

6.0 Project Alternatives

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6.1. INTRODUCTION

This discussion of alternatives is required by the California Environmental Quality Act (CEQA) to “focus on alternatives capable of eliminating significant adverse environmental effects...” or of reducing such effects to a less-than-significant level (CEQA *Guidelines*, Section 15126(d)(3)).

Therefore, it is important to identify feasible alternatives that could reduce the significant environmental impacts of the proposed project. In order to effectively evaluate the alternatives, the project objectives were used to determine the reasonableness and feasibility of each alternative. The objectives of the proposed project (as presented in Chapter 3, Project Description) considered while developing the alternatives are listed below:

- Plan a balanced transportation system that meets the policies of the City’s General Plan;
- Manage and plan for an increase in vehicle trips on local roadways throughout the City to facilitate a safe, efficient flow of vehicle traffic;
- Construct financially feasible roadway improvements to provide a safe and reliable transportation network to accommodate planned urban growth in the City and surrounding areas;
- Minimize the visual impact of roadway improvements on surrounding areas;
- Provide cost-efficient improvements that reduce congestion on roadways and intersections to assist the City in maintaining a level of service (LOS) of C, except in those highly urbanized areas where a lower level of service is appropriate;
- Minimize the need to acquire new rights-of-way, particularly where residential or commercial buildings and/or parking could be affected; and
- Update the City’s traffic model.

Alternatives are evaluated for their potential to eliminate significant impacts of the proposed project, reduce significant impacts to a less-than-significant level, increase the magnitude of significant impacts, or result in additional significant impacts beyond those associated with the proposed project. The Mitigation Measures identified for the proposed project impacts would apply to the alternatives analyzed, where impacts are similar in nature, and would reduce the impact of an alternative to a less-than-significant level.

Some project alternatives were initially considered but not carried forward for further analysis because they could not sufficiently meet one or more of the proposed project objectives or they were economically infeasible. The alternatives considered and eliminated from further detailed analysis, as well as the alternatives analyzed in this Draft Subsequent EIR, are described below.

6.2. ALTERNATIVES CONSIDERED AND ELIMINATED FROM FURTHER ANALYSIS

In developing alternatives, the primary consideration was reducing impacts of the proposed project while achieving the project objectives. Maintaining the current land use forecasts in the travel demand model was eliminated as an alternative because the development projects incorporated into the updated travel demand model reflect projects that have already been approved by the City, or represent the City's current assumptions regarding growth to 2020. Overall trips would increase by less than 1 percent. Differences in trip generation can be attributed to both changes in land use and the changes in trip generation related to an expanded set of land use categories (such as hotels, the convention center, and universities) included in the new travel demand model. Some significant and unavoidable impacts of the proposed project would be related to increased traffic on City of Roseville roadways, but these would not be caused by the proposed project.

An objective of the CIP is to manage and plan for an increase in vehicle trips on local roadways throughout the City to facilitate a safe, efficient flow of vehicle traffic. An offsite alternative would not meet this basic objective; therefore, this Draft Subsequent EIR does not evaluate an offsite alternative.

6.3. ALTERNATIVES ANALYZED

This section of the Draft Subsequent EIR provides a comparative analysis of the merits of the proposed project alternatives pursuant to Section 15126.6 of the CEQA Guidelines, as amended. The purpose of the alternatives analysis is to explain potentially feasible ways to avoid or minimize significant effects of the project. According to the CEQA Guidelines, an EIR needs only examine in detail those alternatives that could feasibly meet most of the basic objectives of the project. When addressing feasibility, Section 15126.6 of the CEQA Guidelines states that “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, jurisdictional boundaries, and whether the applicant can reasonably acquire, control or otherwise have access to alternative sites.” The CEQA Guidelines also specify that the alternatives discussion should not be remote or speculative, and need not be presented in the same level of detail as the assessment of the proposed project.

Therefore, based on the CEQA Guidelines, several factors need to be considered in determining the range of alternatives to be analyzed in an EIR and the level of analytical detail that should be provided for each alternative. These factors include (1) the nature of the significant impacts of the proposed project; (2) the ability of alternatives to avoid or lessen the significant impacts associated with the project; (3) the ability of the alternatives to meet the objectives of the project; and (4) the feasibility of the alternatives. These factors would be unique for each project. These considerations narrowed the alternatives for analysis in this Draft Subsequent EIR to the two alternatives described below in Sections 6.3.1 and 6.3.2. This analysis primarily evaluates these alternatives for their ability to eliminate or substantially reduce residual (post-mitigation) impacts or effects attributed to the proposed project and for the impacts of Mitigation Measures.

The following two alternatives are evaluated in this chapter:

- **Alternative 1:** No Project/No Action Alternative

- **Alternative 2:** Cumulative Plus Project with Placer Parkway and Caltrans Improvements Alternative

6.3.1 ALTERNATIVE 1: NO PROJECT/ NO ACTION ALTERNATIVE

Alternative 1, the No Project/No Action Alternative, is required to be evaluated in accordance with Section 15126 (2)(4) of the CEQA Guidelines. As required by the CEQA Guidelines, the analysis must examine the impacts that might occur if the project sites are left in their present condition, as well as what may reasonably be expected to occur in the foreseeable future if the proposed project were not approved.

Under Alternative 1, the current CIP would still be implemented. Growth would still be assumed outside the Roseville City limits, but land use projections within the City incorporated into the travel demand model would not be revised. Improvements delineated in the current CIP would be constructed, but no additional intersection or roadways improvements incorporated into the proposed project would be implemented. Noise, biological resource, and cultural resource impacts would still occur from construction of the proposed roadway and intersection widenings incorporated into the current CIP, but these impacts would be reduced under Alternative 1 because the footprint of disturbance would also be reduced. Since traffic congestion would be worse under Alternative 1, this alternative would result in increased long-term impacts to traffic and circulation as well as air quality. In addition, Alternative 1 would not comply with the project objective of meeting the City's LOS policy.

Based on consideration of long-term impacts, the Plus Project conditions are considered environmentally superior to the No Project/No Action Alternative. The analysis below compares the environmental effects of Alternative 1 against environmental effects that would occur if the proposed project were approved.

6.3.1.1 Transportation and Circulation

Alternative 1 represents the 2020 No Project conditions (Scenario 4) discussed in detail in Section 4.1.4.2 of this Draft Subsequent EIR. **Table 4.1-12** shows the p.m. peak hour levels of service (LOS) at all 172 signalized intersections assumed to be in place within Roseville, under 2020 No Project conditions and 2020 Plus Project conditions.

Table 6-1 identifies the number of intersections projected to operate at LOS C or better under both 2020 Plus Project conditions (Scenario 5) and 2020 No Project conditions (Scenario 4). **Table 6-1** shows that under No Project conditions, 53 (31 percent) of the 172 intersections would operate at LOS D or worse and 119 (69 percent) would operate at LOS C or better. This table also shows that when compared with 2020 Plus Project conditions, a lower percentage of intersections would operate at LOS C or better under the 2020 No Project conditions. With the 2020 No Project conditions, the City would not comply with its LOS policy of maintaining an LOS of C or better at 70 percent of all signalized intersections in the City. Therefore, the proposed project would be preferred over Alternative 1, the No Project Alternative.

TABLE 6-1				
CITY OF ROSEVILLE				
NUMBER OF INTERSECTIONS OPERATING AT LOS C OR BETTER				
ALTERNATIVE 1: NO PROJECT CONDITIONS				
Level of Service (LOS)	2020 Plus Project (Scenario 5)		Alternative 1: 2020 No Project (Scenario 4)	
LOS A–C	136	76%	119	69%
LOS D	24	13%	27	16%
LOS E	11	6%	14	8%
LOS F	8	4%	12	7%
LOS D–F	43	25%	53	31%
TOTAL INTERSECTIONS	179 ¹		172	
Note:				
¹ Includes 9 additional intersections listed in Table 3-3 and excludes 2 intersections in Riverside Gateway Pedestrian District				
SOURCE: DKS Associates, 2006				

6.3.1.2 Air Quality

Air emissions during construction and operation of the proposed project would be less than significant. Under the No Project Alternative, improvements outlined in the current CIP would still occur, but the additional roadway and intersection improvements incorporated into the proposed project would not occur. Since the overall disturbance area would be reduced with the No Project Alternative, emissions from dust and construction equipment would also be reduced under the No Project Alternative; therefore, with respect to air emissions from construction, Alternative 1 would be preferred over the proposed project.

Under No Project conditions (Scenario 4), 53 intersections would have an LOS of D or worse versus 43 under the Plus Project conditions (Scenario 5). Therefore, traffic congestion would be worse at 10 additional intersections under the No Project Alternative, which would result in increased air emissions at these specific intersections. With respect to air emissions from operations, the proposed project would be preferred over the Alternative 1.

6.3.1.3 Noise

Under the proposed project, potentially significant noise impacts would be mitigated to less than significant levels through implementation of Mitigation Measure 4.3-1 (development and implementation of a construction noise abatement program). No significant noise impacts from operations were identified for the proposed project. Under the No Project Alternative, there would be reduced noise impacts because there would not be additional roadway and intersection improvements, although improvements identified in the current CIP would still be constructed. While traffic noise may change, the increases in noise would be due to development-related

increases in traffic rather than construction of the additional improvements. With respect to noise, Alternative 1 would be preferred over the proposed project.

6.3.1.4 Biological Resources

Under the proposed project, potentially significant biological impacts would be mitigated to less-than-significant levels through implementation of Mitigation Measures 4.4-1 through 4.1-7 (pre-construction surveys, compliance with no net loss of wetlands, etc.). Under the No Project Alternative, roadway and intersection widenings identified in the current CIP would still occur; however, the area of disturbance would be reduced because the additional improvements incorporated into the proposed project would not occur. Although some impacts would still occur through implementation of the current CIP, the area of disturbance would be reduced and potential impacts to Swainson's hawk, burrowing owl, western spadefoot toad, Sanford's arrowhead, and rose mallow (all special-status species) would be avoided and/or reduced under the No Project Alternative. With respect to biological resources, Alternative 1 would be preferred over the proposed project.

6.3.1.5 Cultural Resources

Under the proposed project, potentially significant cultural resource impacts would be mitigated to less-than-significant levels through implementation of Mitigation Measures 4.5-1 and 4.5-2 (cultural surveys, comply with recommendations of a qualified professional archaeologist.). Potentially significant impacts to cultural resources would still occur under the No Project Alternative because improvements identified in the current CIP would still be implemented. However, implementation of Mitigation Measures 4.5-1 and 4.5-2 would reduce the impacts to cultural resources to less-than-significant levels when implementing the current CIP. Since no additional disturbance would occur beyond that identified in the current CIP, potential cultural resource impacts would be reduced under the No Project Alternative. With respect to cultural resources, Alternative 1 would be preferred over the proposed project.

6.3.2 ALTERNATIVE 2: CUMULATIVE PLUS PROJECT WITH PLACER PARKWAY AND CALTRANS IMPROVEMENTS ALTERNATIVE

Alternative 2 (also referred to as Scenario 7a) is based on Cumulative Plus Project conditions (Scenario 7) but with additional roadway improvements incorporated into the travel demand model used to project 2025 traffic conditions. Transportation projects incorporated into Alternative 2 include the proposed Placer Parkway and a number of improvements to the state highway system, described further below. This alternative was evaluated based on the fact that under cumulative conditions, the City just meets its General Plan LOS policy with the proposed project. **Table 5.2-1** shows that the percentage of intersections operating at LOS C or better under Cumulative No Project conditions (Scenario 6) and Cumulative Plus Project conditions (Scenario 7) would be 56 percent and 70 percent, respectively (with the assumption that Mitigation Measures 5.2-1 and 5.2-2 are implemented).

Alternative 2 was developed to determine whether the proposed Placer Parkway and improvements to the state highway system would result in conditions that further improve compliance with the City's LOS policy when considering cumulative development beyond the Roseville city limits. For this alternative, the following roadway improvements were assumed in addition to the roadway

improvements and Mitigation Measures 5.2-1 and 5.2-2 already incorporated in the Cumulative Plus Project conditions:

- **Placer Parkway:** a proposed four-lane parkway (in 2025) connecting State Route (SR) 65 in Rocklin to SRs 70 and 99 in Sutter County;
- **Interstate 80 (I-80):** the addition of high occupancy vehicle (HOV) lanes and auxiliary lanes (where they do not currently exist) between the Placer/Sacramento County line and SR 65; and
- **SR 65:** widening SR 65 from four to six lanes from I-80 to Twelve Bridges Boulevard in Lincoln.

This analysis compares the proposed project under cumulative conditions (Scenario 7) with Alternative 2. To compare Alternative 2 with the proposed project under 2020 conditions (Scenario 5) would not be appropriate because of the amount of development outside the Roseville City limits that is assumed under Alternative 2 but that is not assumed under Scenario 5. This additional development would create a bias against Alternative 2 unless the development was also considered when comparing the alternative to the proposed project.

6.3.2.1 Transportation and Circulation

Table 6-2 compares the number of intersections operating at LOS C or better under both Cumulative Plus Project (Scenario 7) and Cumulative Plus Project with Placer Parkway and Caltrans Improvements (Alternative 2: Scenario 7a). Both scenarios assume the implementation of Mitigation Measures 5.2-1 and 5.2-2 presented in Section 5.0, Other CEQA Considerations. This table shows that adding Placer Parkway and the specified state highway improvements would reduce the number of intersections operating at LOS D or worse in Roseville, from 54 to 45. In turn, the percentage of intersections operating at LOS C or better would increase from 70 percent to 75 percent.

TABLE 6-2						
CITY OF ROSEVILLE						
NUMBER OF INTERSECTIONS OPERATING AT LOS C OR BETTER						
ALTERNATIVE 2: CUMULATIVE PLUS PROJECT WITH PLACER PARKWAY						
AND CALTRANS IMPROVEMENTS						
Level of Service (LOS)	Cumulative No Project (Scenario 6)		Cumulative Plus Project (Scenario 7)		Alternative 2 (Scenario 7a)	
LOS A-C	96	56%	125	70%	134	75%
LOS D-F	76	44%	54	30%	45	25%
TOTAL INTERSECTIONS	172		179		179	
SOURCE: DKS Associates, 2006						

Table 6-2 also shows that while the proposed project would improve the City's percentage of intersections operating at LOS C or better when compared to Cumulative No Project conditions, the state highway improvements would improve conditions when compared to Cumulative Plus Project conditions (Scenario 7).

Table 6-3 shows the 20 intersections that would have significantly improved LOS under Alternative 2, which adds Placer Parkway and the state highway improvements under cumulative conditions: 10 intersections would improve from LOS D to LOS C or better; 7 intersections would improve from LOS E to LOS D; and 3 intersections would improve from LOS F to LOS E. No intersections would experience significantly degraded LOS with the addition of the improvements to the state highway system.

The addition of Placer Parkway and improvements to the state highway system would cause changes in volume on I-80 and SR 65; **Table 6-4** shows the volume changes on these roadways. This table also shows the changes in numbers of lanes on I-80 and SR 65. It should be noted that the volumes reported in **Table 6-4** do not include traffic in the HOV lanes because the HOV lanes are anticipated to operate at an acceptable LOS. The LOS on I-80 is calculated based on the number of mainline and auxiliary lanes and does not include the HOV lanes. **Table 6-4** shows that all segments would operate at LOS F with or without the roadway improvements. However, the number of vehicles using the mainline lanes of I-80 would decline. With the addition of Placer Parkway and additional lanes on SR 65, the volumes on SR 65 would increase by approximately 30,000 vehicles per day. While the volumes would increase, the number of daily vehicles per travel lane would actually decrease by about 15 percent.

With respect to traffic and circulation, Alternative 2 would be preferred over the proposed project.

6.3.2.2 Air Quality

Alternative 2 (Scenario 7a) incorporates additional roadway improvements in addition to projects considered in Cumulative Plus Project conditions (Scenario 7). Construction emissions of air pollutant emissions under Alternative 2 would exceed Placer County Air Pollution Control District's significance thresholds due to the large number of projects that could be under construction simultaneously. The implementation all feasible and applicable control measures would reduce emissions to the extent possible during construction activities. Despite implementation of these measures, construction activities under Alternative 2 would generate unavoidable, temporary increases in the nonattainment pollutants and their precursors on air quality. This would be a significant impact of Alternative 2. There would be no preference between Alternative 2 and the proposed project with respect to air quality during construction.

As with the proposed project under cumulative conditions (Scenario 7), Alternative 2 would accommodate future buildout conditions within the City of Roseville. Alternative 2 would also include additional improvements to alleviate traffic congestion within and outside the city limits. As shown in **Table 6-3**, 20 intersections in the City of Roseville would have significantly improved LOS with the addition of Placer Parkway and the state highway improvements. No intersections would have significantly degraded LOS with the addition of these improvements. With reduced traffic congestion under Alternative 2, there would be a corresponding reduction in air quality impacts. With respect to air quality operational emissions, Alternative 2 would be preferred over the proposed project.

TABLE 6-3
CITY OF ROSEVILLE INTERSECTIONS
WITH IMPROVED LOS: FROM 2025 CUMULATIVE PLUS PROJECT
TO ALTERNATIVE 2

ID	N/S Street	E/W Street	2025 Cumulative Plus Project (Scenario 7)		Alternative 2 (Scenario 7a)	
			LOS	V/C	LOS	V/C
3	Yosemite	Atlantic St	D	0.82	C	0.72
15	Orlando/Marlin	Cirby Way	D	0.86	C	0.81
58	Harding Blvd	Lead Hill Blvd	D	0.82	C	0.81
69	Fiddymment Rd	Pleasant Grove	D	0.86	C	0.79
74	Washington Blvd	Pleasant Grove	D	0.88	C	0.79
75	Woodcreek Oaks	Pleasant Grove	D	0.86	C	0.76
93	Roseville Pkwy	Secret Ravine	D	0.87	C	0.81
107	Sierra College Blvd	Old Auburn Rd	D	0.83	C	0.81
129	Grant Street	Vernon Street	D	0.85	C	0.76
177	Chase Dr	Roseville Pkwy	D	0.83	C	0.70
39	Fiddymment Rd	Baseline Rd	E	1.00	D	0.89
47	Foothills Blvd	Junction Blvd	E	0.95	D	0.89
54	Foothills Blvd	Vineyard Rd	E	0.93	D	0.87
91	Roseville Pkwy	Olympus Dr	E	0.91	D	0.86
130	Judah	Vernon Street	E	0.91	D	0.82
136	Washington Blvd	Main Street	E	1.00	D	0.89
139	Woodcreek Oaks	Baseline Rd	E	0.95	D	0.85
9	Washington Blvd	Blue Oaks Blvd	F	1.06	E	0.94
18	Vernon St	Cirby Way	F	1.05	E	0.98
78	Roseville Pkwy	Pleasant Grove	F	1.13	E	0.97

LOS = level of service; V/C = volume to capacity ratio

SOURCE: DKS Associates, 2006

TABLE 6-4

**DAILY VOLUMES ON STATE HIGHWAYS:
ALTERNATIVE 2**

Facility	Segment	Cumulative Plus Project (Scenario 7)			Alternative 2 (Scenario 7a)			
		Lanes	ADT	LOS	Lanes	ADT		LOS
						Mainline	HOV	
I-80	Sac. County line to Riverside Ave	8	246,700	F	8 (2)	215,600	(35,800)	F
	Riverside Ave to Douglas Blvd	6	222,600	F	8 (2)	202,200	(35,300)	F
	Douglas Blvd to Eureka Rd	6	221,700	F	8 (2)	203,500	(31,200)	F
	Eureka Rd to Taylor Rd	8	221,200	F	8 (2)	205,800	(33,500)	F
	Taylor Rd to SR 65	8	207,400	F	8 (2)	191,900	(29,900)	F
	SR 65 to Rocklin Rd	6	147,400	F	6	146,900		F
SR 65	I-80 to Galleria Blvd	4	128,800	F	6	157,000		F
	Galleria Blvd to Pleasant Grove Blvd	4	119,300	F	6	156,300		F
	Pleasant Grove Blvd to Blue Oaks Blvd	4	124,700	F	6	160,300		F
	Blue Oaks Blvd to Sunset Blvd	4	106,000	F	6	137,800		F

Notes:

- Roadway segment LOS are based on roadway capacities and LOS criteria in **Table 4.1-11**
- LOS calculations based on mainline volumes
- Lanes in **bold** represent additional lanes added with Alternative 2
- Lanes in **(parentheses)** represent HOV lanes

ADT = average daily traffic; HOV = high-occupancy vehicle; LOS = levels of service

SOURCE: DKS Associates, 2006.

6.3.2.3 Noise

Alternative 2 (Scenario 7a) incorporates additional roadway improvements in addition to projects considered in Plus Cumulative Plus Project conditions (Scenario 7). Similar to air quality, construction noise impacts under Alternative 2 would exceed significance thresholds due to the large number of projects that could be undergoing simultaneous construction. The addition of Placer Parkway and improvements to the state highway system would further contribute to noise levels during construction, beyond those levels anticipated under Scenario 7. During construction of Alternative 2, the City would adhere to their Noise Ordinance, which requires that construction activity occur on weekdays between 7 a.m. and 7 p.m. and on weekends between 8 a.m. and 8 p.m. In accordance with the Municipal Code, all construction equipment would be fitted with factory-installed muffling devices or better and all construction equipment shall be maintained in good working order. Implementation of Mitigation Measure 4.3-1 would further ensure that sensitive receptors would not experience significant noise impacts during construction.

Under Alternative 2, the LOS within Roseville would be improved at numerous intersections, which could affect noise levels at nearby sensitive receptors. **Table 6-5** summarizes the results of the analysis for Alternative 2 (Scenario 7a) compared to the Cumulative No Project conditions (Scenario 6) and Cumulative Plus Project conditions (Scenario 7) for the intersections where widening would occur under both the proposed project and Alternative 2. The results show that the day-night noise exposure level (L_{dn}) of a representative set of receivers for each intersection would decrease with the addition of the Placer Parkway and Caltrans improvements at Intersection 165 (Fiddymment Road/Westlake). No change in noise levels are expected for the other nine intersections under Alternative 2 when compared to the Cumulative Plus Project conditions (Scenario 7). With respect to noise levels during operation, Alternative 2 would be slightly preferred over the proposed project.

Intersection ID	Calculated Noise Exposure, L_{dn} , dBA		
	Cumulative Plus Project (Scenario 7)	Alternative 2 (Scenario 7a)	Change Scenario 7a minus Scenario 7
15	65	65	0
19	70	70	0
69	62	62	0
91	67	67	0
100	66	66	0
104	68	68	0
105	65	65	0
165	70	69	-1
178	60	60	0
179	66	66	0

L_{dn} = day-night noise exposure level ; dBA = A-weighted sound level

6.3.2.4 Biological Resources

Under Alternative 2, roadway and intersection widening improvements incorporated into the proposed project would still occur. Implementation of Mitigation Measures 4.4-1 through 4.4-7 would minimize significant impacts to biological resources. However, Alternative 2 includes additional roadway improvements outside of Roseville not included in the Cumulative Plus Project conditions (Scenario 7), including Placer Parkway and Caltrans improvements. With the construction of these additional projects, the overall disturbance areas and loss of biological

resources would increase under Alternative 2. With respect to biological resources, the proposed project would be preferred over Alternative 2.

6.3.2.5 Cultural Resources

Under Alternative 2, roadway and intersection widening improvements proposed as part of the project would still occur. Implementation of Mitigation Measure 4.5-1 and 4.5-2 would reduce significant impacts to cultural resources to less-than-significant levels. However, Alternative 2 includes additional roadway construction outside of Roseville not included in the Cumulative Plus Project conditions (Scenario 7), including Placer Parkway and Caltrans improvements. Therefore, additional potentially significant impacts could occur to cultural resources. Although Mitigation Measures would still reduce these impacts to less-than-significant levels, the overall footprint would be increased with this alternative, correspondingly increasing the likelihood of inadvertently exposing archaeological resources. With respect to cultural resources, the proposed project would be preferred over Alternative 2.