

4 CUMULATIVE IMPACT ANALYSIS

CEQA defines cumulative impacts as “two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts.” Section 15130 of the CEQA Guidelines requires that an EIR evaluate potential environmental impacts that are individually limited but cumulatively considerable. These impacts can result from the proposed project alone, or together with other projects. The CEQA Guidelines state: “The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects” (CEQA Guidelines, Section 15355). A cumulative impact of concern under CEQA occurs when the net result of combined individual impacts compounds or increases other overall environmental impacts (CEQA Guidelines, Section 15355). In other words, cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. CEQA does not require an analysis of incremental effects that are not cumulatively considerable nor is there a requirement to discuss impacts which do not result in part from the project evaluated in the EIR.

CEQA Guidelines Section 15130 describes the requirements for the discussion of cumulative impacts in an EIR. It states that an EIR must discuss cumulative impacts of a project “when the project’s incremental effect is cumulatively considerable, as defined in section 15065(a)(3).” (CEQA Guidelines, Section 15130, subd. (a).) In other words, CEQA requires a lead agency to undertake a two-step analysis. First, the agency must consider whether the combined effects from the proposed project and other projects would be cumulatively significant. And second, if the answer is yes, the agency must then consider whether the proposed project’s incremental effects are cumulatively considerable. The EIR need not provide as much detail as is provided for the impacts attributable to the project alone. Instead, the discussion will reflect the severity of the impacts and their likelihood of occurrence. In addition, the CEQA Guidelines allow for a project’s contribution to be rendered less than cumulatively considerable with implementation of appropriate mitigation.

4.1 METHODS OF ANALYSIS

The General Plan Update is cumulative by design. As such, the environmental analysis of the General Plan Update presented throughout this Recirculated Draft EIR is a cumulative analysis of impacts of projected development under the General Plan Update, and this Recirculated Draft EIR contains detailed analysis of regional (cumulative) impacts at the County level. Additionally, the following discussion examines impacts associated with projected development under the General Plan Update, plus projected development for jurisdictions that neighbor Tuolumne County, in order to assess the potential for cumulative impacts from growth in the greater region. As shown in the analysis below, Tuolumne County is generally surrounded by other counties that expect limited growth or are buffered from the County by sufficient public land/open space and other factors (e.g., natural features that limit development potential), such that cumulative impacts would be limited.

When evaluating cumulative impacts, CEQA allows the use of either a list of past, present, and probable future projects (including projects outside the control of the lead agency), or a summary of projections in an adopted planning document, or a thoughtful combination of the two approaches. The cumulative analysis presented below uses a projections-based approach. As described in Chapter 2, “Project Description,” land use and growth projections for Tuolumne County, which are the subject of analysis throughout this Recirculated Draft EIR, are combined with the growth projections for the City of Sonora and adjoining counties, consistent with the population projection approach used by the Tuolumne County Transportation Commission (TCTC) in their 2016 Regional Transportation Plan (RTP). The six counties adjacent to Tuolumne County are shown in Exhibit 4-1 and described briefly below.

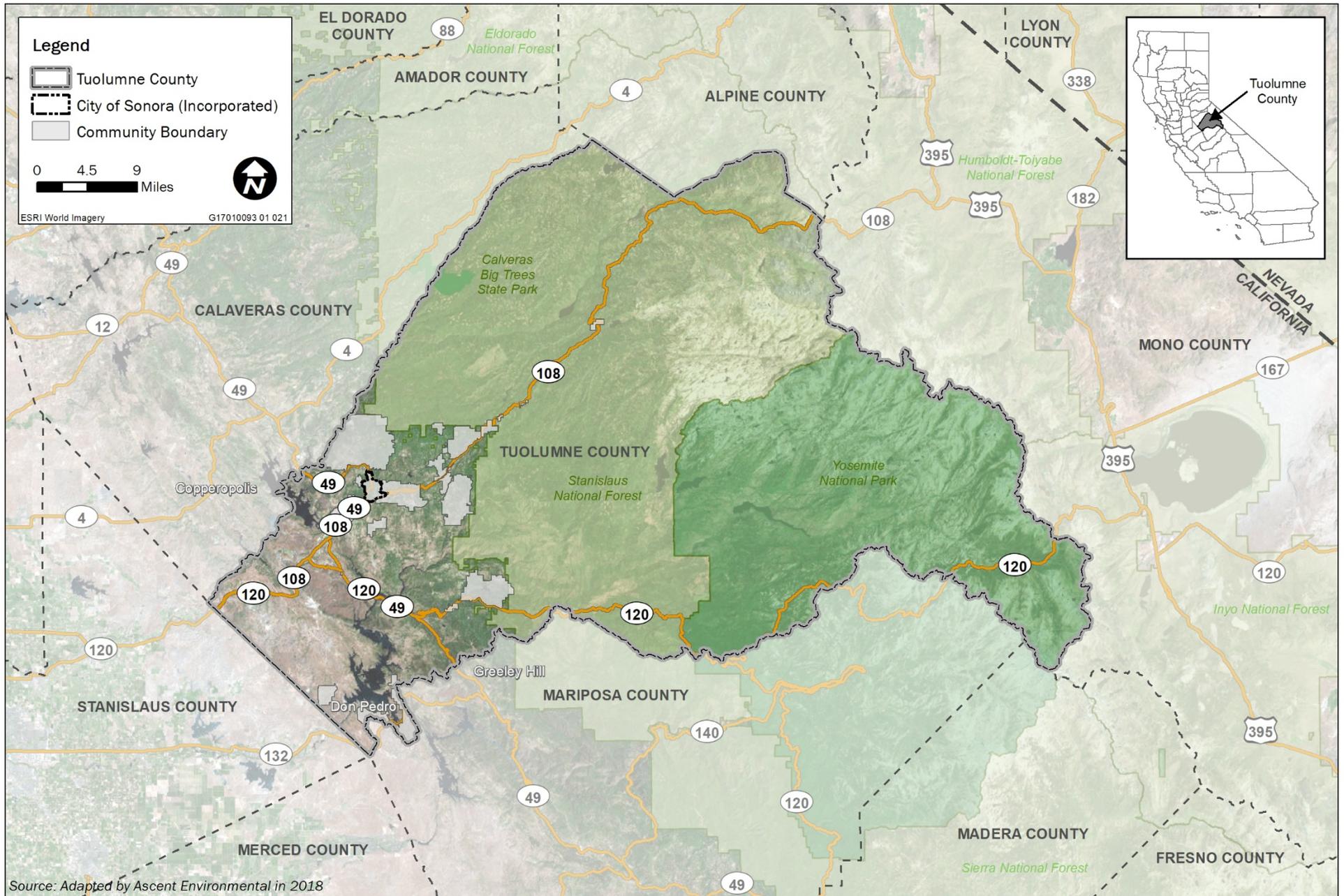


Exhibit 4-1

Tuolumne County and Surrounding Counties



The area that includes Tuolumne County, the City of Sonora, and the adjoining counties is referred to in this analysis as the “cumulative impact analysis area.” As shown in Table 4-1, the population for the six counties surrounding Tuolumne County is projected to grow from roughly 885,000 people in 2015 to 1,143,000 people by 2040.

Table 4-1 Population, Households, and Employment Projections of Cumulative Impact Analysis Area 2015 - 2040

County	Size (square miles)	Population	
		2015	2040
Alpine	738	1,150	1,143
Calaveras	1,020	44,899	40,033
Mariposa	1,449	18,088	18,761
Merced	1,935	269,870	369,542
Mono	3,049	13,841	14,991
Stanislaus	1,495	537,608	699,022

Source: Data provided by California Department of Finance, California State Association of Counties in 2018

City of Sonora: The City of Sonora is located in Tuolumne County. As mentioned above, the population projection assumed in the General Plan Update, consistent with the TCTC’s 2016 RTP, conservatively includes the City of Sonora population. However, the General Plan Update policies apply only to the unincorporated parts of the County and not to the City of Sonora; therefore, this Recirculated Draft EIR does not directly analyze and mitigate for impacts of future development in the City. Nonetheless, future development in the City is included in the Recirculated Draft EIR’s consideration of cumulative impacts.

Calaveras County: Calaveras County is located along the northeast boundary of Tuolumne County in the western Sierra Nevada. Like Tuolumne County, a substantial portion of Calaveras County is in public or quasi-public ownership and, as such, is controlled by agencies other than the county. State Route (SR) 4 traverses the county from the northeast to the southwest, roughly parallel to the boundary between Calaveras and Tuolumne counties.

Although the California Department of Finance projects a decrease in Calaveras County’s population during the Tuolumne County General Plan Update horizon (between 2015 and 2040, Table 4-1), Calaveras County is currently preparing a General Plan Update that assumes the population of the county will increase modestly, from the current population of 45,578 to 55,541 persons in 2035 (an increase of nearly 10,000 residents). While there are current population centers associated with communities along SR 4, the Draft General Plan Land Use Map maintains a buffer of Resource Management and Resource Production land use designations between the developed areas and the county boundary. The exception is the future specific plan area associated with the community of Copperopolis near the southwestern end of the county and adjacent to Tuolumne County (Calaveras County 2018).

Alpine County: Alpine County is located directly north of Tuolumne County along the crest of the Sierra Nevada. Alpine County is the smallest county in California and is comprised of roughly 95 percent government-owned-and-administered land (Alpine County 1999). No meaningful growth is projected for the County over the horizon of the Tuolumne County General Plan Update.

Mono County: Mono County is located east of Tuolumne County. Like Alpine County, roughly 94 percent of the county is in public ownership (including lands owned by the City of Los Angeles). This land use pattern, combined with the remote location of the county and the limited access, has limited development (Mono County 2015). The General Plan Map does not establish land use designations for the area of the county

that borders Tuolumne County, which is in public lands (national forest and national park) located in a high alpine area. Mono County population is expected to grow by around 1,000 people over the 25-year horizon of the Tuolumne County General Plan Update (Table 4-1).

Mariposa County: Mariposa County borders Tuolumne County to the south. Land uses adjacent to the county boundary primarily include Yosemite National Park, Agriculture/Working Landscape, and Planning Study Areas associated with Don Pedro and Greeley Hill. The Lake Don Pedro-Coulterville area is one of the few areas of the County with public water and sewer disposal systems. The Mariposa General Plan indicates that this area has the potential to accommodate substantial increases in population and there is a potential for construction of single-family residences (Mariposa County 2006). Mariposa County is projected to grow by approximately 1,700 people over the 25-year horizon of the Tuolumne County General Plan Update.

Merced County: Merced County is located southeast of Tuolumne County, in the heart of California's San Joaquin Valley. The county, which spans from the coastal range to the foothills of the Sierra Nevada, is a very productive agricultural region. Substantial growth is projected in the county over the General Plan Update horizon, with the population growing by around 100,000 people. The majority of county residents and growth is located in cities (Merced, Atwater, Livingston, Los Banos, Gustine, Dos Palos) and communities located along the San Joaquin Valley floor. No population centers are located near Tuolumne County.

Stanislaus County: Stanislaus County is located west of Tuolumne County. Similar to Merced County, Stanislaus County is located in the San Joaquin Valley and is primarily in agricultural production. The area adjacent to Tuolumne County is designated as General AG 40 Acre. With the city of Modesto at its core, Stanislaus County is the largest of the surrounding counties with a population over 537,000, and with projections to grow by more than 160,000 by 2040. Similar to Merced County, the major population centers in the county are located in cities (Modesto, Turlock, Ceres, Riverbank, Newman, Patterson, Oakdale) located along the valley floor and the base of the foothills. No major population centers are located near Tuolumne County.

4.2 CUMULATIVE IMPACTS

The following analysis examines the cumulative effects of projected development under the General Plan Update within the cumulative impact analysis area, unless otherwise noted. Because the General Plan Update anticipates development across a large geographical area (unincorporated parts of Tuolumne County) over a long period of time (through 2040), the analysis presented throughout this Recirculated Draft EIR is inherently cumulative. The potential for cumulative effects associated with projected development under the General Plan Update in combination with development of the City of Sonora and surrounding counties are summarized qualitatively below for each of the topics analyzed in Chapters 3, "Environmental Impacts and Mitigation Measures," of this Recirculated Draft EIR.

CEQA Guidelines section 15130(b)(3) directs lead agencies to define the geographic scope of the area affected by the cumulative effect and to provide a reasonable explanation for the geographic limitation used. The geographic scope defines the area within which a proposed project and related projects may contribute to a specific cumulative impact. The geographic scope of the cumulative impact analysis varies depending upon the specific environmental issue being analyzed. The geographic scope for each environmental issue analyzed in this EIR is identified in Table 4-2 below. For many of the resource areas, including geology, noise, public services, and hazards and hazardous materials, impacts would be location specific, and would not be expected to combine with development outside of the County to result in any additional impacts not already addressed in this EIR.

Table 4-2 Geographic Scope of Cumulative Impacts

Environmental Issue Area	Geographic Scope of Cumulative Analysis
Aesthetics	County ¹ and land in surrounding counties that have views of county land
Agriculture and Forest Resources	County ¹ and surrounding counties
Air Quality	Mountain Counties Air Basin
Biological Resources	County ¹ and surrounding counties (and statewide as appropriate)
Cultural Resources	Local (limited to plan area and off-site improvement areas), with regional implications
Energy	County ¹ and surrounding counties
Geology	County ¹ (impacts are primarily localized)
Global Climate Change	Global
Hazards and Hazardous Materials	County ¹ (impacts are primarily localized)
Hydrology and Water Quality	County ¹ and shared watersheds and waterways of surrounding counties
Land Use and Planning	County ¹ (impacts are primarily localized)
Noise	County ¹ (impacts are primarily localized)
Population and Housing	County ¹ and surrounding counties
Public Services	Local service areas
Recreation	County ¹ and surrounding counties
Transportation and Circulation	County ¹ and surrounding counties
Utilities and Service Systems	Local service areas
Notes:	
¹ County = Tuolumne County, including City of Sonora	
Source: Ascent 2018	

4.2.1 Aesthetics

Visual resources impacts associated with projected development under the General Plan Update are analyzed in Section 3.1, “Aesthetics,” of this Recirculated Draft EIR. Effects on scenic resources generally occur at the interface between development and the scenic resources, and tend to be localized. Impacts associated with changes to scenic resources, visual character and quality, and light and glare would be less than significant at the County scale. Consequently, the General Plan Update would not be expected to combine with development in adjacent counties to produce a considerable contribution to cumulative impacts. The potential for cumulative impacts related to visual resources is not cumulatively significant, and the impact would be less than cumulatively considerable.

4.2.2 Agricultural and Forest Resources

Projected development under the General Plan Update has the potential to result in conversion of land uses, including agricultural lands and forest land, to urban uses. Implementation of Mitigation Measure 3.2-1 would compensate for the conversion of any High-Value Agricultural Land resulting from the redesignation of Agriculture land to a non-agricultural use. However, although compensation would prevent other existing High-Value Agricultural Land from future conversion, it would not replace the lost High-Value Agricultural Farmland. Further, implementation of cumulative development outside the County, particularly in Merced and Stanislaus counties where the majority of growth would occur, would be expected to result in conversion of farmland, of much higher quality (due to its location on the San Joaquin Valley floor) could also result in

additional conversion of agriculture land and forest land to other uses. The potential for cumulative impacts related to agricultural resources is cumulatively significant, and the impact would be cumulatively considerable. Proposed mitigation of agricultural conversion in Tuolumne County, using a ratio of 1 acre conservation easements for every acre of High-Value Agricultural Land converted, is considered a maximum reasonable mitigation. This is affirmed by case law. While this mitigation would reduce the impact, it would remain cumulatively considerable.

4.2.3 Air Quality

Air quality impacts are assessed at the air-basin level. As a result, the impacts identified in Section 3.3, “Air Quality,” are inherently cumulative. Tuolumne County is located within the Mountain Counties Air Basin (MCAB), along with Amador, Calaveras, El Dorado (western), Mariposa, Nevada, Placer (central), Sierra, and Plumas County. However, the Tuolumne County portion of the MCAB is a non-attainment area for the state standards for ozone (CARB 2017) and the high levels of ozone are caused by transport of emissions from the San Francisco Bay Area, Sacramento Valley, and San Joaquin Valley. Thus, for this cumulative analysis the MCAB and the regions that affect air quality within Tuolumne County define the geographic context.

As the San Francisco Bay Area, Sacramento Valley, and San Joaquin Valley continue to grow, it is likely that ozone transfer will continue to occur, affecting levels with Tuolumne County. However, these regions are required by the Clean Air Act to prepare attainment plans that include measures to reduce these pollutants. In addition, although Tuolumne County Air Pollution Control District (TCAPCD) is not required to prepare an attainment plan, all available measures are required to be implemented by TCAPCD. As discussed in Section 3.3, “Air Quality,” numerous policies and programs are included in the General Plan Update that would reduce construction and operational-related emissions of ozone precursors. Nonetheless, due to the geography and location of Tuolumne County, it is likely that transport of ozone will continue to occur, and this existing cumulative condition would remain unchanged or worsened in the future.

In addition to emissions transport from other regions, projected development under the General Plan Update would result in associated long-term increases in emissions. As discussed in Section 3.3, “Air Quality,” the General Plan update would not result in significant impacts related to construction- or operations-related emission of criteria pollutants. TCAPCD establishes thresholds designed to help the basin achieve state ambient air quality standards; therefore, because the General Plan Update would not exceed those thresholds, the cumulative impact related to air quality is not significant. The contribution of projected development under the General Plan Update to cumulative air quality impacts would not be cumulatively considerable.

4.2.4 Biological Resources

The effect of projected development under the General Plan Update on regional biological resources is analyzed in Section 3.4, “Biological Resources,” of this Recirculated Draft EIR. As noted in Section 3.4, implementation of the proposed land use development pattern could result in regional impacts on riparian, oak woodland, or other sensitive natural communities. Similarly, development pursuant to other local and regional planning efforts within the greater cumulative impact area could also have impacts on special-status species and habitat. Regional development in surrounding counties may result in similar impacts, although the majority of cumulative development is expected in different habitat types (e.g., habitat associated with the San Joaquin Valley floor).

Implementation of Mitigation Measure 3.4-2, in combination with existing state and federal regulations, the General Plan Update policies and implementation programs, Community Plan policies, existing Oak Woodlands Conservation Fund established by the County, and Chapter 9.24 (Premature Removal Of Native Oak Trees) of the County of Tuolumne Ordinance Code would reduce impacts associated with projected development under the General Plan Update to riparian habitats, oak woodlands, and other sensitive communities. Specifically,

implementation of Mitigation Measure 3.4-2 would reduce impacts to oak woodlands resulting from projected development under the General Plan Update because it would require impact avoidance or minimization through feasible project design modification or mitigation at a ratio sufficient to offset the loss of oak woodland habitat function and values. Section 3.4, “Biological Resources,” concludes that with compliance with existing state and federal regulations, existing and proposed County policies and implementation programs, as well as mitigation measures, the proposed General Plan Update would result in less-than significant impacts related to disturbance or loss of special-status plant and animal species; loss or degradation of riparian, oak woodland, or other sensitive natural communities; loss or degradation of federally protected wetlands; disturbance or loss of animal movement corridors; potential conflict with local policies or ordinances protecting biological resources; and potential conflict with an adopted conservation plan. Because overall development anticipated under the General Plan is relatively low, would be constructed over 20 years, and would likely be dispersed throughout the many identified communities in the County, and because impacts associated with implementation of the General Plan Update on biological resources would not be individually significant, it is unlikely that impacts would meaningfully combine with impacts to species and habitat outside the County.

For these reasons, the proposed General Plan Update would not substantially reduce habitat of a fish or wildlife species or 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. The potential for cumulative impacts related to biological resources is not cumulatively significant. The contribution of projected development under the General Plan Update to cumulative biological resources impacts would not be cumulatively considerable.

4.2.5 Cultural Resources

The effect of projected development under the General Plan Update on cultural resources is analyzed in Section 3.5, “Cultural Resources,” of this Recirculated Draft EIR. While some cultural resources may have regional significance, the resources themselves are site-specific, and impacts to them are project-specific. For example, impacts to a subsurface archeological find at one project site are generally not made worse by impacts from another project to a cultural resource at another site. Rather, the resources and the effects upon them are generally independent. Therefore, the impacts of projected development under General Plan Update would not be expected to combine with impacts to cultural resources in the surrounding counties to create more considerable impacts. The potential for cumulative impacts related to cultural resources is not cumulatively significant, and the impact would be not be cumulatively considerable.

4.2.6 Energy

Potential impacts related to increased energy consumption from projected development under the General Plan Update are evaluated in Section 3.6, “Energy,” of this Recirculated Draft EIR. Construction that could occur with projected development under the General Plan Update would result in a temporary increase in fuel consumption. However, it is anticipated that fuel would not typically be consumed in a wasteful manner during construction of individual projects under the General Plan Update, as it is in the interest of construction contractors to meet project schedules and minimize costs. This translates to various efficiencies, including in the use of energy resources. Through the policies and actions of the General Plan Update, transportation-related energy would be reduced through improved facilities for alternative modes of transportation and transit-oriented development. Fuel consumption associated with vehicle trips would not be considered inefficient, wasteful, or unnecessary in comparison to that associated with other, similar rural counties. Building energy would be reduced through improvements in energy efficiency and installation of solar photovoltaics, as expressed in Policies 2.F.3, 6.3.5, and 18.A.6. Further, Policy 18.A.1 requires the County to prepare a climate action plan (CAP) that would aim to reduce GHG emissions and conserve energy. In addition, the General Plan Update emphasizes a clustered pattern of land development.

Development in surrounding counties will also consume energy; it is likely the same or similar factors governing development in these areas would result in efficient energy use: construction contractors would be encouraged to be energy efficient as a matter to business practices, as well as adherence to air quality standards that require minimization of emissions, and strict energy standards. The potential for cumulative impacts related to energy is not cumulatively significant. As such, despite other growth and development in the cumulative impact analysis area that could result in increases in the demand for energy, projected development under the General Plan Update would not result in a wasteful or inefficient use of energy and its contribution to cumulative energy impacts would not be cumulatively considerable.

4.2.7 Geology

Impacts to geology that may result from projected development under the General Plan Update are analyzed in Section 3.7, “Geology,” of this Recirculated Draft EIR. Geology and soils impacts may be related to: increased exposure to seismic hazards; increased risks associated with soil liquefaction and subsidence; and risks associated with mass wasting, expansive soils, and erosion. These effects occur independently of one another and are related to site-specific and project-specific characteristics and conditions. In addition, existing regulations specify mandatory actions that must occur during project development, which would adequately address the potential for effects from construction or operation of projects related to geology, soils, and seismicity, as noted throughout the impacts discussed in Section 3.7 of this Recirculated Draft EIR. The potential for cumulative impacts is not cumulatively significant, and the impact would not be cumulatively considerable.

4.2.8 Global Climate Change

Climate change is an inherently cumulative issue and relates to development in the region, California, and the world. Therefore, the impacts are discussed in Section 3.8, “Global Climate Change,” are also the cumulative effects of implementation of projected development under the General Plan Update. The General Plan Update includes a number of policies that would help to reduce GHG emissions, including policies that would reduce GHG emissions from the two largest emissions sources, energy and mobile source emissions. Additionally, Policy 18.A.1 of the General Plan Update requires the preparation of a CAP, or similar GHG reduction plan. However, a CAP has not yet been adopted or implemented and estimated GHG emissions associated with General Plan Update would result in a substantial increase in GHG emissions and, therefore, could potentially conflict with state’s 2017 Scoping Plan. Thus, the General Plan Update may contribute to cumulatively significant climate change effects, and impacts would be cumulatively considerable.

4.2.9 Hazards and Hazardous Materials

Impacts associated with hazards and hazardous materials related to projected development under the General Plan Update are analyzed in Section 3.9, “Hazards and Hazardous Materials,” of this Recirculated Draft EIR. Hazards and hazardous materials impacts may be related to: the transport, use, or disposal of hazardous materials; exposure to wildland fires; proximity to airports; and the potential to impair emergency response or evacuation plans. Existing regulations specify mandatory actions that must occur during project development, including related to the transport, use, and disposal of hazardous materials, which would adequately address issues pertaining to hazards and hazardous materials, as noted throughout the impact discussed in Section 3.9. Wildland fires, in contrast, can cross county lines and create a regional hazard. As described in Section 3.9, the policies and implementation programs in the General Plan Update would reduce potential risk of injury or damage from wildland fires by providing specific requirements for new and existing development to reduce fire hazard, ensuring emergency access, and providing for safe evacuation. This would result in a less-than-significant impact. The potential for cumulative impacts related to hazards and hazardous materials is not cumulatively significant, and the impact would not be cumulatively considerable.

4.2.10 Hydrology and Water Quality

Tuolumne County is upstream from counties that would experience substantial development and, therefore, cumulative impacts would occur if projected development under the General Plan Update would considerably affect hydrology and water quality. Impacts associated with water resources related to projected development under the General Plan Update are analyzed in Section 3.10, “Hydrology and Water Quality,” of this Recirculated Draft EIR. Water resources impacts may be related to: exposure of people to a significant risk of loss, injury, or death involving flooding; dam failure; and effects to waterways associated with stormwater runoff and point source contamination. Existing regulations specify mandatory actions that must occur during project development, which would adequately address the potential for construction or operation of projects to affect water resources, as noted throughout the impacts discussed in Section 3.10. It is also important to consider that overall development anticipated under the General Plan is relatively low, would be constructed over 20 years, and would likely be dispersed throughout the many identified communities in the County. Thus, the potential for cumulative impacts related to water resources is not cumulatively significant, and the impact would not be cumulatively considerable.

4.2.11 Land Use and Planning

Land use and physical development impacts associated with projected development under the General Plan Update are analyzed in Section 3.11, “Land Use and Planning,” of this Recirculated Draft EIR. The General Plan Update would be consistent with the goals of the 2016 RTP and would not contribute to a cumulative effect due to conflict with regional plans. Other impacts evaluated (i.e., conflict with local plans and potential to result in division of a community) are site-specific and do not result in regional impacts beyond the County boundary. As described in Section 3.11, no significant impacts would result from projected development under the General Plan Update. Further, as also noted in Section 3.11, the additional population, housing, and job growth forecasted for the planning period is not a result of the General Plan Update; rather the General Plan Update provides a strategy to allocate growth to optimize the way that anticipated growth is accommodated in the County. Thus, projected development under the General Plan Update would not result in displacement at the regional scale, or localized displacement that would be expected to exert development pressure on surrounding areas. Because projected development under the General Plan Update would not exert development pressure on adjacent counties through displacement of land uses, indirect effects that would otherwise be expected (effects tied to development) would not occur. Thus, the potential for cumulative impacts is not cumulatively significant, and the impact would not be cumulatively considerable.

4.2.12 Noise

Noise impacts associated with projected development under the General Plan Update are analyzed in Section 3.12, “Noise,” of this Recirculated Draft EIR. Noise impacts are based on factors related to site-specific and project-specific characteristics and conditions, including distance to noise sources, barriers between land uses and noise sources, and other factors. Projected development under the General Plan Update is not expected to substantially increase inter-regional travel, because the General Plan Update addresses how to accommodate projected growth. While traffic would be generated within the County as growth and development occurs over time, a much lesser portion of the project-generated traffic increases would occur in surrounding counties. Thus, given that most roadways within the County would experience a 1-db or less increase in traffic-noise, increases in traffic within surrounding counties would be expected to result in traffic noise increases of less than 1-db. In addition, regional traffic modeling from the RTP suggests that traffic from surrounding regions is similarly not expected to substantively affect roadway noise within Tuolumne County. Therefore, contributions of projected development under the General Plan Update to traffic noise outside the region are expected to be minimal, and the General Plan Update’s contribution to cumulative traffic noise would be less than cumulatively considerable. Further, due to the distribution characteristics of sound, construction noise and vibration impacts are generally site-specific and do not

combine with distant projects to create cumulative effects. Therefore, the contribution of projected development under the General Plan Update to cumulative noise impacts would not be cumulatively considerable, and the impact would not be cumulatively considerable.

4.2.13 Population and Housing

As discussed in Section 3.13, “Population and Housing,” projected development under the General Plan Update would not result in substantial displacement of existing residents or induce substantial population growth inside or outside of the County. The potential for cumulative impacts related to population and housing is not cumulatively significant. As such, the impacts of projected development under the General Plan Update would not be cumulatively considerable.

4.2.14 Public Services

Impacts to public services related to projected development under the General Plan Update are analyzed in Section 3.14, “Public Services,” of this Recirculated Draft EIR. This assessment includes an analysis of the need for new facilities or modification to facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools, emergency services, police protection, fire protection, and other public facilities. Public schools are provided by school districts to areas within their jurisdictions. While districts may have cross-jurisdictional boundaries, school services are still provided at the local, rather than regional, level. Law enforcement, fire protection, and emergency services are provided by local governments or fire protection districts for areas within their jurisdiction, although mutual aid agreements between agencies do help spread resources. The US Forest Service and State Department of Forestry and Fire Protection provide fire protection services within many rural areas.

The effects of projected development under the General Plan Update related to most public services are not cumulatively significant due to the localized (and inherently non-cumulative) nature of these services. In addition, project-level effects to fire protection and emergency services, law enforcement, public schools, and other public services would be less than significant. As such, the impacts of projected development under the General Plan Update would not be cumulatively considerable.

4.2.15 Recreation

Neighborhood and county parks and recreational services are provided by local governments for areas within their jurisdiction. As discussed in Section 3.15, “Recreation,” projected development under the General Plan Update is not expected to result in effects to parks due to proposed policy changes or impacts to existing parks resulting from inadequate park provision within the County or in adjacent jurisdictions. As such, the impacts of projected development under the General Plan Update would not be cumulatively considerable, and impacts would not be cumulatively considerable.

4.2.16 Transportation and Circulation

Impacts to transportation and circulation related to projected development under the General Plan Update are analyzed in Section 3.16, “Transportation and Circulation,” of this Recirculated Draft EIR. The travel demand model used to analyze the transportation operations impacts of projected development under the General Plan Update reflects the changes to future growth patterns assumed as part of the General Plan Update under years 2030 and 2040. The impact analysis relies on existing and future growth accommodated through the General Plan Update and accounts for the projected growth of the surrounding

counties. Therefore, the transportation and circulation impacts identified in Section 3.16, “Transportation and Circulation,” are inherently cumulative. Because the impacts to roadway segment and intersection operations (Impacts 3.16-1 and 3.16-2) would remain significant and unavoidable after mitigation, the potential for cumulative impacts related to transportation and circulation is cumulatively significant, and the impact would be cumulatively considerable.

4.2.17 Utilities and Service Systems

Impacts to utilities and services related to projected development under the General Plan Update are analyzed in Section 3.17, “Utilities and Service Systems,” of this Recirculated Draft EIR. This analysis includes an examination of potential impacts related to the availability and capacity of water supply, stormwater, wastewater, and solid waste disposal. The utilities identified below are generally provided or delivered on a local level, but may originate from sources outside of the local jurisdiction and/or as part of a regional distribution system. The contribution of projected development under the General Plan Update to cumulative impacts associated with the provision of utilities is discussed below.

WATER SUPPLY AND INFRASTRUCTURE

Water supply and associated infrastructure have both local and regional aspects. The rivers that provide surface water supplies travel through the region and beyond, providing water supply to jurisdictions inside and outside of the County along the way. An increase in demand and water consumption in one region has the potential to affect supplies throughout California, because the surface water supply systems are interconnected. Future growth anticipated with projected development under the General Plan Update would result in an increase in water supply needs and demand. Future growth elsewhere in the cumulative impact analysis area could also lead to potential future water shortages and depletion of existing water supplies.

As shown in Table 3.17-5, it is projected that projected development would generate additional demand for 1,725 AFY of water in TUD’s service area using the baseline generation factor. It is anticipated that there would be adequate water supplies and infrastructure capacity to serve development associated with projected development under the General Plan Update. This is a minor increase in regional water use. In addition, policies and implementation programs in the General Plan Update would seek to increase the water supply and reduce water demand in Tuolumne County. The policies and implementation programs in the Utilities and Water Supply Elements would enhance the reliability and availability of the water supply system and would require appropriate development types to be served by public water after demonstrating that appropriate supply is available. These policies also help restrict the pattern of development to more urbanized areas that are already served by public water. Therefore, the impacts of projected development under the General Plan Update would not be cumulatively significant with respect to wastewater and wastewater infrastructure, and impacts would not be cumulatively considerable.

WASTEWATER AND INFRASTRUCTURE

Wastewater service (septic tank treatment and sewer treatment) is a localized concern, as the wastewater treatment facilities and services are usually provided and regulated by local governments or special districts for areas within their jurisdiction. As such, wastewater systems and associated infrastructure within Tuolumne County would not be substantially affected by development in adjacent counties. Projected development under the General Plan Update would have less-than-significant impacts related to wastewater capacity. Therefore, the impacts of projected development under the General Plan Update would not be cumulatively significant with respect to wastewater and wastewater infrastructure, and impacts would not be cumulatively considerable.

STORMWATER AND INFRASTRUCTURE

Stormwater drainage systems are generally provided by local governments for areas within their jurisdictions or for county/city areas combined, and are not typically provided on a regional or extra-regional basis. Stormwater drainage solutions typically depend on site-specific and project-specific characteristics and implementation. As such, stormwater drainage systems within Tuolumne County would not be significantly affected by development in adjoining counties. Projected development under the General Plan Update is anticipated to result in less-than-significant impacts related to new or expanded stormwater infrastructure. Therefore, the impacts of projected development under the General Plan Update would not be cumulatively significant with respect to stormwater and stormwater infrastructure, and impacts would not be cumulatively considerable.

SOLID WASTE

Solid waste disposal is generally provided by the Merced County Regional Waste Management Authority. Because applicable landfills have capacity to accommodate solid waste generated under the life of the General Plan Update, and implementation of the policies in the Utilities Element would further reduce the amount of solid waste disposed of at landfills, impacts of projected development under the General Plan Update related to solid waste would not be cumulatively significant, and impacts would not be cumulatively considerable.

5 OTHER CEQA DISCUSSIONS

This chapter discusses other issues for which CEQA requires analysis in addition to the specific issue areas discussed in Chapter 3, “Environmental Impact Analysis.” These additional issues include the potential to induce growth and significant and irreversible impacts on the environment.

5.1 GROWTH-INDUCING IMPACTS

In accordance with Section 15126.2(d) of the State CEQA Guidelines, “an EIR must discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.” In addition, when discussing growth-inducing impacts of a proposed project, “it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment” (CEQA Guidelines, Section 15126.2(d)).

The following discusses ways in which the General Plan Update could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth can be induced in a number of ways, such as through the elimination of obstacles to growth, through the stimulation of economic activity within the region, or through the establishment of policies or other precedents that directly or indirectly encourage additional growth. Although growth inducement itself is not considered an environmental effect, it could potentially lead to environmental effects. In general, a project may foster spatial, economic, or population growth in a geographic area if the project removes an impediment to growth (e.g., the establishment of an essential public service, the provision of new access to an area, a change in zoning or general plan amendment approval) or economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base and employment expansion).

5.1.1 Population and Economic Growth

As discussed in Chapter 2, “Project Description,” the proposed project is a comprehensive update to the Tuolumne County General Plan that establishes the community’s vision for the development of Tuolumne County through the year 2040 and will serve as the fundamental land use policy document for the County. Incremental build-out by 2040 under the General Plan Update is projected (as further described in the paragraph below) to result in a net increase of 5,159 dwelling units, 938,000 square feet of commercial development, and 196,000 square feet of industrial development above existing conditions (year 2015). This represents a 24 percent increase in dwelling units, 20 percent increase in commercial development, and 11 percent increase in industrial development above existing conditions. Full build-out of every parcel in the County is not foreseeable.

It is important to acknowledge that the General Plan Update does not facilitate growth in the County; rather, it is intended to shape the location and type of development that would otherwise occur on land zoned and planned for certain uses. Land use changes proposed in the General Plan Update are almost exclusively built around conforming the land use map to underlying zoning and increasing the potential development density in identified communities, rather than in rural areas. General Plan and Community Plan policies would encourage the future growth in the County to occur in the 18 identified communities. The basis of growth projections is the Tuolumne County Transportation Council, which adopted a population projection of 63,243 residents in Tuolumne County (including the City of Sonora) by the year 2040 after considering the California Department of Finance forecasts, Census population projections, and past Tuolumne County Transportation Council adopted population projections. Projected development under the General Plan Update would add an estimated 8,906 residents to the existing population of Tuolumne County and the City of Sonora. As noted in Chapter 2, this is a conservatively high and optimistic estimate of growth. The

California Department of Finance projects little to no growth in the County in the period between 2015 and 2040 (see Chapter 2).

Further, within the General Plan Update, each identified community contains a well-defined, cohesive, and compact community built around an appropriately scaled “urban” core and community gathering places. The size of each community is based on a community boundary. Infill and mixed-use development are encouraged to take advantage of existing public infrastructure and services, rather than an extension of these services. Residential and commercial areas are encouraged by the General Plan Update to become more compact, promoting mixed-use and higher density residential development to supply housing demand.

As stated above, the General Plan Update is projected to accommodate up to 938,000 square feet of new commercial development and 196,000 square feet of new industrial development by 2040 in the unincorporated County. This would result in new employment opportunities (including short-term construction jobs) and foster economic sustainability within the County. It would also result in greater employment-generating uses that may generate a secondary demand for goods and services to support new and expanding businesses. Thus, projected development under the General Plan Update would increase the amount of economic activity resulting from the direction and strategies within the County, which would result in economic growth; however, the growth would be consistent with the regional growth forecasts that have been adopted for the County.

5.1.2 Removal of Obstacles to Growth

Growth in an area may result from the removal of physical impediments or restrictions to growth, as well as the removal of planning impediments resulting from land use plans and policies. In this context, physical growth impediments may include nonexistent or inadequate access to an area or the lack of essential public services (e.g., water service), while planning impediments may include restrictive zoning and/or general plan designations.

The General Plan Update encourages growth within the identified communities, which could intensify the uses over what currently exists in some areas. Limits in existing infrastructure capacity could be an obstacle to this growth. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with these services is expected to support new development.

Growth within the identified communities depends on expansion of service systems. The General Plan Update’s policies provide for the expansion of infrastructure to accommodate new growth within the identified communities. This includes improvements to streets to serve the projected population and provision of water, sanitary sewer, and electricity. Development consistent with the General Plan Update could necessitate the construction of additional distribution and collection systems in areas that are not currently served by public utilities. In addition, it is anticipated that upgrading/upsizing of existing utilities could occur in areas where there is significant reinvestment in vacant or underutilized areas. It is expected that utilities would be appropriately sized to accommodate proposed development, rather than oversizing for unforeseen development, which would be more costly and not supported by projected growth estimates.

5.1.3 Conclusion

Planning documents, such as general plans and regional transportation plans, serve as blueprints for future growth that is projected to occur. The General Plan Update is designed to accommodate a projected population increase. County-wide (including the City of Sonora), this increase is anticipated to be 8,906 residents (or approximately 360 people per year averaged over the 25-year period between 2015 and the 2040 planning horizon). The General Plan Update includes a comprehensive policy framework designed, in large part, to control and focus the growth and minimize potential environmental impacts associated with that growth. The General Plan Update does not include land use designations or policies that would promote growth beyond

population projections. Therefore, because growth in the County will occur with or without approval of the General Plan Update, and because the General Plan Update would not in and of itself induce growth, but would rather control and focus growth, impacts related to growth inducement would be **less than significant**.

5.2 IRREVERSIBLE ENVIRONMENTAL EFFECTS

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes. Generally, a project would result in significant irreversible environmental changes if:

- ▲ the primary and secondary impacts (such as highway improvement which provides access to a previously inaccessible area) would commit future generations to similar uses;
- ▲ the project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project;
- ▲ the project would involve a large commitment of nonrenewable resources; or
- ▲ the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Implementation of the General Plan Update would result in the long-term commitment of resources to development within identified communities. This would preclude non-urban uses for the lifespan of the General Plan Update. Restoration of the plan area to a less developed condition would not be feasible given the degree of disturbance, the urbanization of the area, and the level of capital investment. The most notable significant irreversible impacts are urbanization of vacant or rural areas and the change in visual character, increased generation of pollutants, including greenhouse gas emissions and the short-term commitment of non-renewable and/or slowly renewable natural and energy resources, such as water resources during construction activities. Resources that would be permanently and continually consumed by projected development under the General Plan Update include water, electricity, and fossil fuels; however, the amount and rate of consumption of these resources would not result in the inefficient or wasteful use of resources. See Section 3.6, "Energy," for a more detailed discussion. These unavoidable consequences of urban growth are described in the appropriate sections in Chapter 3, "Environmental Impact Analysis," of this EIR.

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by an accident associated with the project. While projected development under the General Plan Update could result in the use, transport, storage, and disposal of hazardous wastes, as described in Section 3.9, "Hazards and Hazardous Materials," all activities would be required to comply with applicable state and federal laws related to hazardous materials transport, use, and storage, which significantly reduces the likelihood and severity of accidents that could result in irreversible environmental damage.

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6 ALTERNATIVES

6.1 INTRODUCTION TO ALTERNATIVES

The California Code of Regulations (CCR) Section 15126.6(a) (State CEQA Guidelines) requires environmental impact reports (EIRs) to describe "... a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a range of potentially feasible alternatives that will avoid or substantially lessen the significant adverse impacts of a project, and foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the 'rule of reason.'" This section of the State CEQA Guidelines also provides guidance regarding what the alternatives analysis should consider. Subsection (b) further states the purpose of the alternatives analysis is as follows:

Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code [PRC] Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

The State CEQA Guidelines require that the EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative must be discussed, but in less detail than the significant effects of the project as proposed (CCR Section 15126.6[d]).

The State CEQA Guidelines further require that the "no project" alternative be considered (CCR Section 15126.6[e]). The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving the proposed project. If the no project alternative is the environmentally superior alternative, CEQA requires that the EIR "...shall also identify an environmentally superior alternative among the other alternatives." (CCR Section 15126[e][2]).

In defining "feasibility" (e.g., "... feasibly attain most of the basic objectives of the project ..."), CCR Section 15126.6(f)(1) states, in part:

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

In determining what alternatives should be considered in an EIR, it is important to consider the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to

whether an alternative is feasible or infeasible is made by the lead agency's decision-making body, here the Tuolumne County Board of Supervisors (see PRC Sections 21081.5, 21081[a][3].)

6.2 ATTAINMENT OF PROJECT OBJECTIVES

As described above, one factor that must be considered in selection of alternatives is the ability of a specific alternative to attain most of the basic objectives of the project (CCR Section 15126.6[a]). Chapter 2, "Project Description," articulated the project objectives for the General Plan Update. As summarized in Section 2.4, the general objectives of the General Plan Update are as follows.

- ▲ Adopt a County-wide General Plan that reflects the current values and vision of the communities in the County and reflects the latest legal, statutory, scientific, and technical changes and advancements.
- ▲ Update the County General Plan to achieve and enable maximum flexibility for development within the bounds of state and federal law as well as an ever-evolving legal, cultural and environmental landscape.
- ▲ Promote the delivery of efficient and cost-effective public services.
- ▲ Enhance the unique nature of identified communities while providing services and amenities for residents, businesses, and visitors on a County-wide basis.
- ▲ Minimize or eliminate restrictions and requirements that can increase delays and/or the cost to development.
- ▲ Promote development within the County that is designed to fit the needs of the County's residents, businesses, and visitors.
- ▲ Promote the stewardship of the County's natural resources, which includes providing for the productive use of natural resources, and management to reduce risks of wildland fires.
- ▲ Conserve the County's historic resources and recognize their unique value to the County's social and economic fabric.
- ▲ Allow residents and property owners to use their land to the maximum extent of the law, while respecting the values of the community.

6.3 SUMMARY OF PROJECT IMPACTS

Sections 3.1 through 3.17 of this Recirculated Draft EIR address the environmental impacts of projected development under the General Plan Update. Potentially feasible alternatives were developed with consideration of avoiding or lessening the significant adverse impacts of projected development under the General Plan Update. In summary, the following impacts have been identified as significant and unavoidable. In some instances, mitigation measures in the form of policies are proposed to substantially reduce these impacts, but they are concluded to be significant and unavoidable because the efficacy of the mitigation may be uncertain or there may be questions as to whether the measures will be adopted.

Agricultural Resources

- ▲ Loss of High-Value Agricultural Land
- ▲ Conflict with Williamson Act contracts, Agricultural preserves or Agricultural Preserve overlay districts (cancellation of contracts/removal of districts that protect agriculture)

Cultural Resources

- ▲ Change in the significance of a historical or unique archaeological resource (adverse effects on these resources)

Global Climate Change

- ▲ Generation of greenhouse gas (GHG) Emissions, either directly or indirectly (considerable contribution to global climate change)
- ▲ Conflict with any applicable plan, policy, or regulation for reducing the emission of GHGs

Noise

- ▲ Expose new sensitive land uses to traffic noise
- ▲ Expose existing sensitive receptors to traffic-noise increases
- ▲ Expose sensitive receptors to construction noise levels that exceed applicable standards
- ▲ Expose sensitive receptors to construction vibration levels that exceed applicable standards

Transportation and Circulation

- ▲ Impacts to several roadway segment operations
- ▲ Impacts to several intersection operations

Cumulative Impacts

- ▲ Contribution to cumulative loss of farmland
- ▲ Contribution to cumulative air quality impacts
- ▲ Contribution to cumulative climate change effects
- ▲ Contribution to cumulative impacts related to transportation and circulation

6.4 UPDATE TO THE ALTERNATIVES ANALYSIS

As required by Section 15126.6(a) of the State CEQA Guidelines, this chapter of the Recirculated Draft EIR examined a range of reasonable alternatives to the General Plan Update. Alternatives were selected for evaluation that could feasibly accomplish most of the basic objectives of the General Plan Update and could avoid or substantially lessen one or more of the significant effects of the General Plan Update. This Recirculated Draft EIR re-examines the alternatives considered in the Draft EIR, with revised analysis where needed to reflect the revised analysis in Chapter 3 of this document, and also considers additional alternatives.

The previous analysis included three alternatives: the CEQA-required “no project” alternative (growth in accordance with the 1996 General Plan); a Public Services alternative; and the Recent Trends, Proposed alternative. These alternatives, which were all included as scenarios in the County’s 2016 Regional Transportation Plan, are summarized below:

- ▲ **Alternative 1: No Project (Recent Trends, Existing).** Under this alternative, the current 1996 General Plan’s land use diagram would be retained and the existing policies in the current 1996 General Plan would remain in effect. The historic and current trend of primarily low-density suburban and rural development would continue.
- ▲ **Alternative 2: Public Services:** Under this alternative, new development would be allocated at higher densities in locations closer to multiple public services than under existing conditions. Although development would continue to grow within identified communities, it also would radiate outward along a select number of arterials, major collectors, and transit corridors where public water and sewer exist. The proposed policies and implementation programs in the General Plan Update would still apply to the Public Services alternative, with the exception of those that are narrowly tailored to focus development within identified communities.

- ▲ **Alternative 3: Recent Trends, Proposed.** Under this alternative, the current 1996 General Plan land use diagram would remain unchanged; however, the alternative would include the proposed policies and implementation programs in the General Plan Update (with the exception of those that are narrowly tailored to focus development within identified communities). As with the General Plan Update, this alternative would promote locating development near identified communities; however, it would generally continue the historic and current trend of primarily low-density residential development.

6.4.1 Alternatives Considered but Dismissed from Further Evaluation

The County considered a Reduced Development Alternative that would result in less overall development in the County. However, the County dismissed this alternative from further considerations for the following reasons. The amount of development anticipated to occur within the 2040 planning horizon is not considered substantial, and, according to some growth forecasts, is conservatively high. The current general plan land use element and the associated map does not constrain the capacity of growth to 2040; growth could be substantially higher, but projections (and demand) do not support this growth. Thus, the only realistic means to reduce the already low growth projections would be to either: (1) significantly downzone the majority of properties in Tuolumne County such that even the modest level of expected growth would not occur, or (2) adopt growth control policies or other policies that restrict the physical or economic ability to develop lands, which would be contrary to several fundamental objectives of the General Plan Update (examples: enable maximum flexibility for development within the bounds of state and federal law, minimize or eliminate restrictions and requirements that can increase delays and/or the cost to development). Even moderate reduction in growth would require land use restrictions and prohibitions that would conflict with the project objectives; a major reduction in growth would require extreme measures.

Several comments received on the Draft EIR addressed alternatives. Some comments related to the overall approach to the development and analysis of alternatives. Other comments identified additional alternatives to the General Plan Update for inclusion in the analysis. Additional alternatives identified include a Modified Public Services Alternative, an Existing Capacity Alternative, and a Conservation Alternative. The County has considered these alternatives and has dismissed two of them from further evaluation in the Recirculated Draft EIR. The County's consideration and reasons for dismissal are described for each of the two alternatives below.

- ▲ **Existing Capacity Alternative.** This alternative would limit development to existing buildable vacant and underused properties and would focus on renovation and reuse of these properties. This alternative would severely limit the size and type of development that could occur within the County because all potential development would be confined to a limited number of parcels. Many of the vacant parcels are located near Pine Mountain Lake in Groveland and are designed to accommodate vacation rentals. It is also probable that a large portion of the other vacant parcels have severe development constraints, such as steep slopes and lack of access to roads, water, and other utilities. This alternative is not consistent with project objectives related to development flexibility. For these reasons the County has dismissed this alternative from further analysis.
- ▲ **Conservation Alternative.** This alternative would prioritize protection of natural, agricultural, and cultural resources, as well as recreation access. Since the draft General Plan Update was released to the public in 2015, many of the policies have been revised to further prioritize resource protection including policies related to oak woodland protection. The Recirculated Draft EIR concludes that, with implementation of mitigation measures, impacts to biological resources are less than significant. The Recirculated Draft EIR also concludes that impacts related to recreation are less than significant, due to the revised parkland provision policy that is consistent with the Quimby Act and more consistent with the parkland provision policies of other nearby counties. For these reasons, this alternative is dismissed from further consideration. However, there are opportunities for an alternative to reduce impacts associated with agricultural and cultural resources, which are both identified as significant and unavoidable impacts. Therefore, additional alternatives (discussed below) are included to address these resource areas.

6.4.2 Additional Alternatives Considered in the Alternatives Analysis

In response to public comments received on the Draft EIR, this chapter of the Recirculated Draft EIR has been revised to include three additional alternatives, which are summarized below.

- ▲ **Alternative 4: Historic Structure Preservation.** This alternative is consistent with the General Plan Update with respect to the land use diagram and is primarily consistent with the proposed policy framework, but with one key difference. The Historic Structure Preservation Alternative would include policies prohibiting demolition or substantial alteration of significant historic structures (with some exceptions based on the structural condition and cost of preservation). This alternative is designed to substantially reduce significant impacts associated with historic resources.
- ▲ **Alternative 5: Williamson Act Property Preservation.** The primary difference between this alternative and the General Plan Update is that, under this alternative, the 134 acres of land designated agriculture that are currently under Williamson Act contracts, would not be redesignated to residential use. To achieve the same amount of housing identified in the General Plan Update, this alternative would require increased residential density in other areas designated for residential development. This alternative is designed to substantially reduce significant impacts associated with consistency with the Williamson Act.
- ▲ **Alternative 6: Modified Public Services.** The Modified Public Services Alternative, which was recommended as part of public comment on the originally circulated Draft EIR, would be designed to directly reduce new development outside identified communities by providing similar incentives in the General Plan Update for encouraging growth within identified communities, but also going further than the General Plan Update to create disincentives for development in rural areas. Under this alternative, no land located outside identified communities would be redesignated from Agriculture to a non-agricultural use.

Table 6-1 provides a summary comparison of the development characteristics of the General Plan Update and the alternatives. A more detailed description of the alternatives is included in the impact analysis for each alternative.

Land Use Designation	Alternatives						
	General Plan Update	Alternative 1: No Project (Recent Trends, Existing) ¹	Alternative 2: Public Services ¹	Alternative 3: Recent Trends, Proposed ¹	Alternative 4: Historic Structure Preservation	Alternative 5: Williamson Act Property Preservation	Alternative 6: Modified Public Services
Residential							
Single Family Residential	4,332 du	5,018 du	4,912 du	5,024 du	4,332 du ²	4,332 du	4,332 du
Multi-Family Residential	827 du	157 du	669 du	151 du	827 du ²	827 du	827 du
Residential Subtotal	5,159 du	5,175 du	5,581 du	5,175 du	5,159 du²	5,159 du	5,159 du
Commercial	938,000 sf	938,000 sf	1,001,000 sf	938,000 sf	938,000 sf²	938,000 sf	938,000 sf
Industrial	196,000 sf	197,000 sf	207,000 sf	196,000 sf	196,000 sf²	196,000 sf	196,000 sf
Notes: du = dwelling units, sf = square feet							
¹ Alternative information is from Tuolumne County GP and RTP Update EIR Traffic Study, Table 6: Alternative Growth Scenarios Land Use Differences, September 2015							
² Totals do not account for constraints to infill/redevelopment associated with the restrictions on historic properties under Alternative 4							
Source: data compiled by Ascent Environmental 2018							

6.5 DESCRIPTION OF ALTERNATIVES AND COMPARISON OF IMPACTS

6.5.1 Alternative 1: No Project (Recent Trends, Existing)

DESCRIPTION

The “No Project” alternative is a “business-as-usual” scenario based on current land use designations within the existing County General Plan (1996). It assumes no change in market demand for housing types and would continue the existing pattern of suburban and rural development in which low-density residential is the primary housing choice. This alternative would require full dependency on automobiles for most residences of Tuolumne County because walkable communities, defined as a 5-minute walk (0.25 mile) between home and the core of a community (shopping, jobs, recreation, community facilities and transit), would exist only within community cores. Policies would not promote a focus on developing within the communities, and it could be expected that sprawling development would persist.

IMPACT COMPARISON

Aesthetics

Whereas the General Plan Update would minimize impacts to scenic vistas from locally-designated scenic routes by promoting development primarily within identified communities, the No Project alternative would not discourage continued suburban and rural low-density residential and other development outside of identified communities. Substantial new residential development in rural areas could adversely affect existing scenic vistas of agricultural and natural landscapes from portions of SR 49 and 108 that are locally-designated scenic corridors. Existing policies in the 1996 General Plan to protect scenic vistas would continue to apply to the No Project alternative, as would the Hillside and Hilltop Guidelines and Guidelines for Development Along Scenic Routes for discretionary permits. However, the continuation of existing suburban development patterns would increase impacts associated with this alternative relative to the General Plan Update.

This alternative also would increase the geographic extent of changes to the County’s predominantly rural character, by accommodating more suburban low-density residential and other development outside the boundaries of identified communities. Although existing policies to minimize changes to visual character (discouraging strip development along the County’s arterials, encouraging cluster development that protects open space areas, and protecting the historic built environment) would continue to apply to the No Project alternative, impacts from changes to visual character would increase relative to the General Plan Update.

As with the General Plan Update, this alternative would facilitate development that would introduce new sources of light and glare, which would increase overall ambient night-time light and daytime glare from building materials. Development outside of identified communities would incrementally increase the intrusion of new sources of light and glare into rural areas. Continued implementation of Policy 17.D.7 in the existing Tuolumne Community Plan would encourage lighting design and scale that incorporates dark sky standards, minimizing and avoiding light pollution throughout the Tuolumne Planning Area, and Implementation Measure 14.A.g in the existing Jamestown Community Plan requires lighting that adheres to dark sky standards. However, impacts associated with the No Project alternative would be greater than for the General Plan Update, which includes creation and implementation of countywide policies to limit the illumination of areas surrounding new development.

Agricultural Resources

The No Project alternative would not be subject to proposed Policy 8.A.2, which would facilitate conversion of agricultural land near developed areas. The General Plan Update includes policies and implementation programs to protect agricultural land from conversion, including policies to promote agritourism to increase the viability (and reduce conversion pressure) of agricultural land, and mitigation measures are included in this Recirculated Draft EIR to reduce impacts to High-Value Agricultural Land. The No Project alternative

would not be subject to these policies or mitigation measures. However, because the General Plan Update would result in the redesignation of 4,509 acres of agricultural land to non-agricultural use including redesignation of 134 acres of land currently under Williamson Act contract, impacts associated with the No Project alternative would be less than under the General Plan Update.

Future development under current land use designations also may result in incompatibilities where residential and agricultural uses would directly abut each other. Land use conflicts would be reduced through the separation of potentially conflicting land uses, continued application of the County's Right to Farm Ordinance, and implementation of existing General Plan policies. Impacts related to land use compatibility with agricultural land would be similar.

As with the General Plan Update, existing timberland would remain in timber production under this alternative. Impacts to timberland would be similar.

Air Quality

Construction activities associated with future development under the No Project alternative would have the potential to result in temporary adverse impacts on air quality in Tuolumne County. Without the addition of policies to control emissions during construction of individual projects, impacts would be greater than under the General Plan Update.

Under the No Project alternative, emissions levels are generally forecast to decline compared to existing conditions between 2015 and 2040 despite projected future growth in the County. This is due to the state-wide continuing downward trend in emissions levels caused by the CARB rules designed to reduce emissions from cars and trucks. The No Project alternative does not incorporate increased density and other vehicle miles traveled (VMT) reducing land use strategies included under the General Plan Update. Therefore, the overall impact associated with the No Project alternative would be somewhat greater than under the General Plan Update.

The No Project alternative also would allow for siting of new sensitive receptors within close proximity to local roadways and other potential sources of toxic air pollutants. While the less compact land use pattern under this alternative would be less likely to result in proximity between sensitive uses and sources of toxic air pollutants, existing policies in the Air Quality Element do not specifically establish buffer zones to separate these uses. Thus, the No Project alternative may result in greater impacts than the General Plan Update, which includes policies to avoid impacts from toxic air pollution.

Biological Resources

Implementation of this alternative would result in greater impacts to biological resources, as more ground disturbance would occur from low density residential and other development in rural areas. This would result in greater impacts to special-status plants, animals, riparian areas and other sensitive habitat, wetlands, and/or migratory wildlife corridors outside identified communities than anticipated under implementation of the General Plan Update. As discussed in Section 3.4, "Biological Resources," there are 177 special-status animal and plant species known to occur or with potential to occur within Tuolumne County. Thirty one of these species (21 animal species and 10 plant species) are given high levels of protection by the federal government through listing under the federal Environmental Endangered Species Act (ESA) and/or by the State government through listing under the California Endangered Species Act (CESA) or Fully Protected. Without proposed policies in the Natural Resources Element and community plans of the General Plan Update to control invasive species, encourage the use of native species, establish thresholds of significance for oak woodland conversion, and recognize the reduced impacts from development on biological resources, impacts of the No Project alternative would be greater than for the General Plan Update.

Cultural Resources

The No Project alternative would have greater potential impacts on archaeological resources because it would allow ground-disturbing development in a greater area of Tuolumne County relative to the General Plan Update. On the other hand, the less compact pattern of development and less of a focus (compared to

the General Plan Update) on development in identified communities, where historic properties are more common, may result in less disturbance of the historic built environment. Adherence to State regulations would preserve human remains unearthed during future construction, and policies in the existing General Plan would protect historic and archaeological resources on a case-by-case basis. However, mitigation would be required to protect potential paleontological resources from future development. Impacts on cultural resources would be greater in some instances and less in others than under the General Plan Update; therefore, overall, the impact would be similar.

Energy

As described for the General Plan Update, development under the No Project alternative would increase electricity and propane consumption. Buildings would still be required to comply with Title 24, Part 6 of the California Building Efficiency Standards, and energy use would be reduced through increased use of solar photovoltaics and energy efficiency. However, development would not be subject to the General Plan Update policies and implementation programs that would promote transit-oriented development, improved accessibility for alternative modes of transportation, and increased transit availability. In addition, the No Project alternative would not include development and implementation of a climate action plan to reduce both transportation- and building energy-related energy consumption. Thus, while energy consumption associated with the No Project alternative would not result in wasteful, inefficient, or unnecessary consumption of energy, impacts would be greater than with implementation of the General Plan Update.

Geology

The No Project alternative would result in development consistent with current land use designations that, similar to development under the General Plan Update, may be subject to fault rupture, ground shaking, liquefaction, landslides, and soil erosion from grading on unstable slopes. Adherence to required building codes during construction would reduce these geologic and soil-related impacts. Existing policies, which would be implemented under both the No Project alternative and the General Plan Update, limit development in seismically hazardous areas; require engineering studies prior to development in landslide or unstable slope areas; establish a program for geologic, seismic, and geotechnical engineering reports for proposed developments; and maintain erosion control measures. Therefore, impacts of the No Project alternative would be similar to the General Plan Update.

Global Climate Change

Although the County would continue to apply project-level GHG thresholds for discretionary entitlements, the continuation of existing land use trends under the No Project alternative would be inconsistent with the goals of applicable GHG reduction plans and policies, including the adopted Tuolumne County Regional Blueprint Greenhouse Gas Study and Statewide goals under AB 32 and SB 32. Whereas the General Plan Update's land use scenario is designed to promote more centralized development to reduce VMT and transportation-related GHG emissions, this alternative would require auto dependency for many parts of Tuolumne County. Walkable communities, defined as a 5-minute walk (0.25 mile) between home and the core of a community, shopping, jobs, recreation, community facilities and transit, would exist only within community cores. Further, under the No Project Alternative, the County would not prepare a comprehensive plan for GHG reduction that identifies specific measures to reduce countywide and adaptation strategies for the County to appropriately adjust to the environmental effects of climate change (as required under Policy 18.A.1 of the General Plan Update). Therefore, impacts would be greater for the alternative than for the General Plan Update.

Hazards and Hazardous Materials

As with the General Plan Update, this alternative could facilitate development near known hazardous material users, construction in areas with existing hazardous materials, or accidental releases of hazardous materials during transportation. The less compact pattern of development may result in less exposure to hazardous materials in community settings. Residential development also might occur in areas designated as Moderate, High or Very High Wildland Fire Hazard areas. Compliance with federal, state, and local regulations, including implementation of existing General Plan policies, would minimize exposure to hazards

and hazardous materials. (The policies included in the General Plan Update would likely result in slightly better minimization of risk exposure.)

Continued coordination with the Tuolumne County Airport Land Use Compatibility Plan also would reduce airport-related hazards, and existing goals and policies from the Land Use and Safety elements would apply to reduce potential risks from hazardous materials, wildland fires, and proximity to airports, or to ensure emergency preparedness. Overall, impacts would be similar to the General Plan Update.

Hydrology and Water Quality

Under the No Project alternative, development facilitated by current land use designations could occur within 100-year flood zones. This alternative also would allow for development in dam inundation areas, whereas the General Plan Update would not, and would result in a greater amount of impervious surfaces from development in rural areas. The addition of impervious surfaces would increase watershed runoff, which could degrade water quality. Under the No Project alternative, there would also be fewer protections for groundwater resources. Therefore, impacts related to hydrology and water quality would be slightly greater than for the General Plan Update.

Land Use and Planning

Whereas the General Plan Update plans for development within well-defined, cohesive, and compact communities, the No Project alternative would allow a more dispersed pattern of development. This land use pattern would result in greater demands on public services, above average public service costs and greater degradation of valuable resources, and would be inconsistent with the Tuolumne Tomorrow Regional Blueprint's policies that are intended to protect environmental resources by reducing dispersed development. Therefore, the No Project alternative would have greater impacts related to inconsistency with the Tuolumne Tomorrow Regional Blueprint.

Noise

Similar to the General Plan Update, the No Project alternative would facilitate development that exposes existing sensitive receptors to noise and vibration from new construction. New and existing noise-sensitive land uses also would be exposed to traffic noise, aircraft-related noise, and noise generated from operational stationary noise sources; in comparison with the General Plan Update, the less compact land use pattern in this alternative would place fewer new sensitive receptors in more developed environments with higher traffic noise levels. The existing General Plan includes policies to reduce noise exposure by enforcing the County's noise standards, considering noise impacts from new projects on sensitive land uses, identifying potential noise conflicts early in the review process for proposed developments, and ensuring land use compatibility. This alternative would be subject to existing standards in Figure 5.C of the County's Noise Element that require new development within Noise Impact Areas identified in the Tuolumne County Airport Land Use Compatibility Plan to be located and designed to minimize aircraft-related noise exposure. The No Project alternative would have greater impacts related to aircraft noise, construction noise and vibration, and railroad noise because it would not include policies to address construction noise and vibration impacts and to buffer new sensitive uses from railroad tracks.

Population and Housing

Due to its less compact development pattern within existing developed areas, potential impacts related to potential displacement of residents would be slightly less for the No Project alternative than the General Plan Update, although the impact (as described in Section 3.13, "Population and Housing") would be less than significant. Overall growth would remain consistent with the population growth projection adopted by the Tuolumne County Transportation Council for the year 2040, although the alternative would allow a greater level of development than the General Plan Update. Overall, impacts would be similar.

Public Services

Similar to the General Plan Update, development facilitated under current land use designations would increase demand for fire protection and law enforcement services. However, review of subsequent

development by the Fire Department pursuant to existing County development review practices, the required provision of emergency access, and payment of impact mitigation fees would reduce impacts related to fire protection to less than significant, and new development may not result in the need to construct new law enforcement facilities. Although the No Project alternative would not likely result in demand for fire protection services above demand of the General Plan Update, because the No Project alternative is not designed to focus development in identified communities, implementation of the No Project alternative may result in a wider dispersion of development, which may influence response times to a greater extent. Regarding school services, the payment of State-mandated school impact fees would fully mitigate impacts related to school facilities. Impacts to libraries would also be similar, due to the similar level of growth. Overall, impacts would be similar to the impacts anticipated under the General Plan Update.

Recreation

The No Project alternative would facilitate a similar amount of development to the General Plan Update. However, under the No Project alternative, the supply of recreational facilities would not meet the County's current goal of 30 acres per 1,000 residents. The General Plan Update includes a proposed policy that would change the County's goal of 30 acres of recreational facilities per 1,000 residents to 5 acres of parkland per 1,000 residents, which is consistent with the Quimby Act (established to provide sufficient recreation for people throughout the State), and is also consistent with parkland requirements of other similar counties. Keeping the existing policy in place under the No Project alternative may result in more parkland provision than the General Plan Update, although this is uncertain because the County is not currently meeting the parkland requirements of the existing policy. Therefore, because the No Project alternative may potentially result in a greater amount of parkland provided (due to the higher level of parkland required), the impact is considered slightly less than the General Plan Update, even though the impact under the General Plan Update is less than significant.

Transportation and Circulation

Because the No Project alternative would allow a similar amount of residential, commercial, and industrial development to the General Plan Update, this development would generate a similar amount of vehicular trips. Trip generation and trip length would be greater because of a scattered land use pattern that promotes dependency on automobiles. Similar to the General Plan Update, the increase in vehicle trips would cause deficiencies in traffic flow at roadway segments and intersections.

The No Project alternative's auto-dependent land use pattern would not reduce existing design hazards for pedestrian and bicyclists in the County. As proposed, new goals and policies to increase pedestrian and bicyclist safety and walkability would not apply to the No Project alternative; impacts from design hazards would be greater.

As with the General Plan Update, development facilitated by current land use designations would be subject to applicable County standards and fire code standards, which require emergency access provisions. Compliance with existing requirements would ensure that adequate emergency access would be provided for by all new development.

Overall, VMT within the Tuolumne County region would increase as a result of regional population growth. However, as discussed in Section 3.16, "Transportation and Circulation," overall VMT would be greater under the No Project alternative (approximately 2,168,520 VMT) compared to the General Plan Update (approximately 2,152,846 VMT) in the year 2040. The higher VMT under this alternative is primarily because land use changes that are included as part of the General Plan Update which are intended to reduce VMT would not occur under this alternative.

Utilities and Service Systems

The No Project alternative would allow for a similar amount of development to the General Plan Update resulting in similar water demand and wastewater and solid waste generation. Therefore, impacts related to utilities and service systems would remain the same. Water, wastewater, and solid waste providers are projected to have enough capacity to serve new development. In addition, the County's existing Water

Quality Plan and policies and implementation programs in the existing General Plan would reduce potential impacts related to storm drainage facilities. Therefore, impacts under the No Project alternative would be similar to those anticipated with implementation of the General Plan Update.

ACHIEVEMENT OF PROJECT OBJECTIVES

The No Project alternative appears to meet some of the project objectives, including delivery of efficient and cost-effective public services and minimizing restrictions and requirements that can delay development. However, the No Project alternative does not appear to meet most of the project objectives. Implementation of the 1996 General Plan under the No Project alternative may not reflect the current values and vision of the communities or the latest legal, statutory, scientific, and technical changes and advancements. It also may not (compared to the General Plan Update) enhance the nature of identified communities, promote stewardship of natural resources, or conserve historic resources.

6.5.2 Alternative 2: Public Services

DESCRIPTION

The Public Services alternative would allocate new development at higher densities in locations closer to multiple public services, such as major transportation corridors, transit lines, public water and sewer, and parks. This alternative would focus growth based on the general availability of public infrastructure and services. Development would continue to grow within identified communities; however, in contrast to the General Plan Update, development also would radiate outward along a select number of arterials, major collectors, and transit corridors where public water and sewer exist. This radial development would create linear communities containing a mix of multi-family housing, townhouses, neighborhood commercial, and traditional neighborhoods. This alternative would result in more dependency than the General Plan Update on automobiles for residents residing beyond transit corridors and community cores. The amount of mixed-use land uses would increase by placing these uses in close proximity to transit stations and community cores, thereby increasing walkability in these areas. The policies and implementation programs in the General Plan Update would still apply to this alternative (including expansion of agritourism and associated changes to Title 17 of the County's Ordinance Code), with the exception of those that are narrowly tailored to focus development within identified communities.

IMPACT COMPARISON

Aesthetics

Whereas the General Plan Update would minimize impacts to scenic vistas from locally-designated scenic routes by channeling development to existing identified communities, new development would be associated with roadways under the Public Services alternative and would therefore branch out further from the identified communities. This new development along corridors could adversely affect existing scenic vistas of rural landscapes from portions of SR 49 and 108 that are locally designated scenic corridors. Implementation of policies in the General Plan Update would incrementally reduce effects on scenic vistas. However, the development near scenic corridors with a mix of multi-family housing, townhouses, neighborhood commercial, and traditional neighborhoods along SR 49 and 108 would have an unavoidably adverse effect on scenic vistas. Therefore, impacts associated with this alternative would increase relative to the General Plan Update.

This alternative also would increase the geographic extent of changes to the County's predominantly rural character, by allowing development to occur along transportation corridors outside the boundaries of identified communities. Proposed policies to discourage strip development along the County's arterials and to encourage cluster development that protects open space areas (which would minimize changes to rural visual character) would not apply to this alternative. While existing policies would protect the visual character

of communities with historic buildings, they would not reduce the adverse effects of development on the visual character of rural areas. Therefore, impacts would increase relative to the General Plan Update.

As with the General Plan Update, this alternative would facilitate development that would introduce new sources of light and glare, which would increase overall ambient night-time light and daytime glare from building materials. Development along transportation corridors would incrementally increase the intrusion of new sources of light and glare into rural areas. However, with implementation of the policies proposed to preserve the existing nighttime environment by limiting the illumination of areas surrounding new development, impacts would be similar (though slightly greater) to those described for the General Plan Update.

Agricultural Resources

Impacts to High-Value Agricultural Land and Williamson Act land would be incrementally greater than those of the General Plan Update because the area of potential disturbance would expand to include agricultural land along transportation corridors, potentially including additional land currently under Williamson Act contracts.

As with the General Plan Update, existing timberland would remain in timber production under this alternative. Potential land use conflicts would be reduced through the separation of potentially conflicting land uses, proposed policies, and application of the County's Right to Farm Ordinance. Impacts would be similar to those identified for the General Plan Update.

Air Quality

This alternative would allow less centralized development, which would result in more dependency on automobiles for residents residing beyond transit corridors and community cores and a greater amount of VMT in the County. This alternative would also allow for siting of new sensitive receptors within close proximity to local roadways and other potential sources of toxic air pollutants, although it is unlikely traffic volumes on adjacent roads would be sufficient to result in substantial health impacts. Impacts would be slightly greater to the General Plan Update.

Biological Resources

Implementation of this alternative would result in greater impacts to biological resources as more ground disturbance would occur for development in rural areas along transportation corridors. This would result in incrementally greater impacts to special status plants, animals, riparian areas and other sensitive habitat, wetlands, and/or migratory wildlife corridors outside developed areas than anticipated under the General Plan Update. As discussed in Section 3.4, "Biological Resources," there are 177 special-status species known to occur or with potential to occur within Tuolumne County. Thirty one of these species (21 animal species and 10 plant species) are given high levels of protection by the federal government through listing under ESA and/or by the State government through listing under CESA or Fully Protected. Similar to the General Plan Update, proposed policies would minimize impacts on special-status species and wetlands. However, overall, impacts would be greater than the General Plan Update.

Cultural Resources

This alternative would have incrementally greater impacts on cultural resources because it would facilitate ground-disturbing development in a greater area of Tuolumne County. As with the General Plan Update, proposed policies would protect historic and archaeological resources on a case-by-case basis, and adherence to State regulations would preserve human remains unearthed during construction. Nevertheless, development could adversely affect historical and unique archaeological resources and avoidance of historical and unique archaeological resources may not be possible. However, overall, impacts to cultural resources would be greater than those described for the General Plan Update.

Energy

As described for the General Plan Update, development under the Public Services alternative would increase electricity and propane consumption. Buildings would still be required to comply with Title 24, Part 6 of the California Building Efficiency Standards, and energy use would be reduced through increased use of solar photovoltaics and energy efficiency. In addition, policies and implementation programs under the General Plan Update would include transit-oriented development, improved accessibility for alternative modes of transportation, and increased transit availability that would reduce VMT, as well as development and implementation of a climate action plan to reduce both transportation- and building energy-related energy consumption. Thus, energy consumption associated with the Public Services alternative would not result in wasteful, inefficient, or unnecessary consumption of energy. Impacts would be similar to those identified for the General Plan Update.

Geology

Similar to the General Plan Update, the Public Services alternative would allow development that may be subject to fault rupture, ground-shaking, liquefaction, landslides, and soil erosion from grading on unstable slopes. Adherence to required building codes during construction would reduce these geologic and soil-related impacts. Proposed policies to limit development in seismically hazardous areas; to require engineering studies prior to development in landslide or unstable slope areas; to establish a program for geologic, seismic, and geotechnical engineering reports required for proposed developments; and to maintain erosion control measures for all grading would further minimize impacts related to geology and soils. Impacts would be similar to those identified for the General Plan Update.

Global Climate Change

Although the County would continue to apply project-level GHG thresholds for discretionary entitlements, the land use scenario under the Public Services alternative would be inconsistent with the goals of applicable GHG reduction plans and policies, including the adopted Tuolumne County Regional Blueprint Greenhouse Gas Study and AB 32/SB 32. Whereas the General Plan Update's land use scenario is designed to centralize development in communities, this alternative would allow development in transportation corridors outside of communities. Impacts related to consistency with applicable GHG reduction plans and policies would be greater.

Hazards and Hazardous Materials

As with the General Plan Update, this alternative could facilitate development near known hazardous material users, construction in areas with existing hazardous materials, or accidental releases of hazardous materials during transportation. Residential development also might occur in areas designated as Moderate, High or Very High Wildland Fire Hazard areas. However, impacts would be addressed through compliance with federal, state, and local regulations, and with General Plan policies. Similar to the General Plan Update, careful land use planning in accordance with General Plan Update policies and continued coordination with the Tuolumne County Airport Land Use Compatibility Plan would reduce airport-related hazards, and development would have no impact on adopted emergency response or evacuation plans. Impacts would be similar to those identified for the General Plan Update.

Hydrology and Water Quality

Development facilitated by the Public Services alternative within communities and along transportation corridors might occur within 100-year flood zones. Similar to the General Plan Update, policies for protection of riparian corridors would prevent development in these flood-prone areas. Furthermore, any development within a 100-year flood zone would be subject to the County's policies as set forth in the General Plan Update Public Safety Element and the community plans, which would ensure that people or property are not subject to flood risks.

Whereas the General Plan Update would not facilitate development in dam inundation areas, this alternative would allow for development in a potential dam inundation area shown in Exhibit 3.10-3 along the SR 49 corridor, near Lake Don Pedro and the Moccasin Reservoir. However, the vulnerability assessment for dam

failure in the 2018 Tuolumne County Multi-Jurisdictional Hazard Mitigation Plan (HMP) concluded that the extent of damage from any dam failure would not be great due to the small areas possibly inundated and the assumption that such an event is unlikely to happen. With implementation of General Plan policies and implementation programs to protect structures from dam failure, impacts would be similar to those identified for the General Plan Update.

Because the Public Services alternative would result in incrementally more development than would the General Plan Update and more dispersed development outside of identified communities, it would lead to a greater amount of impervious surfaces within the County. The addition of impervious surfaces would increase watershed runoff, which could degrade water quality. However, similar to the General Plan Update, impacts would be addressed through compliance with existing regulations and implementation of proposed policies. Impacts would be similar to those identified for the General Plan Update.

Land Use and Planning

Whereas the General Plan Update plans for development within well-defined, cohesive, and compact communities, this alternative would allow for linear development along major transportation corridors. By converting open space buffers between communities to developed areas, the Public Services alternative would reduce the distinctiveness of communities. Therefore, the Public Services alternative would have greater impacts related to inconsistency with the Tuolumne Tomorrow Regional Blueprint.

Noise

The Public Services alternative would have similar impacts to the General Plan Update from construction and operational noise. Existing sensitive receptors would be subject to noise and vibration from new construction, and new and existing noise-sensitive land uses would be exposed to transportation noise. However, proposed policies would reduce noise exposure.

Similar to the General Plan Update, this alternative would facilitate development that could be exposed to noise generated from operational stationary noise sources and aircraft. However, proposed policies to enforce noise standards for new development would reduce noise exposure. These impacts would be similar to the General Plan Update. Because the Public Services would likely result in development occurring in the vicinity of railroad tracks, impacts from exposure to railroad noise and vibration would also be similar.

Population and Housing

Both the General Plan Update and the Public Services alternative would facilitate new residential development in Tuolumne County, which would accommodate an increase in the population to approximately 63,243 by the year 2040. Although future redevelopment projects could displace residents temporarily during construction activities, this displacement would not be wide-spread and, given the county's vacancy rate (30.7 percent), would not likely require construction of replacement housing elsewhere. Impacts would be similar to those identified for the General Plan Update.

Public Services

Similar to the General Plan Update, development facilitated by the Public Services alternative would increase demand for fire protection and law enforcement services. However, review of subsequent development by the Fire Department pursuant to existing County development review practices, the required provision of emergency access and payment of impact mitigation fees would reduce impacts related to fire protection, and new development may not result in the need to construct new law enforcement facilities. In addition, the payment of State-mandated school impact fees would fully mitigate impacts related to school facilities. Impacts would be similar to those identified for the General Plan Update.

Recreation

The Public Services alternative would facilitate a similar amount of development as the General Plan Update, although it would allocate new development at higher densities near parks. As under the General Plan Update, this alternative would include a proposed policy that would change the County's goal of 30 acres of

recreational facilities per 1,000 residents to 5 acres of parkland per 1,000 residents. Impacts associated with the development of new parks and use of existing facilities would be similar.

Transportation and Circulation

Because the Public Services alternative would facilitate a similar amount of residential, commercial, and industrial development to the General Plan Update, this alternative would generate a similar amount of vehicular trips. Similar to the General Plan Update, the increase in vehicle trips would cause deficiencies in traffic flow at roadway segments and intersections. Although implementation of Mitigation Measures 3.16-1 and 3.16-2 would reduce traffic impacts on roadway segments and at intersections, impacts would remain significant because implementation of these measures may not be feasible.

Similar to the General Plan Update, implementation of proposed policies relating to traffic calming and improving walkability and bikeability would reduce potential impacts from design hazards. Buildout of this alternative also would not substantially increase the use of available public transit resources and would not have a significant impact on existing or planned pedestrian and bicycle infrastructure. As with the General Plan Update, development facilitated by this alternative would be subject to applicable County standards and fire department standards, which require emergency access provisions. Compliance with existing requirements would ensure that adequate emergency access would be provided for by all new development.

Overall, VMT within the Tuolumne County region would increase as a result of regional population growth. However, overall VMT would be greater under the Public Services alternative (approximately 2,167,632 VMT¹) compared to the General Plan Update (approximately 2,152,846 VMT) in the year 2040.

Utilities and Service Systems

The Public Services alternative would allocate new development at higher densities in locations closer to public water infrastructure in communities and along major transportation corridors. This alternative would allow for a similar amount of development to the General Plan Update, resulting in similar water demand and wastewater and solid waste generation. The need to extend infrastructure would be slightly reduced under this alternative. Water, wastewater, and solid waste providers are projected to have enough capacity to serve new development. Therefore, these impacts would be similar or less than those identified for the General Plan Update.

ACHIEVEMENT OF PROJECT OBJECTIVES

This alternative appears to meet the overall objectives of the General Plan Update because it would implement the same policies and would only slightly change the development pattern, resulting in less centralized development. This development pattern may be inconsistent with the General Plan Update objective related to enhancing the unique nature of identified communities.

6.5.3 Alternative 3: Recent Trends, Proposed

DESCRIPTION

This alternative represents an intermediate land-use scenario with a density in-between the conditions in the year 2010 (prior to the adoption of the Tuolumne Tomorrow Regional Blueprint and the adoption of the Distinctive Communities Growth Scenario) and the General Plan Update. This alternative would generally continue the existing pattern of development, in which low density residential is the primary type of residential development. This alternative would require more auto dependency for many parts of Tuolumne County because walkable communities, defined as a 5-minute walk (0.25 mile) between home and the core of a community, shopping, jobs, recreation, community facilities and transit, would exist only within community cores. This alternative would promote more development near identified communities, somewhat

¹ Tuolumne County GP and RTP Update Traffic Study, Wood Rogers (September 2015). See Appendix C for full Traffic Study.

similar to the General Plan Update, but not to the same level or density as the General Plan Update. Thus, while this alternative would have some similar goals and policies for land use as the General Plan Update, it would also maintain some of the existing development trends similar to conditions prior to the year 2010 (when the Tuolumne Tomorrow Regional Blueprint was adopted). The policies and implementation programs in the General Plan Update would still apply to this alternative (including expansion of agritourism and associated changes to Title 17 of the County's Ordinance Code), with the exception of ones that are narrowly tailored to focus development within identified communities.

IMPACT COMPARISON

Aesthetics

The Recent Trends, Proposed alternative would not include all of the General Plan Update policies that minimize impacts to scenic vistas from locally designated scenic routes by encouraging residential development near identified communities. New residential development in rural areas could adversely affect existing scenic vistas of agricultural and natural landscapes from portions of SR 49 and SR 108 that are locally designated scenic corridors. Implementation of policies in the General Plan Update would incrementally reduce effects on scenic vistas. However, potential development along SR 49 and 108 would have an unavoidably adverse effect on scenic vistas. Therefore, impacts associated with this alternative would be greater.

This alternative also would increase the geographic extent of changes to the County's predominantly rural character, by promoting a greater degree of dispersed residential development to occur outside the boundaries of identified communities. Proposed policies to discourage strip development along the County's arterials and to encourage cluster development that protects open space areas would minimize changes to rural visual character. In addition, policies would protect the visual character of communities with historic buildings. These policies, however, would not fully reduce the adverse effects of development on the visual character of rural areas. Therefore, impacts would be greater.

As with the General Plan Update, this alternative would facilitate development that would introduce new sources of light and glare, which would increase overall ambient night-time light and daytime glare from building materials. Development outside of identified communities would incrementally increase the intrusion of new sources of light and glare into rural areas. However, impacts would remain similar to the General Plan Update through the incorporation of policies designed to regulate lighting.

Agricultural Resources

Because this alternative would retain existing land use designations and would generally continue the existing pattern of more dispersed development, the area of potential disturbance would expand to include agricultural land outside of identified communities. Impacts to High-Value Agricultural Land and Williamson Act land would be incrementally greater than those of the General Plan Update and would remain significant and unavoidable.

As with the General Plan Update, existing timberland would remain in timber production under this alternative. Impacts to timberland would be similar to the General Plan Update. This alternative also would alter the present land use pattern in portions of the County, but land use conflicts between residential and agricultural uses would be reduced through the separation of potentially conflicting land uses, proposed policies, and application of the County's Right to Farm Ordinance. Impacts would be similar to the General Plan Update.

Air Quality

Construction activities associated with future development under the Recent Trends, Proposed alternative would have the potential to result in temporary adverse impacts on air quality in Tuolumne County. However, with implementation of policies and implementation measures to control emissions during construction of individual projects, impacts would be similar to the General Plan Update.

In comparison to the General Plan Update, long-term operational emissions would be similar under this alternative. However, relative to future “no project” conditions, this alternative would increase density within community cores, reducing VMT and associated emissions from vehicular travel. Impacts would likely remain similar to the General Plan Update.

Similar to the General Plan Update, this alternative would allow for siting of new sensitive receptors within close proximity to local roadways and other potential sources of toxic air pollutants. However, the less compact land use pattern under this alternative would be less likely to result in proximity between sensitive uses and sources of toxic air pollutants. The exposure of new sensitive receptors to toxic air pollutants, impacts would be slightly less than the General Plan Update.

Biological Resources

Implementation of this alternative would result in greater impacts to biological resources as more ground disturbance would occur for scattered development in rural areas. This would result in incrementally greater impacts to special status plants, animals, riparian areas and other sensitive habitat, wetlands, and/or migratory wildlife corridors outside developed areas than anticipated under the General Plan Update. As discussed in Section 3.4, “Biological Resources,” there are 177 special-status species known to occur or with potential to occur within Tuolumne County. Thirty one of these species (21 animal species and 10 plant species) are given high levels of protection by the federal government through listing under FESA and/or by the State government through listing under CESA or Fully Protected. Similar to the General Plan Update, proposed policies would minimize impacts on special-status species and wetlands. However, with implementation of mitigation measures, impacts on sensitive habitats and wildlife movement would be slightly greater than the General Plan Update.

Cultural Resources

This alternative would have incrementally greater impacts on cultural resources, in part because it would allow ground-disturbing development in a greater area of Tuolumne County. On the other hand, the less compact pattern of development may result in less disturbance of the historic built environment. As with the General Plan Update, proposed policies would protect historic and archaeological resources on a case-by-case basis, and adherence to State regulations would preserve human remains unearthed during construction. Overall impacts on cultural resources, similar to the General Plan Update, would be significant and unavoidable; however, the impact would be slightly greater under the alternative, due to the larger overall disturbance area.

Energy

As described for the General Plan Update, development under the Recent Trends, Proposed alternative would increase electricity and propane consumption. Buildings would still be required to comply with Title 24, Part 6 of the California Building Efficiency Standards, and energy use would be reduced through increased use of solar photovoltaics and energy efficiency. In addition, policies and implementation programs under the General Plan Update would include transit-oriented development, improved accessibility for alternative modes of transportation, and increased transit availability that would reduce VMT, as well as development and implementation of a climate action plan to reduce both transportation- and building energy-related energy consumption. Thus, energy consumption associated with the Recent Trends, Proposed alternative would not result in wasteful, inefficient, or unnecessary consumption of energy. Impacts would be similar to those identified for the General Plan Update.

Geology

Similar to the General Plan Update, the Recent Trends, Proposed alternative would allow development that may be subject to fault rupture, ground-shaking, liquefaction, landslides, and soil erosion from grading on unstable slopes. Adherence to required building codes during construction would reduce these geologic and soil-related impacts. Proposed policies to limit development in seismically hazardous areas; to require engineering studies prior to development in landslide or unstable slope areas; to establish a program for geologic, seismic, and geotechnical engineering reports required for proposed developments; and to

maintain erosion control measures for all grading would further minimize impacts related to geology and soils. Impacts would be similar to the General Plan Update.

Global Climate Change

Relative to the General Plan Update, this alternative would result in a similar amount of construction-related GHG emissions. Furthermore, this alternative would allow less centralized development, which would result in some dependency on automobiles for residents residing beyond transit corridors and community cores and would increase VMT and mobile emissions in the County.

Although the County would continue to apply project-level GHG thresholds for discretionary entitlements, the general continuation of existing land use trends under the Recent Trends, Proposed alternative would be largely inconsistent with the goals of applicable GHG reduction plans and policies, including the adopted Tuolumne County Regional Blueprint Greenhouse Gas Study and AB 32/SB 32. Whereas the General Plan Update's land use scenario is designed to centralize development to reduce VMT and transportation-related GHG emissions, this alternative would likely result in a greater amount of residential development outside of identified communities. This alternative would require auto dependency for many parts of Tuolumne County, because walkable communities, defined as a 5-minute walk (0.25) mile between home and the core of a community, shopping, jobs, recreation, community facilities and transit, would exist only within identified community cores. Because this land use scenario would be largely inconsistent with applicable plans and policies to reduce GHG emissions, impacts would be greater than for the General Plan Update.

Hazards and Hazardous Materials

Overall impacts relating to hazards would be similar to those of the General Plan Update. As with the General Plan Update, this alternative could facilitate development near known hazardous material users, construction in areas with existing hazardous materials, or accidental releases of hazardous materials during transportation. The less compact pattern of development may result in less exposure to hazardous materials in community settings. Residential development also might occur in areas designated as Moderate, High or Very High Wildland Fire Hazard areas. However, impacts would remain less than significant given compliance with federal, state, and local regulations, and with General Plan policies. Similar to the General Plan Update, careful land use planning in accordance with General Plan Update policies and continued coordination with the Tuolumne County Airport Land Use Compatibility Plan would minimize airport-related hazards, and development would have not substantially affect adopted emergency response or evacuation plans.

Hydrology and Water Quality

Development facilitated by the Recent Trends, Proposed alternative could occur within 100-year flood zones. Similar to the General Plan Update, policies for protection of riparian corridors would prevent development in these flood-prone areas. Furthermore, any development within a 100-year flood zone would be subject to the County's policies as set forth in the General Plan Update Natural Hazards Element and the community plans, which would ensure that people or property are not subject to flood risks. Impacts would be similar to the General Plan Update.

Whereas the General Plan Update would not facilitate development in dam inundation areas, this alternative would allow for future development in a potential dam inundation areas associated with several reservoirs. However, the vulnerability assessment for dam failure in the 2018 Tuolumne County Multi-Jurisdictional HMP concluded that the extent of damage from any dam failure would not be great due to the small areas possibly inundated, and the assumption that such an event is unlikely to happen. With implementation of General Plan policies and implementation programs to protect structures from dam failure, impacts would be similar to the General Plan Update.

Buildout of the Recent Trends, Proposed alternative would result in a similar amount of development and associated impervious surfaces within the County. The addition of impervious surfaces would increase watershed runoff, which could degrade water quality. However, similar to the General Plan Update, impacts

would be similar to the General Plan Update given compliance with existing regulations and implementation of proposed policies.

Land Use and Planning

Similar to the General Plan Update, existing identified community boundaries may be expanded to allow growth to occur near identified community nodes under the Recent Trends, Proposed alternative. Whereas the General Plan Update plans for development within well-defined, cohesive, and compact communities, this alternative would encourage more scattered development outside of communities. By converting open space buffers between communities to developed areas, the Recent Trends, Proposed alternative would reduce the distinctiveness of communities. Therefore, the Recent Trends, Proposed alternative would have greater impacts related to inconsistency with the Tuolumne Tomorrow Regional Blueprint.

The less compact pattern of development under this alternative would not physically divide established communities. Potential impacts would be similar to the General Plan Update.

Noise

The Recent Trends, Proposed alternative would have similar impacts to the General Plan Update from construction and operational noise. Existing sensitive receptors would be subject to noise and vibration from new construction, and new and existing noise-sensitive land uses would be exposed to transportation noise. In comparison with the General Plan Update, the less compact land use pattern in this alternative would place fewer new sensitive receptors in developed environments with higher traffic noise levels. Proposed policies also would reduce noise exposure. These impacts would be similar to the General Plan Update.

Similar to the General Plan Update, this alternative would facilitate development that could be exposed to noise generated from operational stationary noise sources and aircraft. However, proposed policies to enforce noise standards for new development would reduce noise exposure. These impacts would be similar to the General Plan Update. Impacts from exposure to railroad noise and vibration would also be similar to the General Plan Update.

Population and Housing

Both the General Plan Update and the Recent Trends, Proposed alternative could temporarily displace residents if redevelopment of existing residential structures occurs. Impacts from displacement would remain less than significant. Overall growth would remain consistent with the population growth projection adopted by the Tuolumne County Transportation Council for the year 2040. Impacts would be similar to the General Plan Update.

Public Services

Similar to the General Plan Update, development facilitated by the Recent Trends, Proposed alternative would increase demand for fire protection and law enforcement services. However, review of subsequent development by the Fire Department pursuant to existing County development review practices, the required provision of emergency access, and payment of impact mitigation fees would reduce impacts related to fire protection to less than significant, and new development would not result in the need to construct new law enforcement facilities. In addition, the payment of State-mandated school impact fees would fully mitigate impacts related to school facilities. These impacts would be similar to the General Plan Update.

Recreation

The Recent Trends, Proposed alternative would facilitate a similar amount of development as the General Plan Update, although it would more dispersed and less dense than under the General Plan Update. As under the General Plan Update, this alternative would include a proposed policy that would change the County's goal of 30 acres of recreational facilities per 1,000 residents to 5 acres of parkland per 1,000 residents. Impacts associated with the development of new parks and use of existing facilities would be similar.

Transportation and Circulation

Because the Recent Trends, Proposed alternative would facilitate a similar amount of residential, commercial, and industrial development to the General Plan Update, this development would generate a similar amount of vehicular trips. However, the more scattered land use pattern under this alternative would likely result in greater auto-dependency, a slight increase in trip generation, and longer trip lengths. The increases in trip generation and trip length would cause greater deficiencies in traffic flow at roadway segments and intersections. Although, similar to the General Plan Update, implementation of mitigation measures would reduce traffic impacts on roadway segments and at intersections, impacts would likely be slightly greater than the General Plan Update.

Similar to the General Plan Update, implementation of proposed policies relating to traffic calming and improving walkability and bikeability would reduce potential impacts from design hazards to a less-than-significant level. Buildout of this alternative also would not incrementally increase the use of available public transit resources and would not have a significant impact on existing or planned pedestrian and bicycle infrastructure. As with General Plan Update, development facilitated by this alternative would be subject to applicable County standards and fire department standards, which require emergency access provisions. Compliance with existing requirements would ensure that adequate emergency access would be provided for by all new development. Impacts would be similar to the General Plan Update.

Overall, vehicles miles traveled (VMT) within the Tuolumne County region would increase as a result of regional population growth. However, overall VMT would be greater under the Recent Trends, Proposed alternative (approximately 2,167,134 VMT) compared to the General Plan Update (approximately 2,152,846 VMT) in the year 2040. The higher VMT under this alternative is primarily because land use changes that are included as part of the General Plan Update which are intended to reduce VMT would not occur under this alternative.

Utilities and Service Systems

The Recent Trends, Proposed alternative would allow for a similar amount of development to the General Plan Update resulting in similar water demand and wastewater and solid waste generation. Therefore, impacts related to utilities and service systems would remain the same. Water, wastewater, and solid waste providers are projected to have enough capacity to serve new development. In addition, the County's existing Water Quality Plan and policies and implementation programs in the General Plan Update would reduce potential impacts related to storm drainage facilities. Therefore, these impacts would be similar to the General Plan Update.

ACHIEVEMENT OF PROJECT OBJECTIVES

This alternative appears to meet most of the overall objectives of the General Plan Update because it would implement the same policies but would change the development pattern and type, resulting in more dispersed, lower density development. This development pattern may be inconsistent with the General Plan Update objectives related to enhancing the unique nature of identified communities, providing efficient public services, and promoting stewardship of natural resources.

6.5.4 Alternative 4: Historic Structure Preservation

DESCRIPTION

The Historic Structure Preservation alternative is designed to reduce significant impacts to historic resources that could potentially result from projected development under the General Plan Update. This alternative would result in a similar level of development as the General Plan Update and would result in an overall pattern of development consistent with the General Plan Update. However, under this alternative, policy provisions would be included that would prohibit, with some exceptions, demolition or substantial alteration of a significant historic structure. The policy would focus on preserving historic structures that are in habitable/occupiable

condition and that are eligible for listing on the California Register of Historical Resources (CRHR) or the National Register of Historic Places. Exceptions to the policy would include proposed demolition or substantial alteration of structures that are not eligible for listing or structures that are eligible but are not in a habitable/occupiable condition (or otherwise demonstrated to be in a condition that would result in an extraordinary financial burden to preserve and maintain). Other than the policies related to historic resources, the policy framework of this alternative would be similar to the General Plan Update (including expansion of agritourism and associated changes to Title 17 of the County's Ordinance Code).

IMPACT COMPARISON

Because the Historic Structure Preservation alternative differs from the General Plan Update only in terms of policies related to historic structures, this impact analysis focuses only on impacts that involve historic resources: Aesthetics and Cultural Resources. All other environmental impacts associated with the alternative would be substantially similar to the General Plan Update. It should be noted that although the restrictions identified in this alternative could result in some constraints to redevelopment in identified communities where historic structures are more concentrated, given the limited number of known historic resources in these communities (there are currently 19 NRHP listings and 20 California Historical Landmarks in the County), it is not likely that the restrictions for altering known or currently unknown historic structures would pose a major impediment to overall infill/redevelopment within identified communities. Therefore, it is not assumed that this alternative would result in more development locating outside identified communities.

Aesthetics

Historic structures are an important component of the aesthetic quality of the communities experienced by motorists, bicyclists, and pedestrians on roadways in the County. These structures also play an integral part in defining the character of the communities. The Historic Structure Preservation alternative would reduce visual changes that could affect the quality of a scenic vista or resource that can be seen from a visually sensitive location (particularly roadways) and would reduce the likelihood that there would be substantial change to the visual character of the County. The General Plan Update would not result in substantial adverse effects related to visual resources; however, this alternative would result in even less impact. Overall, the impact would be slightly less than the General Plan Update.

Cultural Resources

This alternative would limit redevelopment in communities where there are known historical resources (e.g., the communities of Columbia, Groveland, Jamestown, and Tuolumne). With implementation of the Historic Structure Preservation alternative, direct effects on known historical resources, including 19 NRHP listings and 20 California Historical Landmarks, would generally be avoided. By prohibiting the demolition or substantial alteration of a significant historic structure, this alternative would limit the potential for a change in the historical significance of these existing resources. In addition, General Plan Update policies and existing regulations pertaining to the protection of cultural resources would reduce impacts to such resources, as identified for the proposed plan.

This alternative would generally avoid impacts to significant historical resources, but provides exceptions where demolition or substantial alteration of structures could still occur. Effects on historical structures would be substantially reduced. However, because a change in the significance of a historical resource could still occur, and recordation of a significant historic resource does not constitute adequate mitigation for a substantial adverse change to that resource, impacts would remain significant and unavoidable. Nevertheless, this alternative would result in less impact to historic resources than the General Plan Update.

ACHIEVEMENT OF PROJECT OBJECTIVES

This alternative would meet some of the overall objectives; however, the alternative may present challenges for accommodating projected growth while defining where and how development would occur. The alternative would, similar to the General Plan Update, focus development within identified communities, and

historic structures are more common and more concentrated in existing developed communities. As mentioned above, avoiding significant historic structures, as required by the alternative, could pose a constraint to individual rehabilitation/redevelopment projects within identified communities that contain these resources; however, given the limited number of historic resources in these communities, it is not likely that the constraints would pose a major impediment to overall infill/redevelopment within identified communities. This alternative may be inconsistent with project objectives to achieve and enable maximum flexibility for development, minimize or eliminate restrictions and requirements that can increase costs and delays of development, and allowing residents and property owners to use their land to the maximum extent of the law while respecting the values of the community.

6.5.5 Alternative 5: Williamson Act Property Preservation

DESCRIPTION

The Williamson Act Property Preservation alternative is designed to reduce significant impacts related to proposed redesignation of approximately 134 acres of agricultural land currently under Williamson Act contract to residential use. Under the alternative, the 134 acres of land would remain designated Agricultural rather than redesignated Large Lot Residential (16 acres), Low Density Residential (26 acres) and Rural Residential (92 acres) under the General Plan Update. To achieve the same amount of housing identified in the General Plan Update, this alternative would require increased residential density in other areas designated for residential development. This alternative would be consistent with the intent of the Williamson Act. Apart from the 134 acres that would remain designated Agricultural, this alternative would result in an overall pattern of development consistent with the General Plan Update. Also, the policy framework of this alternative would be similar to the General Plan Update (including expansion of agritourism and associated changes to Title 17 of the County's Ordinance Code).

IMPACT COMPARISON

The Williamson Act Property Preservation alternative is identical to the General Plan Update, except for the 134 acres of land under Williamson Act contract that would not be redesignated from Agricultural to residential use. Generally, preserving 134 additional acres of undeveloped agricultural land would result in reduction of environmental impacts related to construction and operation of development that would be anticipated under the General Plan Update. This is because there would be less grading and other ground disturbance and there would likely be lower VMT (and associated air pollutant and GHG emission) because housing would not be provided on these relatively rural agricultural properties. On a countywide basis, 134 acres constitutes a fraction of 1 percent of the total number of acres designated for development under the General Plan Update; therefore, preserving this land constitutes only a minor impact reduction for most environmental issue areas. The exception is Agricultural Resources, which is discussed in more detail below.

Agricultural Resources

As shown in Figure 3.2-1, a substantial portion of western Tuolumne County (122,905 acres) is under Williamson Act contracts for the preservation of agricultural land. The General Plan Update would redesignate 134 acres of individual agricultural parcels that are currently under Williamson Act contracts to residential uses. The Williamson Act Property Preservation alternative would not redesignate any land currently under Williamson Act contract.

The Williamson Act Property Preservation alternative would reduce impacts associated with the loss of High-Value Agricultural Land because land under Williamson Act contract would not be re-designated. However, 4,379 acres of agricultural land would continue to be redesignated. With implementation of Mitigation Measure 3.2-1, this impact would remain significant and unavoidable. The potential for conflicts with forest and timber land, as well as conflicts between agricultural land use and the identified communities would remain less than significant.

The Williamson Act Property Preservation alternative would not result in conflict with the overarching intent of the Williamson Act. In addition, this alternative would be subject to the same policies as the General Plan Update, including those designed to reduce indirect pressure to convert agriculture to non-agricultural uses through limiting the expansion of public services and requiring land use buffers. Conflicts with Williamson Act contracts would be reduced, but the proposed redesignation of 1,7397 acres of land in Tuolumne County that are currently within an agricultural preserve would continue to be a significant impact.

ACHIEVEMENT OF PROJECT OBJECTIVES

The Williamson Act Preservation alternative would achieve many of the General Plan Update objectives, including those that promote stewardship of the County's natural resources. However, because land use designations would be based on the presence of Williamson Act contracts, some of which are currently in non-renewal and the remainder of which could go through the non-renewal process during the life of the General Plan Update, this alternative could unnecessarily restrict the development potential of 134 acres. This alternative may be less effective at meeting the objectives of minimizing or eliminating restrictions and requirements that can increase delays and/or the cost to development, and allowing residents and property owners to use their land to the maximum extent of the law, while respecting the values of the community.

6.5.6 Alternative 6: Modified Public Services

Public comments received on the originally circulated Draft EIR recommended the EIR evaluate a Modified Public Services Alternative. This alternative would be aimed at reducing impacts to the environment associated with development occurring in more rural areas. Development in rural areas can result in greater VMT and associated impacts to roadway congestion and air quality. The land use map within the identified communities would be the same as the proposed General Plan Update. Given the projected growth rate, it is assumed that all growth could be accommodated within the identified communities without increasing the allowable development densities on these parcels. Therefore, as identified in Table 6-1, the level of development is assumed to be similar than the development projected to occur under the proposed General Plan Update.

The Modified Public Services Alternative would be designed to reduce the potential for new development to occur outside identified communities by providing similar incentives as the General Plan Update for encouraging growth within identified communities, but going further than the General Plan Update by creating disincentives for development in rural areas. Similar to Alternative 2: Public Services, the Modified Public Services Alternative would be anticipated to result in development more concentrated in locations closer to multiple public services, such as major transportation corridors, transit lines, public water and sewer, and parks. This alternative would focus growth based on the general availability of public infrastructure and services. However, unlike Alternative 2, development would primarily be confined within identified communities and would not, to the same degree, radiate outward along a select number of arterials, major collectors, and transit corridors where public water and sewer exist. Growth in rural areas would be further constrained by placing more rigorous limitations on the expansion of infrastructure beyond identified community boundaries. Also, under this alternative none of the land located outside identified communities would be redesignated from Agriculture to a non-agricultural use (i.e., a use not intended for commercial agriculture as the primary use and that allows residential or commercial development), which would prevent over 3,200 acres of land currently designated Agriculture from being redesignated to a non-agricultural use, including nearly 200 acres of land under Williamson Act contract. (Note that these acreage numbers differ from other discussions because they do not include land within identified communities.) Moreover, nearly all development would be expected to occur in identified communities. Overall, the policy framework under this alternative would be similar to the General Plan Update (including expansion of agritourism and associated changes to Title 17 of the County's Ordinance Code), but, as discussed above, would include some additional disincentives for development in areas outside identified communities.

IMPACT COMPARISON

Aesthetics

The Modified Public Services Alternative would focus more new development along existing transportation/transit corridors. This could adversely affect existing scenic vistas from portions of SR 49 and SR 108 that are locally designated scenic corridors, but the effects would be limited to the areas of the County that are already developed. Implementation of policies similar to those included in the General Plan Update would incrementally reduce effects on scenic vistas. Although the development near scenic corridors along SR 49 and SR 108, which would include a mix of higher-density multi-family housing, townhouses, neighborhood commercial, and traditional neighborhoods, would likely be visually more intrusive within identified communities, there would be less development along these corridors outside identified communities. Therefore, the overall level of impact would be similar to the General Plan Update.

Because this alternative would focus more development within identified communities, and would further disincentivize development in rural areas, this alternative would decrease the geographic extent of changes to the County's predominantly rural character. The impact related to visual character would be less under the alternative.

As with the General Plan Update, this alternative would facilitate development that would introduce new sources of light and glare, which would increase overall ambient night-time light and daytime glare from building materials. With implementation of the policies proposed to preserve the existing nighttime environment by limiting the illumination of areas surrounding new development, impacts would be minimized, similar to the General Plan Update. However, because less development would occur in rural areas that currently have fewer existing light and glare sources, impacts would be slightly less.

Agricultural Resources

This alternative would prevent the redesignation of over 3,200 acres of Agriculture (including nearly 200 acres of Williamson Act land) to a non-agricultural use. While not all of the 3,200 acres would convert to developed uses under the General Plan Update, and although the developed uses such as rural estates may incorporate agricultural uses, the amount of land converted from a primary agricultural use to a non-primary agricultural use would be reduced under the alternative. Although some redesignation of Agriculture would still occur within identified communities, this land is less likely to be considered High-Value Agricultural Land due to its proximity to existing development and infrastructure (which are considerations for evaluating High-Value Agricultural Land). Maintaining the Agriculture designation of over 200 acres of land currently under Williamson Act contract would also substantially reduce potential conflicts with the Williamson Act. Overall, the impact to agriculture would be substantially less under this alternative than the General Plan Update.

As with the General Plan Update, existing timberland would remain in timber production under this alternative. Impacts to timberland would be similar to the General Plan Update. This alternative also would alter the present land use pattern in portions of the County, but land use conflicts between residential and timber production uses may be slightly reduced through the separation of potentially conflicting land uses, proposed policies, and application of the County's Right to Farm Ordinance. Overall, impacts related to timber production would be similar to the General Plan Update.

Air Quality

Construction activities associated with future development under the Modified Public Services Alternative would have the potential to result in temporary adverse impacts on air quality in Tuolumne County. Although development would be focused more within identified communities than under the General Plan Update, given the same population growth assumptions, the overall amount of development is not assumed to be different. Therefore, with implementation of policies and implementation measures to control emissions during construction of individual projects, construction-related air quality impacts would be similar to the General Plan Update.

In comparison to the General Plan Update, long-term operational emissions would be less under this alternative. This alternative would increase concentration of development within community cores, reducing VMT and associated emissions from vehicular travel. Impacts would likely be slightly less than the General Plan Update.

Similar to the General Plan Update, this alternative would allow for siting of new sensitive receptors within close proximity to local roadways and other potential sources of toxic air pollutants. The compact land use pattern under this alternative would be more likely to result in proximity between sensitive uses and sources of toxic air pollutants. However, it is not likely that new sensitive receptors under the alternative would be exposed to substantially higher levels of toxic air pollutants; therefore, impacts would be similar.

Biological Resources

Implementation of this alternative would result in fewer impacts to biological resources as less ground disturbance would occur for scattered development in rural areas. This would result in incrementally fewer impacts to special status plants, animals, riparian areas and other sensitive habitat, wetlands, and/or migratory wildlife corridors outside developed areas than anticipated under the General Plan Update. As discussed in Section 3.4, "Biological Resources," there are 177 special-status species known to occur or with potential to occur within Tuolumne County. Thirty one of these species (21 animal species and 10 plant species) are given high levels of protection by the federal government through listing under FESA and/or by the State government through listing under CESA or Fully Protected. Similar to the General Plan Update, proposed policies would minimize impacts on special-status species and wetlands. Impacts on sensitive habitats and wildlife movement would be slightly less than the General Plan Update.

Cultural Resources

This alternative would have incrementally fewer impacts on archaeological resources, in part because it would allow less ground-disturbing development in currently undeveloped areas of Tuolumne County. On the other hand, the compact pattern of development may result in more alteration to the historic built environment. As with the General Plan Update, proposed policies would protect historic and archaeological resources on a case-by-case basis, and adherence to State regulations would preserve human remains unearthed during construction. Overall impacts on historic resources, similar to the General Plan Update, would be significant and unavoidable; however, the impact would be slightly greater under the alternative, due to the greater potential for alteration of historical structures within the identified communities.

Energy

As described for the General Plan Update, development under the Modified Public Services Alternative would increase electricity and propane consumption. Buildings would still be required to comply with Title 24, Part 6 of the California Building Efficiency Standards, and energy use would be reduced through increased use of solar photovoltaics and energy efficiency. In addition, policies and implementation programs under the General Plan Update would include transit-oriented development, improved accessibility for alternative modes of transportation, and increased transit availability that would reduce VMT, as well as development and implementation of a climate action plan to reduce both transportation- and building energy-related energy consumption. Thus, energy consumption associated with the Modified Public Services Alternative would not result in wasteful, inefficient, or unnecessary consumption of energy. Impacts would be similar to those identified for the General Plan Update.

Geology

Similar to the General Plan Update, the Modified Public Services Alternative would allow development that may be subject to fault rupture, ground-shaking, liquefaction, landslides, and soil erosion from grading on unstable slopes. Adherence to required building codes during construction would reduce these geologic and soil-related impacts. Proposed policies to limit development in seismically hazardous areas; to require engineering studies prior to development in landslide or unstable slope areas; to establish a program for geologic, seismic, and geotechnical engineering reports required for proposed developments; and to

maintain erosion control measures for all grading would further minimize impacts related to geology and soils. Impacts would be similar to those identified for the General Plan Update.

Global Climate Change

Relative to the General Plan Update, this alternative would result in a similar amount of construction-related GHG emissions. However, this alternative would promote centralized development, which could result in less dependency on automobiles for residents residing within transit corridors and community cores and could decrease VMT and mobile GHG emissions in the County. The pattern of development under this alternative would be consistent with the goals of applicable GHG reduction plans and policies, including the adopted Tuolumne County Regional Blueprint Greenhouse Gas Study and AB 32/SB 32, and is anticipated to result in slightly less impact relative to the General Plan Update.

Hazards and Hazardous Materials

As with the General Plan Update, this alternative could facilitate development near known hazardous material users, construction in areas with existing hazardous materials, or accidental releases of hazardous materials during transportation. The more compact pattern of development may result in more exposure to hazardous materials in community settings. However, impacts would remain less than significant given compliance with federal, state, and local regulations, and with General Plan policies. Similar to the General Plan Update, careful land use planning in accordance with General Plan Update policies and continued coordination with the Tuolumne County Airport Land Use Compatibility Plan would minimize airport-related hazards, and development would have not substantially affect adopted emergency response or evacuation plans. By disincentivizing development outside identified communities, the alternative would likely result in slightly less impact with respect to wildland fire hazard. Therefore, overall, impacts associated with the alternative would be slightly less than the General Plan Update.

Hydrology and Water Quality

Similar to the General Plan Update, policies for protection of riparian corridors would prevent development in these flood-prone areas. Furthermore, any development within a 100-year flood zone would be subject to the County's policies as set forth in the General Plan Update Natural Hazards Element and the community plans, which would ensure that people or property are not subject to flood risks. Impacts would be similar to the General Plan Update. Further, based on the vulnerability assessment for dam failure in the 2018 Tuolumne County Multi-Jurisdictional HMP, which concluded that the extent of damage from any dam failure would not be great due to the small areas possibly inundated, the implementation of General Plan policies and implementation programs to protect structures, and the assumption that such an event is unlikely to happen, impacts associated with dam failure would be similar to the General Plan Update.

Buildout of the Modified Public Services Alternative would result in a similar amount of development and associated impervious surfaces within the County. The addition of impervious surfaces would increase watershed runoff, which could degrade water quality. However, impacts would be similar to the General Plan Update given compliance with existing regulations and implementation of proposed policies.

Land Use and Planning

Similar to the General Plan Update, existing identified community boundaries may be expanded to allow growth to occur near identified community nodes under the Modified Public Services Alternative. This alternative would increase the level of development within the identified communities and would maintain the distinction between the identified communities and the rural areas. This alternative would not physically divide established communities. The Modified Public Services Alternative would be consistent with the intent of the Tuolumne Tomorrow Regional Blueprint. Potential impacts would be similar to the General Plan Update.

Noise

The Modified Public Services Alternative would have similar impacts to the General Plan Update from construction and operational noise. Existing sensitive receptors would be subject to noise and vibration from new construction, and new and existing noise-sensitive land uses would be exposed to transportation noise.

In comparison with the General Plan Update, the more compact land use pattern in this alternative would place more new sensitive receptors in developed environments with higher traffic noise levels. However, proposed policies to enforce noise standards for new development would reduce noise exposure. These impacts would be similar to the General Plan Update.

Population and Housing

Both the General Plan Update and the Modified Public Services Alternative could temporarily displace residents if redevelopment of existing residential structures occurs. Impacts from displacement would remain less than significant. Overall growth would remain consistent with the population growth projection adopted by the Tuolumne County Transportation Council for the year 2040. Impacts would be similar to the General Plan Update.

Public Services

Similar to the General Plan Update, development facilitated by the Modified Public Services Alternative would increase demand for fire protection and law enforcement services. However, review of subsequent development by the Fire Department pursuant to existing County development review practices, the required provision of emergency access, and payment of impact mitigation fees would reduce impacts related to fire protection to less than significant, and new development would not result in the need to construct new law enforcement facilities. The payment of State-mandated school impact fees would fully mitigate impacts related to school facilities. In addition, the new demand would be more concentrated within the identified communities, where there are existing services in place, and disincentivizing growth outside identified communities would not affect police and fire response times because development would not be as remote and would be centralized. Overall, the impacts would be slightly less than the General Plan Update.

Recreation

The Modified Public Services Alternative would facilitate a similar amount of development as the General Plan Update, although there would be less rural development than under the General Plan Update. As under the General Plan Update, this alternative would include a proposed policy that would change the County's goal of 30 acres of recreational facilities per 1,000 residents to 5 acres of parkland per 1,000 residents. Impacts associated with the development of new parks and use of existing facilities would be similar.

Transportation and Circulation

Overall, VMT within the Tuolumne County region would increase as a result of regional population growth. Because the Modified Public Services Alternative would facilitate a similar amount of residential, commercial, and industrial development to the General Plan Update, this development would generate a similar (though fewer) number of vehicular trips. However, the less scattered land use pattern under this alternative would likely result in less auto-dependency, a slight decrease in trip generation, and shorter trip lengths. The decrease in trip generation and trip length would cause reduced deficiencies in traffic flow at roadway segments and intersections. VMT may be reduced in the year 2040 with the implementation of this alternative because there would be policies that disincentivize development outside of the identified communities. Impacts would likely be slightly less than the General Plan Update.

Similar to the General Plan Update, implementation of proposed policies relating to traffic calming and improving walkability and bikeability would reduce potential impacts from design hazards to a less-than-significant level. Buildout of this alternative also would incrementally increase the use of available public transit resources and would not have a significant impact on existing or planned pedestrian and bicycle infrastructure. As with General Plan Update, development facilitated by this alternative would be subject to applicable County standards and fire department standards, which require emergency access provisions. Compliance with existing requirements would ensure that adequate emergency access would be provided for by all new development. Impacts would be similar to the General Plan Update.

Utilities and Service Systems

The Modified Public Services Alternative would allow for a similar amount of development to the General Plan Update, resulting in similar water demand and wastewater and solid waste generation. Therefore, impacts related to utilities and service systems would remain the same. Water, wastewater, and solid waste providers are projected to have enough capacity to serve new development. In addition, the County's existing Water Quality Plan and policies and implementation programs in the General Plan Update would reduce potential impacts related to storm drainage facilities. Therefore, these impacts would be similar to the General Plan Update.

ACHIEVEMENT OF PROJECT OBJECTIVES

The Modified Public Services Alternative appears to achieve some of the General Plan Update objectives, including those that promote the delivery of efficient and cost-effective public services and stewardship of the County's natural resources. This alternative may be less effective at meeting the objectives of minimizing or eliminating restrictions and requirements that can increase delays and/or the cost to development, and allowing residents and property owners to use their land to the maximum extent of the law, while respecting the values of the community. In addition, by concentrating growth in the communities, development under this alternative it may conflict with goals related to conservation of historic resources and enhancing the unique nature of the identified communities.

6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of the environmentally superior alternative among the options studied. When the "No Project" alternative is determined to be environmentally superior, CEQA also requires identification of the environmentally superior alternative among the development options. In this case, the No Project alternative is inferior to the General Plan Update and all other alternatives.

Table 6-2 indicates whether each alternative's environmental impact is greater, less, or similar to the General Plan Update. Alternatives 2 and 3 would be inferior to the General Plan Update in several categories of environmental issues, especially with regard to impacts on the visual character of rural areas, global climate change, and consistency with the preferred growth scenario of the Tuolumne Tomorrow Regional Blueprint plan. Alternative 4 would reduce impacts to historical structures, but not to a less-than-significant level, and it may present some constraints to infill development and redevelopment. Alternative 5 would reduce significant impacts associated with conflicts to the Williamson Act and may reduce the overall effects on farmland, but may not fully achieve project objectives.

Through modifications to the land use diagram that would avoid redesignation of agricultural lands and implementation of policies that restrict growth outside of the identified communities, Alternative 6 would reduce effects associated with land disturbance and scattered development. This would include a reduction in impacts identified as significant and unavoidable for the General Plan Update. Impacts to transportation and circulation would be reduced due to the potential for shorter vehicle trips and greater use of alternative modes of transportation where residences and goods and services are developed nearer to each other. Impacts to air quality would be slightly reduced due to the lower projected VMT; this would also slightly reduce significant impacts related to GHG emissions. In addition, there would be a substantial reduction to significant impacts to agricultural resources because there would be no redesignation of agricultural land to other land uses outside of the identified communities (although the impact may not be able to be reduced to a less-than-significant level due to the fact that Alternative 6 would allow redesignation of Agriculture land within identified communities).

As indicated above, this alternative may not achieve all of the project objectives. In areas outside of the identified communities, the Modified Public Services Alternative would add restrictions and requirements that can increase delays and/or the cost to development and would attempt to limit property owners to use their land. Although this alternative may not meet all of the identified objectives and the reduction in impacts

would may not completely avoid a significant and unavoidable impact associated with the General Plan Update, it would result in a substantial reduction to the significant and unavoidable agricultural resources impact and would also result in overall reduction in environmental impacts. Therefore, Alternative 6, the Modified Public Services Alternative, is considered the environmentally superior alternative.

Table 6-2 Comparison of Environmental Impacts of Alternatives

Issue	General Plan Update ¹	Alternative 1: No Project (Recent Trends, Existing)	Alternative 2: Public Services	Alternative 3: Recent Trends, Proposed	Alternative 4: Historic Structure Preservation	Alternative 5: Williamson Act Property Preservation	Alternative 6: Modified Public Services Alternative
Aesthetics	LTS	Greater	Greater	Greater	Slightly less	Similar	Slightly less
Agricultural and Forest Resources	SU	Less	Greater	Greater	Similar	Less	Less
Air Quality	LTS	Greater	Similar	Slightly less	Similar	Similar	Slightly less
Biological Resources	LTSM	Greater	Greater	Slightly greater	Similar	Similar	Slightly less
Cultural Resources	SU	Similar	Greater	Slightly greater	Less	Similar	Slightly greater
Energy	LTS	Greater	Similar	Similar	Similar	Similar	Similar
Geology	LTS	Similar	Similar	Similar	Similar	Similar	Similar
Global Climate Change	SU	Greater	Greater	Greater	Similar	Similar	Slightly less
Hazards and Hazardous Materials	LTS	Similar	Similar	Similar	Similar	Similar	Similar
Hydrology and Water Quality	LTS	Slightly greater	Similar	Similar	Similar	Similar	Similar
Land Use and Planning	LTS	Greater	Greater	Greater	Similar	Similar	Similar
Noise	SU	Greater	Similar	Similar	Similar	Similar	Similar
Population and Housing	LTS	Similar	Similar	Similar	Similar	Similar	Similar
Public Services	LTS	Similar	Similar	Similar	Similar	Similar	Slightly less
Recreation	LTS	Slightly less	Similar	Similar	Similar	Similar	Similar
Transportation and Circulation	SU	Greater	Similar	Greater	Similar	Similar	Slightly less
Utilities and Service Systems	LTS	Similar	Similar	Similar	Similar	Similar	Similar
Overall	n/a	Greater	Greater	Greater	Less	Less	Less

Notes: LTS = less-than-significant impact; LTSM = less-than-significant impact with mitigation; SU = significant and unavoidable impact.

¹ This column lists the most severe impact determination for each environmental issue.

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Chapter 5, “Other CEQA Discussions”

No sources were used in this chapter.

Chapter 6, “Alternatives”

No sources were used in this chapter.

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