based on the findings of design-level environmental investigations. Design-level investigations shall be required to document any reasonably foreseeable storage, use, production or storage of hazardous or potentially hazardous materials or substances associated with implementation of the infrastructure improvements. The Development and Engineering Services Department shall ensure that all appropriate measures are implemented in order to reduce the risk of accidental releases of hazardous materials prior to the issuance of a grading permit.*

Threshold (c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant with Mitigation Incorporated. The TMP Update is a policy document that identifies the transportation infrastructure required to accommodate growth envisioned by the General Plan at buildout, which is consistent with the total buildout development scenario studied in the General Plan EIR for this resource. Moreover, as noted above under Threshold VIII (a), future construction of infrastructure identified in the TMP Update would require the use and transport of hazardous materials. However, construction activities would be conducted during a relatively short time; thus, the transport of potentially hazardous material would not be “routine.” It is likely that this infrastructure would be within one-quarter mile of schools throughout the City. However, future operation of transportation facilities would not involve the routine use of hazardous materials and, thus, the potential to emit hazardous materials near schools would be less than significant. Moreover, individual projects would be required to implement Mitigation Measure HAZ-1, identified above, which would further reduce the risk of exposure to hazardous materials within one-quarter mile of a school by requiring individual projects to address the potential for significant accidental releases of hazardous materials based on the findings of design-level environmental investigations. A less than significant impact would occur with mitigation incorporated.

Threshold (d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result, would create a significant hazard to the public or the environment?

Less Than Significant Impact. According to the Department of Toxic Substances Control (DTSC) there are no Cortese Sites listed within the City of Tracy (DTSC, 2022). The Environmental Protection Agency (EPA) has listed two hazardous waste sites on the Superfund National Priorities List (NPL) within the City and its SOI. One is the Tracy Defense Depot, which is located on the east side of Tracy, on Chrisman Road between Valpico and Schulte Roads. Remedial action has been taken at this site, including ground water treatment and soil vapor extraction. Projects facilitated through the TMP Update located on Chrisman Road would, on a case-by-case basis, undergo CEQA review and appropriate studies to evaluate potential hazards from the hazardous site to the public or environment. The second is the Lawrence Livermore National Lab, located in the southwest corner of the City and its SOI. The TMP Update does not recommend any infrastructure improvements within this site. The transportation improvements recommended through the TMP Update would be necessary to accommodate growth envisioned by the General Plan within the total buildout timeframe analyzed by the General Plan EIR. Thus, the infrastructure improvements identified by the TMP Update would not be expected to result in any greater impacts than identified in the General Plan EIR. Therefore, impacts regarding hazardous material sites would be less than significant.

Threshold (e) Would the project be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less Than Significant Impact. The Tracy Municipal Airport is a general aviation airport owned by the City and managed by the Parks and Community Services Department. It is located in the southern portion of the City. The TMP does make transportation infrastructure recommendations within two miles of the airport. However, due to the infrastructure recommended by the TMP Update would primarily be located below-grade within existing rights-of-way and a less than significant impacts would occur regarding safety hazards and airport use. Furthermore, implementation of policies and actions identified in the General Plan (Objective LU-6.3, P1 and P2, Objective SA5.1, P1, and Objective SA-5.1, A1) would avoid a significant safety impact with the Tracy Municipal Airport.

The TMP Update identifies infrastructure improvements necessary to accommodate the growth envisioned by the General Plan through buildout consistent with the timeframe analyzed by the General Plan EIR. Thus, the infrastructure improvements identified by the TMP Update would not be expected to result in any greater impacts than identified in the General Plan EIR. A less than significant impact would occur regarding safety hazards and airport use.

Threshold (f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant with Mitigation Incorporated. The City has an emergency preparedness plan. According to the General Plan EIR, the General Plan includes actions for the City to update its emergency preparedness plan in response to changes in land use, population and city boundaries associated with

General Plan buildout, and to conduct periodic drills using the emergency response systems to test the effectiveness of City procedures (Objective SA-6.1, A1 and A4). The General Plan EIR found that new development and population growth within the City due to General Plan buildout would increase demand for emergency services during disasters, but that General Plan policies and actions, such as Objective SA-6.1, A1 and A4 would reduce any impacts associated with emergency preparedness to a less than significant level.

The infrastructure improvements identified by the TMP Update would be necessary to serve the total buildout development scenario analyzed in the General Plan EIR and would not be expected to result in any greater demand for emergency services during disasters than identified in the General Plan EIR. Thus, construction of proposed infrastructure is not expected to cause significant impacts on emergency response plans or emergency evacuation plans. Additionally, future infrastructure projects would implement Mitigation Measure HAZ-2 which would require implementation of a Traffic Management Plan to allow the continued vehicular use of the existing roadways or relegate traffic to agency-approved detour routes around any given construction sites. With implementation of Mitigation Measure HAZ-2, the construction of those facilities located outside of urbanized areas would be less than significant.

Mitigation Measure HAZ-2: *A Traffic Management Plan (TMP) shall be prepared and implemented to the satisfaction of the City of Tracy where construction of infrastructure improvements would affect roadways. The TMP shall include, but not limited to, the following measures:*

- *Limit construction to one side of the road or out of the roadbed where possible.*
- *Provision of continued access to commercial and residential properties adjacent to construction sites.*
- *Provide alternate bicycle routes where existing bicycle routes are disrupted by construction activities.*
- *Submit a truck routing plan, for approval by the City of Tracy in order to minimize impacts from truck traffic during material delivery and disposal.*
- *Where construction is proposed for two-lane roadways, confine construction to one half of the pavement width. Establish one lane of traffic on the other half of the roadway using appropriate construction signage and flagmen or submit a detour plan for approval by the City Traffic Engineer.*

Threshold (g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant with Mitigation Incorporated. Infrastructure recommended by the TMP Update would be located throughout the City and its SOI, including within urbanized and undeveloped land. Infrastructure located adjacent to or within undeveloped wildland areas could be subject to increased fire hazards. Implementation of Mitigation Measure HAZ-3, which includes requirements for fuel-modification

zones, fire equipment access, and emergency preparedness protocol, would reduce these impacts to a less than significant level.

Mitigation Measure HAZ-3: *Prior to approval of site design, facilities located within area of high susceptibility to wildfire hazards shall include fuel-modification zones, road standards that provide for fire equipment access, the assured provision of minimum water supply reserves for emergency fire use, fuel breaks and greenbelts, clearances around structures, and emergency preparedness protocol and procedures as recommended by the General Plan.*

Cumulative Impacts

The TMP Update identifies transportation infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Therefore, TMP Update implementation would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to hazards and hazardous materials to occur, nor an increase in the severity of an impact related to hazards and hazardous materials previously disclosed in the General Plan EIR, with compliance with General Policies and implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

X. HYDROLOGY AND WATER QUALITY

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. As identified in the General Plan EIR, the City's Storm Water Management Plan (SWMP) establishes Best Management Practices (BMPs) to limit the discharge of pollutants from the City's storm sewer system to the Maximum Extent Practicable (MEP), as specified by Section 402(p) of the Clean Water Act. The SWMP includes BMPs related to construction site and post-construction runoff controls, illicit discharge detection and elimination, pollution prevention, as well as public education and outreach. The General Plan EIR concludes that implementation of the BMPs identified in the City's SWMP, as well as General Plan policies and other regulatory requirements regarding stormwater management ensure that the buildout of the General Plan would not have a significant impact on storm water quality or waste discharge requirements.

The TMP Update identifies infrastructure improvements necessary to accommodate the growth envisioned by the General Plan through buildout. This time period is consistent with the timeframe analyzed by the General Plan EIR for this resource. Thus, the improvements and expansions identified by the TMP Update would not be expected to result in any greater impacts than identified in the General Plan EIR. Individual projects would be required to implement BMPs identified in the City's SWMP, which have been identified to limit the discharge of pollutants from the City storm sewer system to the MEP. In addition, individual projects would be required to comply with maintenance procedures identified in the City's SWQC Manual to ensure that selected control measures would be maintained to provide effective, long-term pollution control.

Short-term water quality impacts during construction of proposed facilities could result from sediment from grading operations, oil and grease from equipment, trash from worker and construction activities, nutrients from fertilizers, heavy metals, pathogens, and other substances. Discharge of these pollutants into waters of the U.S. is regulated by the State Water Resources Control Board (SWRCB). The SWRCB has adopted General Permit No. CAS000002- Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity (General Permit) for California that applies to most construction-related storm water discharges within California. The General Permit requires that projects disturbing greater than one acre develop and implement a Storm Water Pollution Prevention Plan (SWPPP) that specifies BMPs to prevent pollutants from construction erosion from moving offsite into receiving waters. The projects recommended as part of the TMP would be subject to the provision of the General Permit and would be required to submit a SWPPP to the SWRCB, Central Valley Region (Regional Board). Therefore, short-term construction operations would have a less than significant impact on water quality standards or discharge requirements. Furthermore, due to the nature of the proposed transportation facilities, no long-term operational impacts are associated.

During infrastructure operations, individual projects would be required to implement BMPs identified in the City's SWMP, which have been identified to limit the discharge of pollutants from the City storm sewer system to the MEP. Individual projects would be required to comply with maintenance procedures identified in the City's SWQC Manual to ensure that selected control measures would be maintained to provide effective, long-term pollution control. Therefore, there would be less than significant impacts on water quality during construction and operation.

Threshold (b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The proposed TMP Update includes improvements to railroad crossings, intersections, bicycle and pedestrian facilities, bridges, and park and ride facilities. The majority of these improvements would be constructed within existing rights-of-way. Further, recommended infrastructure improvements necessary to accommodate the growth envisioned by the General Plan through buildout. Therefore, implementation of the TMP Update would not result in any greater impacts than identified in the General Plan EIR, as the infrastructure improvements this document identifies would be necessary to accommodate growth envisioned by the General Plan under the total buildout timeframe analyzed by the

General Plan EIR for this resource. Therefore, impacts associated with impeding sustainable groundwater management of the basin would be less than significant.

Threshold (c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i.Result in substantial erosion or siltation on- or off-site?

Less Than Significant with Mitigation Incorporated. Any site development or construction of new facilities has the potential to alter existing drainage patterns, primarily due to runoff from construction activities, increase in impervious surfaces, and vegetation removal. Implementation of Mitigation Measure HYD-1 would require minimization of time periods in which natural drainages are disturbed. Further, erosion and siltation would be controlled via detention basins identified by the TMP Update and onsite facilities constructed with new development in conformance with the City's SWQC Manual. Therefore, with the implementation of Mitigation Measure HYD-1, impacts would be less than significant.

Mitigation Measure HYD-1: *Where drainage courses are crossed, temporarily altering their capacity or flow characteristics, appropriate precautions shall be incorporated into the project design to minimize the time period in which drainages are disturbed while maintaining the natural flow or provide additional capacity within the drainages during the construction period to handle designed flows.*

ii.Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant with Mitigation Incorporated. Refer to Response 4.10 (c) (i) above. A less than significant impact would occur with implementation of Mitigation Measure HYD-1.

iii.Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. Future transportation infrastructure would potentially increase the amount of impervious surface within the City and its SOI and create additional sources of stormwater runoff. However, as previously mentioned, the majority of improvements would be constructed within existing rights-of-way and, as such, would not contribute a significant amount of runoff water to the stormwater drainage system. Therefore, implementation of the proposed TMP Update would not have any greater impacts than those identified in the General Plan EIR and would not exceed the capacity of the City's storm water drainage system. Impacts would be less than significant.

iv.Impede or redirect flood flows?

Less Than Significant Impact. The majority of the City and its SOI is located outside of a 100-year flood zone. However, portions of the northern SOI area are located within a 100-year flood zone.

Construction of transportation in, Therefore, impacts associated with the infrastructure recommended through the TMP Update would not result in any greater impacts than previously identified by the General Plan and General Plan EIR through buildout. Impacts would be less than significant.

Threshold (d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact. The majority of the City and its SOI is located outside of a 100-year flood zone. While portions of the northern SOI are located within a 100-year flood zone, the General Plan EIR found the City and its SOI are not near the areas of San Joaquin County that could be subject to flooding due to tsunamis or seiches resulting in levee failure. However, the General Plan EIR identified some potential seiche risk for the City and its SOI due to overtopping of the San Luis Reservoir dam or other enclosed body of water during a seismic event. However, these risks were determined to be low and unaffected by General Plan implementation. Further, the hillsides in the southwest portion of the City and its SOI could be at risk for mudflows as a result of a seiche during the buildout scenario timeframe of the General Plan. However, no new development is proposed in the hillsides during the buildout scenario timeframe of the General Plan.

The proposed infrastructure improvements identified by the TMP Update would not be at risk from inundation by seiche, tsunamis or mudflows, as the City is not located near areas likely to be affected by seiche flooding; the City is located inland and could not be affected by a tsunami; and the none of the infrastructure improvements would be located near any physical or geologic features that would pose a mudflow hazard, such as a volcano or hillsides. Impacts would be less than significant.

Threshold (e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. A majority of facilities recommended by the TMP Update would be constructed within street ROWs and minimally increase impervious surfaces. The TMP Update identifies the infrastructure necessary to accommodate the transportation demand from growth envisioned by the General Plan at buildout and would not increase development within the City and its SOI. Thus, in accordance with the General Plan, Municipal Code, and applicable regulations, impacts to a water quality control plan or sustainable management plan would be less than significant.

Cumulative Impacts

The TMP Update identifies the transportation infrastructure needed to accommodate future development envisioned by the General Plan through buildout. Because of this, implementation of the TMP Update would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new hydrological impact to occur, nor an increase in the severity of a hydrological impact previously disclosed in the General Plan EIR, with implementation of the Mitigation Measure HYD-1. Therefore, the

proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XI. LAND USE AND PLANNING

WOULD THE PROJECT:

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project physically divide an established community?

No Impact. An example of a project that has the potential to divide an established community includes the construction of a new freeway or highway through an established neighborhood. Numerous land uses exist within the Project area, primarily public, residential, agricultural, and open space. The proposed TMP Update includes future improvements to railroad crossings, intersections, bicycle and pedestrian facilities, bridges, park and ride facilities, and roadways throughout the City and its SOI. The majority of these improvements would be constructed within or adjacent to existing ROWs and would not have any impact on General Plan designations, Zoning classifications, or existing development. As proposed, the TMP Update would not physically divide an established community and no impacts would occur.

Threshold (b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The TMP Update outlines the transportation infrastructure and improvements to ensure that City facilities could accommodate anticipated regional growth. Typically, the buildout horizon for a General Plan is approximately 20 years, while an infrastructure Master Plan has a life-span of approximately 5 to 10 years. With this in mind, the proposed TMP Update is based on the most current information available for the City and its SOI, and the analysis conducted provides adequate resources to accommodate growth through anticipated General Plan buildout. Therefore, no impact would be associated with potential conflict with any land use policy, plan, or regulation.

Cumulative Impacts

The TMP Update identifies transportation infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Accordingly, TMP Update implementation would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project

would not cause a new land use impact to occur, nor an increase in the severity of a land use impact previously disclosed in the General Plan EIR, with compliance with General Plan policies discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XII. MINERAL RESOURCES

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The General Plan EIR found that potential development under the General Plan could occur on or around land containing important mineral resources, potentially resulting in significant loss of mineral resources and associated recovery sites. The General Plan designates specific areas for aggregate mining in the Southern portion of Tracy that the City and State have agreed to protect. Future improvements to the transportation infrastructure would be located within and adjacent to existing ROWs and would not be located in areas designated as Aggregate in the General Plan. Therefore, no impacts would occur.

Threshold (b) Would the project result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. Refer to response XII(a), above.

Cumulative Impacts

As discussed above, the proposed Project would not cause a new significant mineral resource impact to occur, nor a significant increase in the severity of mineral resource impacts previously identified in the General Plan EIR. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XIII. NOISE

WOULD THE PROJECT:

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant with Mitigation Incorporated. Construction and operation of transportation improvements and facilities identified in the TMP Update would depend upon increased transportation needs in the City and its SOI. Short-term construction noise would be dependent upon the phasing schedule of subsequent components. However, it is anticipated that future construction impacts associated with the TMP Update would result in similar construction noise impacts.

Construction noise estimates are based upon noise levels on typical noise levels generated by construction equipment published by the Federal Transit Administration (FTA) and FHWA. Construction noise is assessed in dBA L_{eq} . This unit is appropriate because L_{eq} can be used to describe noise level from operation of each piece of equipment separately, and levels can be combined to represent the noise level from all equipment operating during a given period. The Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment Manual* (2018) (FTA Noise and Vibration Manual) identifies a maximum 1- hour noise level standard of 90 dBA L_{eq} at residential uses and 100 dBA L_{eq} at commercial and industrial uses for short-term construction activities.

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g. land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. During construction, exterior noise levels could affect sensitive receptors nearby construction sites. Future construction of infrastructure identified by the TMP Update could occur approximately 25 feet from existing sensitive receptors. However, construction activities would occur throughout Project sites and

would not be concentrated at a single point near sensitive receptors. Noise levels typically attenuate (or drop off) at a rate of 6 dB per doubling of distance from point sources, such as industrial machinery. During construction, exterior noise levels could affect the residential neighborhoods near the construction site.

Construction activities associated with implementation of future improvements facilitated by the TMP Update could include demolition, grading, building construction and paving. Such activities may require graders, dozers, and tractors during grading; cranes, forklifts, generators, tractors, and welders during building construction; and pavers, rollers, mixers, tractors, and paving equipment during paving. Grading and excavation phases of Project construction tend to be the shortest in duration and create the highest construction noise levels due to the operation of heavy equipment required to complete these activities. It should be noted that only a limited amount of equipment can operate near a given location at a particular time. Equipment typically used during this stage includes heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, and scrapers. Operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Other primary sources of noise would be shorter-duration incidents, such as dropping large pieces of equipment or the hydraulic movement of machinery lifts, which would last less than one minute.

Typical noise levels associated with individual construction equipment are listed in **Table 6-4: Typical Construction Equipment Noise Levels.**

Noise impacts for mobile construction equipment are typically assessed as emanating from the center of the equipment activity or construction site. This analysis conservatively assumes a center point approximately 50 feet from the nearest sensitive receptor, as this analysis is a “Tier 1” evaluation of overall TMP Update objectives, goals, and policies. “Tier 2” evaluations, including evaluation of required onsite infrastructure, would occur on a project-by-project basis. The assumptions herein represent the worst-case noise scenario because construction activities would typically be spread out throughout any given project site, and thus some equipment would be further away from the affected receptors. In addition, construction noise levels are not constant, and in fact, construction activities and associated noise levels would fluctuate and generally be brief and sporadic, depending on the type, intensity, and location of construction activities. Construction noise would also be acoustically dispersed throughout the Project site and will be masked by freeway noise and roadway noise.

Table 6-4: Typical Construction Equipment Noise Levels		
Equipment	Typical Noise Level (dBA) at 50 Feet from the Source	Typical Noise Level (dBA) at 100 Feet from the Source
Concrete Mixer	85	79
Concrete Pump	82	76
Concrete Vibrator	76	70
Cranes	83	77
Dozer	85	79
Generator	82	76
Grader	85	79

Table 6-4: Typical Construction Equipment Noise Levels

Equipment	Typical Noise Level (dBA) at 50 Feet from the Source	Typical Noise Level (dBA) at 100 Feet from the Source
Loader	80	74
Paver	85	79
Pump	77	71
Roller	85	79
Saw	76	70
Scraper	85	79
Shovel	82	76
Truck	84	78
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.		
Notes:		
1. Calculated using the inverse square law formula for sound attenuation: $dBA_2 = dBA_1 + 20\log(d_1/d_2)$ Where: dBA_2 = estimated noise level at receptor; dBA_1 = reference noise level; d_1 = reference distance; d_2 = receptor location distance		

As outlined in the Section 3.0, Project Description, the TMP Update recommends transportation infrastructure improvements in developed areas of the City. Accordingly, future infrastructure projects facilitated by the TMP Update would have the potential to occur within 50 feet of sensitive receptors including, but not limited to, residential land uses and schools. As indicated in **Table 6-4**, construction noise levels would range between 76 dBA and 85 dBA at the sensitive receptors approximately 50 feet away from any given Project site. The highest anticipated construction noise level of 85 dBA is expected to occur during building construction and paving from the use of dozers, pavers, concrete mixer. Therefore, construction noise would not exceed the FTA's standards of 90 dBA L_{eq} at residential uses and 100 dBA L_{eq} at commercial and industrial uses.

To further minimize any extraneous construction noise impacts on adjacent sensitive land uses, future infrastructure project proponents would be required to install noise attenuating buffers near residential areas, place mufflers on equipment engines, and orient stationary sources to direct noise away from sensitive uses as specified in Mitigation Measure NOI-1. Implementation of Mitigation Measure NOI-1 would reduce short-term construction impacts to less than significant.

Operational noise associated with TMP Update infrastructure would be mainly generated by operational-related traffic, such as from automobiles, trucks, and buses, associated with the proposed transportation improvements. However, all future transportation improvement projects would be constructed according to industry standards and according to the City Noise Ordinance requirements, which would ensure that any operational noise impacts would not be excessive or significant. The proposed transportation improvements would also be required to comply with TMP Objective CIR-1-7, which aims to minimize traffic-related impacts by requiring projects to use rubberized asphalt on roadway projects, to implement ITS technologies, and to consider implementation of roundabouts where feasible. In addition, implementation of Mitigation Measure NOI-2 would require that facilities located within 150 feet of sensitive receptors have a noise study prepared to determine potential noise impacts. With the implementation of Mitigation Measure NOI-2, operational impacts would be less than significant.

Mitigation Measure NOI-1: Prior to the issuance of grading permits and to the satisfaction of the City of Tracy, the Project Contractor shall be required to implement feasible noise control measures to reduce daytime construction noise levels to meet the daytime speech interference criterion of 70-dBA for infrastructure projects located within 500 feet of any noise-sensitive receptors (e.g., residences, schools, childcare centers, churches, hospitals, and nursing homes). Such control measures could include any of the following, as appropriate:

- To the extent possible, all mechanical equipment shall be oriented away from the nearest noise sensitive receptors; and
- All mechanical equipment shall be screened and enclosed to minimize noise.
- Construction contracts shall specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state required noise attenuation devices.
- All residential units located within 1,000 feet of the construction site shall be sent a notice regarding the construction schedule of the proposed project. A sign, legible at a distance of 50 feet shall also be posted at the construction site. All notices and signs shall indicate the dates and duration of construction activities, as well as provide a telephone number where residents can inquire about the construction process and register complaints.
- A “noise disturbance coordinator” shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within one-quarter mile of the construction site and all signs posted at the construction site shall list the telephone number for the disturbance coordinator.
- Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.
- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.
- Operation of equipment requiring use of back-up beepers shall be avoided near sensitive receptors to the extent feasible during nighttime hours (10:00 PM to 7:00 AM).
- If impact equipment (e.g., jack hammers, pavement breakers, and rock drills) is used during construction, hydraulically or electric-powered equipment shall be used wherever feasible to avoid the noise associated with compressed-air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed-air exhaust shall be used (a muffler can lower noise levels from the exhaust by up to about 10 dBA).

Mitigation Measure NOI-2: Infrastructure or facility improvements located within 150 feet of sensitive receptors (i.e., residential homes, schools, or hospitals) shall require preparation of a noise study to verify that the design shall meet the applicable City noise standards. Note that these noise limitations are for steady-state, base load operations, and exclude startups, shutdowns, and off-normal or emergency conditions.

Threshold (b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Increases in groundborne vibration levels attributable to the Project would be primarily associated with construction-related activities. Construction on infrastructure Project sites would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

The FTA has published standard vibration velocities for construction equipment operations. In general, depending on the building category of the nearest buildings adjacent to the potential pile driving area, the potential construction vibration damage criteria vary. For example, for a building constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.50 inch per second (in/sec) peak particle velocity (PPV) is considered safe and would not result in any construction vibration damage. In general, the FTA architectural damage criterion for continuous vibrations (i.e. 0.2 in/sec) appears to be conservative. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience cosmetic damage (e.g. plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on soil composition and underground geological layer between vibration source and receiver.

Table 6-5: Typical Construction Equipment Vibration Levels, lists vibration levels at 25 and 50 feet for typical construction equipment. Groundborne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. As indicated in **Table 6-5**, based on FTA data, vibration velocities from typical heavy construction equipment operations that would be used during project construction range from 0.001 to 0.089 in/sec PPV from 25-50 feet from the source of activity. Construction of TMP Update transportation infrastructure and improvements could be located adjacent to urbanized areas that contain sensitive receptors, including schools, hospitals, and residential areas.

As shown in **Table 6-5**, the highest vibration levels are achieved with the large bulldozer operations. This construction activity is expected to take place during grading. The active construction zone for future transportation improvement projects are anticipated to be more than 25 feet from the closest structure. Therefore, construction equipment vibration velocities would not exceed the FTA's 0.20 PPV threshold. In addition, construction activities would occur throughout any given project site and would not be concentrated at the point closest to the nearest sensitive receptor(s). Therefore, construction vibration impacts associated with the Project would be less than significant.

Table 6-5: Typical Construction Equipment Vibration Levels		
Equipment	Typical Level (dBA) 25 Feet from the Source¹	Typical Level (dBA) 50 Feet from the Source¹
Large Bulldozer	0.089	0.032
Loaded Trucks	0.076	0.027
Rock Breaker	0.059	0.021
Jackhammer	0.035	0.012
Small Bulldozer/Tractors	0.003	0.001
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018		
Notes: Calculated using the inverse square law formula for sound attenuation: $dBA_2 = dBA_1 + 20\log(d_1/d_2)$. Where: dBA_2 = estimated noise level at receptor; dBA_1 = reference noise level; d_1 = reference distance; d_2 = receptor location distance		

Operational vibration from vehicles traveling on new or improved roadways associated with the TMP Update would not be substantial. Groundborne vibration would occur from heavy-duty vehicular travel (e.g., refuse trucks, heavy duty trucks, delivery trucks, and transit buses) on City roadways. However, due to the rapid drop-off rate of ground-borne vibration and the short duration of the associated events, vehicular traffic-induced ground-borne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity. According to the FTA Transit Noise and Vibration Manual, trucks rarely create vibration levels that exceed 70 VdB (equivalent to 0.012 inches per second PPV) when they are on roadways. Therefore, vehicles and trucks traveling along City roadways would not exceed FTA thresholds for building damage or annoyance. Further, the TMP Update does not propose new rail lines and would not result in increased railroad activity. Impacts would be less than significant in this regard.

Threshold (c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels??

Less Than Significant Impact. The Tracy Municipal Airport (TMA) is a general aviation airport owned by the City and managed by the Parks and Community Services Department. The proposed Project consists of updating the City's TMP and would not include development that would expose people to excessive noise levels from airports. Impacts would be less than significant.

Cumulative Impacts

The TMP Update identifies transportation infrastructure and improvements to accommodate future development envisioned by the General Plan through buildout. As discussed above, the proposed Project

would not cause a new noise impact to occur, nor an increase in the severity of a noise impact previously disclosed in the General Plan EIR, with implementation of Mitigation Measure NOI-1 and NOI-2. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XIV. POPULATION AND HOUSING

WOULD THE PROJECT:

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. Proposed improvements identified in the TMP Update would serve existing and planned development consistent with the General Plan. Therefore, the proposed Project would not induce population growth, either directly or indirectly, not already anticipated in the General Plan EIR and impacts would not be any greater than those identified in the General Plan EIR. Impacts associated with the proposed TMP Update would be less than significant.

Threshold (b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Less Than Significant Impact. Facilities recommended by the TMP Update would primarily be located within and adjacent existing ROWs and would not displace existing people or housing. Therefore, a less than significant impact would occur.

Cumulative Impacts

The TMP Update identifies the transportation infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the TMP Update would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to population and housing to occur, nor an increase in the severity of an impact related to population and housing previously disclosed in the General Plan EIR. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XV. PUBLIC SERVICES

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?

i. Fire Protection

Less Than Significant with Mitigation Incorporated. Future construction of facilities recommended by the TMP Update could delay Fire Department response due to work areas within ROWs requiring temporary roadblocks and detours. However, with implementation of detour plans and coordination with the Tracy Fire Department, as identified in Mitigation Measure PS-1, impacts to fire services would be less than significant. No long-term operational impacts to fire protection services are anticipated. For these reasons, operational impacts would not be any greater than those identified in the General Plan EIR.

Mitigation Measure PS-1: Prior to construction of individual infrastructure facilities, the City shall coordinate with the Fire Department and other affected fire protection services in surrounding jurisdictions to review construction detour plans. Specifically, the following shall occur:

- Emergency vehicle access to structures and fire hydrants in the project area shall be maintained

- *A prior notice of at least 24 hours in advance of an impact even such as a road closure or disruption of water service shall be given to the appropriate authorities*
- *Traffic control measures, such as the use of flagmen, shall be used, if deemed necessary, in order to regulate traffic to ensure that access will be maintained to all structures for emergency response*

ii. Police Protection

Less Than Significant with Mitigation Incorporated. Future construction of facilities recommended by the TMP Update could delay Police Department response during construction due to work areas within ROWs requiring temporary roadblocks and detours. However, with implementation of detour plans and coordination with the Tracy Police Department, as identified in Mitigation Measure PS-2, impacts to police services would be less than significant. No long-term operational impacts to police protection services are anticipated. The TMP Update outlines components and recommendations for Intelligent Transportation Systems (ITS). The following include emergency management ITS strategies that would support police protection.

- Emergency Call-Taking and Dispatch
- Emergency Routing
- MAYDAY and Alarms Support
- Wide-Area Alert

For these reasons, operational impacts would not be any greater than those identified in the General Plan EIR.

Mitigation Measure PS-2: *Prior to construction of individual infrastructure facilities, the City shall coordinate with the Tracy Police Department to review construction detour plans. Specifically, the following shall occur:*

- *A prior notice of at least 24 hours in advance of an impact event such as a road closure or disruption of water service shall be given to the appropriate authorities*
- *Prior to construction, the Tracy Police Department and California Highway Patrol shall be notified of all roadway areas, which will be obstructed to allow them to efficiently respond to any emergencies*
- *Traffic control measures, such as the use of flagmen, shall be used, if necessary, in order to regulate traffic to ensure that access will be maintained to all structures for emergency response*

iii. Schools

No Impact. The infrastructure improvements recommended by the TMP Update would support General Plan buildout and would not generate students either directly or indirectly and, therefore, would not result in impacts to school services.

iv. Parks

No Impact. The infrastructure improvements recommended by the TMP Update would support General Plan buildout and would not generate residents either directly or indirectly and, therefore, would not result in impacts to parks.

v. Other Public Facilities

No Impact. The infrastructure improvements recommended by the TMP Update would support General Plan buildout, and would not generate residents either directly or indirectly, therefore, would not result in impacts to other public facilities.

Cumulative Impacts

The TMP Update identifies the transportation infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. TMP Update implementation would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. With implementation of Mitigation Measures PS-1 and PS-2 the proposed Project would not cause a new public services impact to occur, nor increase the severity of an impact previously disclosed in the General Plan EIR. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XVI. RECREATION

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. The transportation infrastructure improvements recommended by the TMP Update would support General Plan buildout and would not generate residents either directly or indirectly not already identified in the General Plan or studies in the General Plan EIR. Therefore, Project implementation would have a less than significant impact to existing parks.

Threshold (b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less Than Significant Impact. The proposed TMP Update recommends bicycle facilities that could be used by the community for commuting and recreational purposes. Bicycle transportation network improvements recommended in the TMP for future projects include bike lanes Class I-IV, bicycle treatments (crossbikes, protected intersections, etc.), wayfinding signs, bicycle detection, bicycle boxes, bicycle parking, and bicycle rentals/sharing. The TMP Update does not propose direct construction of the above mentioned bicycle network improvements, rather, it provides capacity for future infrastructure improvements. Implementation of future recreation projects recommended through the TMP would be site specific and would require CEQA review, on a case-by-case basis, at the project level when future development is proposed in accordance with the General Plan, Master Plan Update, and Municipal Code. Therefore, a less than significant impact would occur.

Cumulative Impacts

The TMP Update identifies the transportation infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Accordingly, the TMP Update implementation would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to recreation to occur, nor an increase in the severity of an impact related to recreation facilities. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XVII. TRANSPORTATION

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less Than Significant Impact. The proposed TMP Update builds upon the goals and objectives of the General Plan and identifies the transportation improvements needed to accommodate future development anticipated at buildout. These improvements include the following:

- **Complete Streets** – Implement design criteria for select Complete Streets in the City and its SOI to achieve more equitable use of City streets for all users. Complete Streets tools are provided in TMP Update Section 4.3.
- **Railroad Facilities** – Maintain and improve four at-grade railroad crossings, provide five new grade-separated crossings, and close two at-grade crossings.
- **Intersections** – Improve traffic operations at 107 intersections. Future improvements would include signal control, coordinated signal timing, stop control, lane reconfiguration, roundabouts, and widening of intersection approaches.
- **Bicycle and Pedestrian Circulation** – Provide bicycle infrastructure and pedestrian facilities throughout the City and its SOI. Proposed improvements would be consistent with the City's Bicycle and Pedestrian Plan and the recent Parks, Recreation, and Trails Master Plan Update.
- **Over/Underpass Facilities, Bridge and Culvert Facilities** – Maintain and improve eleven existing over/underpass, ten bridges, and nine culvert facilities. Provide four new over/underpass facilities and three bridges. One existing under/overpass facility at I-205/11th Street would be removed.

- **Roadway Classifications** – Establish roadway hierarchy, functionality, operations and typical cross sections.
- **Mobility Hubs** – Develop mobility hubs to provide residents with shared mobility options, offering feasible alternatives to driving alone.
- **Intelligent Transportation System (ITS)** – Incorporate ITS strategies into the City’s transportation infrastructure to provide an enhanced multi-modal transportation system that can collect and disseminate traffic information from various modes to provide operational effectiveness, thereby increasing mobility and reducing travel times.
- **Truck Routes** – Identify three distinct truck routes: STAA Route, Through Truck Route, and Local Truck Route.
- **Air Quality and Smart Growth Design Elements** – Build upon the foundation and strategies identified in the General Plan and Sustainability Action Plan to reduce Greenhouse Gas Emissions and work towards meeting reduction goals.
- **Transportation Demand Management** – Establish a set of strategies, measures, and incentives to encourage residents and employees to use alternatives to driving alone. TDM measures help the City achieve the trip reduction and GHG emission targets outlined in the City’s SAP. The City’s TDM program will tier off the SJCOG TDM Plan.
- **Transit Facilities** – Improve the frequency and directness of the Local Fixed-Route Bus Service (TRACER), provide additional Regional Intercity Fixed Route Bus Service (San Joaquin Regional Transportation District) service on the I-205 corridor, develop a new rail alignment through the Altamont Pass, and develop the Valley Link Rail. Additionally, Goal 4 of the City’s Circulation Element is “A balanced transportation system that encourages the use of public transit and high occupancy vehicles.” To strive towards meeting this goal, all existing and future roadways and property owners along Transit Priority Roadways (identified in Figure XX) must consider and construct transit improvements, as appropriate.

While the General Plan Update and EIR forecasts traffic conditions to the year 2030, the TMP looks out to Horizon Year of 2042 to provide the maximum possible infrastructure planning. The Horizon Year was chosen because it is practically possible to estimate Tracy land use growth patterns to that year, and because the San Joaquin Council of Governments has updated its travel demand model to the year 2042. Note that neither the Year 2030 nor the Horizon Year forecasts represent full build-out of all the development capacity in the General Plan areas, but rather, the residential and non-residential growth that is expected under the growth management ordinance (for residential uses) and based on market trends (for non-residential uses).

The City of Tracy geographic location emphasizes its regional significance; various modes of transport travel to, from and through the City on a daily basis. Utilizing the most recent SJCOG model for analysis, results in consistency in identifying improvements that are consistent between the regional agencies, who are responsible for the freeways, CMA roads, local roads, and transit services.

The 2030 traffic impacts for the General Plan were assessed through the use of the travel demand model, which provides directional roadway segment traffic forecasts and several level of service analysis techniques. The thresholds of significance used to determine at what level of service the freeways, roadways, and intersections would operate under the General Plan included the following:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency or the city for designated roads or highways.
- Substantially increase hazards due to a design feature or incompatible uses.
- Result in inadequate emergency access.
- Result in inadequate parking capacity.
- Conflict with adopted policies, plans or programs supporting alternative transportation.
- Result in a change in air traffic patterns, including either an increase in traffic levels or an increase in traffic levels or a change in location that results in substantial safety risks.

The General Plan includes a significantly expanded local roadway network designed to support the ultimate buildout of the land use plan. However, due to the City's Growth Management Ordinance (GMO) and market conditions, not all of the Tracy Planning Area would fully develop by 2030. As a result, the entire roadway network would not be required to be constructed in the next 20 years. As part of the analysis for the General Plan and General Plan EIR, the improvements that would be needed by 2030 were identified. These improvements include the reclassification of portions of several streets from minor arterial to major arterial status, road widening to serve development in 2030, and Caltrans' planned widening of I-205 to eight lanes. A substantial number of new roads would be required to serve traffic generated by the General Plan. Other improvements, such as signalization of approximately 30 intersections, would also be required to support the General Plan. In addition, the upgrading of Eleventh Street/Lammers Road to an urban interchange would be needed.

The General Plan EIR acknowledged that the TMP would require updating to ensure that the improvements identified in the General Plan are included in the TMP. The TMP was last updated in 2012. The proposed TMP Update considers the City's existing transportation system, development trends, and consistency with local and regional plans and programs including the City's SAP and SJCOG Travel Demand Model update. Thus, the proposed TMP Update would further the goals and objectives of the General Plan and would be consistent with it.

The General Plan EIR evaluated the potential impacts that growth associated with the General Plan would have on the City's circulation system. With development resulting from the General Plan, traffic volumes would grow throughout the City and the levels of congestion would increase as well. In existing urbanized areas of the City, this congestion would be moderated by selected improvements, such as the construction of Schulte Road as a parallel route to Eleventh Street and a proposed urban interchange at Eleventh Street and Lammers Boulevard.

Roadways in other areas of the City are projected to operate at acceptable levels, with the roadway improvements identified in the General Plan. For instance, Lammers Road would be widened from two lanes to four and six lanes in sections to accommodate growth from developments such as Tracy Hills, Tracy Gateway, and other projects. Linne Road, Valpico Road, and MacArthur Drive are a few of the roadways that would be widened to provide an acceptable level of service with the development in the City under the General Plan. As a result, there would be a less than significant impact on local roadways. Thus, the General Plan EIR found that impacts to local roadways would be less than significant.

Regarding intersections, the General Plan EIR found that the City's level of service standards would be maintained except at the intersections of Eleventh Street/Corral Hollow Road and Eleventh Street/Lammers Road, assuming that planned improvements identified in the General Plan would be implemented. General Plan Policy 2 under Objective CIR-1.3 allows individual locations to fall below the City's level of service standards in instances where the construction of physical improvements would be infeasible or would conflict with the character of the community.

Additional traffic analysis was conducted for the TMP to determine the level of service at the study intersections for future horizon year 2042. Based on the City's visioning, the Horizon Year housing and employment represent growth of about 72-percent and 323-percent respectively, over 2015 conditions. As such, the City's roadway system must be continually maintained and improved to keep pace with development. The TMP Update incorporates several Smart Growth principles to facilitate sustainable provision of transportation infrastructure to accommodate future growth.

Based on the Horizon Year traffic modeling and forecast volumes, forecast volumes were post-processed to obtain intersection traffic volumes for Horizon Year future traffic volumes. Post-processing of the model data to provide peak hour intersection volumes was conducted in accordance with industry standards which included review of existing traffic volumes for consistency on major corridors within the City. Based on these results, the TMP Update identifies the lane configuration by approach and intersection control for future intersections. The lane configurations identify where improvements are recommended to accommodate future Horizon Year traffic demand. The improvements identified would maintain a LOS per the City and Caltrans LOS standards, as appropriate. As documented in the proposed TMP Update, all the intersections would operate at level of service D or better during the AM and PM peak hours, except the following three intersections:

- International Parkway & Old Schulte Road,
- MacArthur Drive & Mount Diablo Avenue, and
- Chrisman Road & Eleventh Street.

The proposed TMP includes recommended actions to implement goals and objectives identified in the *General Plan*, including Objective CIR 1.3, "Adopt and enforce LOS standards that provide a high level of mobility and accessibility, for all modes, for residents and workers." Associated actions include, "Identify locations or areas where the LOS can fall below the standard due to infeasible mitigation measures or where improvements would have an adverse impact to pedestrians or bicycles or other users..."

As proposed, the TMP would establish polices and recommends improvements that would promote consistency with the General Plan and improve LOS at study intersections. Thus, the resulting level of service under future horizon year 2042 at the three intersections noted above would result in a less than significant impact.

Threshold (b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Less Than Significant Impact with Mitigation Incorporated. The roadway projects included as part of the TMP Update were analyzed using vehicle miles traveled (VMT) as the measure of effectiveness (MOE). As only the capacity enhancing roadway projects were considered as a part the overall Project, for this analysis the land use assumptions remained constant between no project and plus project. However, the land use assumptions were modified between Existing and Cumulative Conditions.

As noted in the TMP Update, for projects that increase roadway capacity and are not identified under the Non-Significant Screening Criteria, the significance criterion should be changed to regional VMT. A finding of a significant impact would be determined if a transportation project results in a net increase in regional VMT. In addition, any roadway with more than a quarter mile in new roadway travel lane (through lanes) should be evaluated for induced demand.

As induced demand is an important consideration for determining an impact for CEQA purposes, the California Induced Travel Calculator⁴ was used to estimate the VMT associated with the induced demand produced by the capacity enhancing roadway projects included in the Tracy TMP Update. This induced demand calculator was developed in a partnership between Caltrans and the National Center for Sustainable Transportation (NCST) at the University of California at Davis and estimates induced demand along freeways, expressways, highways, and major arterials. These are the only roadway functional classifications analyzed for induced demand as they have a network-wide impact as opposed to collector and local streets which have a very localized impact that is negligible to the entire roadway network due to their low volume.

Two types of induced demand are included in this analysis, short-term induced demand and long-term induced demand. Short-term induced demand is associated with the additional vehicle trips that occur within the first three years or so after a project is constructed. Long-term induced demand is associated with the additional vehicle trips that remain on the roadway network long after the project is constructed. The NCST calculator estimates long-term induced demand while short-term induced demand is a percentage of the long-term induced demand and calculated based on an equation using the elasticity of induced demand in the project area.

The Tracy SOI includes 37.25 lane miles of freeways and 105.36 lane miles of highways, expressways, and major arterials without the addition of the Tracy TMP. The Tracy TMP includes an additional 14.02 lane miles of highways, expressways, and major arterials. Using the NCST calculator, the increased lane miles

⁴ *California Induced Travel Calculator*. Caltrans and the National Center for Sustainable Transportation (NCST). Accessed December 15, 2021.

associated with the Tracy TMP induces an additional 28,000,000 VMT annually or 76,712 daily VMT. The magnitude of the induced demand is measured as the elasticity of the VMT with respect to lane miles. The elasticity is calculated as percent change in VMT divided by percent change in lane miles. The greater the elasticity, the greater the increase in VMT from a given increase in roadway capacity. The Tracy TMP adds 73,287 additional daily VMT when induced VMT is considered. Therefore, the elasticity associated with the Tracy TMP was calculated to be 0.25. As noted in the NCST Calculator documentation, the elasticity of highways, expressways, and major arterials is 0.75. Therefore, to calculate the short-term induced demand, a ratio of the Tracy TMP elasticity to the elasticity associated with highways, expressways, and major arterials was calculated and multiplied by the long-term induced demand. This resulted in a short-term demand of 25,092 for the Tracy TMP.

To determine the VMT associated with Existing No Project, Existing plus Project, Cumulative No Project, and Cumulative plus Project, the City of Tracy's version of the Three-County travel demand model (Tracy TDM) was used. The land use scenarios remained consistent between No Project and Plus Project Conditions, but was modified between the Existing and Cumulative scenarios. The VMT was determined by multiplying the volume on the roadway by the distance of the roadway. The total VMT within the City and its SOI was calculated for each scenario; see **Table 6-6: City of Tracy Vehicle Miles Traveled (VMT) Summary** below. As shown in **Table 6-6**, for both Existing plus Project and Cumulative plus Project conditions, the total VMT is reduced compared to No Project when induced demand is not accounted for.

Table 6-6: City of Tracy Vehicle Miles Traveled (VMT) Summary			
Scenario	Total VMT	Induced Demand¹	Total VMT + Induced Demand
Existing No Project	45,654	0	1,945,654
Existing plus Project	1,942,229	25,092	1,967,320
Cumulative No Project	4,171,101	0	4,171,101
Cumulative plus Project	4,023,645	76,712	4,100,357
Change in Existing VMT	-3,426	25,092	21,666
Change in Cumulative VMT	-147,456	76,712	-70,744
Notes:			
¹ Existing plus Project represents short-term induced demand. Cumulative plus Project represents long-term induced demand.			

As shown in **Table 6-6**, when induced VMT is added to the total VMT for the project scenarios, the Existing plus Project scenario has an increase in VMT of 21,666 compared to the No Project scenario resulting in a finding of a significant impact. Alternatively, the Cumulative plus Project scenario has a decrease of 70,744 VMT compared to the No Project scenario resulting in a finding of less than significant impact.

To mitigate the impact for the Existing plus Project scenario, the City of Tracy VMT Bank can be used. The VMT Bank is described in the Tracy TMP and consists of projects that reduce VMT within the Tracy SOI and their associated VMT reductions are monetized in the form of credits. These credits are then purchased for the purposes of mitigating VMT in excess of determined impact thresholds. The fee calculated per VMT to mitigate was \$633.11 and the total VMT available to purchase is 106,214 meaning there is ample available VMT to mitigate the impact. To fully mitigate the Tracy TMP's impact for the Existing plus Project scenario, the total cost is \$13,716,961.26 which is found by multiplying the cost per VMT (\$633.11) by the total VMT needed to be reduced (21,666). Implementation of Mitigation Measure

TR-1 would reduce potential VMT impacts associated with the Existing plus Project scenario to less than significant.

Mitigation Measure TR-1: Prior to construction of individual TMP facilities, the City or developer responsible for building the facilities, shall provide evidence to the satisfaction of the Development Services Director, that VMT credits have been secured to offset potential VMT increases generated by the project.

Threshold (c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. Improvements identified in the TMP Update would be designed to ensure that they would not increase hazards. Future development of transportation infrastructure would comply with all relevant design guidelines, including but not limited to, the Tracy Municipal Code, TMP Update, and Caltrans Design Guidelines. No impact would occur.

Threshold (d) Result in inadequate emergency access?

Less Than Significant with Mitigation Incorporated. Construction of improvements identified in the proposed TMP could delay emergency response times due to roadblocks, construction delays, and detours of the various facilities. However, with implementation Mitigation Measures HAZ-1, PS-1 and PS-2, impacts associated with inadequate emergency access would be less than significant.

Cumulative Impacts

The TMP Update identifies transportation infrastructure needed to accommodate future development envisioned by the General Plan through buildout. Accordingly, TMP Update implementation would not induce any additional population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new transportation impact to occur, nor an increase in the severity of a transportation impact previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XVIII. TRIBAL CULTURAL RESOURCES

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Since certification of the General Plan EIR, the topic Tribal Cultural Resources was added to the Appendix G checklist of CEQA thresholds. On September 25, 2014, Governor Brown signed Assembly Bill (AB) 52 into law, which requires tribal cultural resources to be considered during the CEQA process. AB 52 is applicable to projects for which a Notice of Mitigated Negative Declaration has been filed on or after July 2015. The proposed TMP Updates provides an evaluation of several changed conditions, from what was included in the 2012 Citywide TMP, therefore the City has initiated consultation with local tribal representatives consistent with the requirements of AB 52. Mitigation measures related to potential impacts to historic and archeological resources in the City and its SOI are described in this section.

Senate Bill (SB) 18 went into effect in January 2005, which establishes new requirements for local governments (city and county) to consult with Native American tribes to aid in the protection of traditional tribal cultural places through local land use planning. SB 18 provides California Native American tribes an opportunity to participate in local land use decisions at an early stage of planning, for the purpose of protecting, or mitigating impacts to cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use designations are made by a local government. SB 18 is applicable to general plan or specific plan processes proposed on or after March 2005. Because the TMP was completed in 2012, and the proposed updates to these plans are after March 2005, the City has initiated consultation with local tribal representatives consistent with the requirements of AB 52 and SB 18, as discussed further below.

Threshold (a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?
- ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant with Mitigation Incorporated. In compliance with PRC § 21080.3.1(b), the City has provided formal notification to California Native American tribal representatives that have previously requested notification from the City regarding projects within the geographic area traditionally and culturally affiliated with the tribe. Native American groups may have knowledge about cultural resources in the area and may have concerns about adverse effects from development on tribal cultural resources as defined in PRC Section 21074.

On April 15, 2022, City staff contacted the following tribal representatives via mailed correspondence:

Buena Vista Rancheria of Me-Wuk Indians	United Auburn Indian Community of the Auburn Rancheria
California Valley Miwok Tribe	
AKA Sheep Rancheria of Me-Wuk Indians of CA	Wilton Rancheria
Chicken Ranch Rancheria of Me-Wuk Indians	Wuksache Indian Tribe/Eshom Valley Band
Ione Band of Miwok Indians	Nashville Enterprise Miwok-Maidu-Nishinam Tribe
Muwekma Ohlone Indian Tribe of the SF Bay Area	Southern Sierra Miwuk Nation
North Valley Yokuts Tribe	Randy Yonemura
The Confederated Villages of Lisjan Nation	Southern Sierra Miwuk Nation
Tule River Indian Tribe	

The City did not receive any requests for tribal consultation.

As discussed in Section V, Cultural Resources, the City and its SOI contain known archaeological sites and likely contains undiscovered archaeological sites as well, particularly in undeveloped areas. Thus, the potential exists for transportation improvements to affect previously unidentified tribal cultural resources during construction activities. However, as noted throughout this document, the TMP Update is a policy document and does not propose the construction or operation of specific transportation infrastructure projects at this time. Consequently, adoption of the TMP Update would not directly result in the construction and operation of infrastructure that could have negative environmental effects. However, adoption would indirectly facilitate the construction and operation of transportation infrastructure.

As such, implementation of Mitigation Measures CR-1, CR-2, and CR-3 in Section V, Cultural Resources, would reduce impacts to archaeological resources, including resources that could be of cultural value to a tribe. Compliance with PRC Section 21083.2 and the listed mitigation measures would ensure the TMP Update improvements would not cause a substantial adverse change in the significance of a tribal cultural resource. For these reasons, impacts associated with tribal cultural resources would be reduced to a less than significant level with mitigation.

Cumulative Impacts

The TMP Update identifies the transportation infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Accordingly, the proposed Project would not cause a new impact related to tribal cultural resources to occur, nor an increase in the severity of an impact related to tribal cultural resources previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XIX. UTILITIES AND SERVICE SYSTEMS

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact. The TMP Update identifies transportation infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. The proposed Project would not result in additional population growth within the City that would increase demand for water or wastewater treatment facilities and would not necessitate construction of new or expanded facilities. Recommended transportation infrastructure improvements would primarily be developed within existing ROWs and would not impact electric power, natural gas, or telecommunications facilities. Further, the nature of the proposed infrastructure would not result in any notable increase in demand for these services.

Construction of improvements identified in the proposed TMP Update would include new facilities to convey storm water runoff from roadways, bridges and other impervious surfaces to the City's storm drainage system. These facilities would be included in the infrastructure design and constructed as part of the improvement. Storm drainage capacity would be verified during design as applicable. Construction of new storm water conveyance facilities associated with improvements identified in the

proposed TMP would occur concurrently and, thus, would have no greater impact than those identified elsewhere in this Initial Study. Mitigation measures are identified throughout this document to reduce impacts associated with implementation of the proposed TMP to less than significant.

Threshold (b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

No Impact. The proposed Project would not require water supplies. No impact would occur.

Threshold (c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The proposed Project would not require wastewater treatment. No impact would occur.

Threshold (d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. Construction debris and other solid waste would be generated during construction of improvements identified in the TMP Update and would require disposal in an appropriate landfill. Solid waste disposal needs would only be temporary and would cease upon completion of the proposed improvements. The operation of transportation infrastructure would not result in generation of solid waste or increase in disposal at area landfills. Therefore, impacts would be less than significant.

Threshold (e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. Future construction of infrastructure recommended by the TMP Update would comply with all federal, state, and local statutes and regulations related to solid waste. Accordingly, Project implementation would not generate substantial increase in solid waste and impacts would be less than significant.

Cumulative Impacts

The TMP Update identifies transportation infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Accordingly, TMP Update implementation would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact concerning utilities and service systems to occur, nor an increase in the severity of an impact previously disclosed in the General Plan EIR. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XX. WILDFIRE

WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Threshold (a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. Since the approval of the General Plan EIR, the State CEQA Guidelines Appendix G checklist has been updated to include Wildfire. However, Wildland Fires were evaluated as part of the Hazards and Hazardous Materials in the General Plan EIR. There are no very high fire hazard severity zones within the City. The General Plan states that the City will provide fire and emergency response facilities and personnel necessary to meet growth of the area. The proposed TMP Update improvements would not induce additional growth within the City and its SOI or expand the City's service area. Therefore, no impact would occur.

Threshold (b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. There are no very high fire hazard severity zones within the City. The General Plan policies detail that any new developments must satisfy fire flow and other design requirements as established by the Fire Department, as well as assess steep terrain. The future infrastructure projects facilitated by the TMP Update would be required to demonstrate compliance and would not create any new risks or exposure. Therefore, no impact would occur.

Threshold (c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. There are no very high fire hazard severity zones within the City. General Plan policies state that in addition to the fire flow requirements, the City will promote coordination between land use planning and fire protection by requiring fire hazard surveying and implementing infrastructure design requirements. As previously concluded in the General Plan EIR, any future improvements would also have to satisfy all requirements and would be subject to separate review from applicable departments. Therefore, no impact would occur.

Threshold (d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less than Significant with Mitigation Incorporated. There are no very high fire hazard severity zones within the city. Facilities proposed as part of the TMP Update would be located throughout the City and its SOI, including within urbanized and undeveloped land. Therefore, those facilities located adjacent to or within undeveloped wildland areas have the potential to be subject to increased fire hazards. Depending on a facility's proximity to areas of high susceptibility to wildfires, that facility may be exposed to significant impacts due to wildfires. Implementation of Mitigation Measure WF-1, which includes requirements for fuel-modification zones, fire equipment access, and emergency preparedness protocol, would reduce these impacts to a less than significant level.

Mitigation Measure WF-1: Prior to approval of site design, facilities located within area of high susceptibility to wildfire hazards shall include fuel-modification zones, road standards that provide for fire equipment access, the assured provision of minimum water supply reserves for emergency fire use, fuel breaks and greenbelts, clearances around structures, and emergency preparedness protocol and procedures as recommended by the General Plan.

Cumulative Impacts

As discussed above, the proposed Project would not cause a new wildfire impact to occur, nor an increase in the severity of a wildfire impact previously identified in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant with Mitigation Incorporated. As discussed in Section IV (Biological Resources) and Section V (Cultural Resources) of this Initial Study/CEQA Guidelines Section 15183 Analysis, the TMP Update has the potential to result in potentially significant impacts on the environment. However, Mitigation Measures BIO-1 through BIO-9 would reduce impacts on biological resources to less than significant, while Mitigation Measures CR-1, CR-2, and CR-3 would reduce impacts on cultural resources to less than significant.

Threshold (b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact. Construction of storm drainage infrastructure identified in the TMP Update would occur over time and would be dependent on future development within the City and its SOI. Therefore, it is not anticipated that cumulative impacts would result from implementation of

improvements. Adherence to the mitigation measures identified throughout this document would reduce potential short-term and long-term impacts to less than significant.

Threshold (c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly? Determination: Less Than Significant Impact with Mitigation Incorporated.

Less Than Significant Impact. As stated in various sections of this Initial Study/State CEQA Guidelines Section 15183 Analysis, the TMP Update has the potential to result in significant impacts on the environment. However, with implementation of mitigation measures identified throughout this document, impacts would be less than significant.

SECTION 7.0 REFERENCES

The following references were utilized during preparation of this Initial Study/CEQA Guidelines Section 15183 Analysis.

California Environmental Quality Act (CEQA) Guidelines, 2021.

City of Tracy, *Amendment to the Draft EIR*, March 2006.

City of Tracy, *Citywide Roadway & Transportation Mater Plan*, August 2022

City of Tracy *General Plan EIR*, October 2005.

City of Tracy, *General Plan*, February 2011.

City of Tracy, *General Plan Supplemental EIR*, February 2010.

Federal Transit Administration (FTA), 2018, *Transit Noise and Vibration Impact Assessment* , Available at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, Accessed March 16, 2022

Department of Conservation, 2010, Fault Activity Map of California, Available at <https://maps.conservation.ca.gov/geologichazards/>, Accessed March 17, 2022

Department of Toxic Substances Control, 2022, Hazardous Waste and Substances Site (Cortese) List, Available at <https://dtsc.ca.gov/dtscs-cortese-list/>, Accessed March 18, 2022

Appendix A

Air Quality and Greenhouse Gas Emissions Modeling Data

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<h2 style="margin: 0;">Road Construction Emissions Model</h2> <h3 style="margin: 0;">Data Entry Worksheet</h3> <p><small>Note: Required data input sections have a yellow background. Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.</small></p> <p><small>The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.</small></p> <p><small>Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.</small></p>		Version 9.0.0		<p>To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.</p>			
<h3 style="margin: 0;">Input Type</h3>							
Project Name	<div>Tracy MTP Update - Representative Project</div>						
Construction Start Year	<div>2023</div>	Enter a Year between 2014 and 2040 (inclusive)					
Project Type	<div>1</div>	1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway 2) Road Widening : Project to add a new lane to an existing roadway 3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane 4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction					
Project Construction Time	<div>6.00</div>	months					
Working Days per Month	<div>22.00</div>	days (assume 22 if unknown)					
Predominant Soil/Site Type: Enter 1, 2, or 3 <small>(for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)</small>	<div>1</div>	1) Sand Gravel : Use for quaternary deposits (Delta/West County) 2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the lone formation (Scott Road, Rancho Murieta) 3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)					
Project Length	<div>0.42</div>	miles					
Total Project Area	<div>8.32</div>	acres					
Maximum Area Disturbed/Day	<div>0.26</div>	acres					
Water Trucks Used?	<div>1</div>	1. Yes 2. No					
<h3 style="margin: 0;">Material Hauling Quantity Input</h3>							
Material Type	Phase	Haul Truck Capacity (yd ³) (assume 20 if unknown)	Import Volume (yd ³ /day)	Export Volume (yd ³ /day)			
Soil	Grubbing/Land Clearing						
	Grading/Excavation	20.00	293.56				
	Drainage/Utilities/Sub-Grade						
	Paving						
Asphalt	Grubbing/Land Clearing						
	Grading/Excavation						
	Drainage/Utilities/Sub-Grade						
	Paving						
<h3 style="margin: 0;">Mitigation Options</h3>							
On-road Fleet Emissions Mitigation	<div></div>						
Off-road Equipment Emissions Mitigation	<div></div>						
<p>Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer</p> <p>Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAQMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation).</p> <p>Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard</p>							
<p>The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.</p>							

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing		0.60		1/1/2023
Grading/Excavation		2.40		1/20/2023
Drainage/Utilities/Sub-Grade		2.10		4/3/2023
Paving		0.90		6/6/2023
Totals (Months)		6		

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions		User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT				
User Input										
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00					
Miles/round trip: Grading/Excavation		30.00		15	450.00					
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00					
Miles/round trip: Paving		30.00		0	0.00					
Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grading/Excavation (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Draining/Utilities/Sub-Grade (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Paving (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.03	0.40	3.11	0.11	0.05	0.02	1,701.41	0.00	0.27	1,781.14
Tons per const. Period - Grading/Excavation	0.00	0.01	0.08	0.00	0.00	0.00	44.92	0.00	0.01	47.02
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.01	0.08	0.00	0.00	0.00	44.92	0.00	0.01	47.02

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

Asphalt Hauling Emissions		User Override of	Program Estimate of	User Override of Truck	Default Values	Calculated					
User Input	Miles/Round Trip	Miles/Round Trip	Round Trips/Day	Round Trips/Day	Round Trips/Day	Daily VMT					
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00						
Miles/round trip: Grading/Excavation		30.00		0	0.00						
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00						
Miles/round trip: Paving		30.00		0	0.00						
Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e	
Grubbing/Land Clearing (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36	
Grading/Excavation (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36	
Draining/Utilities/Sub-Grade (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36	
Paving (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36	
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Paving (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e	
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Note: Worker commute default values can be overridden in cells D121 through D126.

Worker Commute Emissions		User Override of Worker Commute Default Values		Default Values		Calculated		Calculated			
User Input		Commute Default Values				Daily Trips		Daily VMT			
Miles/ one-way trip				20							
One-way trips/day				2							
No. of employees: Grubbing/Land Clearing				4		8		160.00			
No. of employees: Grading/Excavation				17		34		680.00			
No. of employees: Drainage/Utilities/Sub-Grade				14		28		560.00			
No. of employees: Paving				10		20		400.00			
Emission Rates		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)		0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68
Grading/Excavation (grams/mile)		0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68
Draining/Utilities/Sub-Grade (grams/mile)		0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68
Paving (grams/mile)		0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68
Grubbing/Land Clearing (grams/trip)		1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50
Grading/Excavation (grams/trip)		1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50
Draining/Utilities/Sub-Grade (grams/trip)		1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50
Paving (grams/trip)		1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50
Emissions		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing		0.02	0.37	0.03	0.02	0.01	0.00	113.26	0.00	0.00	114.17
Tons per const. Period - Grubbing/Land Clearing		0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.75
Pounds per day - Grading/Excavation		0.10	1.57	0.13	0.07	0.03	0.00	481.33	0.01	0.01	485.21
Tons per const. Period - Grading/Excavation		0.00	0.04	0.00	0.00	0.00	0.00	12.71	0.00	0.00	12.81
Pounds per day - Drainage/Utilities/Sub-Grade		0.08	1.30	0.11	0.06	0.02	0.00	396.39	0.01	0.01	399.58
Tons per const. Period - Drainage/Utilities/Sub-Grade		0.00	0.03	0.00	0.00	0.00	0.00	9.16	0.00	0.00	9.23
Pounds per day - Paving		0.06	0.93	0.08	0.04	0.02	0.00	283.14	0.01	0.01	285.42
Tons per const. Period - Paving		0.00	0.01	0.00	0.00	0.00	0.00	2.80	0.00	0.00	2.83
Total tons per construction project		0.01	0.08	0.01	0.00	0.00	0.00	25.41	0.00	0.00	25.62

Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

Water Truck Emissions		User Override of	Program Estimate of	User Override of Truck	Default Values	Calculated	User Override of	Default Values	Calculated
User Input		Default # Water Trucks	Number of Water Trucks	Round Trips/Vehicle/Day	Round Trips/Vehicle/Day	Trips/day	Miles/Round Trip	Miles/Round Trip	Daily VMT
Grubbing/Land Clearing - Exhaust			1		5	5		8.00	40.00
Grading/Excavation - Exhaust			1		5	5		8.00	40.00
Drainage/Utilities/Subgrade			1		5	5		8.00	40.00
Paving			1		5	5		8.00	40.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grading/Excavation (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Draining/Utilities/Sub-Grade (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Paving (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.00	0.04	0.31	0.01	0.00	0.00	151.24	0.00	0.02	158.32
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.04
Pounds per day - Grading/Excavation	0.00	0.04	0.31	0.01	0.00	0.00	151.24	0.00	0.02	158.32
Tons per const. Period - Grading/Excavation	0.00	0.00	0.01	0.00	0.00	0.00	3.99	0.00	0.00	4.18
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.04	0.31	0.01	0.00	0.00	151.24	0.00	0.02	158.32
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.01	0.00	0.00	0.00	3.49	0.00	0.00	3.66
Pounds per day - Paving	0.00	0.04	0.31	0.01	0.00	0.00	151.24	0.00	0.02	158.32
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	0.00	1.57
Total tons per construction project	0.00	0.00	0.02	0.00	0.00	0.00	9.98	0.00	0.00	10.45

Note: Fugitive dust default values can be overridden in cells D183 through D185.

Fugitive Dust		User Override of Max Acreage Disturbed/Day		Default Maximum Acreage/Day		PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing				0.26		2.60	0.02	0.54	0.00
Fugitive Dust - Grading/Excavation				0.26		2.60	0.07	0.54	0.01
Fugitive Dust - Drainage/Utilities/Subgrade				0.26		2.60	0.06	0.54	0.01

Off-Road Equipment Emissions														
Grubbing/Land Clearing	Default		Mitigation Option		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Number of Vehicles	Override of	Default											
	Override of Default Number of Vehicles	Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
				Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		1		Model Default Tier	Crawler Tractors	0.44	2.24	5.12	0.20	0.18	0.01	758.27	0.25	766.45
				Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		1		Model Default Tier	Excavators	0.19	3.26	1.55	0.08	0.07	0.01	500.11	0.16	505.50
				Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Other Material Handling Equiprr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		1		Model Default Tier	Signal Boards	0.06	0.30	0.36	0.01	0.01	0.00	49.31	0.01	49.56
				Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User-Defined Off-road Equipment														
If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab														
Number of Vehicles		Equipment Tier		Type	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
					pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Grubbing/Land Clearing	pounds per day	0.69	5.80	7.03	0.29	0.27	0.01	1,307.69	0.41	1,321.51
				Grubbing/Land Clearing	tons per phase	0.00	0.04	0.05	0.00	0.00	0.00	8.63	0.00	8.72

Drainage/Utilities/Subgrade				Default	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Default Number of Vehicles		Mitigation Option	Override of	Default										
Override of Default Number of Vehicles		Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)		Equipment Tier	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
				Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1			Model Default Tier	Air Compressors	0.26	2.41	1.74	0.09	0.09	0.00	375.26	0.02	376.67
				Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1			Model Default Tier	Generator Sets	0.31	3.67	2.72	0.13	0.13	0.01	623.04	0.03	625.12
	1			Model Default Tier	Graders	0.38	1.69	4.65	0.15	0.14	0.01	640.86	0.21	647.76
				Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Other General Industrial Equipn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Other Material Handling Equiprr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1			Model Default Tier	Plate Compactors	0.04	0.21	0.25	0.01	0.01	0.00	34.48	0.00	34.65
				Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1			Model Default Tier	Pumps	0.33	3.73	2.75	0.13	0.13	0.01	623.04	0.03	625.14
				Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1			Model Default Tier	Rough Terrain Forklifts	0.11	2.29	1.40	0.04	0.04	0.00	333.80	0.11	337.40
				Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2			Model Default Tier	Scrapers	1.57	12.27	16.57	0.65	0.60	0.03	2,940.26	0.95	2,971.94
	1			Model Default Tier	Signal Boards	0.06	0.30	0.36	0.01	0.01	0.00	49.31	0.01	49.56
				Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2			Model Default Tier	Tractors/Loaders/Backhoes	0.30	4.46	3.07	0.15	0.14	0.01	603.15	0.20	609.64
				Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User-Defined Off-road Equipment				If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab										
Number of Vehicles		Equipment Tier		Type	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Drainage/Utilities/Sub-Grade		pounds per day	3.35	31.04	33.51	1.38	1.30	0.07	6,223.20	1.55	0.05	6,277.89
		Drainage/Utilities/Sub-Grade		tons per phase	0.08	0.72	0.77	0.03	0.03	0.00	143.76	0.04	0.00	145.02

Data Entry Worksheet

Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/day	Default Values Hours/day
Aerial Lifts		63		8
Air Compressors		78		8
Bore/Drill Rigs		221		8
Cement and Mortar Mixers		9		8
Concrete/Industrial Saws		81		8
Cranes		231		8
Crawler Tractors		212		8
Crushing/Proc. Equipment		85		8
Excavators		158		8
Forklifts		89		8
Generator Sets		84		8
Graders		187		8
Off-Highway Tractors		124		8
Off-Highway Trucks		402		8
Other Construction Equipment		172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		168		8
Pavers		130		8
Paving Equipment		132		8
Plate Compactors		8		8
Pressure Washers		13		8
Pumps		84		8
Rollers		80		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers		247		8
Rubber Tired Loaders		203		8
Scrapers		367		8
Signal Boards		6		8
Skid Steer Loaders		65		8
Surfacing Equipment		263		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		97		8
Trenchers		78		8
Welders		46		8

END OF DATA ENTRY SHEET

Summary of VMT Analysis for the Tracy Transportation Master Plan Update			
Scenario	Total VMT	Induced Demand Ex+PP = Short-Term C+PP = Long-Term	Total VMT + Induced Demand
Existing NP (Ex+NP)	1,945,654	-	1,945,654
Existing PP (Ex+PP)	1,942,229	25,092	1,967,320
Cumulative NP (C+NP)	4,171,101	-	4,171,101
Cumulative PP (C+PP)	4,023,645	76,712	4,100,357
Ex+PP - Ex+NP	(3,426)	25,092	21,666
C+PP - C+NP	(147,456)	76,712	(70,744)

Existing NP (Ex+NP)

	ROG	NO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	CH ₄ (CO ₂ e)	N ₂ O	N ₂ O (CO ₂ e)	CO ₂ e	SOX	CO
Emissions Rate (g/mi)	0.024772501	0.23909408	0.004298	0.004060849	434.995908	0.00688914		0.02558238			0.004235372	1.002854968
Emission Reduction (g)	48,198.72	465,194.35	8,362.42	7,901.01	846,351,528.40	13,403.88		49,774.46			8,240.57	1,951,208.78
Emission Reduction (lbs/day)	106.26	1,025.58	18.44	17.42	1,865,886.05	29.55	738.76	109.73	32,700.71		18.17	4,301.68
Emission Reduction (tons/year)	18.12	174.86	3.14	2.97	318133.57	5.04	125.96	18.71	5,575.47		3.10	733.44
				MT	2.89E+05	4.57E+00	114.27	1.70E+01	5,057.98	293,778	2.81E+00	6.65E+02

Existing PP (Ex+PP)

	ROG	NO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	CH ₄ (CO ₂ e)	N ₂ O	N ₂ O (CO ₂ e)	CO ₂ e	SOX	CO
Emissions Rate (g/mi)	0.024772501	0.23909408	0.004298	0.004060849	434.995908	0.00688914		0.02558238			0.004235372	1.002854968
Emission Reduction (g)	48,735.44	470,374.56	8,455.54	7,988.99	855,776,149.74	13,553.14		50,328.73			8,332.33	1,972,936.64
Emission Reduction (lbs/day)	107.44	1,037.00	18.64	17.61	1,886,663.78	29.88	746.99	110.96	33,064.85		18.37	4,349.58
Emission Reduction (tons/year)	18.32	176.81	3.18	3.00	321676.17	5.09	127.36	18.92	5,637.56		3.13	741.60
				MT	2.92E+05	4.62E+00	115.54	1.72E+01	5,114.31	297,050	2.84E+00	6.73E+02

Cumulative NP (C+NP)

	ROG	NO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	CH ₄ (CO ₂ e)	N ₂ O	N ₂ O (CO ₂ e)	CO ₂ e	SOX	CO
Emissions Rate (g/mi)	0.007128625	0.108820128	0.002426442	0.002302545	325.7949988	0.002541238		0.01808713			0.003170299	0.519955806
Emission Reduction (g)	29,734.21	453,899.74	10,120.93	9,604.15	1,358,923,845.34	10,599.76		75,443.23			13,223.64	2,168,788.18
Emission Reduction (lbs/day)	65.55	1,000.68	22.31	21.17	2,995,914.76	23.37	584.21	166.32	49,564.51		29.15	4,781.36
Emission Reduction (tons/year)	11.18	170.62	3.80	3.61	510803.47	3.98	99.61	28.36	8,450.75		4.97	815.22
				MT	4.63E+05	3.61E+00	90.36	2.57E+01	7,666.39	471,150	4.51E+00	7.40E+02

Cumulative PP (C+PP)

	ROG	NO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	CH ₄ (CO ₂ e)	N ₂ O	N ₂ O (CO ₂ e)	CO ₂ e	SOX	CO
Emissions Rate (g/mi)	0.007128625	0.108820128	0.002426442	0.002302545	325.7949988	0.002541238		0.01808713			0.003170299	0.519955806
Emission Reduction (g)	29,229.91	446,201.37	9,949.28	9,441.26	1,335,875,803.94	10,419.98		74,163.67			12,999.36	2,132,004.43
Emission Reduction (lbs/day)	64.44	983.71	21.93	20.81	2,945,102.52	22.97	574.30	163.50	48,723.87		28.66	4,700.27
Emission Reduction (tons/year)	10.99	167.72	3.74	3.55	502139.98	3.92	97.92	27.88	8,307.42		4.89	801.40
				MT	4.56E+05	3.55E+00	88.83	2.53E+01	7,536.36	463,159	4.43E+00	7.27E+02

Ex+PP - Ex+NP

	ROG	NO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	CH ₄ (CO ₂ e)	N ₂ O	N ₂ O (CO ₂ e)	CO ₂ e	SOX	CO
Emissions Rate (g/mi)	0.024772501	0.23909408	0.004298	0.004060849	434.995908	0.00688914		0.02558238			0.004235372	1.002854968
Emission Reduction (g)	536.72	5,180.21	93.12	87.98	9,424,621.34	149.26		554.27			91.76	21,727.86
Emission Reduction (lbs/day)	1.18	11.42	0.21	0.19	20,777.74	0.33	8.23	1.22	364.14		0.20	47.90
Emission Reduction (tons/year)	0.20	1.95	0.04	0.03	3542.60	0.06	1.40	0.21	62.09		0.03	8.17
				MT	3.21E+03	5.09E-02	1.27	1.89E-01	56.32	3,271	3.13E-02	7.41E+00

C+PP - C+NP

	ROG	NO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	CH ₄ (CO ₂ e)	N ₂ O	N ₂ O (CO ₂ e)	CO ₂ e	SOX	CO
Emissions Rate (g/mi)	0.007128625	0.108820128	0.002426442	0.002302545	325.7949988	0.002541238		0.01808713			0.003170299	0.519955806
Emission Reduction (g)	-504.31	-7,698.37	-171.66	-162.89	-23,048,041.40	-179.78		-1,279.56			-224.28	-36,783.75
Emission Reduction (lbs/day)	-1.11	-16.97	-0.38	-0.36	-50,812.24	-0.40	-9.91	-2.82	-840.64		-0.49	-81.09
Emission Reduction (tons/year)	-0.19	-2.89	-0.06	-0.06	-8663.49	-0.07	-1.69	-0.48	-143.33		-0.08	-13.83
				MT	-7.86E+03	-6.13E-02	-1.53	-4.36E-01	-130.03	-7,991	-7.65E-02	-1.25E+01

Source: EMFAC2021 (v1.0.2) Emission Rates

Region Type: Sub-Area

Region: San Joaquin (SJV)

Calendar Year: 2023

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Trips	NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX				
San Joaquin (SJV)	2023	HHDT	Aggregate	Aggregate	Gasoline	2.419215607	60.00819344	48.40366587	17.23281582	1034.110146	0.00864479	0.518758241	0.009401998	0.564196919	2648.77612	158948.2698
San Joaquin (SJV)	2023	HHDT	Aggregate	Aggregate	Diesel	8575.081903	1199316.402	140104.4472	1.771884363	2125049.978	0.027662946	33176.62539	0.028913742	34676.72517	1607.468927	1927863850
San Joaquin (SJV)	2023	HHDT	Aggregate	Aggregate	Electricity	7.235982461	504.4472048	122.913689	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2023	HHDT	Aggregate	Aggregate	Natural Gas	216.9125611	14031.10566	1757.131941	1.422503997	19959.30388	0.003118872	43.76122786	0.003392058	47.59432812	1457.705166	20453215.21
San Joaquin (SJV)	2023	LDA	Aggregate	Aggregate	Gasoline	246367.0682	9973102.473	1138235.391	0.047876736	477479.5938	0.001372336	13686.45232	0.001492533	14885.18365	293.0723697	2922840775
San Joaquin (SJV)	2023	LDA	Aggregate	Aggregate	Diesel	705.734891	23139.82538	3023.214022	0.253235822	5859.832697	0.016315956	377.5483626	0.017053691	394.6194243	238.7466651	5524556.139
San Joaquin (SJV)	2023	LDA	Aggregate	Aggregate	Electricity	8001.328468	363039.9879	40250.44007	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2023	LDA	Aggregate	Aggregate	Plug-in Hybrid	5703.269131	280683.0778	23583.01786	0.003632968	1019.712594	0.00074581	209.3363791	0.000811137	227.6724123	153.4548601	43072182.43
San Joaquin (SJV)	2023	LDT1	Aggregate	Aggregate	Gasoline	22016.87719	727225.7141	95173.38769	0.177087364	128782.4848	0.002210995	1607.892334	0.002404572	1748.666771	348.9477871	253763803.7
San Joaquin (SJV)	2023	LDT1	Aggregate	Aggregate	Diesel	6.309776167	72.3140659	18.53577151	1.484734446	107.3671846	0.235338086	17.01825383	0.24597903	17.78774375	414.8613224	30000.30901
San Joaquin (SJV)	2023	LDT1	Aggregate	Aggregate	Electricity	20.78945774	801.7854063	98.13532943	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2023	LDT1	Aggregate	Aggregate	Plug-in Hybrid	14.55955125	806.2351183	60.20374441	0.003287222	2.650273971	0.000435352	0.350995958	0.000473485	0.381740129	138.8507259	111946.3314
San Joaquin (SJV)	2023	LDT2	Aggregate	Aggregate	Gasoline	99986.64004	4006976.314	463638.6569	0.08629512	345782.5007	0.001413941	5665.62951	0.001537783	6161.858254	363.7318999	1457465108
San Joaquin (SJV)	2023	LDT2	Aggregate	Aggregate	Diesel	269.0353638	11767.77307	1277.639106	0.061214166	720.3544123	0.008011235	94.27439669	0.008373468	98.53706657	318.7179539	3750600.554
San Joaquin (SJV)	2023	LDT2	Aggregate	Aggregate	Electricity	355.2254888	12747.1166	1824.57637	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2023	LDT2	Aggregate	Aggregate	Plug-in Hybrid	577.5817002	30744.79172	2388.30033	0.003420744	105.170052	0.000556466	17.10844144	0.000605208	18.60699106	144.4906112	4442333.746
San Joaquin (SJV)	2023	LHDT1	Aggregate	Aggregate	Gasoline	9831.305478	343356.5628	146471.803	0.235185213	80752.38637	0.001657601	569.1480175	0.001802792	619.0003985	912.9880604	313480442.3
San Joaquin (SJV)	2023	LHDT1	Aggregate	Aggregate	Diesel	8858.793592	311287.7804	111432.479	2.330755495	725535.7047	0.049223952	15322.81488	0.051449641	16015.64458	637.9722222	198592957
San Joaquin (SJV)	2023	LHDT2	Aggregate	Aggregate	Gasoline	1172.202392	40932.81227	17464.06906	0.212459602	8696.568998	0.001502547	61.50348353	0.001634157	66.89064997	1016.559411	41610635.54
San Joaquin (SJV)	2023	LHDT2	Aggregate	Aggregate	Diesel	3130.564849	115648.0857	39378.56755	1.701420548	196766.0293	0.039817934	4604.86779	0.041618324	4813.079478	772.4580611	89333296.07
San Joaquin (SJV)	2023	MCY	Aggregate	Aggregate	Gasoline	12111.77426	65765.94827	24223.54852	0.662203564	43550.44533	0.001873699	123.2255786	0.001999508	131.499544	194.9805296	12823079.43
San Joaquin (SJV)	2023	MDV	Aggregate	Aggregate	Gasoline	94539.47242	3309649.733	427287.8869	0.140085846	463635.0827	0.001471948	4871.631833	0.001600804	5298.100116	449.2076881	1486720105
San Joaquin (SJV)	2023	MDV	Aggregate	Aggregate	Diesel	1386.649679	54072.49461	6485.715736	0.098873226	5346.321997	0.007485414	404.7549857	0.007823871	423.0562101	425.8213696	23025223.71
San Joaquin (SJV)	2023	MDV	Aggregate	Aggregate	Electricity	390.0562846	13969.00515	2002.100935	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2023	MDV	Aggregate	Aggregate	Plug-in Hybrid	442.7031892	21234.49182	1830.577687	0.003593775	76.31197698	0.000791101	16.79863165	0.000860395	18.27004464	151.7993554	3223382.171
San Joaquin (SJV)	2023	MH	Aggregate	Aggregate	Gasoline	1507.494843	13134.1796	150.8097841	0.429611006	5642.588109	0.001592509	20.91630543	0.001731999	22.74839057	1949.892447	25610237.6
San Joaquin (SJV)	2023	MH	Aggregate	Aggregate	Diesel	642.7961913	5646.642802	64.27961913	5.065578156	28603.51043	0.129413713	730.7530125	0.135265227	763.7944211	1079.913891	6097887.999
San Joaquin (SJV)	2023	MHDT	Aggregate	Aggregate	Gasoline	560.525111	27400.6685	11214.98642	0.750201508	20556.02284	0.001519629	41.6388593	0.001652736	45.28605865	1813.080568	49679619.61
San Joaquin (SJV)	2023	MHDT	Aggregate	Aggregate	Diesel	5658.128852	270692.8725	68765.67965	1.211733366	328007.5854	0.015414717	4172.654007	0.016111702	4361.322905	1132.106343	306453117.9
San Joaquin (SJV)	2023	MHDT	Aggregate	Aggregate	Electricity	3.29695609	78.45777058	41.48974833	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2023	MHDT	Aggregate	Aggregate	Natural Gas	61.89789664	3521.033886	557.5774665	0.080167539	282.272623	0.00143912	5.067190155	0.001565174	5.511031628	999.0438188	3517667.14
San Joaquin (SJV)	2023	OBUS	Aggregate	Aggregate	Gasoline	184.2186442	8143.534601	3685.846633	0.794962581	6473.805289	0.000922	7.508339134	0.001002759	8.166003875	1807.427062	14718844.81
San Joaquin (SJV)	2023	OBUS	Aggregate	Aggregate	Diesel	80.89530072	5887.415133	966.3779757	2.188725012	12885.93276	0.047353704	278.7909141	0.049494828	291.3966021	1422.501481	8374856.745
San Joaquin (SJV)	2023	OBUS	Aggregate	Aggregate	Natural Gas	1.988115012	121.7959509	17.69422361	0.106423293	12.96192623	0.00146284	0.178168026	0.001590972	0.193773985	1076.243929	131082.1528
San Joaquin (SJV)	2023	SBUS	Aggregate	Aggregate	Gasoline	127.6658449	7011.404807	510.6633795	0.216945516	1521.092831	0.00088974	6.238330645	0.000967674	6.784753767	797.336076	5590445.996
San Joaquin (SJV)	2023	SBUS	Aggregate	Aggregate	Diesel	488.0661519	10999.75707	7067.197879	4.721751834	51938.1231	0.024758491	272.337383	0.02587796	284.651271	1140.467306	12544863.31
San Joaquin (SJV)	2023	SBUS	Aggregate	Aggregate	Electricity	0.181653159	2.107903368	2.630337741	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2023	SBUS	Aggregate	Aggregate	Natural Gas	89.51956651	2234.606395	1296.243323	0.448527902	1002.283317	0.003378346	7.549273866	0.00367426	8.210524132	1243.143833	2777937.158
San Joaquin (SJV)	2023	UBUS	Aggregate	Aggregate	Gasoline	49.369827	3719.55506	197.479308	0.2389533	888.7999566	0.001193144	4.437965261	0.001297653	4.826692145	1824.619387	6786772.272
San Joaquin (SJV)	2023	UBUS	Aggregate	Aggregate	Diesel	78.33872382	5427.523002	313.3548953	0.343886594	1866.452401	0.006258604	33.96871733	0.00654159	35.504632	1126.835923	6115927.893
San Joaquin (SJV)	2023	UBUS	Aggregate	Aggregate	Electricity	17.15976006	766.360054	68.63904026	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2023	UBUS	Aggregate	Aggregate	Natural Gas	62.42094021	4015.877699	249.6837608	0.07656363	307.470176	0.000276696	1.111176502	0.000289207	1.161418973	1061.814103	4264115.575
21289740.08									5090250.811	86454.41121	91503.29724	9260949816				
									0.23909408	0.004060849	0.004298	434.995908				

CH4_RUNEX	N2O_RUNEX		ROG_RUNEX		TOG_RUNEX		NH3_RUNEX		CO_RUNEX		SOx_RUNEX		
0.563375114	33.80712279	0.355075645	21.30744801	3.72232986	223.3702903	5.431614994	325.9414032	0.029976819	1.798854768	221.0383932	13264.11466	0.026185849	1.571365
0.00071966	863.099484	0.253257384	303735.7346	0.015494072	18582.29521	0.017638822	21154.52859	0.21767135	261056.8206	0.076417269	91648.48374	0.015221769	18255.72
0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.316642573	32505.05673	0.297162734	4169.521721	0.079425214	1114.423567	2.417082861	33914.34501	0.866571948	12158.96257	12.16661029	170710.9945	0	0
0.00288992	28821.47315	0.005142897	51290.64327	0.011119377	110894.6827	0.016222746	161791.1114	0.033487784	333977.1019	0.882754011	8803796.211	0.002897319	28895.26
0.001476367	34.16288097	0.037614634	870.3960695	0.031785318	735.5067134	0.036185472	837.3254934	0.0031	71.73345867	0.413060683	9558.152083	0.002262246	52.34798
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.000554207	155.5565315	0.000672274	188.6958266	0.001732631	486.320283	0.002528252	709.6374154	0.019555564	5488.915883	0.256505885	71996.8612	0.001517058	425.8124
0.009417895	6848.935718	0.012438554	9045.636184	0.042731065	31075.12906	0.062341035	45336.00382	0.03704922	26943.14537	2.005019865	1458102.003	0.003449704	2508.714
0.014143464	1.022771419	0.06536157	4.726560902	0.304500462	22.01966647	0.346653531	25.06792631	0.0031	0.224173604	1.722870146	124.5877453	0.003931022	0.284268
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0005024	0.40505265	0.000610426	0.492147173	0.001567739	1.263965941	0.002287641	1.844376134	0.019403943	15.6441402	0.232094495	187.1227328	0.001372681	1.106703
0.003732464	14955.89684	0.006970916	27932.29507	0.014965372	59965.88953	0.021836123	87496.82944	0.035568831	142523.4626	1.052107602	4215770.242	0.00359586	14408.53
0.001053204	12.39386206	0.050214143	590.9086447	0.022674855	266.8325531	0.025813815	303.7711215	0.0031	36.4800965	0.1885806	2219.173704	0.003020015	35.53885
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.000522834	16.07441719	0.000635281	19.53159679	0.001631418	50.15759321	0.002380561	73.18984227	0.020152216	619.5756871	0.241521787	7425.537043	0.001428437	43.91699
0.010827264	3717.612221	0.013128761	4507.846281	0.054634885	18759.24629	0.079723096	27373.44815	0.044861296	15403.42025	1.310577454	449995.37	0.009025816	3099.073
0.010505398	3270.202164	0.100512783	31288.40125	0.226175043	70405.52723	0.25748525	80152.01187	0.146348179	45556.39994	0.661144024	205806.0557	0.006045111	1881.769
0.008199508	335.6289234	0.012300625	503.4991544	0.039074376	1599.424086	0.057017237	2333.875871	0.044968731	1840.696629	1.057040529	43267.64153	0.010049725	411.3635
0.008757288	1012.763547	0.121701082	14074.49718	0.188539246	21804.20289	0.214639397	24822.63535	0.168112493	19441.88798	0.515451528	59610.98252	0.007319433	846.4784
0.206588482	13586.48743	0.043606702	2867.836135	1.419218034	93336.21982	1.681031202	110554.6111	0.008565105	563.2922376	15.49956246	1019343.423	0.001927581	126.7692
0.00557634	18455.73175	0.009809779	32466.93403	0.024127025	79852.00253	0.035180343	116434.6131	0.034044002	112673.7207	1.329528667	4400274.197	0.004440875	14697.74
0.000885379	47.87466814	0.06708833	3627.633372	0.019061695	1030.713418	0.021700473	1173.3987	0.0031	167.6247333	0.319698068	17286.87204	0.004034874	218.1757
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.000545773	11.58920461	0.000659455	14.0031901	0.001713939	36.39462969	0.002500976	53.10695822	0.021213472	450.4573035	0.253738643	5388.01114	0.001500691	31.86641
0.015178355	199.3552448	0.026370617	346.3564149	0.065835679	864.6976276	0.096067268	1261.764748	0.04482752	588.7726961	1.539469999	20219.67546	0.019276672	253.1833
0.00661099	37.32990031	0.170140873	960.7247376	0.142330727	803.6907753	0.16203407	914.9485147	0.123415943	696.8857442	0.4894165	2763.560157	0.010232733	57.78059
0.025118156	688.2542778	0.033404281	915.2996183	0.129488383	3548.068262	0.188949145	5177.33288	0.044914482	1230.686832	2.81177333	77044.4689	0.017924147	491.1336
0.001503315	406.9366422	0.178363815	48281.81352	0.032365959	8761.234317	0.03684618	9973.998353	0.21116635	57161.22585	0.118436944	32060.03658	0.01072037	2901.928
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.769661596	2710.004562	0.203661618	717.0994581	0.010996946	38.72061798	0.785496112	2765.758427	1.06	3732.295919	2.916298507	10268.38586	0	0
0.021686647	176.6059588	0.035308936	287.5395445	0.10776265	877.5688667	0.157247006	1280.54643	0.04493501	365.9298094	2.399929617	19543.90988	0.017868257	145.5108
0.005077614	29.89401909	0.224115688	1319.462091	0.109319628	643.6100334	0.124452075	732.7010306	0.207387894	1220.978626	0.319761142	1882.566586	0.013470238	79.30489
0.836028584	101.8248964	0.219399366	26.72195436	0.011945199	1.454876855	0.85322849	103.9197754	1.06	129.103708	3.378882464	411.5342027	0	0
0.004381808	30.72263158	0.016041418	112.4728773	0.020146459	141.2549798	0.029397666	206.118935	0.045	315.5132163	0.478017073	3351.571204	0.007882479	55.26725
0.003517041	38.68659464	0.179681089	1976.448323	0.075720924	832.9111774	0.086202509	948.2066523	0.126451861	1390.939752	0.223614509	2459.70528	0.010799543	118.7924
0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.10476542	6937.928662	0.253423003	566.3006622	0.044360972	99.12931111	3.168640838	7080.665079	1.06	2368.682779	10.08708978	22540.67532	0	0
0.003900607	14.50852357	0.021147588	78.65961813	0.0129003	47.98337538	0.018824087	70.01722871	0.045	167.3799777	0.295091247	1097.608141	0.01803822	67.09415
0.002942975	15.97306479	0.177533459	963.5669301	0.063361444	343.8956943	0.072132182	391.4990771	0.19485608	1057.585857	0.070920284	384.9214752	0.010677343	57.95152
0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.638081005	10594.21068	0.216457751	869.2678548	0.038411969	154.2577703	2.693140131	10815.32139	0.97	3895.401368	27.5698014	110716.9506	0	0
146668.0101		544642.2734		527400.1003		756590.0953		1053312.747		21350521.61		90169.98	
0.00688914		0.025582382		0.024772501		0.03553778		0.049475134		1.002854968		0.004235	

Source: EMFAC2021 (v1.0.2) Emission Rates

Region Type: Sub-Area

Region: San Joaquin (SJV)

Calendar Year: 2042

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Trips	NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX				
San Joaquin (SJV)	2042	HHDT	Aggregate	Aggregate	Gasoline	0.453500541	58.02157608	9.073638822	2.189146502	127.0177303	0.001430924	0.083024448	0.00155626	0.090296662	1822.450378	105741.4433
San Joaquin (SJV)	2042	HHDT	Aggregate	Aggregate	Diesel	11833.27443	1622096.322	199066.6844	1.293933099	2098884.121	0.02587618	41973.65712	0.027046187	43871.51964	1283.339259	2081699891
San Joaquin (SJV)	2042	HHDT	Aggregate	Aggregate	Electricity	2706.623608	257521.5914	35027.94138	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2042	HHDT	Aggregate	Aggregate	Natural Gas	312.2737868	17578.95041	2499.042672	0.33485434	5886.387836	0.001882793	33.09752486	0.002047709	35.99657814	1255.579883	22071776.5
San Joaquin (SJV)	2042	LDA	Aggregate	Aggregate	Gasoline	276987.2364	1099466.3	1277977.067	0.020822815	228931.5707	0.000552083	6069.74528	0.00060044	6601.401801	241.6446173	2656705272
San Joaquin (SJV)	2042	LDA	Aggregate	Aggregate	Diesel	193.9184229	6657.722001	851.607151	0.023661648	157.5326725	0.00152539	10.15562174	0.001594361	10.61481389	194.1980734	1292916.786
San Joaquin (SJV)	2042	LDA	Aggregate	Aggregate	Electricity	36359.25506	1404080.485	170732.4877	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2042	LDA	Aggregate	Aggregate	Plug-in Hybrid	12906.35242	519410.931	53367.76727	0.002964017	1539.5429	0.000228753	118.8167683	0.00024879	129.2240765	125.2237341	65042576.33
San Joaquin (SJV)	2042	LDT1	Aggregate	Aggregate	Gasoline	18349.54321	657765.409	82150.9454	0.024658127	16219.26318	0.000625517	411.4437106	0.000680307	447.4825758	280.3762109	184421773
San Joaquin (SJV)	2042	LDT1	Aggregate	Aggregate	Diesel	0.18926268	7.45434305	0.882194142	0.031757051	0.236727954	0.004289498	0.031975389	0.00448345	0.033421174	359.1865324	2677.499631
San Joaquin (SJV)	2042	LDT1	Aggregate	Aggregate	Electricity	454.3332415	18184.5837	2159.536696	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2042	LDT1	Aggregate	Aggregate	Plug-in Hybrid	352.3731978	14586.21745	1457.063173	0.002938927	42.8678283	0.000207217	3.022517337	0.000225368	3.287263381	124.1637264	1811079.116
San Joaquin (SJV)	2042	LDT2	Aggregate	Aggregate	Gasoline	150093.0324	5731036.505	689509.0905	0.024657472	141312.8699	0.000569093	3261.494125	0.000618941	3547.172443	296.7712762	1700807018
San Joaquin (SJV)	2042	LDT2	Aggregate	Aggregate	Diesel	558.2215974	21709.14188	2586.532774	0.03204863	695.7482577	0.004308675	93.53764599	0.004503495	97.76700327	273.00466	5926696.896
San Joaquin (SJV)	2042	LDT2	Aggregate	Aggregate	Electricity	5425.180211	148219.9205	25671.96212	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2042	LDT2	Aggregate	Aggregate	Plug-in Hybrid	3831.135981	152648.4984	15841.74728	0.002950236	450.3490235	0.000216533	33.05343858	0.000235499	35.94863028	124.6414891	19026336.15
San Joaquin (SJV)	2042	LHDT1	Aggregate	Aggregate	Gasoline	6503.770803	216207.9156	96896.49435	0.026003796	5622.226624	0.001180396	255.2108647	0.001283788	277.565101	757.8254544	163847861.9
San Joaquin (SJV)	2042	LHDT1	Aggregate	Aggregate	Diesel	4470.027073	138963.4491	56227.31729	0.500983845	69618.44303	0.022668504	3150.09357	0.023693474	3292.526823	608.9097676	84616201.5
San Joaquin (SJV)	2042	LHDT1	Aggregate	Aggregate	Electricity	4870.457001	218732.2037	68522.1933	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2042	LHDT2	Aggregate	Aggregate	Gasoline	688.0771445	22481.55212	10251.32422	0.027559717	619.58522	0.001137899	25.58173381	0.001237569	27.82246919	855.0937955	19223835.73
San Joaquin (SJV)	2042	LHDT2	Aggregate	Aggregate	Diesel	2128.32184	64400.17766	26771.61132	0.659124134	42447.71136	0.026200207	1687.297983	0.027384864	1763.59011	711.8401428	45842631.66
San Joaquin (SJV)	2042	LHDT2	Aggregate	Aggregate	Electricity	1141.256266	49910.98339	15108.67311	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2042	MCY	Aggregate	Aggregate	Gasoline	11947.3086	62337.89677	23894.6172	0.488909099	30477.56493	0.002204065	137.3968006	0.002363733	147.3501719	188.8899424	11775001.73
San Joaquin (SJV)	2042	MDV	Aggregate	Aggregate	Gasoline	91434.56339	3202810.151	413047.7017	0.029862848	95645.03175	0.000595336	1906.747161	0.000647482	2073.761511	360.7761585	1155497542
San Joaquin (SJV)	2042	MDV	Aggregate	Aggregate	Diesel	1051.476917	35758.93731	4713.197367	0.015642829	559.3709295	0.001389613	49.69106738	0.001452445	51.93787694	357.8676725	12796967.67
San Joaquin (SJV)	2042	MDV	Aggregate	Aggregate	Electricity	5057.567144	136617.5614	23839.47367	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2042	MDV	Aggregate	Aggregate	Plug-in Hybrid	2442.651618	92013.16873	10100.36444	0.002954104	271.8164391	0.000222408	20.4644981	0.000241889	22.25700888	124.8049101	11483695.25
San Joaquin (SJV)	2042	MH	Aggregate	Aggregate	Gasoline	726.5634876	7316.602457	72.6854113	0.126593406	926.2336272	0.001337406	9.785265792	0.001454551	10.64236936	1948.790404	14258524.66
San Joaquin (SJV)	2042	MH	Aggregate	Aggregate	Diesel	492.0943542	4267.937262	49.20943542	2.913053396	12432.72913	0.04369297	186.4788556	0.045668572	194.9106019	1088.825127	4647037.332
San Joaquin (SJV)	2042	MHDT	Aggregate	Aggregate	Gasoline	336.2035404	17033.76861	6726.760436	0.083378248	1420.173498	0.001372936	23.38627037	0.001493193	25.43470281	1558.971763	26555164.28
San Joaquin (SJV)	2042	MHDT	Aggregate	Aggregate	Diesel	5377.441226	249292.9567	66132.07859	0.369823896	92194.49245	0.003623912	903.4156281	0.003787769	944.2640739	1000.243731	249353717.2
San Joaquin (SJV)	2042	MHDT	Aggregate	Aggregate	Electricity	3453.454965	168746.4079	43826.03177	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2042	MHDT	Aggregate	Aggregate	Natural Gas	84.9892341	3719.664569	748.262255	0.059561222	221.5477681	0.001527658	5.682377102	0.001661468	6.180103564	944.4379292	3512992.303
San Joaquin (SJV)	2042	OBUS	Aggregate	Aggregate	Gasoline	94.76214158	3141.772473	1896.000929	0.274865444	863.5646738	0.001181802	3.71295257	0.001285317	4.038174693	1561.740873	4906634.486
San Joaquin (SJV)	2042	OBUS	Aggregate	Aggregate	Diesel	109.0115166	6708.689033	1277.247476	1.243188248	8340.163367	0.022144497	148.5637182	0.023146267	155.2811103	1252.257223	8401004.299
San Joaquin (SJV)	2042	OBUS	Aggregate	Aggregate	Electricity	40.8549263	2980.487089	817.4253653	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2042	OBUS	Aggregate	Aggregate	Natural Gas	6.508933953	279.1554627	57.92951218	0.06794559	18.96738249	0.00164578	0.459428564	0.001789936	0.499670482	915.1288322	255463.2126
San Joaquin (SJV)	2042	SBUS	Aggregate	Aggregate	Gasoline	111.0998114	5957.914156	444.3992456	0.168679073	1004.975439	0.001102385	6.567913796	0.001198944	7.143205515	758.9480121	4521747.105
San Joaquin (SJV)	2042	SBUS	Aggregate	Aggregate	Diesel	310.4089174	6367.546972	4494.721124	0.815465736	5192.516376	0.005499393	35.01764155	0.005748051	36.60098391	1050.346577	6688131.168
San Joaquin (SJV)	2042	SBUS	Aggregate	Aggregate	Electricity	213.4926817	6129.524963	2850.074069	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2042	SBUS	Aggregate	Aggregate	Natural Gas	96.22311432	1974.143328	1393.310695	0.224162072	442.528059	0.003378346	6.669339472	0.003674206	7.253515192	1111.254098	2193774.862
San Joaquin (SJV)	2042	UBUS	Aggregate	Aggregate	Diesel	3.382015182	200.3502285	13.52806073	0.399248426	79.98951335	0.007530316	1.508700629	0.007870804	1.576917377	1210.039758	242431.742
San Joaquin (SJV)	2042	UBUS	Aggregate	Aggregate	Electricity	232.2122602	15744.48699	928.8490407	0	0	0	0	0	0	0	0
San Joaquin (SJV)	2042	UBUS	Aggregate	Aggregate	Natural Gas	13.62468973	807.1252061	54.49875893	0.067701043	54.64321817	0.000685541	0.553317443	0.000716538	0.578336003	1322.140365	1067132.815
						26306730.55			2862701.782		60572.42384	63831.75338			8570601248	
									0.108820128		0.002302545	0.002426442			325.7949988	

26306730.55

2862701.782

60572.42384

63831.75338

8570601248

0.108820128

0.002302545

0.002426442

325.7949988

CH4_RUNEX	N2O_RUNEX			ROG_RUNEX		TOG_RUNEX		NH3_RUNEX		CO_RUNEX		SOx_RUNEX	
0.096795454	5.616224785	0.102677335	5.957500797	0.448819132	26.04119343	0.654915824	37.99924832	0.045	2.610970924	30.53469978	1771.671407	0.018016777	1.045362
0.00052383	849.7032985	0.202190623	327972.6655	0.011277924	18293.87901	0.012839058	20826.1887	0.219776624	356498.8526	0.044034715	71428.54897	0.012152455	19712.45
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.899816676	15817.83273	0.255958173	4499.476027	0.020358268	357.8769806	0.926875751	16293.50286	0.82177446	14445.93248	7.603007099	133652.8848	0	0
0.001146158	12601.168	0.003345246	36778.5256	0.003370009	37050.77864	0.00491751	54064.40922	0.041825713	459843.0316	0.550864243	6056348.186	0.002388903	26264.24
0.000334058	2.224063706	0.030595986	203.6995661	0.007192067	47.88278215	0.00818769	54.51136401	0.0031	20.6389382	0.206438471	1374.409951	0.001840125	12.25104
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.000428973	222.8131846	0.000500855	260.1494014	0.001405742	730.1577873	0.002051256	1065.444529	0.017234877	8951.983612	0.210060524	109107.7324	0.001237964	643.0121
0.001322213	869.7058856	0.003602889	2369.855658	0.00413112	2717.308045	0.006028121	3965.089521	0.041357561	27203.57327	0.602305533	396175.7451	0.002771804	1823.197
0.000829655	0.006184534	0.056589984	0.421841157	0.017861988	0.133149385	0.020334686	0.151581723	0.0031	0.023108463	0.188156994	1.402586781	0.003403475	0.025371
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.000425973	6.21334041	0.00049804	7.264526188	0.001393843	20.33089085	0.002033892	29.6667882	0.017116096	249.6591009	0.208282381	3038.052098	0.001227485	17.90436
0.001512826	8670.059502	0.003608637	20681.23246	0.004664598	26732.98264	0.006806571	39008.70552	0.041753621	239291.5251	0.642651452	3683058.932	0.002933886	16814.21
0.00083102	18.04073496	0.043011995	933.7535095	0.017891375	388.4064019	0.020368141	442.1748656	0.0031	67.29833982	0.188943653	4101.804578	0.002586858	56.15847
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.000425944	65.01973732	0.000496152	75.73687466	0.001399206	213.5866734	0.002041718	311.6651724	0.017181401	2622.715071	0.209083819	31916.33097	0.001232208	188.0947
0.001296464	280.3057143	0.002063166	446.0727376	0.004481499	968.9356139	0.006539393	1413.868573	0.045	9729.356202	0.594369796	128507.4547	0.007491876	1619.803
0.004906937	681.8848407	0.095933982	13331.31701	0.105643457	14680.57915	0.120268052	16712.86333	0.209571052	29122.71621	0.283657339	39418.00217	0.005769729	801.7815
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.001201917	27.02096125	0.002474142	55.62254282	0.004063387	91.35123582	0.005929284	133.2995089	0.045	1011.669845	0.601277138	13517.64331	0.008453473	190.0472
0.005733155	369.2161832	0.112150704	7222.525287	0.123431446	7949.007044	0.140518495	9049.416033	0.206338469	13288.23407	0.33754159	21737.73835	0.006745047	434.3822
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.147919642	9220.999397	0.03628609	2261.998548	0.900317483	56123.89832	1.120258902	69834.58377	0.009127485	568.9882071	10.91035125	680128.3497	0.001867369	116.4079
0.001678402	5375.602556	0.003874586	12409.56307	0.005479729	17550.53217	0.007996008	25609.69534	0.041563454	133119.853	0.682630681	2186336.474	0.00356664	11423.27
0.000340866	12.18899206	0.056382198	2016.167467	0.007338636	262.4218227	0.008354549	298.7497981	0.0031	110.8527057	0.218660007	7819.049484	0.003390978	121.2578
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.000423866	39.00122258	0.000490799	45.15998406	0.00140104	128.9141665	0.002044395	188.1112491	0.017204484	1583.039087	0.209357954	19263.68879	0.001233824	113.528
0.004079153	29.84554135	0.014051993	102.8128489	0.011615682	84.98732714	0.016949576	124.0133083	0.045	329.2471106	0.161430572	1181.123317	0.019265777	140.96
0.004487832	19.1537838	0.171544842	732.1426241	0.096620373	412.3696882	0.10999587	469.4554738	0.198000955	845.0556537	0.297373961	1269.17341	0.010317171	44.03304
0.00340355	57.97529139	0.007666492	130.5892475	0.013120534	223.4921418	0.019145453	326.1192087	0.045	766.5195876	0.219358554	3736.50286	0.015412023	262.5248
0.000310764	77.47120784	0.157588807	39285.77969	0.006690658	1667.93386	0.007616805	1898.815735	0.219661342	54760.02533	0.04700927	11719.07996	0.00947171	2361.231
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.780569001	2903.454859	0.19252985	716.1464622	0.011152791	41.48464102	0.796627919	2963.188644	1.06	3942.844444	2.904206486	10802.67397	0	0
0.008057365	25.31440763	0.014652444	46.03464492	0.03842619	120.7263461	0.056071406	176.1636008	0.045	141.3797613	0.816313304	2564.670668	0.015439399	48.50708
0.002301754	15.44175156	0.197293635	1323.581649	0.049556132	332.4566765	0.056415884	378.4766192	0.213628668	1433.168304	0.16234543	1089.125006	0.011858127	79.55249
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.857033291	239.245525	0.186554999	52.07784706	0.012245315	3.418346488	0.874665335	244.1676063	1.06	295.9047905	3.435472329	959.0308675	0	0
0.001934475	11.52543503	0.015127698	90.12952447	0.008154055	48.58115823	0.011898378	70.88951205	0.045	268.106137	0.202536695	1206.696244	0.007502974	44.70207
0.000899795	5.729489461	0.165482531	1053.717789	0.019372348	123.3543369	0.022053944	140.4295227	0.210669777	1341.4497	0.085052871	541.5781535	0.009946154	63.3326
0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.488920089	4913.484988	0.226536417	447.2153568	0.035561757	70.2040055	2.540125507	5014.571821	1.06	2092.591927	7.188988644	14192.09396	0	0
0.003406448	0.682482595	0.190642257	38.19521968	0.073339828	14.69365124	0.08349185	16.72761127	0.22	44.07705026	0.086281869	17.28659226	0.011465742	2.297164
0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.234424063	3417.710395	0.269526963	217.5420052	0.0645563	52.10501666	4.325967115	3491.597099	0.97	782.9114499	49.99738	40354.14564	0	0
66851.65791			475813.13		187530.8109		274654.7127		1364775.835		13678337.28		83400.2
0.002541238			0.018087125		0.007128625		0.010440473		0.051879341		0.519955806		0.00317