4 Analysis of Alternatives

The California Environmental Quality Act (CEQA) mandates that this EIR identify and analyze a range of alternatives to the proposed General Plan. The purpose of the alternatives analysis is to foster informed decision-making and public participation; therefore, each alternative is included on the basis of its ability to help decision-makers make a reasoned choice. To this end, the range of alternatives considered in this document need only include "those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects" (CEQA Guidelines Section 15126.6 (d)(2)) of the proposed project, and which are held to a "rule of reason." CEQA defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors" (CEQA Guidelines, Section 15364). The discussion must also include an evaluation of the No Project Alternative to allow decision-makers to compare the impacts of approving the proposed Plan against the impacts of not approving it.

CEQA Guidelines do not specify what constitutes an adequate level of detail, but they do require that the EIR provide sufficient information to allow meaningful evaluation, analysis, and comparison of each alternative. The EIR must therefore describe the major characteristics and significant environmental effects of each alternative, as well as any additional impacts the alternatives may have beyond those of the proposed Plan. Case law suggests that the discussion of alternatives need not be exhaustive, and overall, the impacts of the alternatives may be discussed in less detail than the significant effects of the Plan as proposed. Quantified information on the alternatives is presented where available; however, in some cases only partial quantification can be provided because of data or analytical limitations.

Finally, the CEQA Guidelines require each EIR to identify the environmentally superior alternative among the alternatives analyzed. If the No Project alternative is the environmentally superior alternative, the EIR must select another alternative from among the alternatives analyzed.

4.1 Background on Alternatives

The two alternatives considered here were developed as part of a set of three initial Growth Concepts that represented various options available to the City to address long-term physical growth and other related community issues and priorities. The Growth Concepts were formulated based on the results of an existing conditions analysis, and input from City staff and members of the community—particularly a series of 13 Emerging Themes that materialized during the research and community outreach process. These themes were informed by the extensive background work required for the analysis, including interviews with community leaders, a citywide survey,

and a community visioning workshop, and identify a number of values and desires of particular importance to the community. The Emerging Themes are as follows.

1. A unique city with a strong sense of community.
2. A city rich in amenities, with a vibrant, expanded downtown, two- and four- year colleges, and walking access to shops and services from neighborhoods.
3. A town-scale community.
4. A city connected to its waterways.
5. A diverse and inclusive city.
6. A city with broad employment opportunities and a diversified economic base.
7. A strong retail sector.
8. A city of vital connected neighborhoods, and excellent quality of life.
9. City of "complete streets" serving all modes of travel.
10. Compact, concentric growth with priority for infill sites.
11. A city with attractive, smooth-flowing streets and mixed-used developments.
12. A safe a secure community.
13. A leader in land and water conservation, green building, energy efficiency, recycling, and stewardship.

As a result, each of the three Growth Concepts was an approach to meeting community goals—such as improving air quality, preserving the unique character of the city, and attracting jobs and education opportunities—through a distinct pattern of land use, transportation, open space, and public facilities contingent on three different sets of options and growth parameters.

Sensitivity analyses were conducted on the assumptions underlying buildout, growth rate and housing mix, and infill for each Concept using feedback from both the City and the General Plan Update Review Committee (GPURC). Upon finalization, the Growth Concepts were presented in eight public meetings (one citywide, four in each quadrant of the city, and three targeted at traditionally underrepresented communities) as well as on the website. The planning team used input from the public to help answer specific questions about complex trade-offs between conflicting goals, and about the urban form and extent of growth associated with each Growth Concept. Over the course of the above described public outreach efforts, the Visalia community helped to prioritize and refine key elements of the Growth Concepts and Emerging Themes.

This process produced the current proposed General Plan—an evolved version of one of the Growth Concepts—and two other thoroughly evaluated and deeply considered Growth Concepts. These remaining Growth Concepts will now serve as the alternatives for comparison in this EIR.

4.2 Alternatives Analyzed in This EIR

This chapter describes and evaluates three alternatives to the proposed General Plan. Two are derived from the Growth Concepts developed during the planning process, and represent contrasting visions for the pattern, direction, and extent of Visalia's urban growth. The third is the No Project Alternative, which represents expected development patterns if no General Plan Update were to occur, instead leaving the existing General Plan (adopted in 1991 and last updated in 1996) in effect. The alternatives are referred to as:

- **Alternative 1:** Neighborhood Nodes and Compact Growth;
- **Alternative 2:** Expanded Growth; and
- **No Project Alternative**

Table 4.2-1 summarizes key characteristics of each alternative and of the proposed Plan at buildout, and compares them to current data for existing conditions.

Table 4.2-1: Comparison of Key Characteristics; Existing, Alternatives, and Proposed General Plan

	Existing (2010)	*Pipeline (2010)*	*Proposed General Plan*	*Alternative 1*	*Alternative 2*	*No Project*
Population	124,440	17,500	210,000	201,400	243,800	204,730
Households	50,300	6,100	71,900	71,700	87,000	73,910
Housing Units	52,700	6,451	76,100	75,200	91,300	77,564
New Students	8,020	3,790	19,960	16,960	25,790	18,164
Schools Provided/Needed	32	4	56	53	65	55
Parks (acres)	650	4	1,390	1,020	1,250	811
Park Ratio	5.1	NA	6.6	5.1	5.1	4.0
Jobs	65,900	2,220	93,730	89,300	104,200	92,918

1. Values for alternatives and proposed General Plan represent total development potential: existing + pipeline projects + net new (not shown).
2. Buildout estimations of households assume 2.77 persons per household.
3. Buildout estimations of households assume a 5.5 percent housing unit vacancy rate.
4. Values for alternatives and proposed General Plan are rounded to the nearest hundred.

Source: US Census, 2010; Dyett and Bhatia, 2011

The two Growth Concept alternatives and the proposed Plan emphasize concentric, balanced development within the city's quadrants and Downtown. All three seek to provide new community and recreational amenities, strengthening of core activity centers, improved local and regional connectivity, enhanced quality of life and visual character, enhanced economic activity, and expanded educational and medical facilities. Additionally, all recognize the need and opportunity for expanded industrial growth in the northwest portion of city, and each reserves at least 1,500

gross acres of available industrial land for that purpose, per recommendations made by the Visalia Economic Development Corporation (VEDC).

The three assume full buildout of opportunity sites within the existing city limits. Outside of city limits, they assume varying degrees of development in the southeast portion of the City and the West 198 Corridor area as well as no development north of St. John's River or in the unincorporated community of Goshen.

What distinguishes the alternatives from one another are their different assumptions of growth rates and development potential, probable development intensity, and the extent to which development could take place beyond current city limits. This is clear in the overall development footprints of each alternative, and in the mix and placement of land use types proposed. The urban growth boundaries established by Visalia's current General Plan are carried through to Alternatives 1 and 2 and the No Project Alternative. The proposed Plan, however, utilizes a revised set of boundaries that differs from the other three. Meanwhile, the land use classifications used in the current General Plan have been revised for Alternatives 1 and 2, as well as the proposed Plan.

Maps showing conceptual land use diagrams of the Planning Area follow the descriptions below. The maps show the Urban Development Boundaries (UDBs) and land use designations proposed for each alternative and for the proposed Plan, and illustrate the differences resulting from the different goals and assumptions underlying them.

ALTERNATIVE 1: NEIGHBORHOOD NODES AND COMPACT GROWTH

This alternative, originally known as Growth Concept A, envisions the majority of new growth taking place within existing city limits and in compact neighborhoods within the current 129,000 UDB. The plan focuses on utilizing the city's existing physical and economic infrastructure to create a more vibrant city center and neighborhood-oriented community. Identification of new neighborhood nodes—parks, schools, and/or neighborhood shopping areas—is emphasized for both existing and new development.

The urban footprint of this alternative is the smallest of the alternatives at 41 square miles, with new development extending roughly up to Avenue 320 and St. Johns Parkway to the north, Road 148 to the east, and Visalia Parkway to the south. As shown in **Figure 4.2-1**, residential areas compose much of the expanded city footprint, with compact new neighborhoods located to the north, southeast, and in the West 198 Corridor area.

Within the city, key areas of new and intensified development include Downtown and East Downtown, which act as primary nodes and job centers for the whole city. East Downtown, along Ben Maddox Way and Goshen Avenue, is intensified as an employment center to further support increased development in Downtown and to provide a nexus of activity between the Downtown core and a new walkable urban neighborhood in the heart of the city. While the alternative anticipates that East Downtown will primarily build out according to the East Downtown Strategic Plan, it also introduces the concept of an urban high school campus located in that area just to the north.

Employment areas remain centered in their current locations: Downtown, South Mooney Boulevard, and the western industrial area. Industries related to agriculture are emphasized in the de-

velopment of the West 198 Corridor north of Highway 198. These uses might include food processing, nursery industries, agricultural equipment operations, or similar. Adjacent to the agricultural-related industrial area is a 90-acre college campus site, which is envisioned as an agricultural/industrial-based satellite location of a nearby California State University (CSU) location. Along Mooney Boulevard, development is intensified and anchored by a northern mixed-use node primarily serving the College of the Sequoias population, and a southern node at Caldwell Avenue that emphasizes a mix of regional commercial and mixed-use development.

Relative to the proposed Plan and the other alternatives, this alternative assumes the lowest amount of growth potential. It anticipates the lowest amount of new population growth, adding only 59,460 new residents compared to the 68,060 projected for the proposed Plan. It would also result in fewer new housing units (75,200 at buildout), lesser park and school demands, and fewer jobs (89,300 at buildout) than the proposed Plan or the other alternatives.

ALTERNATIVE 2: EXPANDED GROWTH

This alternative, originally known as Growth Concept C, builds on the concepts of both neighborhood and corridor development, while maintaining the same character and typology of existing development in the city. It extends the city outwards with expanded residential, industrial, and commercial areas. Both residential and non-residential development areas occupy a greater amount of land than the other alternatives, building out the full extent of the southeast, the north, and the east (in the Urban Reserve area beyond the current UDB). The resulting urban footprint is 48 square miles, the largest of the alternatives.

Of all the alternatives, this alternative has the greatest amount of traditional single family development. Most lower density residential uses are located on the edges of the city. Medium and high density housing is primarily located at the center of new neighborhoods and along major corridors like Shirk Street and Lovers Lane. A node of high density residential uses is located in the South Mooney area adjacent to Mooney Grove Park. New residential development is also located in the West 198 corridor, both to the north and south of Highway 198.

New activity centers are located primarily along major corridors including Shirk Street, Lovers Lane, Caldwell Avenue, and South Mooney Boulevard. The alternative also introduces several new locations for regional retail uses. In addition to Mooney Boulevard, which is where this type of retail has traditionally been located in Visalia, two other potential locations are shown: at the Plaza Drive interchange on Highway 198, and southeast of the Caldwell Avenue interchange along Highway 99. These three potential locations are identified as options 1, 2, and 3, respectively, in **Figure 4.2-2**.

Downtown Visalia is also expanded as an activity center, with a larger mixed use footprint and new medium and high density housing located just to the east of Downtown along Goshen Avenue. Intensification of Downtown, as well as buildout of the East Downtown Strategic Plan, would help diversify the area's economic and employment base. Additional employment uses outside of Downtown are expanded in the western industrial area. Office uses are intensified and focused at the western edge of the city along Highway 198 along North Plaza Drive. Industrial uses are expanded to the north up to Avenue 320 and west to Road 76. This alternative also introduces a college campus site in the northwestern quadrant of the city, north of Avenue 320.

This alternative assumes a higher, more aggressive rate of growth than either the proposed Plan or Alternative 1, adding 101,860 new residents to the Planning Area. Thus, it also has the highest projections for housing units (91,300 at buildout), and park and school demand. Alternative 2 has the highest projection for jobs out of all of the alternatives, at 104,200.

NO PROJECT ALTERNATIVE

The No Project Alternative represents the continuation of the current City of Visalia General Plan and Zoning Ordinance, which last underwent a major update in 1996. It covers a 90-square mile area defined by an Urban Area Boundary (UAB), considered the city's "probable ultimate physical boundary." The UAB includes lands not necessarily anticipated to develop during the General Plan's 30-year planning period. Within the area, the existing General Plan delineates a 54-square mile Urban Growth Boundary (UGB), or the "165,000 Boundary," which was expected to accommodate growth through the year 2020, and a projected population of 165,000. Because the current General Plan has a horizon year of 2020, it is not directly comparable to the buildout year of 2030 assumed for the proposed Plan and the other two alternatives. In reality, the remaining developable area within the UGB would be able to accommodate additional growth beyond 165,000 population threshold, given Visalia's current population and development footprint. Therefore, while the current General Plan (No Project alternative) contains a policy that targets a population 165,000 in 2020, yet more growth could actually be accommodated under this plan, growth under this alternative is assumed to continue through 2030 without use of the tiered development system in the proposed Plan and two alternatives. Through the year 2030, buildout within the UGB under the No Project alternative would accommodate a total population of 204,730.

This alternative is expected to add 62,790 new residents and have a total of 92,918 jobs, both of which are slightly greater in magnitude than Alternative 1, but fewer than the proposed Plan. Fewer parks are included in the No Project alternative than any of the other alternatives, as under the current General Plan, the provision of parks were anticipated to meet needs through 2020, rather than 2030.

The purpose of evaluating the No Project Alternative is to allow decision makers to compare the potential impacts of approving the project with the potential impacts of not approving the project. The No Project analysis discusses both the existing conditions at the time the NOP is published as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved.

PROPOSED PLAN

The proposed Plan evolved from adjustments made to Growth Concept B. A full description of the proposed Plan can be found in Chapter 2. Its proposed land use diagram is shown in Figure 2.3-1, in Chapter 2.

Figure 4.2-1:

Alternative 1: Neighborhood Nodes and Compact Growth

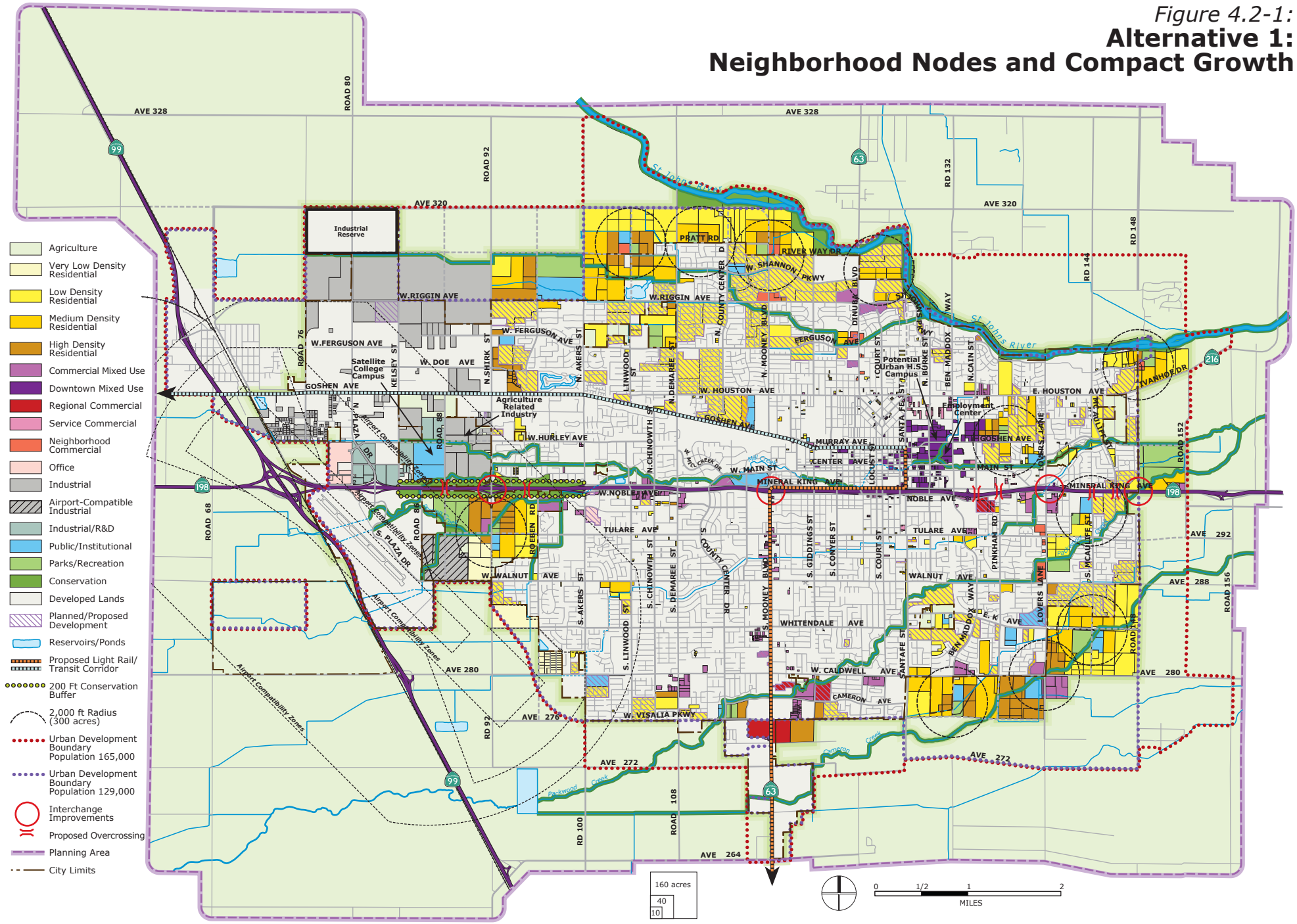
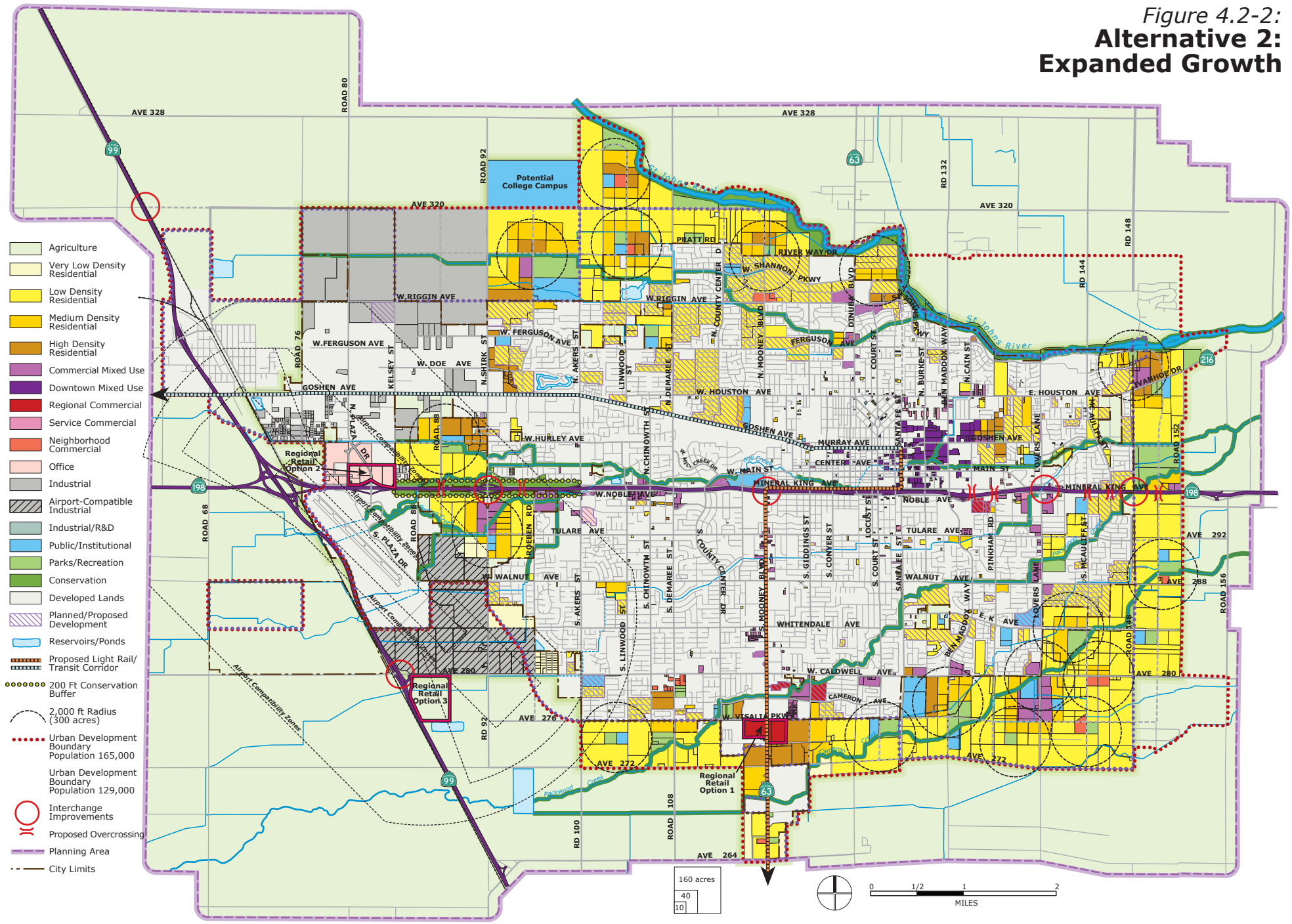


Figure 4.2-2:

Alternative 2: Expanded Growth



4.3 Comparative Impact Analysis of Alternatives

The comparative impact analysis evaluates the impacts that each alternative would have on the environmental issue areas discussed in Chapter 3. Alternatives are compared to one another and to the proposed General Plan, and impacts are assessed relative to baseline conditions. The assessment uses the same significance criteria applied in Chapter 3. It is assumed that Alternatives 1 and 2 would generally include the same policies as those defined for the proposed Plan, excluding site- or area-specific policies that would not apply due to differences in land use and extent of development.

LAND USE

As with the proposed General Plan, any of the Alternatives, if adopted, would become Visalia's new guiding document for development; all local plans and zoning regulations would be amended to conform to the alternative's policies. The No Project Alternative represents the current General Plan, implemented by the current zoning ordinance. As such, none of the alternatives conflict with current applicable land use plans, including the County General Plan, and would have a less than significant impact in that regard.

The two alternatives are expected to result in different patterns, degrees, and intensities of growth. In general, none of them would cause significant land use impacts by disrupting or displacing communities or businesses, or by restricting neighborhood access to services or amenities. Alternatives 1 and 2, like the proposed Plan, include policies that establish compatibility requirements for new development. They also propose a number of corridor improvements intended to enhance connectivity within the city. Also, although development may temporarily remove some housing, the overall number of housing units is expected to increase under these alternatives. The No Project Alternative, meanwhile, is a continuation of current trends and policies.

Table 4.3-1 compares the development potential of residential and non-residential uses under each Alternative and the proposed General Plan on opportunity sites—that is, sites within the Planning Area most likely to experience growth and change through 2030.[1] These areas are the ones shown with new land use designations in Figures 4.2-1 and 4.2-2. .The proposed Plan would have the greatest amount of residential land on opportunity sites, followed by Alternative 2, the No Project Alternative, and Alternative 1. The No Project alternative would have the greatest amount of commercial land on opportunity sites, followed by the proposed Plan, Alternative 2 and Alternative 1. Alternative 2 would have the greatest amount of mixed use land, followed by the proposed Plan, and Alternative 1, while the No Project alternative would have much less mixed use acreage on opportunity sites. The proposed Plan would result in the greatest industrial land on opportunity sites, followed by Alternative 2, the No Project alternative, and Alternative 1.

[1] Opportunity sites in the Planning Area were determined early in the General Plan update process. They are used to distinguish between developed areas of the city where land use change or redevelopment is highly unlikely (e.g., established residential neighborhoods), and areas where change is likely to occur. Opportunity sites fall into three categories: 1) vacant; 2) underutilized (where the ratio of the value of improvements on a parcel to the value of the land itself is less than 1.0, or otherwise considered a redevelopment candidate); and 3) farmland adjacent to city limits. This analysis compares potential land uses on opportunity sites only, as land uses on other properties are constant amongst all alternatives, including the proposed Plan and the No Project.

The greatest public/conservation and reserve acreages would occur under the No Project alternative (due to the large amount of land kept in urban reserve), followed by the proposed Plan, Alternative 2 and Alternative 1. The greatest overall land use change on opportunity sites would occur under the proposed Plan, followed by Alternative 2, and the No Project alternative. The least land use change on opportunity sites would occur under Alternative 1. Overall development follows the same pattern, and would be greatest under Alternative 2, with a population of 243,800, followed by the proposed Plan (210,000), the No Project alternative, and Alternative 1, with the least total population (201,400).

Table 4.3-1: Comparison of Land Use on Opportunity Sites by Alternative (Gross Acres)[1]

Land Use[2]	*Proposed Plan*	*Alternative 1*	*Alternative 2*	*No Project*
Rural Residential	-	-	-	197
Very Low Density Residential	510	111	119	-
Low Density Residential	5,740	679	3,601	2,775
Medium Density Residential	618	640	996	237
High Density Residential	287	382	497	90
Residential Land Subtotal	*7,154*	*1,812*	*5,213*	*3,299*
Convenience Commercial	-	-	-	8
Community Commercial	-	-	-	83
Regional Retail Commercial	-	-	-	102
Shopping/Office Commercial	-	-	-	123
Professional/Administrative Offices	-	-	-	131
Service Commercial	214	-	-	268
Highway Commercial	-	-	-	5
Neighborhood Commercial	83	55	67	44
Regional Commercial	286	35	47	-
General/Service Commercial	-	7	13	-
Office	64	32	105	-
Commercial Land Subtotal	*647*	*129*	*233*	*764*
Central Business District	-	-	-	21
Commercial Mixed Use	336	147	355	-
Downtown Mixed Use	21	55	117	
Mixed Use Land Subtotal	*357*	*202*	*472*	*21*
Business Research Park	85	-	-	108
Light Industry	132	-	-	189
Heavy Industry	-	-	-	1,080
Agriculture/Industrial	1,799	757	1,330	-
Industrial/R&D	-	74	68	-
Industrial Land Subtotal	*2,016*	*832*	*1,399*	*1,376*
Conservation	-	-	-	145
Regional Retail Reserve	-	-	-	100
Heavy Industry Reserve	-	-	-	611
Urban Reserve	795	-	-	2,259
Public/Institutional	508	294	736	172

Table 4.3-1: Comparison of Land Use on Opportunity Sites by Alternative (Gross Acres)[1]

Land Use[2]	*Proposed Plan*	*Alternative 1*	*Alternative 2*	*No Project*
Park	1,390	1,020	1,250	170
Public/Conservation/Reserve Subtotal	*2,693*	*1,314*	*1,986*	*3,456*
Subtotal of Land Use Change Areas	*12,867*	*4,289*	*9,303*	*8,918*
Right of way	*5,718*	*5,718*	*5,718*	*5,718*
Remainder of Planning Area	*48,056*	*56,634*	*51,620*	*52,005*
Total in Planning Area	**66,641**	**66,641**	**66,641**	**66,641**

1. Acreages in this table are gross, and for purposes of straightforward comparison between alternatives, do not incorporate the 80% net-to-gross ratio that other proposed Plan buildout tables show.

2. Some land uses exist in certain alternatives only.

Source: City of Visalia, 2013, Dyett and Bhatia, 2013.

TRANSPORTATION

The differences in projected land use development for each alternative translate into varying levels of demand for transportation services throughout the Planning Area. It is assumed that the same policies and roadways improvements are in place for the proposed General Plan and Alternatives 1 and 2, so there would be similar levels of emphasis on creating walkable streets, pedestrian-supportive neighborhoods, and opportunities for bicycling and using public transit. The No Project alternative assumes the existing General Plan circulation network. **Table 4.3-2** compares the effects of the alternatives and the proposed General Plan on daily vehicle miles traveled (VMT), with existing conditions shown for reference.

Alternative 1 would result in the lowest peak and off-peak VMT totals, due to the lowest population growth and employment growth. Despite the lower total VMT, Alterative 1 would still cause SR 198 to operate at an unacceptable roadway LOS (see Appendix D).

Alternative 2 would result in the greatest amount of vehicle activity, as measured by peak and off-peak VMT. As Alternative 2 has the largest population, number of households, and highest employment growth, it would produce the largest VMT. Similar to the proposed General Plan, Alternative 2 would not cause local roadways or intersection to operate below LOS D during peak periods; however, it would cause SR 198 to operate at an unacceptable LOS (see Appendix D).

The No Project alternative would result in the second highest VMT (greater than the proposed General Plan), and would not include planned roadway system improvement, including widening portions of major arterials, new bridge crossings, interchange improvements and grade separations, and installation of new traffic signals. The No Project would cause two segments, rather than three (under the proposed General Plan and Alternatives 1 and 2), of SR 198 to operate at an unacceptable LOS: Akers Street to Mooney Boulevard (LOS F) and Mooney Boulevard to Lovers Lane (LOS F). However, under the No Project alternative, ten local intersections would operate at an unacceptable LOS, which is substantially worse than no unacceptable intersection LOS under

the proposed General Plan and Alternatives 1 and 2 (see Appendix D). The No Project alternative would not include proposed General Plan policies optimizing travel by all modes, and enabling access for all users, including users of public transportation, bicyclist, and pedestrians.

Table 4.3-2: Comparison of Daily Vehicle Miles Traveled by Speed for Alternatives and Proposed General Plan

Speed Range (mph)		*Existing (2012)*		*2030 Proposed General Plan*		*2030 Alternative 1*		*2030 Alternative 2*		*2030 No Project*	
		Peak	*Off-Peak*	*Peak*	*Off-Peak*	*Peak*	*Off-Peak*	*Peak*	*Off-Peak*	*Peak*	*Off-Peak*
0	5	0	0	0	0	0	0	0	0	0	0
5	10	0	0	0	0	0	0	0	0	0	0
10	15	1	1	0	1	1	1	0	1	0	1
15	20	1,043	1,578	1,526	2,450	1,554	2,450	2,010	3,132	1,797	2,552
20	25	6,681	9,133	9,080	12,223	9,052	12,223	11,102	14,780	13,859	14,320
25	30	62,155	82,789	89,861	105,114	89,875	105,114	121,463	135,815	133,416	131,318
30	35	139,872	190,145	277,837	339,843	263,738	339,843	350,722	434,745	347,744	416,495
35	40	189,561	266,882	345,864	503,384	324,586	503,384	374,793	578,034	351,847	548,633
40	45	155,682	233,213	241,844	365,264	224,788	365,264	234,830	381,994	218,809	369,095
45	50	94,074	145,275	134,663	211,706	128,238	211,706	129,414	207,775	129,367	211,152
50	55	42,480	66,211	51,488	101,883	50,539	101,883	48,366	95,824	53,310	97,457
55	60	12,895	20,596	14,373	27,597	11,362	27,597	12,559	24,756	12,675	23,909
60	65	6,289	9,028	11,308	15,888	7,922	15,888	9,821	13,752	6,651	10,482
65	70	3,384	4,766	9,699	11,772	7,540	11,772	9,040	10,780	6,434	7,784
Total		714,115	1,029,615	1,187,542	1,697,125	1,119,195	1,697,125	1,304,119	1,901,387	1,275,910	1,833,198

Source: Omni Means and TCAG, 2014

AIR QUALITY

Over the long term, the full implementation of the proposed Visalia General Plan would result in an increase in certain criteria pollutant emissions primarily due to an increase in VMT. Overall, implementation of the proposed General Plan would result in a significant net increase of particulate matter that would exceed the annual SJVAPCD thresholds for PM10 and PM2.5, primarily as a result of increased entrained dust raised from roadways. Emissions of other ozone precursors—reactive organic gases (ROG) and nitrogen oxides (NOx)—are expected to decrease by 2030, primarily as a result of increasingly stringent emission control measures ARB has adopted for new vehicle engines, particularly diesel engines. Proposed General Plan policies intend to support the SJVAPCD's efforts to achieve and maintain air quality standards.

Air pollutant emissions are a function of human activity and are directly related to VMT. Development under all alternatives would result in increases in population and employment and consequently increases in traffic and air pollutant emissions. **Table 4.3-3** shows mobile source emissions by alternative relative to existing conditions. Increasingly strict ARB and SJVAPCD rules governing criteria air pollutants have resulted in cleaner vehicles, and for nitrogen oxides and reactive organic gases, these gains are projected to more than offset increased mobile source emissions under all of the future growth scenarios considered. However, for each Alternative and the No Project scenario, the increase in VMT over existing conditions would result in a significant air quality impact concerning PM10 and PM2.5, as would also occur with the proposed General Plan. Proposed General Plan policies would also apply to Alternatives 1 and 2 and further reduce impacts, but the impact would remain significant in all cases.

Air quality problems in the Valley are regional in nature, and the impacts to air quality with regard to particulate matter are considered significant cumulative impacts. The contribution of each alternative to these cumulative impacts is considerable. Proposed General Plan policies intend to support the SJVAPCD's efforts to achieve and maintain air quality standards. Alternatives 1 and 2 would include these policies; however, the No Project alternative would not.

Alternative 1 would in the lowest increase in VMT, resulting in less air pollutant emissions than the proposed General Plan. However, VMT would increase by 61 percent over existing conditions. Resulting PM10 and PM2.5 emissions would have a significant impact, though would be less than under the proposed General Plan.

Alternative 2 would result in the greatest increase in VMT, resulting in highest air pollutant emission. VMT would increase by 83 percent over existing conditions, and the impact of increase PM10 and PM2.5 would remain significant.

The No Project alternative would result in a 78 percent increase in VMT, greater than the proposed General Plan, but less than Alternative 2. The impact of increase PM10 and 2.5 would be significant. The No Project alternative would not benefit from proposed General Plan policies that seek to reduce VMT and air quality impacts.

Table 4.3-3. Estimated Mobile Source Emissions by Alternative (Tons per Year)

Alternative	*Annual VMT*	*ROG*	*NOX*	*CO*	*PM10*	*PM2.5*
Existing (2012)	605,074,310	185	768	1,873	246	78
2030 No Build	1,078,860,303	115	309	976	414	116
2030 Proposed General Plan	1,000,979,449	106	285	899	384	108
2030 Alternative 1	977,263,040	104	279	878	375	105
2030 Alternative 2	1,112,310,409	118	318	1,006	427	120
Comparison to Existing (2012)						
2030 No Project	473,785,993	-70	-459	-897	+168	+38
2030 Proposed General Plan	395,905,139	-79	-483	-974	+139	+30
2030 Alternative 1	372,188,730	-82	-489	-995	+130	+28
2030 Alternative 2	507,236,099	-67	-449	-867	+181	+42
SJVAPCD Thresholds	-	10	10	N/A	15	15

Source: ICF International, CT-EMFAC modeling, 2014.

ENERGY, GREENHOUSE GASES AND CLIMATE CHANGE

Greenhouse gas (GHG) emissions forecasts are based upon anticipated population and job growth, and the resultant increase in vehicle miles traveled (VMT), electricity use, and waste generation, as described in Section 3.4: Greenhouse Gases and Climate Change. The GHG analysis was based on an inventory of citywide GHG emissions from draft Climate Action Plan, evaluated as part of the proposed Plan. The analysis of GHG emissions takes into consideration emissions reductions that would result from effective implementation of State legislation, including the Renewable Portfolio Standard, Assembly Bill 1493 (fuel efficiency), Title 24 (building efficiency), and the Low Carbon Fuel Standard. Energy use for each alternative was evaluated based on the direct energy required to operate vehicles and to provide power to residential and non-residential buildings throughout the Planning Area.

The analysis for GHG emission and energy use also seeks to account for the effects of each land use mix proposed by the alternatives on VMT, and the effects of the housing mix as it relates to energy use. Because higher numbers of jobs and larger urban areas that are primarily automobile-dependent often suggest higher levels of VMT, these characteristics may contribute to greater impacts from GHG emissions. Higher emissions may also result from development patterns that are less conducive to trips made by foot, bike, or public transportation, may contribute to greater impacts from GHG emissions. Similarly, higher population numbers can translate to more buildings, which may contribute to greater energy use and associated GHG emissions. Finally, impacts may be greater where more land is given over to industrial use if this use creates more point sources of GHGs.

Alternative 1 would result in the lowest population growth and least amount of jobs overall. This alternative would also result in the least amount of additional housing units to be built. Because less population growth and jobs correlates to less additional VMT, there would be a smaller growth in the amount of GHG emissions produced in the City. Lower population growth, jobs and vehicle use would result in the least energy use of any alternative. This alternative would also produce the least amount of additional industrial land than any of the other proposed alternatives as well as the proposed Plan. Overall, Alternative 1 would result in the lowest amount of energy use and GHG emissions, compared to the other alternatives.

The No Project alternative would result in greater population growth than Alternative 1 and less than the proposed Plan. Similarly, it would add a greater amount of housing units and jobs than Alternative 1. Therefore, it would result a larger amount of GHG emissions than Alternative 1 and less than the proposed Plan. The policies in the proposed General Plan would not apply under No Project alternative, although existing policies and state requirements that would reduce energy use and GHG emissions would.

Alternative 2 would produce a substantially larger population compared to the proposed Plan or Alternative 1. This alternative provides for expanded residential, industrial and commercial areas, and results in the largest footprint of either of the alternatives, at 48 square miles. This alternative would also result in the highest amount of jobs among the proposed alternatives. Due to the larger amount of job and land use growth under Alternative 2, there would be an increase in VMT, which would therefore result in a larger increase in greenhouse gas

emissions. The growth in population, jobs, and VMT would result in the highest energy use of among the alternatives.

AGRICULTURE AND SOIL RESOURCES

Development of any of the alternatives would result in a significant and unavoidable impact on agricultural resources, as all would require some conversion of Important Farmland, including farmland under Williamson Act contracts, to urbanized uses. For all alternatives (including the No Project), it is assumed that future development on lands subject to Williamson Act contracts would be subject to the Act's procedures, including minimizing early termination of active contracts. The analysis of impacts on agriculture and soil resources focuses on differences in the amount of new urbanized land resulting from each alternative, as most of the land surrounding Visalia is farmland, and much of it is considered "prime."

With the smaller footprint of either alternative, Alternative 1 would result in the least amount of Important Farmland and farmland under the Williamson Act converted to other land uses. Because this alternative involves the least amount of population, job and residential growth, it would have the least impact on the conversion of farmland to urban uses as well.

The No Project Alternative would result in more development than Alternative 1, and less than the proposed Plan, and would therefore result in the second lowest amount of conversion of farmland, above Alternative 1. However, the policies included in the proposed Plan would not apply under this alternative, including policies that protect farmland and the development of agriculture within the City limits.

Alternative 2 would result in the largest population growth and urban footprint of all the alternatives. Due to this fact, this alternative would also result in a large amount of converted farmland, greater than the proposed Plan, the No Project alternative, and Alternative 1.

HYDROLOGY, FLOODING, AND WATER QUALITY

Urban development can bring about an increase in impervious surfaces that could lead to increased run-off rates and flooding in downstream areas. The proposed General Plan and alternatives focus new development in currently built-up areas to limit impacts to hydrology and flooding. Additionally, they include policies that would minimize surface water run-off and reduce flooding hazards, such as requiring new development within a floodplain to submit studies and comply with the City's Floodplain Management and Flood Damage Prevention Ordinance. Consequently, impacts to hydrological resources and flooding are expected to be minimal, with the exception of exposure to risk of inundation due to possible (though unlikely) failure of the Terminus Dam. As the majority of the Planning Area is within the Terminus Dam failure inundation area, and the proposed Plan, Alternative 1, Alternative 2, and the No Project Alternative all would place housing in this area, all alternatives would be exposed to this risk.

Alternative 1 would result in the lowest overall amount of residential development, therefore exposing the fewest number of people to the risk of inundation. The No Project alternative would result in a higher amount of residential development, placing more people at risk of

inundation than Alternative 1. Alternative 2 would result in the greatest population growth, and would place more people in areas prone to flood risk from dam failure.

GEOLOGY, SOILS, AND SEISMICITY

Impacts related to geology, soils, and seismic hazards are similar across all alternatives, including the proposed Plan, and are considered less than significant. Visalia is located 30 miles away from the nearest known earthquake faults. The risk that development within the Planning Area would expose people or structures to damage, injury, or death from a surface rupture is therefore low for all alternatives. Existing regulations and building codes further minimize the potential for damage or injury during an earthquake. Their purpose is to ensure that buildings are constructed to resist collapse due to earthquake-related ground shaking or ground failure, and all new development would be subject to their parameters. Furthermore, because there is little variation in the elevation of the Planning Area, landslide risk is also quite low. No specific liquefaction hazards have been identified in the Planning Area, though there is recognized potential for liquefaction throughout San Joaquin Valley in locations where the water table is high; risks would not necessarily differ between the alternatives, and are addressed through soil testing requirements contained in the Subdivision Ordinance. Lastly, as the Planning Area contains no important or regionally valuable mineral resources, none of the alternatives would have an impact in this issue area.

Under Alternative 1, there would be the least amount of additional housing units and development, which would result in the least exposure to geologic and seismic hazards. The No Project alternative would have more housing units and development than Alternative 1, and therefore a higher exposure to geologic and seismic hazards. Alternative 2 would have the greatest amount of additional housing and development, thereby providing the highest exposure to geologic and seismic hazards. State and local building code requirements, including seismic design criteria, would apply under all alternatives (including the No Project) and would still be effective to reduce the potential risks to a less than significant level.

BIOLOGICAL RESOURCES

The proposed General Plan and all alternatives have the potential to affect natural communities as well as special-status species within the Planning Area. Indirect and direct effects on these communities may occur due to the potential disturbances associated with new development.

Under Alternative 1, the amount of development that would take place is similar to (but less than) that of the proposed Plan. The impacts of development on biological resources would be the least under this alternative due to the fact that growth is concentrated within existing city limits and in compact neighborhoods. This alternative would result in intensified development in the Downtown and East Downtown areas as well as the smallest urban footprint of the alternatives. Therefore, Alternative 1 would have least impact on biological resources of the any of the alternatives.

The No Project alternative would result in a higher amount of additional housing units than Alternative 1, resulting in a higher potential effect on biological resources. The policies of the

proposed Plan do not apply under this alternative, many of which provide measures to combat the effects of development posed on biological resources in Visalia.

Alternative 2 would create the largest urban footprint among the alternatives as well as result in the largest amount of development. This alternative's impact on biological resources in Visalia would be substantially greater than under the No Project alternative or Alternative 1. In addition, this alternative calls for the introduction of a college campus in the northwestern quadrant of the City, which could contribute to additional effects on biological resources through development on the site.

PUBLIC SERVICES, FACILITIES, AND UTILITIES

Development under both alternatives and the No Project alternative would require schools, public services and facilities, utilities and infrastructure, and parks. As shown in **Table 4.2-1**, the Alternative 1 would result in the least number of schools provided (53 schools), followed by the No Project alternative (55 schools), and Alternative 2 (65 schools). For policies, fire, and emergency services, each alternative would require service expansion to accommodate additional population growth. While the greatest growth in services would be from Alternative 2, followed by the No Project alternative, and Alternative 1 with the least growth, the physical impact of service expansion (resulting from the need for new fire stations, for example), would be the same, and the magnitude of the impact would be dictated by the amount of service expansion needed. For utilities such as water, sewer, and electricity, the demand would similarly be assumed to scale with population growth under each alternative.

NOISE

The comparison of noise impacts under the alternatives is based on VMT projections since streets and highways are the primary generators of noise. In terms of construction-related noise and vibration, the amount of construction is correlated with the extent of development, so it may be assumed that Alternative 2 would have relatively greater impact than the proposed Plan and Alternative 1, with the No Project alternative having the least impact. However, the No Project alternative would not benefit from the proposed Plan's policies promoting the use of noise attenuation.

Alternative 2 generates more trips compared to the proposed Plan, since it projects more development overall. Citywide noise levels are therefore likely to be greater than the proposed Plan. The No Project generates fewer trips compared to the proposed Plan, due to lower amount of development, and Alternative 1 generates the fewest trips overall. Both the No Project alternative and Alternative 1 would produce a lower citywide noise level, with Alternative 1 producing the least amount.

HAZARDS AND HAZARDOUS MATERIALS

Hazardous materials impacts would be similar for each of the alternatives and the proposed Plan. Generally, these impacts are determined by the level and nature of job growth. Jobs in the industrial sector, for example, could indicate the presence of hazardous materials related to industrial uses. Office or retail jobs might be expected to generate less than those in the industrial sector, but more than residential homes. Redevelopment is another potential indi-

cator, as the demolition of older buildings can expose people and the environment to asbestos and lead-based paint. Locating new development on sites included on a list of hazardous materials site could also create a hazard to the public or the environment; however new development on contaminated sites would be required by the California Hazardous Waste Control Law, the Porter-Cologne Water Quality Act, and other legislation to remediate hazardous substances.

The greatest number of industrial and office jobs would occur under Alternative 2 (38,300 net job increase), followed by the No Project alternative (27,018 net job increase), indicating that the largest number of industrial workers potentially exposed to hazardous materials would occur in Alternative 2, followed by the No Project alternative. The No Project alternative would produce the least amount of industrial jobs, and therefore the least amount of potential exposure to hazards and hazardous materials.

Similarly, the greatest amount of new development would occur under Alternative 2, followed by the No Project alternative, and Alternative 1, indicating that the largest potential exposure from the construction of new development on contaminated sites would occur in Alternative 2, followed by the No Project alternative, and Alternative 1. Under each alternative, remediation of contaminated sites would occur as required by federal and state law for new development.

CULTURAL RESOURCES

Development resulting from any of the alternatives would have similar impacts on cultural resources as the proposed General Plan. In all cases, construction activities associated with urbanization and future growth might damage or destroy objects, properties, or remains of cultural significance. There are, however, many measures proposed or in place that would mitigate these impacts. The proposed General Plan and, by extension, Alternatives 1 and 2 include specific policies that ensure the appropriate identification and handling of any cultural resource discoveries. These policies reinforce already existing state laws regulating archeological review and the treatment of human remains. Similarly, the current Historic Preservation Ordinance (HPO) affords special protections to all of Visalia's registered historic properties, minimizing any impacts from intensified infill development. The proposed Plan and Alternatives 1 and 2 contain additional policies that further support the HPO. Impacts would therefore be less than significant for all alternatives overall, and generally similar to those of the proposed Plan.

VISUAL QUALITY

Differences between the alternatives in their impacts on visual resources between the proposed General Plan and the alternatives are minor and relate primarily to the extent and type of development proposed. Alternative 1 would focus development in neighborhood nodes, with residential development in much of the expanded footprint and compact neighborhoods located to the north, southeast, and in the West 198 corridor area. Alternative 2 would expand the city outwards with expanded residential, industrial, and commercial areas. As each of the alternatives would provide visual compatibility with existing development, neither of the alternatives would be expected to have a significant adverse impact on Visalia's visual quality. In addition, each alternative would generally include the same polices as those de-

fined in the proposed General Plan. These policies would reduce the impact on aesthetics, and ensure that the alternatives would not substantially degrade the existing visual character or quality of Visalia and its surroundings.

The No Project alternative would result in less development than either Alternative 2 or the proposed Plan. However, without the benefit of the new policies in the proposed General Plan, the No Project alternative will not have updated policies for visual resources. Since Alternative 1 would result in less development overall, it follows that this alternative will produce fewer view obstructions, fewer sources of light and glare, and less construction activity.

4.4 Environmentally Superior Alternative

CEQA Guidelines require the identification of an environmentally superior alternative among the alternatives analyzed in an EIR. The Guidelines also require that if the No Project alternative is identified as the environmentally superior alternative, then another environmentally superior alternative must be identified.

Based on a comparison of the alternatives' overall environmental impacts and their compatibility with General Plan goals and objectives, Alternative 1 appears to be the environmentally superior alternative, with the smallest amount of additional population growth and jobs, as well as the least amount of development. Because development under this alternative is concentrated in the Downtown and infill areas of the city and focuses on growth taking place within city limits, there exists the lowest chance that development would affect any of the environmentally sensitive areas of the Planning Area or pose a threat on environmental resources in the Planning Area.

During the development of alternatives, the proposed Plan and Alternatives 1 and 2 were compared to evaluate the degree to which each plan met the 13 Emerging Themes. Each plan reflected a unique city with a strong sense of community (Emerging Theme 1); a city rich in amenities (Theme 2); a city with broad employment opportunities (Theme 6); a city of "Complete Streets" serving all modes of travel (Theme 9); a city with attractive, smooth-flowing streets and mixed-use developments (Theme 11); and a safe and secure community (Theme 12). Both Alternatives 1 and 2 did not emphasize a city connected to its waterways (Theme 4). Alternative 1 did not emphasize a strong retail sector (Theme 7), while Alternative 2 could be improved in its approach to providing a town-scale community (Theme 3); a diverse and inclusive city (Theme 5); a city of vital connected neighborhoods, and excellent quality of life (Theme 8); compact concentric growth with priority for infill sites (Theme 10); and a leader in land and water conservation, green building, energy efficiency, recycling and stewardship (Theme 13). Overall, the proposed Plan most closely embodies the 13 Emerging Themes to meet community goals, while Alternative 1 is lacking in creating connectivity to waterways and emphasizing a strong retail sector.

Moreover, the Alternatives were vetted in a public process with the Visalia community, elected officials, and the General Plan Update Review Committee, the majority of whom believed that the proposed Plan most closely responded to citywide goals and priorities, including for targeted growth rates and accommodation of new population, commercial business, and jobs.

The amount of development possible under Alternative 1 was felt by many to unnecessarily hamper the City's economic prosperity, and the amount of growth possible under the proposed Plan was preferred, provided that policies ensured it would occur in an orderly, controlled, and sustainable fashion. The proposed Plan follows a three-tier growth boundary system that controls the phasing and distribution of future development, while the Alternatives rely on a two-tier system based on a continuation of the current General Plan.

The proposed Plan would fully accommodate the projected population and job growth in Visalia, and plans for its orderly, sequential development, emphasizing natural and urban corridors and largely maintaining current development trends. Allowing growth in Visalia through continuous responsible development relieves development pressure elsewhere in the region and ensures that Visalia plays its part in accommodating the San Joaquin Valley's growth in a sustainable, compact urban form. The proposed Plan meets all the plan objectives and most closely reflects the Emerging Themes, but would have larger impacts than Alternative 1 due directly to its larger buildout population and urban footprint.