Draft
Subsequent Environmental Impact Report
for the City of Roseville 2020 Transportation System Capital Improvements Program Update

Public Works

State Clearinghouse No. 2006062086

January 2007

Prepared by:

URS

221 Main Street
Suite 600
San Francisco, CA 94105
(415) 896-5858

Prepared for:

311 Vernon Street
Roseville, CA 95678
Contact: Rob Jensen
(916) 774-5331
www.roseville.ca.us/pw

CITY OF ROSEVILLE CALIFORNIA

Table of Contents

Table of Contents

Appendices

List of Tables

List of Figures

1.0 Introduction

1.0 Introduction

1.1 BACKGROUND AND PURPOSE

The City of Roseville Transportation System Capital Improvements Program (CIP) identifies the various improvements needed to serve the future transportation demands on the City's roadway system through 2020. The CIP is periodically updated to respond to changing conditions and to ensure the development of an adequate transportation system, consistent with the City's level of service (LOS) policy.

Pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15050, the City of Roseville is the lead agency responsible for preparing a Subsequent Environmental Impact Report (EIR) for the update to the City's current 2020 Transportation System CIP.

Previous EIRs prepared for the City's CIP include the 2015 CIP EIR, certified in 2000, and the 2020 CIP Supplemental EIR, certified in 2002 (2002 Supplemental EIR). The 2015 CIP EIR evaluated a revised set of roadway and intersection improvements and amendments to the City's General Plan LOS policy. The 2002 Supplemental EIR was prepared based on the determination that land use absorption in the City was occurring more quickly than previously anticipated. The 2002 Supplemental EIR specifically addressed (1) an expanded list of intersections that required modification from 2015 levels to citywide buildout levels, and (2) an amendment to the General Plan to modify the City's LOS policy to maintain a LOS C standard at a minimum of 70 percent of all signalized intersections and roadway segments in the City during the p.m. peak hour. These two previous EIRs are available for public review at the City of Roseville Permit Center, 311 Vernon Street, Roseville. Modifications to the 2020 CIP since preparation of the 2002 Supplemental EIR have also occurred as a result of subsequent individual City projects.

Since the 2002 Supplemental EIR for the 2020 CIP was published, the City has determined that a Subsequent EIR should be prepared to update the 2020 CIP, based on revised citywide buildout conditions and the use of an updated traffic model.

1.2 SCOPE OF THE SUBSEQUENT EIR

A Notice of Preparation (NOP) for this Draft Subsequent EIR was prepared for the project and distributed for a 30-day review period on June 16, 2006. Copies of the NOP and comment letters received are included in Appendices A and B, respectively. An Initial Study and Environmental Checklist were prepared to evaluate potential environmental impacts of proposed project. The findings of the Initial Study are provided in Appendix C.

This Draft Subsequent EIR evaluates the physical effects of the proposed project for specific resource areas where potentially significant impacts were identified in the Initial Study. These resource areas include Transportation and Circulation, Air Quality, Noise, Biological Resources, and Cultural Resources. The evaluation of effects of the proposed project on these resource areas is presented in Sections 4.1 through 4.5 of Chapter 4, Environmental Analysis. Each section is divided into five parts: Introduction, Environmental Setting, Regulatory Setting, Impacts, and Mitigation Measures. In addition to these discussions in each section, those impacts that cannot be mitigated

to a less than significant level (and are therefore considered significant unavoidable adverse impacts) are identified separately in Chapter 5, Other CEQA Considerations.

Other CEQA-related issues, such as cumulative impacts and the potential for growth resulting from implementation of the proposed project, are analyzed in Chapter 5. In addition, two alternatives (Alternative 1: No Project/No Action Alternative and Alternative 2: Cumulative Plus Project with Placer Parkway and Caltrans Improvements) are analyzed in this Draft Subsequent EIR. These alternatives are discussed in Chapter 6, Project Alternatives.

This Draft Subsequent EIR will focus on any potential new significant impacts and/or increases in severity of impacts from those previously identified in the City's 2000 EIR, prepared for the 2015 CIP Update, and the 2002 Supplemental EIR, prepared for the 2020 CIP.

1.3 CEQA PROCESS

CEQA (Public Resources Code Section 21000 *et seq.*) is one of California's most important environmental laws. It requires state and local agencies to disclose and consider the environmental implications of their actions. It further requires agencies to avoid environmental impacts when such avoidance is feasible. In furtherance of these goals, six objectives are identified:

- Disclose to decision makers and the public the significant environmental effects of proposed activities;
- Identify ways to avoid or reduce environmental damage;
- Prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures;
- Disclose to the public reasons for agency approvals of projects with significant environmental effects;
- Foster interagency coordination; and
- Enhance public participation.

The CEQA procedures are guided by the legislative intent to have public participation to the greatest extent possible. The state legislature also intended that decision makers be able to make informed decisions based on substantial information regarding a "project" and that these decisions be based on a trail of reasoning accessible to the public.

The EIR and its preparation is the method by which information is gathered and organized, impacts assessed, and Mitigation Measures developed. The EIR is prepared by a lead agency (City of Roseville for this EIR); the Draft EIR is then circulated for public review and comment; and a final document with responses to public comments is prepared for consideration by advisory and legislative bodies, in this case the City of Roseville Transportation Commission and City Council.

In addition, the State Resources Agency has adopted regulations, known as the State CEQA Guidelines (Guidelines Section 15000 *et seq.*), to guide agencies in implementing the law. The CEQA Guidelines provide detailed procedures that agencies must follow to implement CEQA,

including the procedures for the preparation of a CEQA document (an EIR for projects that may have significant impacts requiring mitigation measures or a Negative Declaration for projects with no significant impacts).

CEQA is more than merely a "procedural" statute. Substantive provisions of CEQA include provisions requiring agencies to avoid or mitigate significant impacts disclosed in an EIR when feasible.

The City has determined that a Draft Subsequent EIR is the appropriate environmental document for this 2020 CIP Update because it meets certain criteria described in CEQA Guidelines Section 15162, namely:

- Substantial changes have occurred with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvements of new significant environmental effects or a substantial increase in the severity of previously identified significant effects [CEQA Guidelines Section 15162(a)(2]. These effects are projected to occur outside of the City of Roseville, and include a substantial amount of new development proposals, which would add a considerable amount of traffic on City of Roseville streets; and

- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows that the project will have one or more significant effects not discussed in the previous EIR or negative declaration, and that significant effects previously examined will be substantially more severe than shown in the previous EIR [portion of CEQA Guidelines Section 15162(a)(3)]. These effects are primarily related to localized degraded traffic conditions, identified as a result of updating the base year traffic model conditions from 2001 to 2004 conditions, modification of citywide buildout conditions, and the aforementioned increase in development outside of the City of Roseville.

1.3.1 Environmental Review Process

This Draft Subsequent EIR was issued on February 1, 2007 for a 45-day period of public review and comment by agencies and other interested parties and organizations. The public review period concludes on March 19, 2007. Copies of the Draft Subsequent EIR are available for public review at the City of Roseville Permit Center, 311 Vernon Street, Roseville, California.

A public hearing to receive comments on this Draft Subsequent EIR will be held at the Transportation Commission Meeting on February 20, 2007.

All comments or questions about this Draft Subsequent EIR should be addressed to:

Rob Jensen
City of Roseville Public Works Department
311 Vernon Street
Roseville, CA 95678
(916) 774-5331 Phone
(916) 746-1331 Fax

Following public and agency review, a Final Subsequent EIR will be prepared in response to written comments received during the public review period as well as comments made during the public hearing. The Final Subsequent EIR will be available for public review prior to its consideration by the Roseville City Council. This decision-making body will review and consider the Final Subsequent EIR prior to its decision to approve, revise, or reject the proposed project.

1.3.2 CEQA Compliance for Future Project-Related Approvals

This Subsequent EIR has been prepared to provide both project- and program-level environmental review in accordance with CEQA. Project-level review is provided for the purposes of adopting the new traffic model, adopting the proposed CIP program of transportation improvements, making findings relative to the City's transportation system Level of Service Policy, and updating related traffic mitigation fees. Program, and for some issues project-level review, is provided for the actual CIP improvement projects. The analysis of CIP improvement projects contained in this Subsequent EIR was conducted based on the best available information. It identifies the broad environmental issues and cumulative effects associated with proposed CIP improvements as well as impacts associated with right-of-way expansion. As such, the Transportation and Circulation, Air Quality, and Noise analyses contained in this Subsequent EIR are considered project level. The analysis of Biological and Cultural Resources is considered programmatic at this time. Although programmatic, depending on the details of individual CIP projects, the City may be able to make the finding that this Subsequent EIR provides project-level CEQA compliance for all issue areas for individual CIP improvements, as discussed below.

Prior to implementation of the individual CIP roadway and intersection improvement projects, the City would perform an Initial Study to determine if the improvements would result in new impacts not previously disclosed in this Subsequent EIR. If there are no new impacts and the analysis and Mitigation Measures contained in this Subsequent EIR provide adequate project-level disclosure and mitigation, no further CEQA review would be required and applicable Subsequent EIR Mitigation Measures would be implemented in conjunction with the project. Consistent with State CEQA Guidelines Section 15183, if the Initial Study shows that the project could result in environmental effects that are peculiar, or site-specific, and these effects were not disclosed in this Subsequent EIR but could be mitigated to a less-than-significant level, a Mitigated Negative Declaration would be prepared focusing on the peculiar effects and relying on this Subsequent EIR for disclosure of the broader and cumulative environmental issues. Should the Initial Study show based on substantial evidence that the project, either individually or cumulatively, may have a significant effect on the environment that cannot be mitigated, and such effect(s) were not discussed in this Subsequent EIR, or new information reveals that the effects are greater than described in this Subsequent EIR, an EIR would be required.

At this time the City anticipates that the majority of CIP improvements will be found to be within the scope of this Subsequent EIR.

1.4 CITY OF ROSEVILLE MITIGATING ORDINANCES, GUIDELINES, AND STANDARDS

CEQA Guidelines (Section 15183(f)) allow the use of uniformly applied, previously adopted policies or standards as mitigation for the environmental effects of future projects when those standards have been adopted by the City, with findings based on substantial evidence that the policies or

standards will substantially mitigate environmental effects. The City's Noise Ordinance, Flood Damage Prevention Ordinance, Construction Standards, Improvement Standards, and Tree Ordinance include standards and policies that are uniformly applied to development projects throughout the City. In March 2003, the City adopted Findings of Fact confirming that certain environmental impacts for the following issue areas are mitigated by the uniform application of the above ordinances, guidelines, and standards (Resolution 03-169):

- Noise
- Flooding
- Urban Form/Aesthetics
- Tree Impacts
- Cultural Resources Impacts
- Hazards/Hazardous Materials
- Water Quality
- Drainage
- Traffic

The City's mitigating ordinances, guidelines, and standards are referenced, where applicable, in the Initial Study and Environmental Checklist (Appendix C) as well as in this Draft Subsequent EIR. Because the City has adopted CEQA Findings that these Mitigating Policies and Standards substantially mitigate environmental impacts, no additional project-specific mitigation is required for the specified impacts that these Mitigation Policies and Standards address. For example, loss of protected trees would be mitigated by application of the City of Roseville Tree Ordinance. Impacts not addressed by the City's Mitigating Policies and Standards require specific environmental evaluation, even if they are included in the above list.

1.5 LEVELS OF SIGNIFICANCE

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance" (CEQA Guidelines, 1998). Definitions of significance vary with the physical conditions affected, and the setting in which the change occurs. The CEQA Guidelines set forth physical impacts that trigger the requirement to make "mandatory findings of significance" (CEQA Guidelines, 1998).

For environmental issues, specific standards of significance are identified. Where the "substantial" effect of an impact is not so identified in the CEQA Guidelines, criteria for evaluating the significance of potential impacts were identified in this Draft Subsequent EIR. Where explicit quantification of significance is identified, such as a violation of an ambient air quality standard, this quantity is used to assess the level of significance of a particular impact in this Draft Subsequent EIR.

For less easily quantifiable impacts, events or occurrences that would be regarded as significant or potentially significant were identified. For example, growth-inducing impacts would be identified as significant if the project results in a level, rate, or character of growth that (among other criteria) exceeds capacity of existing infrastructure and services to adequately support it. A criterion for determining the level of significance of the loss of a particular habitat would be that habitat's importance to rare or endangered species and/or whether the habitat itself has become depleted within the region.

This assessment of levels of significance promotes consistent evaluation of impacts for all alternatives considered.

1.6 ORGANIZATION OF THIS DRAFT SUBSEQUENT EIR

This report includes eight principal chapters, including this Introduction, Executive Summary, Project Description, Environmental Analysis (Settings, Impacts, and Mitigation Measures), Other CEQA Considerations, Project Alternatives, References, and List of Contributors. These chapters are then followed by the Appendices.

The **Executive Summary** presents an overview of the results and conclusions of the environmental evaluation. This summary identifies project impacts and available Mitigation Measures for use by the City in reviewing the individual project components and establishing conditions under which the components may be developed. The Executive Summary is provided in Chapter 2.

The **Project Description** includes a description of the proposed project and specific elements of the project. The Project Description is provided in Chapter 3.

The **Environmental Analysis** includes a topic-by-topic analysis of impacts that would or could result from implementation of the project. The results of field visits, data collection and review, and modeling are presented in the text. The Environmental Analysis is provided in Chapter 4.

Other CEQA Considerations includes a discussion of issues required by CEQA: irreversible environmental changes, cumulative impacts, growth inducement, and unavoidable adverse impacts. Other CEQA considerations are discussed in Chapter 5.

The **Project Alternatives** section includes an assessment of alternative methods for accomplishing the basic objectives of the proposed project. This assessment, required under CEQA, must provide adequate information for decision makers to make a reasonable choice between alternatives based on the environmental aspects of the proposed project and alternatives. The Project Alternatives are discussed in Chapter 6.

References are provided in Chapter 7, and a **List of Preparers** is provided in Chapter 8.

The **Appendices** contain a number of reference items providing support and documentation of the analysis performed for this report.

4.2 Air Quality

4.2 Air Quality

4.2.1 INTRODUCTION

This section focuses on the potential air quality impacts associated with construction of the proposed roadway and intersection modifications as well as changes to level of service (LOS) throughout the City's roadway system. This section assesses the potential air quality impacts based on references and new traffic data provided by DKS Associates (i.e., vehicle volume, LOS).

4.2.2 ENVIRONMENTAL SETTING

Ambient air quality in the City of Roseville is affected by pollutants generated locally, but pollutants from neighboring jurisdictions also impact local air quality. The local topography and climatological conditions transport pollutants from the Sacramento Metropolitan Area (SMA) into Roseville. The following subsections describe relevant characteristics of Roseville that affect ambient air pollutant concentrations and dispersion capability.

4.2.2.1 Climate and Topography

The City of Roseville is located in southern Placer County within the Sacramento Valley Air Basin (SVAB). Weather patterns throughout the SVAB are, in part, affected by the geography (i.e., terrain). The SVAB is bounded by the northern Coast Ranges to the west, the northern Sierra Nevada Mountains to the east, and the Cascade Range to the north. The area to the south is within these mountain ranges and is relatively flat. This area is also known as the Sacramento Valley, which is the northern portion of the Central Valley. The Carquinez Strait breaches the Coast Range, exposing the middle portion of the SVAB to the influence of Pacific Coast marine weather. This geography channels winds through the Sacramento Valley, but inhibits dispersion of pollutant emissions in portions of the valley (CARB, 2006a). Typically, marine air enters the SVAB through the Carquinez Strait and transports pollutants out of the valley to the north. However, conditions can lead to the prevailing winds circling back south, particularly between July and September, thus elevating pollution levels in the SVAB. This marine influence can result in pollutants being carried from the San Francisco Bay Area and Sacramento regions to western Placer County.

The climate of the SVAB is Mediterranean in character, with mild, rainy winter weather from November through March, and hot, dry weather from May through September. January temperatures in the SVAB area range from an average low in the 30s (°F) to an average high in the 50s (°F). July temperatures range from an average low in the 50s (°F) to an average high in the 90s (°F). These high temperatures, combined with low humidity, produce hot, dry summers that contribute to the buildup of ozone (a major constituent of smog). The climatological station closest to the project that monitors temperature is the Rocklin Station. The monthly average temperature recorded between 1971 and 2000 at the Rocklin Station ranges from 33.6ºF in January to 95.5ºF in August (Western Regional Climatic Center, 2006). January and December are typically the coldest months in the Rocklin area. Average rainfall measured in the Rocklin area varied from 3.84 inches in November to 1.83 inches or less between April and October, with an average annual total of 21.35 inches.

4.4 Biological Resources

4.4 Biological Resources

4.4.1 INTRODUCTION

The proposed 2020 CIP Update is an update to the current 2020 CIP. The proposed project has several elements, including incorporating roadway and intersection improvements beyond those identified in the current 2020 CIP. This evaluation of potential impacts to biological resources focuses on improvements categorized as widening projects, as these improvements would require an increase in the area of disturbance from that identified (and previously evaluated) in the current 2020 CIP. These areas of proposed widening are shown on **Figure 3-3** in Chapter 3, Project Description. The areas affected by the intersection and roadway widenings are described in **Tables 4.4-1 and 4.4-2**. New lanes could be up to 14 feet wide, with construction disturbance up to 17 feet from the existing roadway. For intersection widenings, the new lanes would typically affect a distance less than 600 feet in length from the existing intersection.

TABLE 4.4-1

PROPOSED 2020 CIP UPDATE INTERSECTION WIDENING MODIFICATIONS

Intersection Number	North-South Street Name	East-West Street Name	Category	Proposed CIP Update Modification	Affected Area
15	Orlando Ave/Marlin	Cirby Way	Widening	EB: Remove 1 lane WB: Add 1 lane	North and south side of Cirby east and west of Orlando, and west side of Orlando south of Cirby
19	Eureka Rd	Douglas Blvd	Widening	SB: Add 1 lane	West side of Eureka south of Douglas, and east side of Eureka north of Douglas
69	Fiddyment Rd	Pleasant Grove Blvd	Widening	NB: Add 1 through lane SB: Add 1 through lane	West side of Fiddyment
91	Roseville Pkwy	Olympus Dr	Widening	EB: Add 1 lane	South side of Olympus west of Roseville Pkwy

TABLE 4.4-1
(CONTINUED)

PROPOSED 2020 CIP UPDATE INTERSECTION WIDENING MODIFICATIONS

Intersection Number	North-South Street Name	East-West Street Name	Category	Proposed CIP Update Modification	Affected Area
100	Reserve Dr	Roseville Pkwy	Widening	EB: Add 1 through lane WB: Add 1 through lane	South and north sides of Roseville Pkwy located east and west of Reserve
104	West Mall	Roseville Pkwy	Widening	EB: Add 1 through lane WB: Add 1 through lane	South and north sides of Roseville Pkwy east and west of West Mall
105	Sierra College Blvd	Eureka Rd	Widening	WB: Add 1 left-turn lane	North side of Eureka east of Sierra College
165	Fiddyment Rd	Westlake	Widening	SB: Add 2 lanes	West side of Fiddyment from Baseline to Pleasant Grove
178	Washington Blvd	All America	Widening	NB: Add 1 lane EB: Add new right-turn/deceleration lane	East side of Washington south of All America
179	Cottonwood	Cirby Way	Widening	Realign driveways	South side of Cirby between two existing drive-ways

TABLE 4.4-2

PROPOSED 2020 CIP UPDATE ROADWAY WIDENING IMPROVEMENTS

Roadway Improvement	Current 2020 CIP Travel Lanes	Proposed 2020 CIP Update Travel Lanes	Category	Affected Area
Fiddyment Rd from Pleasant Grove Blvd to Baseline Rd	4	6	Widening	West side of Fiddyment between Pleasant Grove and Baseline
Roseville Pkwy from Galleria Blvd to West Mall	6	8	Widening	South side of Roseville Parkway
Roseville Pkwy from West Mall to Gibson Dr	6	7	Widening	North side of Roseville Pkwy

The environmental setting is based on a reconnaissance level survey conducted on September 27, 2006 by North Fork Associates biologists within the roadway and intersection improvement study areas. The results of the reconnaissance level survey are incorporated into this Draft EIR. In addition, a few of the intersection study areas were surveyed and evaluated under previous environmental documents. For these study areas, the setting and impacts are based on the *West Roseville Specific Plan and Sphere of Influence Amendment Area EIR* (approved 2002), *NCRSP Parcel 35 - Galleria Mall Expansion Initial Study and Mitigated Negative Declaration* (approved August 2006), Placer County's *Environmental Questionnaire* for Eureka Road and Sierra College Boulevard Widening (approved September 2006), and the *Wetland Delineation* for Baseline 430 (verified by the U.S. Army Corps of Engineers on February 17, 2004).

Impacts to biological resources are evaluated on a programmatic level in this Draft EIR. It is anticipated that subsequent environmental review may be required when site-specific plans are prepared and more specific roadway alignments and areas of disturbance are identified.

4.4.2 ENVIRONMENTAL SETTING

The project area for biological resources encompasses the City of Roseville and a small section of Placer County, which is located on the eastern edge of the Sacramento Valley at the base of the Sierra Nevada foothills. Dominant habitats within the 13 areas proposed for roadway and intersection widenings include oak woodland, annual grassland, riparian, and seasonal wetlands and streams. Following is a general description of these habitats, as well as a definition of special-status species discussed in this Draft Subsequent EIR.

4.4.2.1 Biological Communities

Each intersection and roadway where widening is proposed is considered its own study area. This section discusses biological communities in the general study areas that may be present in at least

one of the intersection study areas. This section is then followed by a more site-specific discussion of each roadway and intersection study area.

Oak Woodland

Oak woodland habitat is characterized by a predominance of native oak trees in relatively high numbers with a substantial canopy cover. Within the intersection study areas, tree species are a mosaic of valley oak (*Quercus lobata*), blue oak (*Q. douglasii*), and interior live oak (*Q. wislizeni*). The understory typically consists of non-native grasses and forbs, such as ripgut grass (*Bromus diandrus*), wild oat (*Avena fatua*), and field hedge-parsley (*Torilis arvensis*). In a couple of the study areas, there was a shrub layer that consisted of scattered coffeeberry (*Rhamnus tomentella*) and coyote brush (*Baccharis pilularis*).

Oak woodlands are important for animal cover, and provide roosting and nesting habitat for birds and shelter for a variety of mammals. Woodlands also support insects and smaller mammals that may function as a source of food for larger animals in the area. Taller trees provide good nesting habitat for raptors such as great horned owl (*Bubo virginianus*), red-tailed hawk (*Buteo jamaicensis*), and red-shouldered hawk (*Buteo lineatus).* Common mammals that may occur in woodland habitats of the project area include western gray squirrel (*Sciurus griseus*), Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor),* and striped skunk (*Mephitis mephitis*). Birds that commonly occur within these habitats include California quail (*Callipepla californica*), oak titmouse (*Parus inornatus*), mourning dove (*Zenaida macroura*), northern flicker (*Colaptes auratus*), acorn woodpecker (*Melanerpes formicivorous*), spotted towhee (*Pipilo erythrophthalmus*), California towhee (*Pipilo crissalis*), and western bluebird (*Sialia mexicana*). Reptiles that may occur in or near woodland habitats of the project area include southern alligator lizard (*Gerrhonotus multicarinatus*) and western fence lizard (*Sceloporus occidentalis*).

Annual Grassland

Annual grassland within the study areas is composed primarily of introduced grasses and forbs that are adapted to California's Mediterranean climate. The most common and abundant species include ripgut grass, wild oat, hedgehog dogtail (*Cynosurus echinatus*), soft chess (*Bromus hordeaceus*), yellow star-thistle (*Centaurea solstitialis*), field hedge-parsley, Spanish clover (*Lotus purshianus*), and rose clover (*Trifolium hirtum*).

Grasslands provide important habitat features for a variety of wildlife species, both on a year-round and seasonal basis. Raptors such as red-tailed hawk, white-tailed kite (*Elanus leucurus*), barn owl (*Tyto alba),* great horned owl (*Bubo virginianus*), northern harrier (*Circus cyaneus*), American kestrel (*Falco sparverius*), and Swainson's hawk (*Buteo swainsoni*) commonly use open grassland areas for foraging. Western burrowing owl (*Athene cunicularia hypugea*) is known to occur in annual grassland habitat with friable substrates for burrowing. Other birds, such as western meadowlark (*Sturnella neglecta*), Brewer's blackbird (*Euphagus cyanocephalus*), and western kingbird (*Tyrannus verticalis*), use open grassland for nesting, as well as foraging. Reptiles that commonly occur in grassland habitats include western fence lizard, Western skink (*Eumeces skiltonianus*), and gopher snake (*Pituophis melanoleucus*). Mammals known to occur in or frequent grassland habitats, such as those in the project area, include coyote (*Canis latrans*), Botta's pocket gopher (*Thomomyss bottae*), California vole (*Microtus californicus),* western harvest mouse (*Reithrodontomys megalotis*), California ground squirrel (*Spermophilus beecheyi*), and black-tailed hare (*Lepus californicus*). Various species of bat are also known to forage in grassland habitats on a nocturnal basis.

Riparian

The riparian habitat within the study area is associated with streams. Vegetation typically includes Fremont cottonwood (*Populus fremontii*), Goodding's black willow (*Salix gooddingii*), red willow (*Salix laevigata*), and Himalayan blackberry *(Rubus discolor*).

Wildlife expected to occur in or to frequent riparian woodland areas of the project area likely consist of those species that commonly occupy surrounding woodland and grassland communities. Many species of birds are known to use riparian habitats on a seasonal basis for nesting, while some visit riparian areas for foraging purposes. Raptors, such as red-shouldered hawk, red-tailed hawk, great-horned owl, and Cooper's hawk (*Accipiter cooperi*), are often known to nest within dense areas of riparian woodland. Many migrant songbirds, including warblers, vireos, and flycatchers, occur in riparian woodlands on a seasonal basis, primarily for nesting.

Wetlands and Creeks

Wetlands, such as seasonal wetlands and wetland swales, and intermittent streams, are located in a few of the intersection study areas. Curry Creek and tributaries to Cirby Creek, Linda Creek, and the South Branch of Pleasant Grove Creek occur within or directly adjacent to some of the intersection study areas. These intermittent streams typically flow during and some time after the winter rainy season and usually have a groundwater component or another water source that provides water in the absence of precipitation.

Seasonal wetlands are low-lying areas where runoff and precipitation collect. Wetland swales are water conveyance features that do not develop the bed-and-bank morphology typical of streams. Moreover, they usually have wetland soils and are vegetated with wetland species. Vegetation within the seasonal wetlands and onsite wetland swales within the study area are primarily composed of non-native wetland generalist plants. These include Italian ryegrass (*Lolium multiflorum*), annual beard grass (*Polypogon monspeliensis*), Mediterranean barley (*Hordeum marinum gussoneanum*) and hyssop loosestrife (*Lythrum hyssopifolium*). Vegetation along the banks of the streams may include cattail (*Typha latifolia*), dallis grass (*Paspalum dilatatum*), smartweed (*Persicaria* sp.), cocklebur (*Xanthium strumarium*), and riparian vegetation as described above.

Wetlands and drainages within the project area are expected to provide habitat for a variety of aquatic and semi-aquatic species. Amphibians that may occur in or frequent ephemeral drainages and wetlands containing standing water for short periods of time, or that retain moist substrates, include Pacific chorus frog (*Psuedacris regilla*) and western toad (*Bufo boreas*). Portions of streams that retain water for longer periods throughout the year may also support bullfrog (*Rana catesbiana*), mosquitofish (*Gambusia affinis*), and other warm water fish species. A variety of small birds and mammals likely forage within aquatic habitats of the study areas and periodically use the cover provided by adjacent vegetation. Seasonal wetlands, drainages, and freshwater marsh communities within the project area also provide important foraging habitat and cover for a variety of waterfowl and wading birds, including killdeer (*Charadrius vociferous*), Canada goose (*Branta Canadensis*), great egret (*Casmerodius albus*), and great blue heron (*Ardea herodias*). Other birds that may occur along drainages or wetlands of the project area include belted kingfisher (*Ceryle alcyon*) and black phoebe.

4.4.2.2 Special-Status Species

For the purposes of evaluation in this Draft EIR, special-status species are those that fall into one or more of the following categories:

- Listed as endangered or threatened under the federal Endangered Species Act (including candidates and species proposed for listing);
- Listed as endangered or threatened under the California Endangered Species Act (including candidates and species proposed for listing);
- Designated as rare, protected, or fully protected pursuant to California Fish and Game Code;
- Designated a Species of Concern by the California Department of Fish and Game (CDFG);
- Defined as rare or endangered under Section 15380 of the California Environmental Quality Act (CEQA); or
- Occurring on List 1, 2, 3, or 4 maintained by the California Native Plant Society (CNPS).

Prior to the reconnaissance level survey, North Fork Associates biologists queried the California Natural Diversity Data Base (CNDDB) for location records for special-status species known to occur in the City of Roseville and surrounding region. The biologists also reviewed the special-status animal species lists for the Roseville U.S. Geological Survey (USGS) quadrangle and Placer County created by the U.S. Fish and Wildlife Service (USFWS). The CNPS Inventory was checked for special-status plants occurring in the area.

The special-status species with potential to occur within the intersection study areas are mentioned under each site-specific habitat below.

4.4.2.3 Site-Specific Habitat

Most of the proposed project improvements would occur within existing paved or landscaped areas, where there are no biological resources. However, a few intersection study areas support significant biological resources such as oak woodland, riparian, and wetland habitat. Site-specific descriptions of the 10 intersections and 3 roadway widenings proposed are described in the following paragraphs. These descriptions include site-specific habitat conditions and potential for special-status species.

Intersection 15: Orlando Avenue/Marlin Drive and Cirby Way

The proposed project would add one westbound left turn lane at the Orlando Avenue/Marlin Drive and Cirby Way intersection, which would affect the areas both north and south along Cirby Way (10 feet from existing edge of road) and the receiving lane west of Orlando Avenue (12 feet from existing edge of road). This intersection study area supports oak woodland, disturbed annual grassland, and urban landscape such as sidewalks and ornamental eucalyptus trees. Tributaries to Cirby Creek cross Cirby Way approximately 60 feet west of and approximately 330 feet east of the intersection; however, the proposed project is not anticipated to directly affect these features. The areas of impact are within upland habitats adjacent or over existing culverts for the tributaries.

The oak woodland habitat within this study area (west of the intersection and near the tributary to the east) supports predominantly blue and interior live oaks, with scattered valley oak trees. Oak woodland within and adjacent to this study area is not expected to support a wide diversity of wildlife based on the site's isolation from other larger areas of undisturbed woodland and the proximity to existing development and roadways. However, a few mammals and birds that are typically associated with urban areas are expected to occur within this study area. Birds observed within or near this study area include northern mockingbird (*Mimus polyglottos*), oak titmouse, mourning dove, acorn woodpecker, American robin (*Turdus migratorius*), and American crow (*Corvus brachyrhynchos*). Taller trees located southwest of the intersection, including mature oaks and cottonwoods, provide marginal-quality nesting habitat for raptors such as red-shouldered hawk. These taller trees, and potential habitat for nesting raptors, are located just outside and down-slope of this study area.

Due to the absence of suitable habitat, no special-status plant or wildlife species known from the project region are expected to occur within this intersection study area.

Intersection 19: Eureka Road and Douglas Boulevard

The proposed project includes adding one southbound lane to the Eureka Road/Douglas Boulevard intersection. This would affect the west wide of Eureka Road south of the intersection (12 feet from existing edge of road) and a small area on the east side of Eureka north of Douglas (17 feet from edge of road). Both of these areas support existing sidewalks and ornamental landscaping, such as rosemary (*Rosmarinus officinalis*), Chinese pistachio (*Pistacia chinensis*), and liquidambar (*Liquidambar styraciflua)*, adjacent to commercial developments.

Due the presence of primarily landscaped vegetation and disturbed habitats, wildlife resources are expected to be limited within this intersection study area. Species likely to occur include those that commonly frequent urban and developed areas, such as western scrub jay, rock dove, mourning dove, Brewer's blackbird, house sparrow, and American crow.

No significant biological resources occur within this intersection study area. Due to the absence of suitable habitat, no special-status plant or wildlife species known from the project region would be expected to occur within this intersection study area.

Intersection 69: Fiddyment Road and Pleasant Grove Boulevard
Intersection 165: Fiddyment Road and Westlake
Roadway Segment: Fiddyment Road from Pleasant Grove Boulevard to Baseline Road

The proposed project includes adding one northbound and one southbound lane to the Fiddyment Road/Pleasant Grove Boulevard intersection, adding two southbound lanes to the Fiddyment Road/Westlake intersection, and widening the roadway segment of Fiddyment Road from Pleasant Grove Boulevard to Baseline Road from four lanes to six lanes. These improvements would affect approximately 87 feet from the existing edge of pavements on the west side of Fiddyment Road from Pleasant Grove Boulevard to Baseline Road.

These intersection and roadway study areas supports annual grassland, an intermittent stream (Curry Creek) with associated riparian vegetation, a seasonal wetland swale, and a seasonal wetland. Widening Fiddyment Road to four lanes was evaluated in the *West Roseville Specific Plan and SOI Amendment Area EIR*; however, the additional two-lane (total six lane) widening proposed in this 2020 CIP Update would affect additional habitat.

The portion of Curry Creek within these intersection study areas contained slow moving water at the time of the site reconnaissance conducted for this Draft EIR. Riparian vegetation adjacent to the creek supports Goodding's black willow, Fremont cottonwood, cattail, narrow-leaved willow (*Salix exigua*), and hairy willow-herb (*Epilobium ciliatum*). Portions of a seasonal wetland south of Curry Creek and a wetland swale north of Curry Creek are also located within this study area. These features are primarily comprised of non-native wetland generalist plants, such as ryegrass and annual beard grass.

Curry Creek and the seasonal wetlands located within these study areas are expected to support both aquatic and semi-aquatic species, and be frequented by mammals and birds that occur in adjacent grassland habitats. At the time of the site visit, several bullfrogs were observed in the channel of Curry Creek, at the downstream end of the culvert, just west of Fiddyment Road. Aquatic habitat of Curry Creek is also expected to support mosquitofish and possibly other warm water fish species. No anadromous fish or resident cold water fish species are expected to occur in Curry Creek (*West Roseville Specific Plan and SOI Amendment Area EIR* 2002). Various species either observed or expected to occur in association with freshwater marsh vegetation located along the drainage include Pacific tree frog, red-winged blackbird (*Agelaius phoeniceus*), mallard, great egret, black phoebe, and great blue heron.

Curry Creek provides suitable habitat for Sanford's arrowhead and marginal habitat for rose mallow. Sanford's arrowhead (*Sagittaria sanfordii*) is an herbaceous perennial member of the water-plantain family (Alismataceae) and is on the CNPS List 1B.2 (fairly endangered in California). Its preferred habitat is marshes associated with slow-moving water in sloughs and ditches; however, it is known to occur in concrete lined channels with only a few inches of soil. Rose mallow (*Hibiscus lasiocarpus*) is a clonal perennial member of the mallow family (Malvaceae**)** that can grow to thee to 6 feet tall. It has no state or federal status, but is on the CNPS' List 2, meaning that it is rare in California but more common elsewhere. This species is an obligate wetland plant that is found along rivers and sloughs in the Sacramento River Delta and Central Valley.

Seasonal wetlands and swales in these study areas provide potential habitat for three special-status animal species, including vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), and western spadefoot toad (*Scaphiopus hammondii*). Vernal pool fairy shrimp, a federal threatened species, and vernal pool tadpole shrimp, a federal endangered species, most often occur in association with vernal pools or other seasonal wetlands located in annual grassland (USFWS, 2006a; USFWS, 2006b). Western spadefoot toad, a California species of special concern, occurs primarily in annual grassland habitats, open sandy floodplains, alluvial terraces, and occasionally in valley-foothill hardwood woodlands. Adults use vernal pools and other ephemeral sources of water for breeding and egg-laying (Zeiner et al., 1988). Potential breeding habitat for this species occurs in seasonal wetlands and swales of these study areas.

The annual grassland vegetation in these study areas includes ripgut grass, soft chess, wild oat, medusa-head grass (*Taeniatherum caput-medusae*), rose clover, Fitch's spikeweed (*Centromadia fitchii*), and prickly lettuce (*Lactuca serriola*).

Annual grassland in these study areas is expected to provide important habitat for a variety of wildlife species, either on a seasonal or year-round basis. The following animals were observed either directly, or evidence of their occurrences was observed in annual grassland during the site visit: Canada goose, killdeer, great egret, Botta's pocket gopher, and California ground squirrel. In addition, a red-tailed hawk and an American kestrel were observed flying over grassland in the vicinity of these study areas during the site visit.

Annual grassland in these study areas also provides potential habitat for a variety of protected raptors, including Swainson's hawk, white-tailed kite, northern harrier, and western burrowing owl. Swainson's hawk, a state threatened species, is an uncommon breeding resident and migrant in the Central Valley. It nests primarily in riparian woodland and oak savannah habitats, and forages in nearby agricultural fields, grasslands, and open pasture. White-tailed kite, a California fully protected species, is a resident species that forages in undisturbed open grasslands, farmlands, meadows, and emergent wetlands. No suitable nesting habitat for either Swainson's hawk or white-tailed kite occurs within these study areas. Annual grassland in these study areas provides suitable foraging habitat for Northern harrier, a California species of concern. However, nesting of this species within these study areas is not expected to occur due to the proximity to the existing roadway. Burrowing owl, a California species of special concern, primarily occurs in open, dry grasslands, deserts, agricultural areas, and rangelands. Burrowing owls may occur on occasion within grassland habitats of these study areas.

Intersection 91: Roseville Parkway and Olympus Drive

The proposed project Roseville Parkway/Olympus Drive intersection improvements include adding one eastbound lane to Olympus Drive (approximately 14 feet from the existing roadway). This intersection study area is within an existing developed area, including sidewalk and ornamental landscape plants such as liquidambar and Chinese pistachio.

Because the only vegetation is landscaping plants, wildlife resources are expected to be limited within this intersection study area. Species likely to occur include those that commonly frequent urban and developed areas, such as western scrub jay, rock dove, mourning dove, Brewer's blackbird, house sparrow, and American crow. No significant biological resources occur within this intersection study area. No special-status plant or wildlife species known from the region are expected to occur in this intersection study area.

Intersection 100: Reserve Drive and Roseville Parkway
Intersection 104: West Mall and Roseville Parkway
Roadway Segments: Roseville Parkway from Galleria Boulevard to Gibson Drive

The proposed project includes widening the roadway segment of Roseville Parkway from Galleria Boulevard to West Mall from six to eight lanes and from West Mall to Gibson Drive from six to seven lanes, as well as widening the Reserve Drive/Roseville Parkway to add one eastbound lane and one westbound lane.

The areas of disturbance are approximately 17 feet from the edge of the existing pavement and located in areas of existing sidewalk, landscaping, and small areas ruderal grassland. A tributary to Pleasant Grove Creek flows west of Reserve Drive and south of Roseville Parkway, but this tributary is outside the area of roadway widening. The areas of impact are within upland habitats adjacent or over existing culverts for this tributary.

Due the presence of primarily landscaped vegetation and disturbed habitats, wildlife resources are expected to be limited within these intersection and roadway segment study areas. Species likely to occur include those that commonly frequent urban and developed areas, such as western scrub jay, rock dove, mourning dove, Brewer's blackbird, house sparrow, and American crow.

Although it is part of the proposed project, the widening on the north side of Roseville Parkway was identified and evaluated in the NCRSP (North Central Roseville Specific Plan) Parcel 35 - Galleria

Mall Expansion Initial Study and Mitigated Negative Declaration (MND). According to this MND, no biological resources are present within the areas proposed for expansion and roadway widening. This assessment concurred with the reconnaissance level survey conducted for the proposed 2020 CIP Update. No special-status plant or wildlife species known from the region are expected to occur in these intersection or roadway segment study areas.

Intersection 105: Sierra College Boulevard and Eureka Road

The project proposes to add one westbound lane along Eureka Road, which would affect an area approximately 17 feet from the edge of roadway on the north side of Eureka Road and east of Sierra College Boulevard (located in unincorporated Placer County). This study area supports oak woodland habitat as well as an intermittent drainage tributary to Linda Creek. An approximately 620-foot-long stretch of the tributary is located 6 feet from the edge of pavement on the north side of Eureka Road and east of Sierra College Boulevard. The stream curves north and leaves the study area approximately 750 feet from the intersection, across from Hillsborough Drive. The stream then crosses Sierra College Boulevard to the north (outside of this intersection study area). At the time of the reconnaissance survey in September 2006, water was flowing in a portion of the tributary stream. The vegetation within the tributary varies from no vegetation to a dense riparian cover, including species such as Himalayan blackberry, cattail, dallis grass, smartweed, Goodding's black willow, red willow, rice cutgrass (*Leersia oryzoides*), and sticktight (*Bidens frondosa*).

The small, intermittent drainage provides suitable habitat for Sanford's arrowhead (*Sagittaria sanfordii*), which is an herbaceous perennial member of the water-plantain family (Alismataceae) and is on the CNPS List 1B.2 (fairly endangered in California). Its preferred habitat is marshes associated with slow-moving water in sloughs and ditches; however, it is known to occur in concrete-lined channels with only a few inches of soil.

The drainage is expected to support few aquatic and semi-aquatic animal species due to shallow surface water depths, proximity to the road, and limited amount of cover available. The drainage may, however, be frequented by a variety of mammals and birds that occur in adjacent grassland and woodland habitats, such as raccoon (*Procyon lotor*) and Virginia opossum. Species observed directly in or near this intersection study area or detected through vocalizations included black phoebe, American goldfinch (*Carduelis tristis*), house finch (*Carpodacus mexicanus*), California quail, Anna's hummingbird (*Calypte anna*), western fence lizard, Pacific treefrog, and bullfrog.

The western portion of this study area supports oak woodland habitat. Tree species include live and blue oak with a shrub layer of coffeeberry and coyote brush. The herbaceous layer consists of soft chess, Bermuda grass (*Cynodon dactylon*), common madia (*Madia elegans*), and summer cottonweed (*Epilobium brachycarpum*).

Taller trees located north of, and adjacent to, this study area may provide suitable nesting habitat for protected raptors, including Cooper's hawk and white-tailed kite. Cooper's hawk**,** a California species of special concern, breeds in most woodland habitats of California but typically nests in riparian woodlands or live oaks near water. White-tailed kite, a California fully protected species, generally forages in undisturbed open grasslands, farmlands, meadows, and emergent wetlands, in areas with a high prey base. Their nests are constructed near the top of a dense oak, willow, or other tall tree located close to foraging areas. While nesting is not expected to occur directly within this study area due to the proximity to the roadway, nesting may occur in taller trees directly north of the site.

Intersection 178: Washington Boulevard and All America

The proposed project includes adding one northbound lane along Washington Boulevard and incorporating a sharper turn onto All America. This intersection study area supports large gravel and paved areas intermixed with disturbed annual grassland, and a small ditch that runs along the eastern boundary of Washington Boulevard.

The annual grassland is located between areas of pavement and gravel and is highly disturbed. The vegetation consists of weedy species such as yellow star-thistle, chicory (*Cichorium intybus*), Bermuda grass, and wild oat.

The disturbed ditch is an ephemeral or intermittent feature paralleling Washington Boulevard. This ditch runs south through this intersection study area and contains garbage and other debris. Although no water was observed in the ditch, the soil was moist. Vegetation within the ditch includes cattails, smartweed, dallis grass, and Goodding's black willow. In the southern portion of this study area, the ditch fades into an upland swale.

Because the site is surrounded by development and contains minimal vegetative cover, there is little habitat for wildlife. While the onsite ditch may convey surface water on a periodic basis, it provides minimal habitat for semi-aquatic species known from the region. Within this study area, wildlife is expected to be limited to species that commonly occur in or frequent urban areas and disturbed habitats, such as western scrub jay, mourning dove, Brewer's blackbird, and American crow. Mammals that often occur in urbanized areas, including raccoon, striped skunk, and opossum, may move through this study area on occasion. Due to the absence of suitable habitat and the highly disturbed nature of this study area, no special-status plant or wildlife known from the region are expected to occur in this study area.

Intersection 179: Cottonwood Drive and Cirby Way

The project proposes to eliminate two existing driveways and create one new driveway on the south side of Cirby Way, across from Cottonwood Drive. The area proposed for the new driveway currently supports pavement, lawn, and small ornamental trees.

Due the presence of primarily landscaped vegetation and impervious surfaces, wildlife resources are expected to be limited within this study area. Species occurring onsite likely consist of those that commonly frequent urban and developed areas, such as western scrub jay, rock dove, mourning dove, Brewer's blackbird, house sparrow, and American crow. No significant biological resources occur within this intersection study area. No special-status plant or wildlife species known from the region are expected to occur in this study area.

4.4.3 REGULATORY SETTING

4.4.3.1 Federal

Federal Endangered Species Act

The federal Endangered Species Act prohibits the "take" of species (including animals and plants) listed by the USFWS as endangered or threatened. The federal Endangered Species Act does not protect species that have been proposed for listing but have not yet been listed. "Take" is defined to

include harassing, harming (including significantly modifying or degrading habitat), pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species, or any attempt to engage in such conduct. Actions that cause the take of endangered or threatened species can result in civil or criminal penalties.

The federal Endangered Species Act guidelines prohibit any federal action, including funding or the issuance of permits for projects that would jeopardize the existence of a threatened or endangered wildlife or plant species. The U.S. Army Corps of Engineers (Corps) must consult with the USFWS to determine if the issuance of a permit for fill in wetlands would jeopardize any threatened or endangered species that may be affected by a proposed project. In the context of a development project, the federal Endangered Species Act would be triggered if the project would result in the take of a threatened or endangered species or if issuance of a Corps permit or other federal agency action could jeopardize a listed species or adversely affect designated critical habitat.

Section 404 of the Clean Water Act

The Corps and the U.S. Environmental Protection Agency regulate the discharge of dredge and fill material into waters of the United States under Section 404 of the Clean Water Act. The Corps will typically exert jurisdiction over that portion of the project area that contains waters of the United States and adjacent or isolated wetlands. This jurisdiction includes approximately the bank-to-bank portion of a creek along its entire length up to the ordinary high-water mark, and adjacent wetland areas that will either be directly or indirectly adversely affected by a proposed project.

4.4.3.2 State

California Endangered Species Act

The California Endangered Species Act restricts the take of plant and wildlife species listed by the state as endangered or threatened, as well as candidates for listing. Section 86 of the California Fish and Game Code defines take as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." As an implementation measure, the California Endangered Species Act directs agencies to consult with the CDFG regarding projects or actions that could affect listed species. Through this consultation, the CDFG must determine if jeopardy to listed species would occur, and identify "reasonable and prudent alternatives" to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if the agency determines that there are "overriding considerations"; however, the agencies are prohibited from approving projects that would cause the extinction of a listed species.

Mitigating impacts on state-listed species involves avoidance, minimization, and compensation (listed in order of preference). Unavoidable impacts on state-listed species are typically addressed in a detailed mitigation plan prepared in accordance with CDFG guidelines. The CDFG exercises authority over mitigation projects involving state-listed species, including those resulting from CEQA mitigation requirements.

The CDFG also maintains a list of Special Status Species (CSC) based on limited distribution, declining populations, diminishing habitat, and/or unusual scientific, recreational, or educational value. These species are not afforded the same legal protection as listed species, but may be added to official lists in the future. The designation of CSC is intended by the CDFG as a management tool for

consideration in future land use decisions. Consequently, the CDFG typically requests that CEQA lead agencies give consideration to minimization of impacts to CSC species when approving projects.

California Environmental Quality Act

The Federal Endangered Species Act and California Endangered Species Act protect only those species formally listed as threatened or endangered (or rare in the case of the State list). Section 15380 of the CEQA Guidelines independently defines "endangered" species of plants or animals as those whose survival and reproduction in the wild are in immediate jeopardy and "rare" species as those who are in such low numbers that they could become endangered if their environment worsens. These definitions include species other than those designated by the Endangered Species Acts. On this basis, the California Environmental Quality Act allows for analysis of impacts for other designations including plants designated as "rare" by non-regulatory organizations (e.g., California Native Plant Society) and CDFG's Species of Special Concern. The CDFG has issued guidelines stating that plants on the California Native Plant Society List 1B fulfill the criteria of "rare" under the CEQA Guidelines Section 15380.

A project normally will have a significant effect on the environment if it will substantially affect a rare or endangered species of animal or plant or the habitat of the species. The significance of impacts to a species under CEQA must be based on analyzing actual rarity and threat of extinction despite legal status or lack thereof.

Fish and Game Code Sections 3511 and 3503.5: Raptors

The CDFG derives its authority from the Fish and Game Code of California. Under Chapter 6 of the California Fish and Game Code, the CDFG is responsible for the protection and conservation of the state's fish and wildlife resources. Fish and Game Code Section 3511 describes bird species, primarily raptors, which are "fully protected." Fully protected birds may not be taken or possessed except under a specific permit from CDFG. Section 3503.5 of the code protects all birds of prey and their eggs and nests.

Fish and Game Code Section 1602: Streambed Alteration Agreements

Section 1600 *et. seq.* of the Fish and Game code defines the responsibilities of the CDFG and the requirements for public and private applicants to obtain an agreement to "divert, obstruct, or change the natural flow or bed, channel, or bank of any existing fish or wildlife resource or from which those resources derive benefit, or will use material from the streambeds designated by the department." The local CDFG warden or unit biologist typically has responsibility for issuing streambed alteration agreements. These agreements usually include specific requirements related to construction techniques and remedial and compensatory measures to mitigate for adverse impacts. The CDFG may also require long-term monitoring as part of an agreement to assess the effectiveness of the proposed mitigation. Additionally, the CDFG has adopted a no-net-loss policy for wetlands.

4.4.3.3 Local

City of Roseville General Plan

The following policies of the City of Roseville General Plan (General Plan) Open Space and Conservation Element are applicable to the proposed project and are cited exactly as written from

this element. Policies relevant to the proposed project from the Vegetation and Wildlife portion of the Open Space and Conservation Element include:

OS-VW-1: Incorporate existing trees into development projects, and where preservation is not feasible, continue to require mitigation for the loss of removed trees. Particular emphasis shall be placed on avoiding the removal of groupings or groves of trees.

OS-VW-2: Preserve and rehabilitate continuous riparian corridors and adjacent habitat along the city's creeks and waterways.

OS-VW-3: Require dedication of the 100-year flood plain or comparable mechanism to protect habitat and wildlife values in perpetuity.

OS-VW-4: Require preservation of contiguous areas in excess of the 100-year flood plain as merited by special resources or circumstances. Special circumstances may include, but are not limited to, sensitive wildlife or vegetation, wetland habitat, oak woodland areas, grassland connections in association with other habitat areas, slope or topographical considerations, recreation opportunities, and maintenance access requirements.

OS-VW-5: Limit recreation activities within the 100-year flood plain and require additional setback areas for trails and other public recreation uses so that natural resource areas are not adversely impacted.

OS-VW-9: Limit the access of pedestrians and cyclists to vernal pool and wetland areas so that access is compatible with long-term protection of these natural resource areas.

OS-VW-10: Manage public lands with special-status species to encourage propagation of the species and discourage non-indigenous, invasive species.

OS-VW-11: Habitat preservation and mitigation for woodlands, creeks, riparian and seasonal wetland areas should occur within the defined boundaries of the impacting projects where long-term resource viability is feasible and desirable.

OS-VW-12: Consider the use of City property for habitat preservation and mitigation requirements resulting from development proposals when such efforts do not conflict with existing resources, recreational opportunities, or other city goals, policies, or programs.

City of Roseville Tree Preservation Ordinance

The City of Roseville has enacted a Tree Preservation Ordinance (Chapter 19.66 of the City of Roseville Municipal Code) that requires a tree permit prior to conducting any activity done within the protected zone (dripline radius plus one foot) of a protected tree that would adversely affect the health of a protected tree, including but not limited to cutting, grading, irrigating, and trenching. A protected tree defined and covered by this ordinance includes a blue oak, valley oak, or live oak tree having a diameter at breast height (dbh) of six inches or greater. An applicant for a tree permit may be required to provide mitigation for any tree approved for removal. Appropriate mitigation

includes replacement onsite, relocation of trees, implementation of a revegetation plan, and/or payment of in-lieu mitigation fee.

Placer County Tree Ordinance

The Placer County Tree Ordinance applies to any project with the potential to affect protected trees. Protected trees are defined as any native tree species with a dbh of six inches or greater. The Placer County Tree Ordinance acknowledges the County's value for native trees and their preservation. This ordinance prohibits the removal of landmark trees, including stands or groves of native trees, native tree corridors, and other significant native tree habitats. In addition, trees that are designated for preservation and avoidance are not to be damaged, and damage penalties of up to $50,000 per scar can be assessed by the County.

The removal of trees from riparian areas is also prohibited by the ordinance without prior evaluation and consideration of suitable mitigation measures. This ordinance is applicable to the proposed project because the Tentative Map requires discretionary approval from Placer County. Suitable mitigation may consist of the replacement of removed trees and should be calculated based on an inch for inch standard. The minimum size of replacement trees may be 15-gallon-sized trees, and the combined diameter of these trees should be equal to the diameter of the removed trees. At least 50 percent of the trees used to replace removed trees should be of the same native species, and these trees may be planted in an appropriate area on site or in another area approved by the Placer County Planning Department.

If a project site cannot support the planting of all replacement trees, a fee may be paid to Placer County for the current market value for each tree not planted, and this money will be placed in the County's Tree Preservation Fund.

4.4.4 IMPACTS

4.4.4.1 Method of Analysis

The biological resources evaluation consists of a review of available literature on biological resources (including special-status plants, wildlife, and habitats) in the general vicinity and a reconnaissance-level field survey. As discussed in Section 4.4.2, Environmental Setting, special-status plants and wildlife have been identified from a review of existing reports, as well as a search of the current CNDDB in the vicinity of the City of Roseville. The special status species lists for the Roseville USGS quadrangle and Placer County created by the U.S. Fish and Wildlife Service were also reviewed. The California Native Plant Society Inventory was checked for special status plants occurring in the area.

The biological setting of the project area has been described in terms of vegetation and plant communities, including wildlife habitat and special-status species. Special-status plant and wildlife species that could occur on within the study areas have been identified.

The intersection study areas have been evaluated with regard to the presence and location of significant biological resources before and after implementation of the proposed roadway improvements. Resources that could be affected as a result of project implementation have been identified, and recommendations for avoidance, reduction of impact, and/or offsite compensation for those resources are provided below.

The impact analysis also assumes implementation of General Plan polices and City Improvement Standards (such as the City of Roseville's Tree Preservation Ordinance) before determining the level of significance. Therefore, City policies and standards are not presented as mitigation.

4.4.4.2 Standards of Significance

As described in CEQA Guidelines (Appendix G), a significant impact would occur if the proposed project would result in the following:

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Disturbance of a significant natural vegetation type, such as riparian or oak woodland;
- Disturbance or degradation of waters or wetlands subject to U.S. Army Corps of Engineers jurisdiction under the federal Clean Water Act;
- Adverse affects on a population or the critical habitat of rare, threatened, or endangered plants or animals;
- Substantial interference with the movement of resident or migratory fish or wildlife; or
- Substantial reduction in habitat for fish, wildlife, or plants.

4.4.4.3 Impacts and Mitigation Measures

IMPACT 4.4-1:	**Potential loss of foraging habitat for Swainson's hawk and other legally protected raptors (Intersections 69 and 165; Fiddyment Road from Pleasant Grove Boulevard to Baseline Road)**
APPLICABLE ORDINANCES AND STANDARDS:	California Endangered Species Act and Fish and Game Code Sections 3511 and 3503.5
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measure 4.4-1: Consult with CDFG and implement appropriate mitigation compensation measures for loss of potential foraging habitat
RESIDUAL SIGNIFICANCE:	Less than Significant

While the study area does not contain suitable nesting habitat for Swainson's hawk, annual grassland located along the west side of Fiddyment Road may provide marginal-quality foraging habitat for this species during the summer (approximately May through September). The proposed widening of Fiddyment Road from Pleasant Grove Boulevard to Baseline Road, as well as the improvements to Intersections 69 (Fiddyment Road/Pleasant Grove Boulevard) and 165 (Fiddyment Road/Westlake), would require removal and/or disturbance of a limited area of annual grassland habitat that provides foraging habitat for Swainson's hawk, burrowing owl, white-tailed kite, and northern harrier. The grassland areas that would be affected are primarily located adjacent to existing roadways and residential development and provide limited foraging habitat value; however,

CDFG considers the loss of foraging habitat for Swainson's hawk from within 10 miles of an active nest site to be detrimental to the breeding success of this species. The CNDDB (2006) and other pertinent literature identify previous nesting of Swainson's hawk within five miles of the these study areas, with the closest previously documented nest approximately three miles to the north, along Pleasant Grove Creek (CNDDB, 2006). While the loss of a limited amount of grassland along Fiddyment Road is not expected to substantially deplete foraging habitat for Swainson's hawk or other sensitive raptors, it will further reduce the amount of foraging habitat available within the region. This would be considered a **potentially significant** impact.

Implementation of any measures required by CDFG to compensate for the loss of potential foraging habitat would reduce the impact to a **less-than-significant** level.

IMPACT 4.4-2:	**Potential disturbance of burrowing owl (Intersections 69 and 165; Fiddyment Road from Pleasant Grove Boulevard to Baseline Road)**
APPLICABLE ORDINANCES AND STANDARDS:	Fish and Game Code Sections 3511 and 3503.5
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measure 4.4-2: Conduct preconstruction burrowing owl surveys and implement measures specified by CDFG, where appropriate
RESIDUAL SIGNIFICANCE:	Less than Significant

The proposed widening of Fiddyment Road from Pleasant Grove Boulevard to Baseline Road and Intersections 69 (Fiddyment Road/Pleasant Grove Boulevard) and 165 (Fiddyment Road/Westlake) would require removal and/or disturbance of a limited area of annual grassland habitat that provides potential habitat for burrowing owl. Burrowing owl has been documented by the CNDDB (2006) and other pertinent literature as occurring in the general vicinity of these study areas. This species often occurs where numerous burrowing mammals are present and frequently occupy California ground squirrel burrows (Zeiner et al., 1990b). Burrowing owl also occasionally use manmade structures such as debris piles, culverts, and cement piles for cover. Grassland areas that would be affected within these study areas are primarily located adjacent to existing roadways and residential development, and provide reduced habitat value for this species; however, there is some limited potential for direct disturbance of individuals of burrowing owl that may occur in annual grassland of these study areas. Any direct disturbance of burrowing owl would be considered a **potentially significant** impact.

Preconstruction surveys would reduce this impact to a **less-than-significant** level.

IMPACT 4.4-3:	**Potential disturbance or loss of habitat for vernal pool crustaceans (Intersections 69 and 165; Fiddyment Road from Pleasant Grove Boulevard to Baseline Road)**
APPLICABLE ORDINANCES AND STANDARDS:	Federal Endangered Species Act
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measure 4.4-3: Avoid disturbance of potential habitat for vernal pool crustaceans or implement mitigation measures in consultation with USFWS
RESIDUAL SIGNIFICANCE:	Less than Significant

The CNDDB documents the occurrence of vernal pool fairy shrimp and vernal pool tadpole shrimp in various locations within the project region and the Roseville area (CNDDB, 2006). While no focused surveys for vernal pool crustaceans were conducted as part of this assessment for the proposed project, potential habitat for these species was observed in association with seasonal wetlands located within these study areas. The proposed widening of Fiddyment Road from Pleasant Grove Boulevard to Baseline Road and Intersections 69 (Fiddyment Road/Pleasant Grove Boulevard) and 165 (Fiddyment Road/Westlake) may result in limited disturbance of seasonal wetlands, and potential habitat for these federally listed species. Any disturbance of seasonal wetlands within these study areas could, therefore, result in a take of vernal pool fairy shrimp and vernal pool tadpole shrimp. Loss of potential habitat for these species or other special-status wildlife species would be considered a **potentially significant** impact.

Disturbance of the seasonal wetland and swale within these study areas should be avoided to the extent feasible. Implementation of measures specified by the 404 permit, secured prior to construction, would mitigate the loss of potential habitat for vernal pool crustaceans and would reduce the impact to a **less-than-significant** level.

IMPACT 4.4-4:	**Potential disturbance or loss of habitat for western spadefoot (Intersections 69 and 165; Fiddyment Road from Pleasant Grove Boulevard to Baseline Road)**
APPLICABLE ORDINANCES AND STANDARDS:	CEQA Guidelines Section 15380; Fish and Game policy for Species of Special Concern
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measure 4.4-4: Avoid disturbance of potential breeding habitat for western spadefoot or implement mitigation measures in consultation with CDFG
RESIDUAL SIGNIFICANCE:	Less than Significant

The CNDDB documents occurrence of western spadefoot in the general project region, with a somewhat recent record (April 2004) reported from northwest of the study area, just south of Pleasant Grove Creek (CNDDB, 2006). The proposed widening of Fiddyment Road from Pleasant Grove Boulevard to Baseline Road and Intersections 69 (Fiddyment Road/Pleasant Grove

Boulevard) and 165 (Fiddyment Road/Westlake) could result in limited disturbance of seasonal wetlands and annual grassland, and potential habitat for western spadefoot, a California species of concern. Any disturbance of seasonal wetlands within these study areas could result in loss or disturbance of potential breeding habitat for this species. Loss of habitat for this species, or disturbance of individual western spadefoots, would be considered a **significant** impact.

Disturbance of the seasonal wetland and swale within these study areas should be avoided to the extent feasible. Implementation of measures specified by CDFG for avoiding direct disturbance of individuals of this species and for mitigating the loss of potential habitat would reduce the impact to a **less-than-significant** level.

IMPACT 4.4-5:	**Potential disturbance of nesting raptors (Intersections 15 and 105)**
APPLICABLE ORDINANCES AND STANDARDS:	Fish and Game Code Sections 3511 and 3503.5
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measure 4.4-5: Construct outside of nesting season or conduct preconstruction raptor nesting surveys
RESIDUAL SIGNIFICANCE:	Less than Significant

The proposed widening of Intersection 105 (Eureka Road/Sierra College Boulevard) may disturb the breeding/nesting lifestages of sensitive raptors, including white-tailed kite and Cooper's hawk, depending on timing of proposed construction activities. Potential nesting habitat for these species occurs just north of, and adjacent to, these study areas. Nesting of other raptors known from the region, including red-tailed hawk, red-shouldered hawk, and great horned owl, could also be adversely affected if construction along Intersections 15 (Cirby Way/Orlando Avenue) and 105 takes place during the identified breeding/nesting seasons (approximately March 1 through August 31). Take of any active raptor nest is prohibited under California Fish and Game Code Section 3503.5. Project activities within or adjacent to these study areas, including tree removal or branch trimming, has the potential disturb raptor nesting activity and would be considered a **potentially significant** impact.

Project activities should be avoided during the typical raptor breeding season, to the extent feasible. If construction must take place during the typical nesting season, preconstruction surveys should be conducted. Implementation of preconstruction raptor surveys and appropriate avoidance measures would reduce impacts to a **less-than-significant** level.

IMPACT 4.4-6:	**Loss of seasonal wetlands and/or creek channels (Intersections 69, 105, 165, and 178; Fiddyment Road from Pleasant Grove Blvd to Baseline Road)**
APPLICABLE ORDINANCES AND STANDARDS:	Section 404 of the Clean Water Act
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measure 4.4-6: Comply with agency permitting requirements and provide for no net loss of wetlands
RESIDUAL SIGNIFICANCE:	Less than Significant

Since only 12 feet of disturbance from the existing edge of pavement is planned for the west side of Orlando Avenue at Intersection 15, this improvement would affect upland habitat only and not affect the stream channel of the nearby tributary to Cirby Creek. However, some of the proposed improvements could result in the fill of seasonal wetland areas and/or creeks, including potential impacts to a tributary to Linda Creek at Intersection 105 (Eureka Road/Sierra College Boulevard); potential impacts to seasonal wetlands and Curry Creek during the widening of Fiddyment Road from Pleasant Grove Boulevard to Baseline Road, or Intersections 69 (Fiddyment Road/Pleasant Grove Boulevard) and 165 (Fiddyment Road/Westlake); and potential impacts to a ditch at Intersection 178 (Washington Boulevard/All America). Impacts from loss of seasonal wetlands and/or creek channels would be considered a **potentially significant** impact.

The Corps and the U.S. Environmental Protection Agency regulate the discharge of dredge and fill material into the waters of the United States under Section 404 of the Clean Water Act. When site-specific designs are available for the roadway and intersection improvements, project-level analysis would require a wetland delineation submitted to the Corps for verification. The City would be required to obtain a Clean Water Act Section 404 Permit from the Corps prior to any construction activity. Compliance with the Corps requirements for no-net-loss of wetlands would ensure that the impact would be reduced to a **less-than-significant** level.

A wetland delineation report, *Wetland Delineation for Baseline 430* (ECORP 2003), has already been prepared and verified for an area encompassing the widening of Fiddyment Road from Pleasant Grove Blvd to Baseline Road and the Intersection 165 (Fiddyment Road/Westlake) improvement area. This verification is valid for five years; therefore, the Fiddyment Road widening and Intersection 165 improvements would not require a new delineation before that time.

IMPACT 4.4-7:	**Potential impacts to Sandford's arrowhead and rose mallow (Intersections 105, 69, 165; Fiddyment Road from Pleasant Grove Boulevard to Baseline Road)**
APPLICABLE ORDINANCES AND STANDARDS:	CEQA Guidelines Section 15380; CDFG policy for California Native Plant Society List 1B species
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measure 4.4-7: Conduct preconstruction rare plant surveys; if required, develop and implement a mitigation plan approved by the CDFG and/or USFWS
RESIDUAL SIGNIFICANCE:	Less than Significant

Habitat for Sanford's arrowhead (*Sagittaria sanfordii*) occurs in Intersections 105 (Eureka Road/Sierra College Boulevard), 69 (Fiddyment Road/Pleasant Grove Boulevard), Intersection 165 (Fiddyment Road/Westlake), and along Fiddyment Road from Pleasant Grove Boulevard to Baseline Road. Marginal habitat for rose mallow (*Hibiscus lasiocarpus*) occurred in Intersections 69 (Fiddyment Road/Pleasant Grove Boulevard) and Intersection 165 (Fiddyment Road/Westlake) and along Fiddyment Road. Sanford's arrowhead and rose mallow do not have any state or federal status but are on the CNPS List 1B.1 and List 2, respectively. Impacts to Sandford's arrowhead and rose mallow would be considered a **potentially significant** impact.

When site-specific designs are available, Mitigation Measure 4.4-7 would ensure that rare plant surveys are conducted prior to construction, which would reduce impacts to Sanford's arrowhead and rose mallow to **less-than-significant** levels.

IMPACT 4.4-8:	**Impacts to protected trees (Intersections 15 and 105)**
APPLICABLE ORDINANCES AND STANDARDS:	City of Roseville Tree Preservation Ordinance and Placer County Tree Ordinance
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None Required
RESIDUAL SIGNIFICANCE:	Less than Significant

The City of Roseville and Placer County define a protected tree as a native oak equal to or greater than six inches in dbh measured as a total of a single trunk or multiple trunks. Protected native oak trees were observed at Intersection 15 (Cirby Way/Orlando Avenue) and Intersection 105 (Eureka Road/Sierra College Blvd) study areas. The area of disturbance for Intersection 105 falls within unincorporated Placer County. The *Environmental Questionnaire* prepared by Placer County for the Intersection 105 widening estimates that 31 oak trees with 5 inches or larger diameter would be removed at this intersection. Since site-specific designs are not available for the Intersection 15 widening, the total number of trees that may be affected at this intersection has not been determined. Prior to construction in these intersection improvement areas, a qualified arborist will conduct a tree survey and prepare an arborist report to identify all protected trees within the area of impact.

The City would adhere to the City's and County's Tree Ordinances, which would be a condition of approval for the proposed project. In accordance with the Tree Ordinances, a Tree Permit application would be submitted to the City and County for review and approval for potential impacts to any native oak tree equal to or greater than six inches dbh. Measures to prevent the damage to native oak trees during construction (including protective fencing) would be implemented as detailed in the Ordinance's Standard Policies and Procedures for Approved Work. Encroachments or damage to native oak trees that have not been authorized by a tree permit would be prohibited. With adherence to the City's and County's Tree Ordinances, impacts to protected trees as a result of the proposed project's intersection improvements would be **less than significant**.

4.4.5 MITIGATION MEASURES

Mitigation Measure 4.4-1: Consult with CDFG and implement appropriate mitigation compensation measures for loss of potential foraging habitat

This Mitigation Measure applies to Impact 4.4-1.

Prior to project initiation, the CDFG shall be contacted to determine if mitigation for the loss of annual grassland and potential foraging habitat for Swainson's hawk will be required. Implementation of any measures required by CDFG to compensate for the loss of potential foraging habitat will reduce the impact to a less-than-significant level.

Mitigation Measure 4.4-2: Conduct preconstruction burrowing owl surveys and implement measures specified by CDFG, where appropriate

This Mitigation Measure applies to Impact 4.4-2.

To ensure that direct disturbance of burrowing owls in annual grassland of the study area is avoided, a preconstruction survey will be conducted to determine presence/absence of the species. The survey will be conducted by a qualified biologist within 30 days of proposed ground-disturbing activities. Results of the survey will be submitted to the County and the CDFG. If burrowing owls are found onsite or evidence of their occurrence is observed during the survey, the CDFG will be immediately contacted to determine appropriate avoidance and mitigation measures. Implementation of preconstruction survey and measures specified by CDFG, as necessary, will reduce the impact to a less-than-significant level.

Mitigation Measure 4.4-3: Avoid disturbance of potential habitat for vernal pool crustaceans or implement mitigation measures in consultation with USFWS

This Mitigation Measure applies to Impact 4.4-3.

To avoid potential take of federally listed species, including vernal pool tadpole shrimp and vernal pool fairy shrimp, disturbance of the seasonal wetland and swale within the study area will be avoided to the extent feasible. Impacts to federally listed species or their habitats would likely require a permit from the USFWS. In the event that potential habitat within the study area cannot be avoided, the USFWS will be contacted to determine survey responsibilities (to determine presence/absence of a species) and pertinent permitting and mitigation requirements, as necessary. Implementation of measures specified by the 404 permit, secured prior to construction, would mitigate the loss of potential habitat for vernal pool crustaceans and will reduce the impact to a less-than-significant level.

Mitigation Measure 4.4-4: Avoid disturbance of potential habitat for western spadefoot, or implement mitigation measures in consultation with CDFG

This Mitigation Measure applies to Impact 4.4-4.

To avoid potential loss of breeding habitat for western spadefoot, disturbance of the seasonal wetland and swale within the study area will be avoided to the extent feasible. CDFG will be contacted prior to project implementation to determine appropriate survey measures (to determine species presence/absence) and/or mitigation requirements for loss of habitat for western spadefoot. Implementation of measures in consultation with CDFG for mitigating the loss of potential habitat will reduce the impact to a less-than-significant level.

Mitigation Measure 4.4-5: Construct outside of nesting season or conduct pre-construction raptor nesting surveys

This Mitigation Measure applies to Impact 4.4-5.

To avoid disturbance of raptor breeding and nesting activity, including nesting of sensitive raptors, project activities will be avoided during the typical raptor breeding season of March through August, to the extent feasible. If construction must take place during the typical nesting season, preconstruction surveys will be conducted by a qualified biologist no more than 30 days prior to

initiation of proposed development activities. Surveys will be conducted to determine if active nesting is occurring on or directly adjacent to the study area. Survey results will then be submitted to the CDFG. If active nests are found on or immediately adjacent to the site, consultation will be initiated with CDFG to determine appropriate avoidance measures. If no nesting is found to occur, necessary tree removal and other project activities could then proceed. Implementation of preconstruction raptor surveys and appropriate avoidance measures will reduce impacts to a less-than-significant level.

Mitigation Measure 4.4-6: Comply with agency permitting requirements and provide for no net loss of wetlands

This Mitigation Measure applies to Impact 4.4-6.

The City shall comply with all applicable Corps, USFWS, CDFG, and Regional Water Quality Control Board permitting and mitigation requirements for intersection widening and construction. The City shall meet the agencies' no net loss of wetlands policy through one of the following measures:

- Avoid impacts through project design.
- Compensate for impacts by acquiring (through fee title or credits in an approved mitigation bank) replacement habitat.

When site-specific designs are available for the roadway and intersection improvements, project-level analysis would require a wetland delineation submitted to the Corps for verification. The City would be required to obtain a Clean Water Act Section 404 Permit from the Corps prior to any construction activity.

A wetland delineation report, *Wetland Delineation for Baseline 430* (ECORP 2003), has already been prepared and verified for an area encompassing the widening of Fiddyment Road from Pleasant Grove Blvd to Baseline Road and the Intersection 165 (Fiddyment Road/Westlake) improvement area. This verification is valid for five years; therefore, the Fiddyment Road widening and Intersection 165 improvements would not require a new delineation before that time.

Mitigation Measure 4.4-7: Conduct preconstruction rare plant surveys

This Mitigation Measure applies to Impact 4.4-7.

To avoid impacts to potentially occurring special-status plant species, the City shall conduct pre-construction floristic rare plant surveys along Intersections 105, 69, and 165 and along the west side of Fiddyment Road from Pleasant Grove Boulevard to Baseline Road. Two special-status plants (Sanford's arrowhead and rose mallow) have the potential to occur within these improvement areas. Floristic surveys shall be conducted (according to agency guidelines) within in the project sites to determine presence or absence of special-status plant species. Should any individual special status plant species be located, the applicant shall retain a qualified botanist to develop and implement a mitigation plan; appropriate measures could include transplanting for species that are not federally or state listed as threatened or endangered (such as Sanford's arrowhead and rose mallow, which are on CNPS List 1B.2 and List 2, respectively). The CDFG would review and approve the mitigation plan, except if the plan or portion of the plan addresses federally listed species. In that case, the mitigation plan would be reviewed by the USFWS. Appropriate measures may include transplanting for species that are not federally or state listed as threatened or endangered (such as Sanford's arrowhead and rose mallow).

4.3 Noise

4.3 Noise

4.3.1 INTRODUCTION

This section focuses on potential noise impacts associated with the proposed roadway and intersection modifications, including placing roadways closer to potential sensitive receptors. The region of influence (study area) is defined to be within a circle having a radius of 500 feet from the center of each intersection. This section incorporates by reference information presented in Section 4.3, Noise of the City of Roseville's 2000 EIR for the 2015 CIP and the 2002 Supplemental EIR for the 2020 CIP.

4.3.2 ENVIRONMENTAL SETTING

Existing land uses within Roseville are dominated by commercial, rural, and residential land uses. There are some light industrial uses, as well as a variety of municipal/public uses, including police and fire facilities, schools, libraries, and City administrative functions. Roseville also has a well-developed system of parks, creeks, trails, and open space. Interstate 80 (I-80), State Route (SR) 65, and the Union Pacific rail yard all bisect the City.

4.3.2.1 Characteristics of Environmental Noise

Noise is generally defined as loud, unpleasant, unexpected, or undesired sound that disrupts or interferes with normal human activities. Although prolonged exposure to high noise levels has been demonstrated to cause hearing loss, the principal human response to environmental noise is annoyance. The response of individuals to similar noise events is diverse and influenced by the type of noise, the perceived importance of the noise and its appropriateness in the setting, the time of day and the type of activity during which the noise occurs, and the sensitivity of the individual.

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air, and are sensed by the human ear. Sound is generally characterized by a number of variables, including frequency and intensity. Frequency describes the sound's pitch and is measured in Hertz (Hz), while intensity describes the sound's loudness and is measured in decibels (dB). Decibels are measured using a logarithmic scale. A sound level of 0 dB is approximately the threshold of human hearing and is barely audible under extremely quiet listening conditions. Normal speech has a sound level of approximately 60 dB. Sound levels above about 120 dB begin to be felt inside the human ear as discomfort and eventually pain at still higher levels. The minimum change in the sound level of sound energy – averaged over time – that an average human ear can detect is about 3 dB. An increase (or decrease) in sound level of about 10 dB is usually perceived by the average person as a doubling (or halving) of the sound's loudness, and this relation generally holds true for loud sounds and for quieter sounds.

Because of the logarithmic nature of the decibel unit, sound levels cannot be added or subtracted directly and are somewhat cumbersome to handle mathematically. However, some simple guidelines are useful in dealing with sound levels. First, if a sound's intensity is doubled, the sound level increases by 3 dB, regardless of the initial sound level. Thus, for example: 60 dB + 60 dB = 63 dB, and 80 dB + 80 dB = 83 dB.

A Hertz (Hz) indicates the rate at which pressure fluctuations occur. For example, when a drummer beats a drum, the skin of the drum vibrates a number of times per second. A particular tone which makes the drum skin vibrate 100 times per second generates a sound pressure wave that is oscillating at 100 Hz, and this pressure oscillation is perceived as a tonal pitch of 100 Hz. Sound frequencies between 20 Hz and 20,000 Hz are within the range of sensitivity of the best human ear.

Sound from a tuning fork contains a single frequency referred to as a tone. In contrast, most sounds one hears in the environment do not consist of a single frequency, but rather a broad band of frequencies differing in sound level. The method commonly used to quantify environmental sounds consists of evaluating all of the frequencies of a sound according to a weighting system that reflects that human hearing is less sensitive at lower frequencies and higher frequencies than at the mid-range frequencies, e.g., 200 Hz to 5,000 Hz. The most commonly used filter introduces an "A" weighting, and the decibel level measured is called the A-weighted sound level (dBA). In practice, the level of a noise source is conveniently measured using a sound level meter that includes a filter corresponding to the dBA curve.

Although the A-weighted sound level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources that creates a relatively steady background noise in which no particular source is identifiable. A single descriptor called the equivalent sound level (L_{eq}) is the "equivalent" constant sound level that would have to be produced by a given source to equal the fluctuating level measured.

Finally, another sound measure known as the day-night average noise level (L_{dn}) describes noise exposure over a 24-hour period. It is calculated by adding a 10-decibel penalty to sound levels at night (10:00 p.m. to 7:00 a.m.) to compensate for the increased sensitivity to noise during the quieter evening and nighttime hours. The L_{dn} is defined by jurisdictions such as the State of California, and implemented by county or city government, to define acceptable land use compatibility with respect to noise. Sound levels of typical noise sources and environments are provided in **Table 4.3-1** to provide a frame of reference.

4.3.2.2 Regional Setting

Ambient sound levels can be characterized based on the types of development present; typically, sound levels in residential areas are relatively low if not affected by a major roadway. Sound levels near commercial areas or along arterial roadways are typically higher than residential areas. Major noise sources are transportation-related. The noise environment within the City is controlled by both traffic from local roadways and railroad operations within their region of influence.

4.3.2.3 Local Setting

The intersection and roadway improvements proposed as part of the 2020 CIP Update are located throughout Roseville and a small section of unincorporated Placer County. Specific improvements are proposed to improve the level of service (LOS) in these areas based on 2020 traffic projections.

TABLE 4.3-1

SOUND LEVELS OF TYPICAL NOISE SOURCES AND NOISE ENVIRONMENTS (A-WEIGHTED SOUND LEVELS)

Noise Source (at Given Distance)	Noise Environment	A-Weighted Sound Level	Human Judgment of Noise Loudness (Relative to Reference Loudness of 70 Decibels)
Military Jet Takeoff with Afterburner (50 ft)	Carrier Flight Deck	140 Decibels	128 times as loud
Civil Defense Siren (100 ft)		130	64 times as loud
Commercial Jet Take-off (200 ft)		120	32 times as loud Threshold of Pain
Pile Driver (50 ft)	Rock Music Concert	110	16 times as loud
Ambulance Siren (100 ft) Newspaper Press (5 ft) Power Lawn Mower (3 ft)		100	8 times as loud Very Loud
Motorcycle (25 ft) Propeller Plane Flyover (1,000 ft) Diesel Truck, 40 mph (50 ft)	Boiler Room Printing Press Plant	90	4 times as loud
Garbage Disposal (3 ft)	Higher Limit of Urban Ambient Sound	80	2 times as loud
Passenger Car, 65 mph (25 ft) Living Room Stereo (15 ft) Vacuum Cleaner (3 ft) Electronic Typewriter (10 ft)		70	Reference Loudness Moderately Loud
Normal Conversation (5 ft) Air Conditioning Unit (100 ft)	Data Processing Center Department Store	60	1/2 as loud
Light Traffic (100 ft)	Private Business Office	50	1/4 as loud
Bird Calls (distant)	Lower Limit of Urban Ambient Sound	40	1/8 as loud Quiet
Soft Whisper (5 ft)	Quiet Bedroom	30	1/16 as loud
	Recording Studio	20	1/32 as loud Just Audible
		10	1/64 as loud Threshold of Hearing

Source: Compiled by URS Corporation

4.3.3 REGULATORY SETTING

4.3.3.1 Federal

Federal noise standards are not applicable given the absence of federal funding for the proposed project or affected federal lands.

4.3.3.2 State

California Code of Regulations Title 24 establishes standards governing interior noise levels for new multifamily residential units. These standards stipulate that acoustical studies shall be performed prior to construction at building locations where the existing L_{dn} exceeds 60 dBA. These studies are required to establish measures that will limit maximum L_{dn} levels to 45 dBA in any inhabitable room. Based on Title 24 standards that apply to residential structures (excepting single-family detached residences), many communities, including the City of Roseville, have adopted an L_{dn} of 45 as the upper limit on interior noise in all residential units, including single-family detached residences.

4.3.3.3 Local

City of Roseville General Plan

The maximum allowable noise exposure limits for transportation and nontransportation noise sources are discussed below and summarized in **Tables 4.3-2** and **4.3-3**, respectively.

- The standard applicable to protect residential land uses from transportation noise sources is an L_{dn} of 60 dBA. If the L_{dn} exceeds 60 dBA but remains at or below 65 dBA, a review of architectural features is necessary to demonstrate that an L_{dn} of 45 dBA or less is achieved for interior spaces. Residential uses include, but are not necessarily limited to, single-family detached and multifamily demised (common-partition) structures. Additional land uses of interest include transient lodging, hospitals, and nursing homes.

- The standards applicable to protect residential land uses from nontransportation noise sources outlined in the Noise Element of the General Plan are a daytime L_{eq} of 50 dBA and a nighttime L_{eq} of 45 dBA.

City of Roseville Noise Ordinance

The City of Roseville has a Municipal Code establishing standards for limiting potential noise impacts from construction activity. The Roseville Noise Ordinance allows construction activity on weekdays between 7:00 a.m. and 7:00 p.m. and on weekends between 8:00 a.m. and 8:00 p.m. and stipulates that all construction equipment used during these time periods shall be maintained in good working order. No quantifiable noise level is specified for construction related activities within the allowable time periods.

TABLE 4.3-2

CITY OF ROSEVILLE MAXIMUM ALLOWABLE NOISE EXPOSURE FOR TRANSPORTATION NOISE SOURCES

Land Use	Outdoor Activity Areas[1]	Interior Spaces	
	L_{dn}/CNEL	L_{dn}/CNEL	L_{eq}, dB[2]
Residential	60[3]	45	—
Transient Lodging	60[3]	45	—
Hospitals, Nursing Homes	60[3]	45	—
Theaters, Auditoriums, Music Halls	—	—	35
Churches, Meeting Halls	60[3]	—	40
Office Buildings	—	—	45
Schools, Libraries, Museums	—	—	45
Playgrounds, Neighborhood Parks	70	—	—

Notes:

[1]Outdoor activity areas for residential development are considered to be the backyard patios or decks of single-family dwellings, and the patios or common areas where people generally congregate for multifamily developments.

Outdoor activity areas for nonresidential developments are considered to be those common areas where people generally congregate, including pedestrian plazas, seating areas, and outside lunch facilities.

Where the location or activity areas are unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

[2]As determined for a typical worst-case hour during periods of use.

[3]Where it is not possible to reduce noise in outdoor activity areas to 60 L_{dn}/CNEL or less using a practical application of the best available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed, provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Note: Where a proposed use is not specifically listed on this table, the use shall comply with the noise exposure standards for the nearest similar use as determined by the City of Roseville Planning Department. Commercial and industrial uses have not been listed because such uses are not considered to be particularly sensitive to noise exposure.

CNEL = Community Noise Exposure Level.

Source: City of Roseville, General Plan, 1992

TABLE 4.3-3

CITY OF ROSEVILLE PERFORMANCE STANDARDS FOR NONTRANSPORTATION NOISE SOURCES OR PROJECTS AFFECTED BY NONTRANSPORTATION NOISE SOURCES (AS MEASURED AT THE PROPERTY LINE OF THE NOISE-SENSITIVE USES)

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq}, dB	50	45
Maximum Level, dB	70	65

Notes:

Each of the noise levels specified above should be lowered by 5 dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying and are a primary source of complaints. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels.

Source: City of Roseville, General Plan, 1992

4.3.4 IMPACTS

4.3.4.1 Methods of Analysis

This section identifies and discusses the environmental noise impacts resulting from the proposed project and suggests Mitigation Measures to reduce the level of impact. **Tables 3-4** and **3-5** in Chapter 3, Project Description, indicate the intersections and roadways modifications proposed as part of the 2020 CIP Update. This evaluation of potential noise impacts focuses on improvements categorized as Widening projects in the above-referenced Chapter 3 tables; these improvements would place the roadway and intersection closer to existing land uses from that identified (and previously evaluated) in the current 2020 CIP. This section also discusses the noise modeling performed to evaluate anticipated noise levels for 2020 No Project conditions (Scenario 4) and 2020 Plus Project conditions (Scenario 5) at intersections proposed to be widened. This modeling also accounted for the three roadway widening projects proposed as part of the project (i.e., Fiddyment Road from Pleasant Grove Boulevard to Baseline Road; Roseville Parkway from Galleria Boulevard to West Mall; and Roseville Parkway from West Mall to Gibson Drive), which are adjacent to these intersections.

Noise levels were calculated using the Federal Highway Administration Traffic Noise Model (TNM) Version 2.5, with reference to known topographical conditions and the assumed surface traffic conditions. It was assumed that noise levels within a few hundred feet of roadways are dominated by noise from traffic moving through each of the intersections being evaluated. For properties within about 500 feet of the center of each intersection, the traffic was modeled to accommodate the potential changes of noise levels caused by changes in the proportions of vehicular traffic accelerating from a stop at an intersection versus free-flowing traffic moving through an intersection at a constant speed. Noise model outputs are provided in Appendix G.

In areas with greater relative contributions from other noise sources, such as railway or industrial sources, the relative changes of project noise levels from the CIP improvements would be less than the results tabulated below for this analysis.

4.3.4.2 Standards of Significance

As described in CEQA Guidelines (Appendix G), a significant impact would occur if the proposed project would result in the following:

- Exposure of persons to or generation of noise levels in excess of established standards;
- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; and
- Exposure to excessive airport or airstrip related noise levels.

Potential significant impacts are evaluated using the following criteria:

- Proposed project construction activities would create unacceptable short-term sound levels at noise sensitive receptors. For the purposes of this Draft Subsequent EIR, construction noise is considered unacceptable if it exceeds an hourly average of 70 dBA L_{eq} at a given receptor during hours of use for schools and churches, and at hospitals, for extended periods of time, or if construction activities would take place outside of hours stipulated in the City's noise ordinance.
- Proposed project-generated traffic would result in sound levels exceeding thresholds recommended in the Noise Element of the City's General Plan. An increase resulting in a calculated noise exposure to greater than 60 dBA L_{dn} is considered significant. For the purposes of this Draft Subsequent EIR, in areas where existing outdoor sound levels already exceed 60 dBA L_{dn} a project-generated increase of 3 dBA or greater at outdoor activity areas is considered significant.

4.3.4.3 Impacts and Mitigation Measures

IMPACT 4.3-1:	**Construction equipment would generate short-term noise level increases at noise-sensitive locations**
APPLICABLE ORDINANCES AND STANDARDS:	City of Roseville Noise Ordinance
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measure 4.3-1: Develop and implement a Construction Noise Abatement Program
RESIDUAL SIGNIFICANCE:	Less than Significant

Noise impacts from construction would result from the operation of construction equipment. The magnitude of impact would depend on the type of construction activity, the noise level generated by various pieces of construction equipment, the number of sources operating concurrently, the duration of the construction phase, the distance between the noise source and receptor, and the presence or absence of noise barriers, including topographical features that will change as project construction activity progresses.

The City would adhere to their Noise Ordinance, requiring 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 shall be fitted with factory-installed muffling devices or better and all construction equipment shall be maintained in good working order. However, even with implementation of the City's Noise Ordinance, **potentially significant** noise impacts could occur if construction activities occurred in the vicinity of sensitive noise receptors (i.e., schools and hospitals) during allowed construction hours. Potential sensitive receptors are located within 500 feet of proposed construction as follows:

- One school at Intersection 178 (Washington Blvd/All America);
- Two schools at Intersection 179 (Cottonwood Drive/Cirby Way);
- One hospital facility (under construction) with surgical procedures that are potentially noise sensitive at Intersection 19 (Eureka Road/Douglas Blvd);
- A church, the "Light of the Gospel," at Intersection 15 (Orlando Avenue/Cirby Way).

The development of a Construction Noise Abatement Program would reduce these potential noise impacts to sensitive receptors to **less-than-significant** levels.

IMPACT 4.3-2:	**Transportation noise sources in excess of an L_{dn} of 60 dBA under Existing Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	City of Roseville Noise Element
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

A qualitative evaluation of Existing Plus Project conditions (Scenario 2) was conducted because the proposed project is focused on relieving 2020 traffic congestion in Roseville that could occur due to growth in the City and future development outside the City limits, which will result in increased traffic inside of the City limits. Most of the improvements are not needed to accommodate existing traffic demand, and in fact, would not be constructed under existing conditions.

The functional result of Existing Plus Project conditions would be to add capacity at existing (and some planned but not yet constructed) intersections and at some roadways. Some locations would have increases in traffic volumes and noise levels as a result of the proposed improvements and other locations would have decreases in traffic volumes and noise levels due to potential redistribution of traffic resulting from improvements. As described in Section 4.1.3.1, the number of intersections operating at unacceptable conditions (LOS D or worse) would decrease with the addition of the proposed project to existing conditions.

Impact 4.3-3 provides a quantitative noise analysis of the project alternatives under 2020 Plus Project conditions (Scenario 5). This analysis concludes that the net effect of changes to the LOS at each intersection for the various modeling conditions would not change the noise exposures at these locations, except for a decrease in noise levels at one location. Noise increases under Existing Plus Project conditions would likely be similar to those under 2020 conditions. Therefore, this impact is considered **less than significant**.

IMPACT 4.3-3:	**Transportation noise sources in excess of an L_{dn} of 60 dBA under 2020 Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	City of Roseville Noise Element
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

The noise modeling for 2020 No Project (Scenario 4) and 2020 Plus Project conditions (Scenario 5) was performed using the available information regarding traffic volumes; posted speed limits; and assumptions provided by the City regarding the proportions of automobiles and trucks. The LOS at each intersection was used as a basis for defining the proportions of vehicles entering an intersection from each direction that are either accelerating from a stop or moving through at a steady speed. The land uses were reviewed at each intersection and then used as a means of identifying receptor locations within a radius of influence of about 500 feet. As such, the survey of land uses directed the set of receptors used to calculate a representative average at each of the intersections.

Table 4.3-4 summarizes the results of the analysis for 2020 No Project and 2020 Plus Project conditions. The results show the energy average (L_{dn}) noise exposure of a representative set of receivers for each intersection. The calculated exposures of the No Project conditions, with available traffic data, range from 62 dBA to 70 dBA. The calculated exposures of the Plus Project conditions range from 61 dBA to 70 dBA. Considered to the nearest decibel, Intersection 69 has a 1 dB reduction associated with project improvements. The net effect of changes to the level of service at each intersection for the various modeling conditions does not change the noise exposures to a significant extent.

TABLE 4.3-4

SUMMARY OF NOISE LEVELS AT INTERSECTIONS PROPOSED FOR WIDENING

Intersection ID	Calculated Noise Exposure, L_{dn}, dBA		
	2020 No Project (Scenario 4)	2020 Proposed Project (Scenario 5)	Change from Proposed Project minus No Project
15	65	65	0
19	70	70	0
69	62	61	-1
91	67	67	0
100	66	66	0
104	68	68	0
105	65	65	0
165	—[1]	70	—
178	—[1]	60	—
179	—[1]	69	—

[1]These intersections are not part of the No Project condition (Scenario 4) because they are among nine intersections added to the CIP as part of the proposed project.

As shown in **Table 4.3-4**, all intersections would have a noise level higher than 60 dBA under No Project conditions. Therefore, the appropriate significance threshold used to determine whether the proposed project would have significant noise impacts during operations was the 3 dBA or greater increase criterion. Since none of the identified intersections are expected to experience an increase in noise levels of 3 dBA or greater, no potentially significant noise impacts were identified at these intersections. Based on a review of the changes of LOS at other intersections that are considered as part of the broader project evaluation, this analysis concludes that a change of more than 1 dBA is not expected at these additional intersections due to project improvements. Note also that where other noise sources such as railways or industrial sources are a potential issue, the addition of these secondary noise sources only serves to further reduce the potential changes of total noise exposures at receptors due to proposed project improvements. Therefore, potential noise impacts from operations of the project would be considered **less than significant**.

4.3.5 MITIGATION MEASURES

Mitigation Measure 4.3-1: Develop and implement a Construction Noise Abatement Program

This Mitigation Measure applies to Impact 4.3-1.

Prior to construction plan approval for each improvement, develop and implement a Construction Noise Abatement Program. The plan shall require that:

- All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers;

- Stockpiling and/or vehicle staging areas shall be identified on the improvement plans and shall be located as far as is practical from existing occupied dwellings;

Specific noise control measures shall be identified that would reduce the hourly noise level of construction activity to 70 dBA or lower where feasible as determined by the Public Works Director during hours of use for schools and churches, and at hospitals. Those potential sensitive receptors located within 500 feet of proposed construction are as follows.

- One school at Intersection 178 (Washington Boulevard/All America).

- Two schools at Intersection 179 (Cottonwood Drive/Cirby Way).

- One hospital facility (under construction) with surgical procedures that are potentially noise sensitive at Intersection 19 (Eureka Road/Douglas Boulevard).

- A church, the "Light of the Gospel," at Intersection 15 (Orlando Avenue/Cirby Way).

Specific noise control measures shall be identified that would reduce the hourly average noise level of construction activity to 70 dBA, L_{eq} or lower at other noise-sensitive receptors where feasible. The construction contractor shall consider implementation of the following measures in the construction noise control plan:

1) Select equipment capable of performing the necessary tasks with the lowest feasible noise-emission level and the lowest feasible height for the acoustic center of noise emissions.

2) Noise barriers may be required to block the line of sight from noise sources to noise-sensitive receivers of concern or to further reduce noise levels beyond that provided by line-of-sight breaks afforded by topographical features. The noise barriers could be constructed using either plywood sheets or other solid material that provide sufficient mass per unit surface area (perhaps approaching 4 pounds per square foot) and have minimal openings between the top of barrier and ground surface (perhaps as little as 1 percent). Noise barriers of a given height are generally most effective when placed as close to either the source or receiver as possible, and perhaps at two such separate locations. The least desirable location is generally at a middle distance between sources and receptors. The plan should identify the proper height, location, and effectiveness of a noise barrier in terms of the expected hourly average noise level due to construction activity at noise-sensitive receivers of concern, with the objective of reducing construction activity noise that contributes to an hourly average of 70 dBA or less.

3) Disseminate essential information to residences and implement a complaint/response tracking system. The construction contractor shall notify residents within 500 feet of the construction areas of the construction schedule in writing before construction begins. The construction contractor will designate a

noise disturbance coordinator who will be responsible for responding to complaints regarding construction noise. The coordinator will determine the cause of the complaint and will ensure reasonable measures are implemented to correct the problem when feasible. A contact telephone number for the noise disturbance coordinator will be conspicuously posted on construction site fences and will be included in the written notification of the construction schedule sent to nearby residents.

4.2.2.2 Air Quality Standards and Existing Concentrations

The federal and state governments have each established their own ambient air quality standards (AAQS). The U.S. Environmental Protection Agency (EPA) has established primary and secondary National Ambient Air Quality Standards (NAAQS) that specify allowable ambient concentrations for criteria pollutants under the provisions of the Clean Air Act (CAA.) Primary NAAQS are established at levels necessary (with an adequate margin of safety) to protect the public health, including the health of sensitive populations such as asthmatics, children, elderly, the acutely ill, and other chronically ill. Similarly, secondary NAAQS specify the levels of air quality determined appropriate to protect the public welfare from any known or anticipated adverse effects associated with air contaminants. Commonly identified sensitive land uses are residences, schools, playgrounds, childcare centers, retirement homes or convalescent homes, hospitals, and clinics. Areas sensitive to air pollutants in or near the project area include residential areas, schools, and the nearest right-of-way where the children and the elderly have continuous access, such as sidewalks.

Allowable ambient concentrations are set for ozone (O_3), respirable particular matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), lead (Pb), and sulfur dioxide (SO_2). **Table 4.2-1** summarizes the NAAQS for these pollutants. The 8-hour ozone and $PM_{2.5}$ standards listed in the table were promulgated in 1997 but challenged in the courts. In 2002, the courts upheld these two standards. EPA made final designations for the 8-hour ozone standards on April 15, 2004, and final designations for the new federal $PM_{2.5}$ standards in December 2004. Most recently, due to the lack of evidence linking health problems to long-term exposure to coarse particle pollution, U.S. EPA has decided to revoke the annual PM_{10} standard, which will be effective on December 17, 2006. In addition, U.S. EPA also revoked the 1-hour O_3 standards for the majority of the U.S., including California. Currently, U.S. EPA and the states are working together to develop air quality attainment plans (AQAPs) or air quality management plans (AQMPs) to comply with the AAQS, where applicable.

In California, the California Air Resources Board (CARB), which is part of the California EPA, has promulgated ambient air quality standards for ozone, PM_{10}, $PM_{2.5}$, CO, NO_2, SO_2, and Pb that are more stringent than U.S. EPA's standards, as shown in **Table 4.2-1**. In 2002, CARB revised the state annual PM_{10} standard and established an annual $PM_{2.5}$ standard. These standards went into effect on July 7, 2004. In April 2005, CARB approved a new 8-hour average standard for ozone. CARB has also developed standards for sulfates, hydrogen sulfide, visibility-reducing particulates, and vinyl chloride.

Counties and metropolitan areas are classified as being attainment or nonattainment with respect to these federal and state AAQS. An area's classification is determined by comparing actual monitored air pollutant concentrations with state and federal guidelines. More than 200 air monitoring stations are located in California and are part of the State and Local Air Monitoring Network. These stations are operated by CARB, local Air Pollution Control Districts (APCDs) or Air Quality Management Districts (AQMDs), private contractors, and the National Park Service. Areas that do not have sufficient data for a determination are given an "unclassified" designation and are not considered to be nonattainment.

TABLE 4.2-1

FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	None	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)*		0.08 ppm 157 µg/m³)[8]		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	--	Inertial Separation and Gravimetric Analysis
	Annual Geometric Mean	20 µg/m³		Revoked[10]		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		35 µg/m³	--	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	15 µg/m³	Same as Primary Standard	
Carbon Monoxide (CO)	8 Hour	9 ppm (10 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m³)	None	Non-dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		--	--	--
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	--	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.25 ppm (470 µg/m³)		--		
Lead[9]	30 days average	1.5 µg/m³	Atomic Absorption	--	--	--
	Calendar Quarter	--		1.5 µg/m³	Same as Primary Standard	High Volume Sampler and Atomic Absorption
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	--	Ultraviolet Fluorescence	0.03 ppm	--	Spectro-photometry (Pararosaniline Method)
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (365 µg/m³)	--	
	3 Hour	--		--	0.5 ppm (1300 µg/m³)	
	1 Hour	0.25 ppm (655 µg/m³)		--	--	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer – visibility of 10 miles of more (0.07-30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards		

TABLE 4.2-1 (CONTINUED)

FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Sulfates	24 Hour	25 μg/m^3	Ion Chromatography	No Federal Standards		
Vinyl Chloride[9]	24 Hour	0.01 ppm (26 μg/m^3)	Gas Chromatography	No Federal Standards		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m^3)	Ultraviolet Fluorescence	No Federal Standards		

Notes:

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure that can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. New federal 8-hour ozone and fine particulate matter standards were promulgated by U.S. EPA on July 18, 1997. Contact U.S. EPA for further clarification and current federal policies.
9. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
10. Due to lack of evidence linking health problems to long-term exposure to coarse particle pollution, U.S. EPA revoked the annual PM_{10} standard in 2006 (effective December 17, 2006).

* - μg/m^3 = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter; ppm = parts per million

Source: CARB, 2006b; U.S. EPA, 2006

CARB collects ambient air pollutant concentration data at two locations near the City of Roseville: the Roseville air monitoring station, located at 151 North Sunrise Avenue, and the North Highlands station in Sacramento County. These two stations are shown in **Figure 4.2-1**. **Table 4.2-2** summarizes the measured criteria pollutant concentrations over the past three years at these stations. Based on pollutant concentrations measured at these stations, the western portion of Placer County

TABLE 4.2-2

SUMMARY OF AMBIENT AIR DATA AT MONITORING STATIONS NEAR ROSEVILLE, 2003-2005

Pollutant	Avg. Time	Units	Standards		2003				2004				2005			
			Federal	State	Conc. ROS1	Days > Federal Stds	Conc. NHI1	Days > Federal Stds	Conc. ROS	Days > Federal Stds	Conc. NHI	Days > Federal Stds	Conc. ROS	Days > Federal Stds	Conc. NHI	Days > Federal Stds
O_3	1-hr	ppm	None	0.09	0.133[3]	1	0.131[3]	1	0.106[3]	0	0.103[3]	0	0.118[3]	0	0.103[3]	0
	8-hr	ppm	0.08	0.070	0.109[2,3]	5	0.094[2,3]	4	0.085[2,3]	1	0.088[2,3]	1	0.106[2,3]	9	0.085[2,3]	2
PM_{10}	24-hr	µg/m³	150	50	58,59[3,4]	0	62[3]	0	43	0	44	0	55,58[3,4]	0	110[3,4]	0
	Annual	µg/m³	None[5]	20	21[3]	0	21[3]	0	22[3]	0	24[3]	0	19	0	27[3]	0
$PM_{2.5}$	24-hr	µg/m³	35	None	30	0	--	--	32,48[2,4]	0	--	--	51,59[2,4]	0	--	--
	Annual	µg/m³	15	12	9.9	0	--	--	9.4	0	--	--	10.7	0	--	--
NO_2	1-hr	ppm	None	0.25	0.083	--	0.087	--	0.067	--	0.146	--	0.079	--	0.06	--
	Annual	ppm	0.053	None	0.014	0	0.015	0	0.013	0	0.014	0	0.013	0	0.011	0
CO	1-hr	ppm	35	20	2.4	0	4.4	0	2.6	0	7.3	0	2	0	8	0
	8-hr	ppm	9	9	1.59	0	2.07	0	1.93	0	4.05	0	1.27	0	2.86	0
SO_2	1-hr	ppm	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--
	3-hr	ppm	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
	24-hr	ppm	0.14	0.04	--	--	0.006	0	--	--	0.002	0	--	--	0.002	0
	Annual	ppm	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
1. Stations: ROS (Roseville) or North Sunrise; NHI (North Highlands)
2. Exceeds the federal standard
3. Exceeds the state standard
4. Federal/state values. The federal and state values differ due to differences in sampling methods and criteria
5. The federal annual PM_{10} standards are revoked as of December 17, 2006

-- Data not collected at the monitoring station
µg/m³ = micrograms per cubic meter; ppm = parts per million; conc. = concentration
Source. CARB, 2006c

is in compliance with ambient air quality standards for all pollutants except the state 1-hour, and state and federal 8-hour O_3 standards, and the state 24-hour and annual PM_{10} standard. The health effects and other characteristics of O_3, PM_{10}, $PM_{2.5}$, CO, NO_2, and SO_2 are discussed below. Pb, sulfates, and hydrogen sulfide are of least concern in this project area because ambient air concentrations are well below standards and no major sources of these pollutants exist in the project area.

Ozone

Ozone is a colorless gas that has a pungent odor and causes eye and lung irritation, reduces visibility, and damages crops. Ozone is a primary constituent of smog and is formed in the atmosphere in the presence of sunlight by a series of chemical reactions involving oxides of nitrogen (NO_X) and reactive organic gases (ROG). (Note that volatile organic compounds (VOCs) and ROG are describing the same category of pollutants and will be used interchangeably throughout this section.) Because these reactions occur on a regional scale, ozone is considered a regional air pollutant. Industrial fuel combustion and motor vehicles are primary sources of NO_X and ROG.

As shown in **Table 4.2-2**, ozone concentrations have exceeded federal and state AAQS over the past three years. These violations, along with other violations throughout the Sacramento region, resulted in the region being classified as nonattainment for the state's 1-hour, and federal and state's 8-hour ozone standards. The nonattainment region is known as the Sacramento Metropolitan Non-attainment Area and encompasses all of Sacramento and Yolo Counties, and portions of El Dorado, Placer (western Placer County, including the City of Roseville), Sutter, and Solano Counties.

Particulate Matter

Particulate matter is generally composed of particles floating in the air, such as dust, soot, aerosols, fumes, and mists. Of particular concern are inhalable, coarse particulate matter with aerodynamic diameters of 10 microns or less (PM_{10}). A subgroup of these particulates is fine particulates (particles with aerodynamic diameters less than 2.5 micrometers, $PM_{2.5}$), which have very different characteristics and potential health effects than coarse particulates (particles with aerodynamic diameter between 2.5 to 10 micrometers). Coarse particulates are generated by sources such as windblown dust, agricultural fields, and dust from vehicular traffic on unpaved roads. $PM_{2.5}$ is typically emitted from combustion activities such as industrial and manufacturing process equipment, vehicle exhaust, and residential wood-burning stoves and fireplaces. $PM_{2.5}$ is also formed in the atmosphere when gases such as SO_2, NO_X, and VOC emitted by combustion activities are transformed by chemical reactions in the air. Inhalation of PM_{10} and $PM_{2.5}$ affects breathing and the respiratory system, and in particular, can damage lung tissue and contribute to cancer and premature death. There are separate standards for $PM_{2.5}$ because these fine particles can penetrate deep into the respiratory tract and cause their own unique adverse health effects.

Measured concentrations at the monitoring stations have not exceeded federal 24-hour PM_{10} standards over the past three years. However, exceedances of the state PM_{10} standards have occurred over the past three years. These measured concentrations have contributed to the region being classified as nonattainment for the state PM_{10} standards.

Carbon Monoxide

CO is an odorless, colorless gas that can impair the transport of oxygen in the bloodstream, aggravate cardiovascular disease and cause fatigue, headache, confusion, and dizziness. CO forms through incomplete combustion of fuels in vehicles, wood stoves, industrial operations, and fireplaces. In Placer County, vehicular exhaust is a major source of CO. CO tends to dissipate rapidly into the atmosphere and consequently is generally a concern at the local level, particularly at major road intersections.

CO concentrations recorded at the two nearby monitoring stations are well below federal and state 1-hour and 8-hour standards; therefore, all of Placer County is in attainment of the CO standards.

Nitrogen Dioxide

NO_2 is a brownish, highly reactive gas that can irritate the lungs, cause pneumonia, and lower the resistance to respiratory infections. NO_X, which includes NO_2, is a key precursor to O_3 and acid rain. NO_X forms when fuel is burned at high temperatures and primarily from transportation sources and stationary fuel combustion sources such as electric utility and industrial boilers.

Data in **Table 4.2-2** show that measured concentrations of NO_2 have consistently remained well below the federal and state standards. With similar trends throughout the region (and state), the area is well within federal and state NO_2 standards.

Sulfur Dioxide

Sulfur dioxide is a colorless acidic gas with a strong odor. High concentrations of SO_2 affect breathing and may aggravate existing respiratory and cardiovascular disease. Sulfur dioxide is also a primary contributor to acid deposition, which causes acidification of lakes and streams and can damage trees, crops, building materials, and statues. In addition, sulfur compounds in the air can contribute to visibility impairment. The major source category for SO_2 is fossil fuel-burning equipment.

Sulfur dioxide is not measured at the Roseville station. However, the project area is designated as unclassified for federal and attainment for state standards. A summary of the attainment status for criteria pollutants within Placer County is presented in **Table 4.2-3**.

Toxic Air Contaminants

Toxic air contaminants (TACs) have the potential to cause irreparable health effects such as increased risk of contracting cancer. TACs are considered separately from the criteria pollutants in the regulatory process. Ambient air quality standards have not been set for TACs because ambient TAC concentrations vary from area to area and are dependent on the type of emission sources within the region. Therefore, TACs are typically regulated on a source-by-source basis (e.g., type and amount of TACs emitted, proximity to nearest sensitive receptors [hospitals, school, daycare, residences]). Motor vehicles also emit TACs, and the amount is dependent on travel speed, type of vehicle (e.g., diesel, gasoline), and engine size.

TABLE 4.2-3

PLACER COUNTY ATTAINMENT STATUS

Criteria Pollutant	State Designation[1]	Proposed 2006 State Designation[2]	Federal Designation[3]
CO	Unclassified	Unclassified	Unclassified/Attainment
NO_2	Attainment	Attainment	Unclassified/Attainment
SO_2	Attainment	Attainment	Unclassified
PM_{10}	Non-attainment	Non-attainment	Unclassified
$PM_{2.5}$	Unclassified	Unclassified	Unclassifiable/Attainment
O_3 (1-hour)	Non-attainment	Nonattainment	Not Applicable
O_3 (8-hour)	Non-attainment	Nonattainment	Nonattainment
Lead	Attainment	Attainment	Not Applicable
Sulfates	Attainment	Attainment	Not Applicable
H_2S	Unclassified	Unclassified	Not Applicable
Visibility-Reducing PM	Unclassified	Unclassified	Not Applicable

Notes:
1. These state area designations are based on air quality data collected during 2001 through 2003 and became effective on July 23, 2005.
2. The CARB will consider the proposed changes to the state area designations based on air quality data collected during 2003 through 2005 on November 16–17, 2006.
3. The federal designations are as of September 2006.

H_2S =Hydrogen Sulfide
Source. CARB, 2006d.

Existing Emissions Sources

The ambient air concentrations presented above are a result of emissions from manmade and natural sources. Manmade sources of emissions are generally divided into three general types: stationary, areawide, and mobile sources. The contributions of these source categories vary from region to region. CARB maintains an emissions inventory to determine the sources and quantities of air pollution generated within the state's counties and air basins. **Table 4.2-4** presents a summary of the estimated 2005 annual average pollutant emission data for the Sacramento Valley portion of Placer County and general source categories. Emissions from mobile sources constitute the majority of ROG, CO, NO_X, and SO_X emissions in the area. Areawide emissions contribute more than 75 percent of the PM_{10} emissions in Placer County.

TABLE 4.2-4

SUMMARY OF 2005 ESTIMATED ANNUAL AVERAGE EMISSIONS IN PLACER COUNTY (TONS/DAY)

SOURCE	ROG	CO	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Stationary Sources						
Fuel Combustion	0.4	1.9	2.9	0	0.2	0.2
Waste Disposal	0.1	--	--	--	--	--
Cleaning And Surface Coatings	2.3	--	--	--	0	0
Petroleum Marketing	0.8	--	--	--	--	--
Industrial Processes	1.5	0.2	0.1	0	1.4	0.8
Total Stationary Sources	**5.1**	**2.1**	**3.0**	**0.1**	**1.7**	**1.0**
Area Sources						
Solvent Evaporation	2.8	--	--	--	--	--
Miscellaneous Processes	1.9	32.2	0.8	0.1	13.0	5.3
Total Area Sources	**4.7**	**32.2**	**0.8**	**0.1**	**13.0**	**5.3**
Mobile Sources						
Other Mobile Sources	4.4	34.7	10.5	0.4	0.7	0.6
On-Road Motor Vehicles	6.0	56.4	9.3	0.1	0.3	0.2
Total Mobile Sources	**10.4**	**91.0**	**19.8**	**0.5**	**1.0**	**0.8**
Total All Sources	**20.3**	**125.4**	**23.6**	**0.7**	**15.7**	**7.1**

CO = carbon monoxide; NO_X = oxides of nitrogen; $PM_{2.5}$ = fine particulate matter; PM_{10} = respirable particular matter; ROG = reactive organic gases; SO_X = oxides of sulfur;

Source: CARB, 2006e

4.2.3 REGULATORY SETTING

4.2.3.1 Federal

The federal Clean Air Act Amendments (CAAA) of 1977 requires each state to adopt a State Implementation Plan (SIP) outlining pollution control measures to attain the federal AAQS in non-attainment areas of the state or comply with the Federal Implementation Plan. The SIP is not a single document, but a compilation of new and previously submitted plans, programs, district rules, state regulations, and federal controls detailing how the AAQS are to be met in each local area. Areas designated as serious nonattainment are required to achieve attainment by June 15, 2013. As discussed previously, the federal government, through the U.S. EPA, has established primary and secondary NAAQS for criteria pollutants under the provisions of the CAA. U.S. EPA has also promulgated new 8-hour ozone and $PM_{2.5}$ ambient air quality standards, which have been upheld in the courts. U.S. EPA made final designations for the 8-hour ozone standards on April 15, 2004, and final designations for the new federal $PM_{2.5}$ standards in December 2004. With the new 8-hour ozone standard in place, the 1-hour ozone standard has been revoked for all regions throughout California.

4.2.3.2 State

CARB coordinates and oversees both state and federal air pollution control programs in California. CARB oversees activities of local AQMDs/APCDs and is responsible for incorporating AQMPs or AQAPs from these local air districts into a SIP for approval by the U.S. EPA. California EPA established its own AAQS (CAAQS) for criteria air pollutants which are, in general, more stringent than the federal standards. Under the California CAA, each area exceeding the CAAQS for O_3, CO, SO_2, and NO_2 must develop an AQMP or AQAP to achieve these standards (California Health and Safety Code 40911.)

The California Health and Safety Code Section 40914 states that air districts must design a plan that achieves an annual reduction in districtwide emissions of 5 percent or more, averaged every consecutive three-year period. As such, local air districts and other agencies prepare AQMPs/AQAPs and submit them to CARB for review and approval. CARB then forwards the SIP revisions to U.S. EPA for approval and publication in the Federal Register. CARB enforces these standards by regulating mobile emission sources and overseeing activities of the County APCDs and regional AQMDs.

4.2.3.3 Local

Placer County Air Pollution Control District

The proposed project is located in the City of Roseville, where air quality is regulated by the local air district, Placer County Air Pollution Control District (PCAPCD). The 1976 Lewis Air Quality Management Act established the PCAPCD and other air districts throughout the State of California. Significant authority for air quality control has been given to local APCDs or AQMDs, which regulate stationary source emissions and develop local attainment plans. PCAPCD has the authority to manage transportation activities at indirect sources and regulate stationary source emissions. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution (e.g., motor vehicles at an intersection, a mall, and highways.)

At the local level, the PCAPCD regulates air quality by establishing local air quality regulations, permitting stationary sources, and planning activities related to air quality. The PCAPCD is also responsible for enforcing and implementing federal and state standards.

The City of Roseville is located approximately 16 miles northeast of downtown Sacramento, which places the City in the northeast fringe of the SMA. The AQMD and APCD within the SMA worked together to develop the 1994 Sacramento Area Regional Ozone Attainment Plan to satisfy the SIP requirement for the 1-hour ozone standard. This Attainment Plan identifies source controls and trip reduction strategies that aimed at achieving the federal 1-hour ozone standard by 2005. The attainment strategy requires reductions of approximately 38 percent of ROG and 40 percent of NO_X (O_3 precursors) relative to 1990 baseline emissions. The strategy relies heavily on mobile source NO_X reductions because, as shown previously, mobile sources generate approximately the majority of the regional NO_X emissions. With the revocation of the 1-hour ozone standard, the APCDs will continue to implement the existing control strategies. Efforts are currently underway to develop and submit an 8-hour ozone attainment plan by June 2007. The new strategies would potentially include strategies for progressive reduction of air pollutants by promoting active public involvement, by

encouraging compliance through positive influence and behavior, and through public education in both public and private sectors.

City of Roseville

The City of Roseville contributes to improved air quality through strategic land use and development planning, and coordination with adjacent counties to avoid conflicts with the goal of the PCAPCD, which is to meet federal and state AAQS. The Air Quality Element in the City of Roseville's General Plan outlines the goals and policies aimed at improving air quality in Roseville. The goals and policy applicable to this project are identified below:

Goal 1a: Improve Roseville's air quality by achieving and maintaining ambient air quality standards established by the EPA and CARB.

Goal 2: Integrate air quality planning with the land use and transportation planning process.

Goal 4: Increase the capacity of the transportation system, including the roadway system and alternative modes of transportation.

Policy 5: Develop transportation systems that minimize vehicle delay and air pollution.

4.2.4 IMPACTS

The significance of air quality impacts resulting from the implementation of the proposed project (i.e., construction and operation) are analyzed in this section. Through the enhanced CEQA review process, PCAPCD developed criteria pollutant significance thresholds for proposed projects that generate air pollutants. The thresholds presented in **Table 4.2-5** apply to both short- (i.e., construction) and long-term (i.e., operation) air pollutant emissions. Projects with the potential to generate emissions exceeding the thresholds are considered to have a significant impact on air quality. If the project's emissions exceed any of the significance criteria, then feasible mitigation measures must be implemented to reduce air quality impacts to a level considered less than significant.

4.2.4.1 Method of Analysis

To accurately assess significance of air quality impacts from construction and operation of the proposed project, project-specific data and reasonable assumptions are used to make the determination. Proposed roadway and intersection improvements would occur from 2007 through 2020. The proposed improvements include widening roadways and intersections to increase the number of lanes, as well as modifying lanes that would not require widening (i.e., restriping). These improvements are expected to reduce traffic congestion and improve the LOS[1] on roadways throughout the City of Roseville.

[1] LOS is a qualitative measure of traffic flow based on a number of factors such as speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort, and convenience.

TABLE 4.2-5

PLACER COUNTY APCD SIGNIFICANCE THRESHOLDS

Pollutant	Significance Thresholds (lb/day)
ROG	82
NO_X	82
SO_X	136
PM_{10}	82
CO	550

CO = carbon monoxide; NO_X = oxides of nitrogen; $PM_{2.5}$ = fine particulate matter; PM_{10} = respirable particular matter; ROG = reactive organic gases; SO_X = oxides of sulfur

To quantify construction emissions and provide an accurate assessment of air quality impacts without grossly overestimating impacts, it is assumed that a maximum of two road widening projects would occur at any one time, with minimal overlapping of construction activities. The assumption is considered to be reasonable because simultaneous roadway construction would potentially create unnecessary traffic congestion throughout Roseville. Furthermore, funding for roadway widening would most likely be received in increments between 2007 and 2020, therefore reducing the likelihood of simultaneous construction work at multiple roadways (i.e., more than two projects). Modifications to intersections and roadways that do not require widening beyond the right-of-way designated in the current CIP are considered to have less-than-significant air quality impacts, and therefore, are not evaluated in this section. Emissions related to construction were quantified using Sacramento Metropolitan Air Quality Management District's (SMAQMD) Road Construction Emission Model (SMAQMD, 2006).

Air quality impacts associated with operational activities were assessed using traffic data provided by DKS Associates. The type of traffic data provided include intersections analyzed, LOS, volume to capacity (V/C) ratio, peak-hour vehicle volumes, and geometrics. Traffic data between the 2020 No Project conditions (Scenario 4) and 2020 Plus Project conditions (Scenario 5) were compared to determine significance of air quality impacts. In addition, localized air quality impacts (i.e., CO hot-spot) were also analyzed at the eight intersections with the worst LOS (LOS F). Intersections with the worst LOS are assumed to be the worst-case scenario. Therefore, if there are no CO hot-spots at these intersections, it was determined that the remaining intersections would not have CO hot-spots. CO concentrations were estimated at these intersections using the EMFAC2002 and CALINE4 models provided by CARB. The CO hot-spot analysis was conducted in accordance with the protocol recommended by the California Department of Transportation (Caltrans) and published in the Institute of Transportation Studies 1997 document entitled *Transportation Project-Level Carbon Monoxide Protocol.* Air quality modeling outputs for construction and operation are provided in Appendix F.

4.2.4.2 Standards of Significance

For the purposes of this Draft EIR, a significant impact would occur if the proposed project would result in the following:

- Cause or contribute to local CO concentrations exceeding 20 parts per million (ppm) over a 1-hour averaging period or 9 ppm over an 8-hour averaging period at the street corners of congested intersections;
- Cause short- and/or long-term project emissions to exceed PCAPCD's significance thresholds as presented in **Table 4.2-5**; or
- Not meet the goals and policies of the City's General Plan or relevant air quality plans prepared by PCAPCD.

4.2.4.3 Impacts and Mitigation Measures

IMPACT 4.2-1:	**Construction-related air pollutant emissions**
APPLICABLE ORDINANCES AND STANDARDS:	PCAPCD significance thresholds
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	Mitigation Measure 4.2-1: Implement construction emission control measures
RESIDUAL SIGNIFICANCE:	Less than Significant

Construction equipment, worker vehicles exhaust, and fugitive dust generated from grading activities would cause emissions during roadway widening.

PCAPCD has not created a method for calculating potential construction emissions associated with various projects; therefore, SMAQMD's construction emissions calculation method (Road Construction Emission [RCE] Model) was used to estimate daily emissions from widening a roadway. Equipment expected to be used during construction are presented in **Table 4.2-6**. Roadway dimensions of 10 acres from the largest roadway widening (Fiddyment Road widening from Pleasant Grove Boulevard to Baseline Road) and a project of approximately 5 acres, for a total of 15 acres were used as input into the RCE model. These widening projects are considered to be the worst-case construction scenario. If air quality impacts are found to be less than significant at these locations, then air quality impacts from construction activities at other roadway segments and intersections would also be considered less than significant. Note that the RCE model provides a default equipment list based on the data entered (i.e., total acreage and duration of construction [12 months].) To reflect a realistic construction scenario as well as to correlate with construction activities for road widening projects and construction equipment data provided by City of Roseville staff, certain default construction equipment parameters were changed. For example, the RCE model default parameters estimated two water trucks and two signal boards would be used. This was changed to four water trucks and four signal boards, which generates twice the amount of air pollutants, but is considered to be more realistic for two separate projects. Similarly, the two default scrapers and excavators were removed from the grubbing/land clearing and site grading activities,

respectively, because the default data also listed other equipment such as dozers and trenchers that can perform identical tasks. The RCE model run is provided in Appendix F.

Fugitive dust emissions were estimated based on the assumption that a maximum of 7 acres per day would be disturbed. Because the PCAPCD significance thresholds are based on daily emissions, the maximum amount of air pollutants emitted for construction activities was also estimated on a daily basis. Daily emissions generated during project construction would vary depending on the type and intensity of construction activity. **Table 4.2-7** presents calculated emissions on a peak construction day.

TABLE 4.2-6

CONSTRUCTION EQUIPMENT LIST

Equipment Description	Quantity of Equipment
Dozer	2
Signal Board	4
Wheeled Grader	2
Wheeled Loader	2
Scraper	1
Compactor	2
Trenchers	2
Pavers	2
Paving Equipment	2
Rollers	3
Concrete Truck	4
Semi-trucks – Asphalt	4
Water Truck	4

Source: Gandler, 2006; RCE Model default data; and reasonable assumptions.

TABLE 4.2-7

PLACER COUNTY APCD SIGNIFICANCE THRESHOLDS AND CONSTRUCTION EMISSIONS

Pollutant	Significance Thresholds (lb/day)	Maximum Daily Construction Emissions (lb/day)
ROG	82	13
NO_X	82	81
PM_{10}	82	39
CO	550	70

Because the significance thresholds are not exceeded on a peak construction day, construction associated with the proposed project would result in **less than significant** air quality impacts. However, construction emissions control measures presented in Mitigation Measure 4.2-1 are recommended to reduce overall construction emissions within the SVAB.

IMPACT 4.2-2:	**Operational air pollutant emissions under Existing Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	Placer County APCD significance thresholds
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

A qualitative evaluation of Existing Plus Project conditions (Scenario 2) was conducted because the proposed project is focused on relieving 2020 traffic congestion in Roseville that could result from growth in the City and future development outside the City limits, which will lead to increased traffic within the City limits. Most of the improvements are not needed to accommodate existing traffic demand, and in fact, would not be constructed under existing conditions.

The functional result of Existing Plus Project conditions would be to add capacity at existing intersections and roadways. Traffic volumes and pollutant emissions would increase at some locations as a result of the proposed improvements, while other locations would experience decreases in traffic volumes and emissions based on the potential redistribution of traffic from the improvements. As described in Section 4.1.4.3.1, the number of intersections operating at unacceptable conditions (LOS D or worse) would decrease under the proposed project. Therefore, the impact of project operations on existing conditions would be **less than significant**.

IMPACT 4.2-3:	**Operational air pollutant emissions under 2020 Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	Placer County APCD significance thresholds
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

Data in **Table 4.2-4** indicate that mobile sources are responsible for a substantial portion of total manmade emissions in the Roseville area. Vehicle traffic is generated as people move among various land uses. The proposed project would include modifications and widening improvements at intersections and roadways to accommodate future citywide buildout conditions within Roseville and adhere to the City's LOS policy. These improvements are designed to reduce vehicular traffic congestion and improve LOS in Roseville.

Traffic data provided information for 172 intersections in Roseville for 2020 No Project (Scenario 4) and 179 intersections for 2020 Plus Project (Scenario 5) conditions. When compared to No Project conditions, the proposed project would improve LOS at 22 intersections and degrade LOS at 4 intersections (see Section 4.1, Transportation and Circulation). In addition, traffic data show that the V/C ratio is expected to decrease at 69 other intersections with implementation of the proposed project, but not significantly enough to change the LOS. V/C ratio is used to assess vehicle volume on a particular roadway segment and whether the roadway capacity is congested (i.e., the higher the V/C ratio, the more congested a roadway segment), and is used to calculate LOS. Therefore, the proposed improvements would improve travel conditions at over 50 percent of the intersections in the City's CIP. Furthermore, the proposed project would not involve constructing any stationary air pollutant sources or affect anticipated land uses or population projections, and therefore, the project would not increase the total number of vehicle miles traveled in the Roseville area.

Consequently, with improved LOS and reduced V/C, it can be deducted that the implementation of the proposed project would result in less traffic congestion and less travel time, which can be interpreted as reducing vehicle emissions within Roseville. Therefore, the impact of project operations on 2020 conditions is considered **less than significant**.

IMPACT 4.2-4:	**CO concentration at intersections**
APPLICABLE ORDINANCES AND STANDARDS:	Federal and State Ambient Air Quality Standards
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

Under congested traffic and high vehicle volumes conditions, ambient CO concentrations can be substantially increased at intersections because of slower travel speed and increased idle time. With these extreme conditions, CO levels can exceed the 1-hour standard of 20 parts per million (ppm) and/or the 8-hour standard of 9 ppm, which is known as a CO hot-spot. To ensure that the proposed project would not create any CO hot-spots, eight intersections with the worst LOS (i.e., LOS F) were identified using traffic data provided by DKS Associates for air modeling, using methodology approved by Caltrans.

To determine if a CO hot-spot would occur at any of these intersections, traffic data such as peak evening vehicle volumes, roadway configurations (i.e., geometrics), and the highest ambient CO concentrations within the last three years (as shown in **Table 4.2-2**) were used to estimate CO concentrations in 2020 for the Plus Project conditions (Scenario 5). In addition, the EMFAC2002 mobile emission factor model was used to estimate CO emission factors for vehicles at travel speeds of 5 and 10 miles per hour. All these data were used as input parameters for the CALINE4 pollutant dispersion model. The worst-case meteorological conditions were assumed. To represent a worst-case scenario, the model receptors were assumed at the four corners of each street intersection to represent pedestrians waiting to cross the intersections. Using these parameters, the model predicts the 1-hour concentration at the receptor locations. **Table 4.2-8** provides the results of the CO modeling effort. Data in **Table 4.2-8** show that the predicted CO concentrations at all of the intersections would not violate the state's 1-hour or 8-hour CO standards during the p.m. peak

traffic hour. Therefore, the operation of the proposed project would not cause any CO hot-spots at any intersections and this impact would be considered **less than significant**.

TABLE 4.2-8

PREDICTED CARBON MONOXIDE CONCENTRATIONS AT AFFECTED INTERSECTIONS IN YEAR 2020

Intersection ID[1]	Intersection Description	LOS	Maximum 1-hour CO concentration (ppm)	Maximum 8-hour CO concentration (ppm)	California 1-hour CO standard (ppm)	California 8-hour CO standard (ppm)
18	Vernon St and Cirby Way	F	8.9	4.7	20	9
21	Harding Blvd and Douglas Blvd	F	8.9	4.7	20	9
60	Harding Blvd and Wills Rd	F	8.8	4.7	20	9
96	Galleria Blvd Roseville Pkwy	F	9.1	4.8	20	9
117	Sunrise Ave and Cirby Way	F	9.1	4.8	20	9
118	Sunrise Ave and Coloma Way	F	8.9	4.7	20	9
125	Sunrise Ave and Roseville Pkwy	F	9.0	4.8	20	9
128	Taylor Rd and Eureka Rd	F	9.2	4.9	20	9

Notes:

1 Intersection identification numbers used in traffic data provided by DKS Associates.

CO = carbon monoxide; LOS = level of service; ppm = parts per million

IMPACT 4.2-5:	**Consistency with Air Quality Attainment Plans**
APPLICABLE ORDINANCES AND STANDARDS:	State Implementation Plan
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

The primary sources of ROG, NO_X, and CO in Placer County are from mobile sources (i.e., motor vehicles), with area sources (e.g., wood-burning stoves and fireplaces) and stationary sources also contributing to emissions of particulate matter. To comply with the AAQS, regional and county air quality attainment plans (AQAPs) are developed by the local AQMDs/APCDs and the Metropolitan Planning Organizations. The AQAP consists of growth projections that are provided in the General Plan and associated amendments. Based on these projections, pollutant reduction strategies including stringent pollutant control measures, are promulgated and enforced by local AQMDs/APCDs to offset the effects of normal growth and also reduce existing ambient air concentrations. The primary objective of the AQAP is to comply with the AAQS. To ensure proposed projects do not hinder the objective of the AQAP, a consistency analysis is conducted. The analysis determines whether operational emissions associated with the proposed project supports or conflicts with the growth projections stated in the General Plan. Because the pollutant reduction strategies in the AQAP are based on the growth projections stated in the General Plan and Regional Transportation Plan, any proposed projects that were not included in the General Plan are considered to be inconsistent with the AQAP. However, if the proposed project can be shown to be consistent with the General Plan (i.e., no net increase of air pollution), then it is considered to be consistent with the AQAP. Hence, the proposed 2020 CIP Update is considered to be consistent with the General Plan and the AQAP because improving the roadways within the City should result in better LOS, faster travel speeds, and reduced travel times. The combination of all these factors would result in less air pollutants emitted from motor vehicles.

The current AQAP for the project area is the Sacramento Regional Nonattainment Area 8-hour Ozone Rate of Progress Plan (Early Progress Plan). This plan fulfills the federal 8-hour ozone requirements for a 2002-2008 Reasonable Further Progress Plan for the Sacramento regional nonattainment area. The Early Progress Plan contains the most recent data on air quality and emissions to make progress towards attaining the 8-hour ozone standard. Within this plan are strategies to reduce overall pollutants within the region. The goal of the proposed project is to minimize traffic congestion within the City of Roseville and comply with the Circulation Element of the Roseville's General Plan. Since these goals would be met with implementation of the proposed project, the project is considered to be consistent with the AQAP.

Furthermore, to evaluate whether the proposed improvements are consistent with the Air Quality Element goals and policies of Roseville's General Plan, Goals 1a, 2, and 4 and Policy 5 of the General Plan were considered in this analysis (see Section 4.2.3, Regulatory Setting, for a complete description of these goals and policy).

The proposed project would comply with Goal 1a by not creating any CO hot-spots, by improving traffic circulation at over 50 percent of the affected intersections, and by improving air quality when compared to No Project conditions. The proposed project would satisfy Goal 2 since this air quality evaluation is being considered as part of the City's transportation planning process, and includes consideration of planning processes outside of the City of Roseville. The proposed project would comply with Goal 4 and Policy 5 because the objective of the proposed improvements and modifications to Roseville's transportation system is to improve LOS and reduce traffic congestion. Hence, the proposed project is deemed to be consistent with the existing AQAP and Roseville's General Plan.

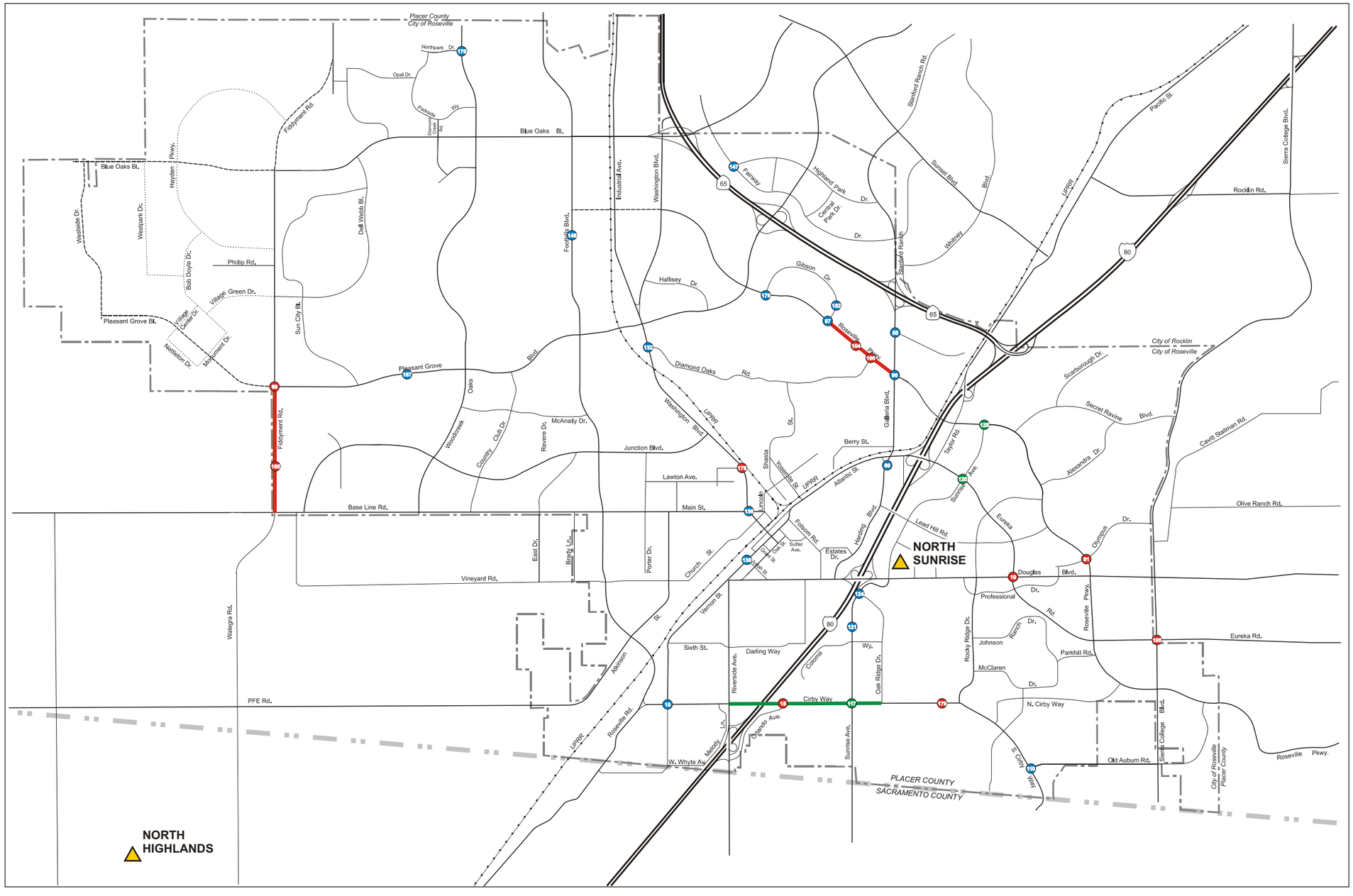
4.2.5 MITIGATION MEASURES

Mitigation Measure 4.2-1: Implement Construction Emissions Control Measures

This Mitigation Measure applies to Impact 4.2-1.

Construction emissions associated with the proposed project would not exceed the PCAPCD's significance thresholds and Mitigation Measures are not required. However, the implementation of feasible and applicable control measures listed below would further reduce construction emissions:

- Minimize idling time to 10 minutes for all diesel-powered equipment.
- Apply water to control dust as needed to prevent dust impacts offsite. Operational water truck(s) shall be onsite, as required, to control fugitive dust. Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt from being released or tracked offsite.
- Spread soil binders on unpaved roads and employee/equipment parking areas and wet broom or wash streets if silt is carried over to adjacent public thoroughfares.
- Install wheel washers or wash all trucks and equipment leaving the site.
- Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service.



LEGEND

- Air Monitoring Station
- Widening
- Reduced Widening
- Modify: No Widening
- City of Roseville Boundary

N

Source:
DKS Associates, 2006

AIR MONITORING STATIONS

City of Roseville 2020
Transportation System CIP Update
Roseville, California

January 2007
28066981

URS

FIGURE 4.2-1

1/04/07 vsa ..\Roseville Traffic CIP\Graphics\F4.2-1_air monitoring_final.cdr

4.1 Transportation and Circulation

4.1 Transportation and Circulation

4.1.1 INTRODUCTION

The City of Roseville's Capital Improvements Program (CIP) identifies the intersection and roadway improvements needed to serve the future transportation demands on the City's roadway system through the year 2020. The goal of the CIP is to meet the City's adopted Level of Service (LOS) policy under full buildout of all vacant land within the City plus some potential redevelopment of properties within the downtown Roseville area as well as 2020 "market levels" of development in the rest of the region. This section evaluates the effects the City's 2020 Transportation System CIP Update (proposed project) would have on the City's roadway, transit and bikeway systems.

The traffic impacts of the proposed project have been evaluated under a number of different scenarios of existing and future traffic conditions. **Table 4.1-1** provides a summary of those scenarios, as well as the sections of the document where the traffic analyses are discussed.

An initial review of the proposed project determined that implementation of the project would not affect air traffic patterns or result in inadequate parking capacity. Therefore, these issues are not addressed in this Draft Subsequent EIR.

4.1.2 ENVIRONMENTAL SETTING

The initial task in defining impacts of the proposed 2020 CIP Update on the circulation system was to evaluate the existing circulation system operating characteristics in the City. In order to understand existing travel patterns and conditions, all major aspects of transportation in Roseville were inventoried and analyzed. The following sections briefly discuss roadway functions, traffic volumes, and traffic LOS, as well as transit, truck and rail services, and bicycle routes.

4.1.2.1 Street and Highway System

4.1.2.1.1 Roadway Functional Classification

The existing street network in the City of Roseville consists of both roadways that have provided access to the older portions of the City for decades and roadways that were designed to serve newer specific plan areas. In the older portions of the City, roadways were classified as arterial or collector roadways in the 1992 City of Roseville General Plan Update. In each of the City's specific plan areas and the North Industrial Area, arterial and collector roadway classifications have been defined and most of these roadways have been constructed since the 1992 General Plan Update was published.

The primary function of arterial roadways is to move traffic through the City and beyond. In the specific plan areas, the right-of-way for arterials varies from 76 feet to 100 feet and generally incorporates four to six travel lanes, bicycle lanes, and a landscaped median. On-street parking on existing arterials in the specific plan areas is prohibited, and access is limited to minimize cross-traffic turning movements in order to improve traffic safety and allow more efficient traffic flow. Outside of the specific plan areas, some roadways function as arterials due to the current high traffic volumes and their key linkages between one section of the City and another. For these roadways, current right-of-way widths vary, but most contain more than two traffic lanes.

TABLE 4.1-1

DESCRIPTION OF TRAFFIC ANALYSIS SCENARIOS

Scenario	Description of Scenario	Section Where Scenario is Discussed
1: Existing Conditions	2004 development levels inside and outside of Roseville	Section 4.1 (Transportation and Circulation)
2: Existing Plus Project Conditions	Buildout of entitled land in Roseville plus proposed land use modifications (those currently under review); 2004 development levels outside of Roseville	
3: Current 2020 CIP (with current travel demand model)	Existing 2020 CIP assumptions inside and outside of Roseville using 2001 travel demand model	
3A: Current 2020 CIP (with updated travel demand model)	Scenario 3 using 2004 travel demand model	
4: 2020 No Project Conditions	Scenario 3A plus updated 2020 development levels outside of Roseville based on entitled land	
5: 2020 Plus Project Conditions (Proposed 2020 CIP Update)	Scenario 4 plus proposed land use and CIP modifications in Roseville	
6: Cumulative No Project Conditions	Scenario 4 updated to 2025 conditions plus projects with NOP (does not include Sierra Vista or Creekview)	Section 5.2 (Cumulative Impacts)
7: Cumulative Plus Project Conditions	Scenario 6 plus proposed land use and CIP modifications in Roseville plus improvements added as Mitigation Measure 5.2-1	
7A: Cumulative Plus Project Conditions With Placer Parkway and Caltrans Improvements	Scenario 7 plus improvements added as Mitigation Measure 5.2-2 Placer Parkway, HOV lanes on I-80, and six lanes on SR-65	Section 6.3 (Alternatives)
8: Super-Cumulative Conditions	Residential buildout of all proposed projects in southwest Placer County and South Sutter County including Sierra Vista, Creekview, Curry Creek, etc.	Appendix D

Note:

Super-cumulative conditions are included for informational purposes only.
HOV = high occupancy vehicle; LOS = level of service; NOP = Notice of Preparation

Collector streets generally link local residential streets and the commercial and office parking areas to the arterials. In the specific plan areas, the right-of-way for these streets varies from 54 feet to 60 feet and contains two traffic lanes and bicycle lanes. Outside the specific plan areas, a number of roadways function as collector roadways due to moderate traffic volumes and their linkage to the arterial roadway system. The right-of-way widths for these roadways vary, but most contain two traffic lanes.

Table 4.1-2 provides a summary of the arterial and collector roadways in the specific plan areas as well as the Infill and North Industrial areas. **Figure 4.1-1** illustrates the arterial/collector roadway system that currently serves the City of Roseville.

4.1.2.1.2 State Highway System

Roseville is served by an interstate highway (Interstate 80 [I-80]) and a state highway (State Route 65 [SR 65]). I-80 is a transcontinental highway that links Roseville to Sacramento and the Bay Area, as well as the rest of the United States via its crossing of the Sierra Nevada mountains. It carries commute traffic between Placer and Sacramento Counties, as well as interregional and interstate business, freight, tourist, and recreational travel. Roseville is connected to I-80 by five interchanges: Riverside Avenue, Douglas Boulevard, Eureka Road/Atlantic Street, Taylor Road, and SR 65. This freeway has eight lanes west of Riverside Avenue (near the southern boundary of Roseville) and six lanes through the remainder of Roseville. Existing (2004 to 2006) traffic volumes range from 175,000 vehicles per day west of Riverside Avenue to 117,000 vehicles per day east of SR 65.

SR 65 is generally a north-south trending highway that connects Roseville with the cities of Lincoln and Marysville (via SR 70). In Roseville, SR 65 is a four-lane freeway with access provided by four interchanges: I-80, Galleria Boulevard/Stanford Ranch Road, Pleasant Grove Boulevard and Blue Oaks Boulevard. Existing traffic volumes range from about 88,000 vehicles per day between I-80 and Galleria Boulevard to 65,000 vehicles per day north of Blue Oaks Boulevard.

4.1.2.1.3 Arterial Street System

The arterial network links residential areas to both commercial and employment centers and links all of these uses to the regional freeway system. The existing arterial network in the City of Roseville is described below. The traffic volumes associated with each roadway are based on traffic counts collected by the City since 2004. The City completed a comprehensive traffic count data collection program in 2004. The City has since re-counted a number of locations in areas that have experienced rapid land use growth since 2004.

Atkinson Street is a north-south roadway that connects PFE Road to Main Street. South of Foothills Boulevard, Atkinson Street is a two-lane arterial that serves 13,200 vehicles per day. Between Foothills Boulevard and Vineyard Road it is a two-lane collector that carries about 6,400 vehicles per day. North of Vineyard Road, it is a local roadway.

Atlantic Street connects downtown Roseville to I-80 as well as to the Northeast Specific Plan Area via Eureka Road. Atlantic Street was recently widened to four lanes between Harding Boulevard and Vernon Street. Between Vernon Street and Harding Boulevard, Atlantic Street carries about 23,900 vehicles per day.

TABLE 4.1-2

ARTERIAL AND COLLECTOR SYSTEM IN THE CITY OF ROSEVILLE

Subarea	Arterials	Collectors
Infill	Vernon Street (north of Cirby) Atlantic Street (Vernon to I-80) Cirby Way Riverside Avenue Auburn Boulevard Roseville Road Harding Boulevard (north of Douglas) Douglas Boulevard Atkinson Street (south of Foothills) Rocky Ridge Drive Sunrise Avenue Roseville Parkway	Main Street Folsom Road Vineyard Road Church Street (west of Washington) Atkinson Street (Foothills to Main) Shasta Street (north of Yosemite) Vernon Street (south of Cirby) Sutter Avenue Lincoln Street (Sierra to Main and Vernon to Sutter) Oak Street (Judah to Lincoln) Grant Street Judah Street Estates Drive Melody Lane West Whyte Avenue Oak Ridge Drive Orlando Avenue Berry Street Yosemite Street Old Auburn Road (South Cirby to Sacramento County Line)
Northwest Roseville Specific Plan	Pleasant Grove Boulevard Foothills Boulevard Woodcreek Oaks Boulevard Junction Boulevard Washington Boulevard Baseline Road	Country Club Drive McAnally Drive
North Central Roseville Specific Plan	Washington Boulevard Galleria Boulevard/Stanford Ranch Road Roseville Parkway Pleasant Grove Boulevard	Hallisey Drive Diamond Oaks Road Gibson Drive
Northeast Roseville Specific Plan	Sunrise Avenue Roseville Parkway Eureka Road Douglas Boulevard Sierra College Boulevard Taylor Road	Lead Hill Road Rocky Ridge Drive (north of Douglas Road) Olympus Drive Stonepoint Drive
Southeast Roseville Specific Plan	Douglas Boulevard Roseville Parkway Sierra College Boulevard Eureka Road Rocky Ridge Drive (south of Douglas Boulevard)	Johnson Ranch Drive McLaren Drive Professional Drive Parkhill Road Old Auburn Road (south Cirby to Roseville Parkway) North Cirby Way

TABLE 4.1-2
(CONTINUED)

ARTERIAL AND COLLECTOR SYSTEM IN THE CITY OF ROSEVILLE

Subarea	Arterials	Collectors
Del Webb Specific Plan	Fiddyment Road Blue Oaks Boulevard Pleasant Grove Boulevard	Del Webb Boulevard Sun City Boulevard
Highland Reserve North Specific Plan	Stanford Ranch Road Pleasant Grove Boulevard Fairway Drive	Highland Drive Central Park Drive
North Roseville Specific Plan (Phases I, II and III)	Blue Oaks Boulevard Pleasant Grove Boulevard Baseline Road Junction Boulevard Woodcreek Oaks Boulevard	Diamond Creek Boulevard Crocker Ranch Road Opal Drive Parkside Drive Northpark Drive
North Roseville Industrial Area	Washington Boulevard Industrial Avenue Foothills Boulevard Blue Oaks Boulevard Woodcreek Oaks Boulevard	Parkside Drive New Meadow Drive Winding Creek Road
Stoneridge Specific Plan	Sunrise Avenue Roseville Parkway Secret Ravine Parkway	Alexandra Drive Scarborough Drive
West Roseville Specific Plan (Planned Roadways)	Pleasant Grove Boulevard Blue Oaks Boulevard West Side Drive	Hayden Parkway Bob Doyle drive Westpark Drive Village Center Drive Village Green Drive Monument Drive

SOURCE: City of Roseville, 2002; DKS Associates, 2006.

Baseline Road is an east-west arterial that links Roseville with the Dry Creek Area and SR 70/99. From the city limits east, Baseline Road is a two-lane road until it becomes Main Street at Foothills Boulevard. Daily volumes on Baseline Road east of Country Club Drive are about 19,800 vehicles per day.

Blue Oaks Boulevard is an east-west arterial that links the cities of Roseville and Rocklin to each other and to SR 65. Between SR 65 and Woodcreek Oaks Boulevard, Blue Oaks Boulevard has four lanes. It serves about 38,700 vehicles per day east of Foothills Boulevard.

Cirby Way is another major east-west arterial. It is a four-lane road that extends from the Roseville Road/Foothills Boulevard intersection, passes over I-80, and terminates at Old Auburn Road. Cirby Way serves its highest daily volumes west of Riverside Avenue (51,300 vehicles per day).

Douglas Boulevard is a major east-west arterial that connects the central portions of Roseville to I-80 and Granite Bay. It has six lanes from Sierra College Boulevard to Sunrise Avenue, but narrows to

four lanes west of Sunrise Avenue. It remains four lanes through the Douglas Boulevard/I-80 interchange until Judah Street, where it further narrows to two lanes, until it ends at Vernon Street. East of Sierra College Boulevard, Douglas Boulevard is four lanes wide. Traffic volumes are heaviest on Douglas Boulevard west of Sunrise Avenue where it carries about 70,900 vehicles per day).

Eureka Road is a major east–west arterial that links southeast Roseville to northeast Roseville and provides access to I-80 and downtown Roseville via Atlantic Street. Eureka Road is four lanes from Sierra College Boulevard to south of Douglas Boulevard. From there it widens to six lanes and continues roughly northwest until it intersects with I-80. Daily traffic volumes on Eureka Road are heaviest between Sunrise Avenue and I-80, where it carries about 45,600 vehicles per day.

Fiddyment Road is a two-lane, north-south arterial that runs along the western city limit of Roseville from Baseline Road north into Placer County. Daily traffic volumes on Fiddyment Road are heaviest north of Baseline Road, where it carries about 19,600 vehicles per day.

Foothills Boulevard is the major north-south arterial in Roseville west of I-80. It extends as far south as Cirby Way, where it becomes Roseville Road and continues south into Sacramento. North of Cirby Way, Foothills Boulevard traverses portions of the City's Infill Area, Northwest Specific Plan Area, and North Industrial Area and currently ends at Duluth Avenue at the northern city limits. This roadway (along with Washington Boulevard, Harding Boulevard and SR 65) provides one of only four grade-separated crossings of the Union Pacific railroad mainline. This four-lane arterial serves its highest daily volume south of Atkinson Street (42,700 vehicles per day).

Harding Boulevard/Galleria Boulevard is a major north-south arterial that runs from Douglas Boulevard to SR 65. From Douglas Boulevard to Atlantic Street, this four-lane arterial parallels I-80, serving a commercial area with daily traffic volumes that range from 21,800 vehicles per day (north of Douglas Boulevard) to 24,000 vehicles per day (south of Atlantic Street). North of its bridge over the Union Pacific mainline and Atlantic Street, Harding Boulevard becomes Galleria Boulevard, which extends past the Galleria Mall to SR 65. Galleria Boulevard is a six-lane arterial north of Roseville Parkway. Galleria Boulevard south of SR 65 carries about 48,800 vehicles per day.

Industrial Avenue extends from Washington Boulevard north, past the northern Roseville city limit, and into the Sunset Industrial Area. It is a two-lane arterial that runs north-south and serves 5,600 vehicles per day north of Blue Oaks Boulevard.

Junction Boulevard is an east-west arterial in west Roseville that has four lanes from Washington Boulevard to Baseline Road. Junction Boulevard carries about 18,600 vehicles per day west of Foothills Boulevard.

Pleasant Grove Boulevard is an east-west arterial that extends from Fiddyment Road to the City of Rocklin, where it becomes Park Drive and connects the Del Webb Specific Plan, Northwest Roseville Specific Plan, North Central Roseville Specific Plan, and Highland Reserve Specific Plan to each other and to SR 65. Pleasant Grove Boulevard is two lanes between Fiddyment Road and Woodcreek Oaks Boulevard, four lanes from Woodcreek Oaks Boulevard to Foothills Boulevard, and six lanes between Foothills Boulevard and SR 65. Daily traffic volumes on Pleasant Grove Boulevard range from 9,800 vehicles per day west of Woodcreek Oaks Blvd to 41,300 east of Washington Boulevard.

Riverside Avenue extends north from Auburn Boulevard (in Sacramento County) as a major north-south arterial. It connects south and central Roseville to I-80 and Sacramento County. Auburn Boulevard is a four-lane arterial that extends from the Sacramento County line north to I-80, where it becomes Riverside Avenue. Riverside Avenue continues north from I-80 to Douglas Boulevard and Vernon Street. Riverside Avenue has four lanes south of 6th Street and two lanes north of 6th Street. Both Auburn Boulevard and Riverside Avenue serve heavy daily traffic volumes near the I-80 interchange, ranging from 20,800 daily vehicles north of Cirby Way to 36,400 south of Orlando Avenue.

Rocky Ridge Drive is a four-lane, north-south arterial that begins at Cirby Way and extends north to Roseville Parkway. Daily traffic volumes on Rocky Ridge Drive range from 29,100 vehicles per day north of Cirby Way to 11,500 vehicles per day between Eureka Road and Roseville Parkway.

Roseville Parkway is an arterial that links the Southeast, Northeast and North Central Specific Plan areas. From Placer County east of Sierra College Boulevard to Douglas Boulevard, it is four lanes wide. It serves an average daily traffic of 20,600 vehicles per day west of Sierra College Boulevard. From north of Douglas Boulevard until it ends at Washington Boulevard, it is six lanes wide. Roseville Parkway carries a daily traffic volume of about 41,700 vehicles per day at its bridge over I-80.

Roseville Road runs parallel to I-80 from the end of Cirby Way to the southern city limit of Roseville. This two-lane arterial serves 16,600 vehicles per day.

Sierra College Boulevard is a major north-south arterial on the east side of Roseville. Portions of this roadway have two lanes while other portions have four lanes. Sierra College Boulevard carries 30,800 vehicles per day south of Old Auburn Road, 22,500 vehicles per day north of Douglas Boulevard, and 22,800 vehicles per day south of Secret Ravine Parkway.

Stanford Ranch Road extends from the SR 65/Stanford Ranch interchange north into the City of Rocklin. It is a major six-lane arterial and carries 33,800 vehicles per day north of SR 65.

Sunrise Avenue is a major north–south arterial in Roseville. It links central Roseville to Sacramento County and is the primary arterial linking north and south Roseville east of I-80. Sunrise Avenue has four lanes from the Sacramento County line to Lead Hill Boulevard, where it widens to six lanes until it ends at Roseville Parkway. Daily volumes on Sunrise Avenue are highest south of Cirby Way (37,800 vehicles per day).

Taylor Road is a north-south arterial that connects Roseville to the City of Rocklin. From Eureka Road to the Taylor Road/I-80 interchange, it is a four-lane arterial. Taylor Road narrows to two lanes north of I-80 where it carries about 21,300 vehicles per day.

Vernon Street parallels the Union Pacific railroad and connects Cirby Way, Douglas Boulevard, and Riverside Avenue on the south side of downtown Roseville to Atlantic Street on the north side of downtown. Vernon Street has four lanes and carries daily volumes of 11,300 vehicles per day north of Douglas Boulevard.

Washington Boulevard is a major north-south arterial. It connects SR 65 and Blue Oaks Boulevard on the north to Oak Street in downtown Roseville. Most of Washington Boulevard is four lanes,

except a two-lane segment north and south of Diamond Oaks Road where it crosses under the Union Pacific railroad north-south tracks. Along with Foothills Boulevard and SR 65, it provides one of three grade-separated crossings of the Union Pacific east-west mainline tracks. Washington Boulevard serves its highest daily volume north of Main Street, where it carries about 22,300 vehicles per day.

Woodcreek Oaks Boulevard is a north-south arterial that extends from Baseline Road to past Blue Oaks Boulevard. Most of this arterial currently has only two lanes, but its wide median is designed for widening to four lanes. It carries about 11,900 vehicles per day south of Junction Boulevard.

4.1.2.1.4 Traffic Volumes

One of the key evaluation measures of a City's roadway system is a comparison of daily and peak period traffic volumes on its major roadway system. The traffic data within Roseville were provided by the City of Roseville Public Works Department. These data include both daily traffic counts at spot locations throughout the City and peak period turning movement counts at the current 150 existing signalized intersections. Traffic count data for many study area roadways outside the City of Roseville were also available from other jurisdictions.

Average daily traffic volumes (ADT) represent the total volume passing a point or segment of roadway, in both directions, on an average weekday. ADTs on a number of key roadway segments are shown on **Figure 4.1-2**.

4.1.2.1.5 Traffic Levels of Service

The evaluation of traffic volumes on the roadway network provides an understanding of the general nature of travel conditions. However, traffic volumes do not indicate the quality of service provided by the street facilities or the ability of the street network to carry additional traffic. To accomplish this, the concept of LOS has been developed.

"Levels of service" describe roadway-operating conditions and is a qualitative measure of the effect of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs. Levels of service are designated "A" through "F" from best to worst, which cover the entire range of traffic operations that might occur. Level of service A through E generally represent traffic volumes at less than roadway capacity, while LOS F represents over capacity and/or forced conditions.

The City's current LOS policy calls for maintaining an LOS C standard at a minimum of 70 percent of all signalized intersections in the City during the p.m. peak hour. Compliance with this policy is determined assuming buildout of currently entitled land within Roseville and 2020 market rate development outside of the City limits.

The traffic flow and capacity of Roseville's arterial/collector system is principally controlled by the capacity of its signalized intersections. Intersection operations were evaluated using a modified version of the Transportation Research Board Circular 212 (critical movement) method that was adopted for Roseville's CIP. **Table 4.1-3** presents the LOS categories for signalized intersections considered in this analysis and provides a definition of each category with the corresponding volume-to-capacity ratios. The p.m. peak hour is used in the operational analysis of the City's roadway system because it generally represents the highest hour for overall traffic volumes during the day.

TABLE 4.1-3

LEVEL OF SERVICE DEFINITIONS AT SIGNALIZED INTERSECTIONS FOR CITY OF ROSEVILLE

Level of Service (LOS)	Volume to Capacity Ratio[1]	Description
A	0.00-0.59	Free Flow/Insignificant Delays: No approach phase is fully utilized by traffic and no vehicle waits longer than one red signal indication.
B	0.60-0.69	Stable Operation/Minimal Delays: An occasional approach phase is fully utilized. Many drivers begin to feel somewhat restricted within platoons of vehicles.
C[2]	0.70-0.81	Stable Operation/Acceptable Delays: Major approach phases fully utilized. Most drivers feel somewhat restricted.
D	0.82-0.90	Approaching Unstable/Tolerable Delays: Drivers may have to wait through more than one red signal indication. Queues may develop but dissipate rapidly, without excessive delays.
E	0.91-1.00	Unstable Operation/Significant Delays: Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream from intersection.
F	Greater than 1.00	Forced Flow/Excessive Delays: Represents jammed conditions. Intersection operates below capacity with low volumes. Queues may block upstream intersections.

Notes:

1. The ratio of the traffic volume demand at an intersection to the capacity of the intersection.
2. The City of Roseville has established a volume-to-capacity ratio of 0.81 as the LOS C threshold.

SOURCE: Transportation Research Board, 1985.

Figure 4.1-3 shows the existing LOS during the p.m. peak hour at 150 signalized intersections. **Table E-1** in Appendix E provides the same data in tabular format. As shown, 127 intersections operate at a LOS of A, B, or C, while 23 intersections operate at a LOS of D, E, or F. The LOS at these intersections are based on turning movement volumes collected by the City since 2004.

4.1.2.2 Transit and Passenger Rail

Transit service is currently provided to City residents by two transit providers: Roseville Transit Services, and Placer County Transit. Transit routes are shown on **Figure 4.1-4**. Other transit systems in Roseville include taxicab services, Greyhound Bus Lines, and Amtrak. These transit services are described below.

4.1.2.2.1 Roseville Transit Services

Roseville Transit, which is operated by the City of Roseville, provides three types of local transit services: fixed route, dial-a-ride, and commuter. The fixed route and dial-a-ride services are local

(within the City of Roseville), whereas the commuter service provides regional trips into the downtown Sacramento area.

Roseville Transit Fixed-Route Service currently operates 13 fixed, scheduled routes. There are five "transfer points": Sierra Gardens, Galleria Mall, City Hall, Auburn/Whyte, and Woodcreek Oaks/Junction. Many of the Roseville Transit riders are elderly and disabled. The Roseville Transit system connects to both Placer County Transit (at Galleria Mall and Auburn/Whyte) and Sacramento Regional Transit (at Auburn/Whyte).

Roseville Transit Dial-a-Ride Service is a curb-to-curb system operated seven days a week. As a dial-a-ride service, it does not operate on fixed-route schedules; most of its riders are elderly and disabled.

Roseville Transit Commuter Service is a fixed-route, scheduled transit system providing weekday commute period service between Roseville and downtown Sacramento.

4.1.2.2.2 Placer County Transit Services

Placer County Transit is a fixed-route scheduled transit system operated by Placer County that principally serves the I-80, SR 49 and SR 65 corridors. Some of the routes are "deviated," which means that the buses generally travel on a main route (i.e., I-80) but can deviate from that route up to a certain distance (three-quarter mile in the case of Placer County Transit) to serve the specific needs of transit patrons. Placer County Transit has an Auburn-to-Light-Rail express route that stops at the Auburn/Whyte transfer point and connects to Sacramento Regional Transit before proceeding to the Watt/I-80 light rail station. Placer County Transit also has a Lincoln Street to Galleria Boulevard to Sierra College Boulevard route.

4.1.2.2.3 Other Transit Services

Greyhound Bus Lines has a station at the intermodal facility (the Amtrak station) in Roseville. This station is a stop on the Sacramento-to-Auburn route and offers six to seven trips to Sacramento per day. From Sacramento, passengers can continue to destinations in any direction.

Several private companies provide taxi service in Roseville.

4.1.2.2.4 Rail Service

Amtrak provides intercity rail service to Placer County via stations in Roseville and Colfax. The "California Zephyr" provides east-west service between Chicago and Oakland, with one Roseville stop in each direction daily. Placer County residents can also access the California Zephyr at Truckee in Nevada County. Other Amtrak trains can be accessed at Sacramento or by using the Amtrak Throughway Bus Connections to Roseville. *Capital Corridor Intercity Rail* links the Bay Area with the Sacramento area and Placer County.

4.1.2.3 Bicycles

Bikeways are defined as specific routes and classes that meet minimum design standards. Roseville generally follows Caltrans' design standards for the following classes of bikeways:

- Class I bikeways provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians, with crossflows by motorists minimized. Class I bikeways are a minimum of 10 feet wide. A 2-foot-wide graded area should parallel the bikeway on both sides, and the bikeway should be a minimum of 5 feet from an adjacent roadway.

- Class II bikeways provide a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited but with vehicle parking and crossflows by pedestrians and motorists permitted. Class II bikeways are typically 4 feet wide in Roseville and separated from vehicle traffic by a solid white stripe.

- Class III bikeways provide a right-of-way designated by signs or permanent markings, and are shared with pedestrians or motorists.

In addition, Roseville has an additional classification for bikeways.

- Class IA facilities are bicycle paths that have been developed as parallel sidewalk routes along major roadways and are separated from the roadway by a landscape strip. Class IA bikeways have a minimum 8-foot-wide planned width. Caltrans does not consider sidewalk facilities to be Class I facilities, and does not recommend that they be signed as bicycle routes. However, Class IA facilities are still desirable for bicyclists of lower skill levels, such as children, as well as others who are hesitant to use on-street routes.

The City of Roseville has an adopted Bikeway Master Plan, which provides guidelines for the development of a city-wide network of Class I, II, and III bicycle facilities and design standards (based on Caltrans standards) for new bicycle facilities within Roseville.

Figure 4.1-5 shows the existing bikeways within Roseville city limits and all points where Roseville bikeways connect with Placer County bicycle routes. Each of the specific plan areas contains significant bikeway elements.

4.1.2.4 Truck Routes

Truck routes within the Roseville City limits include the following:

- I-80
- SR 65
- Baseline Road west of Foothills Boulevard
- Foothills Boulevard south of Baseline Road
- Cirby Way between Foothills Boulevard and Sunrise Avenue
- Roseville Road south of Cirby Way
- Riverside Avenue/Auburn Boulevard south of Cirby Way
- Sunrise Avenue south of Cirby Way
- Douglas Boulevard between Eureka Road and Sierra College Boulevard
- Eureka Road between Douglas Boulevard and I-80
- Sierra College Boulevard
- Fiddyment Road between Baseline and Blue Oaks Boulevard
- Blue Oaks Boulevard west of SR 65

Figure 4.1-6 shows the existing truck routes. These truck routes link with Sacramento County's designated truck routes on Roseville Road, Auburn Boulevard, Sunrise Boulevard, and Hazel Avenue.

4.1.2.5 Rail

Union Pacific's transcontinental rail line and its switching yard and maintenance facilities have played a major role in Roseville's history. The railroad facilities in the City have and will continue to have a significant effect on the area's economy. However, the railroad tracks and yard create a substantial barrier to both pedestrian and automobile circulation. The tracks and railroad yard concentrate vehicle traffic into a limited number of crossings and, thereby, have a large influence on travel patterns through Roseville.

The main line of the Union Pacific tracks crosses under SR 65 adjacent to Taylor Road; it then follows I-80 south to Atlantic Street, which it follows into downtown Roseville. The main line then connects with a northern spur and enters the Roseville switching yard. Adjacent land use in this vicinity is a mixture of commercial, industrial, and residential land use. The switching yard then continues south past the Roseville city limits. The only two at-grade crossings in the city limits are at Yosemite Street and Tiger Street. The main line crosses under Harding Boulevard, over Washington Boulevard, and under Foothills Boulevard, which together with SR 65 are the only four grade-separated crossings of the Union Pacific main line tracks within Roseville.

The northern spur of the Union Pacific rail line crosses under Blue Oaks Boulevard, adjacent to Industrial Avenue. The rail continues south and crosses over Washington Boulevard under Pleasant Grove Boulevard and under Sierra Boulevard before it joins the main line near the downtown area. There are no at-grade crossings of this spur line. The four grade-separated crossings are at Blue Oaks Boulevard, Pleasant Grove Boulevard, Washington Boulevard, and Sierra Boulevard.

Amtrak provides commuter rail service to Roseville, which is discussed in Section 4.1.2.2.4, above.

4.1.2.6 Aviation

There are no existing aviation facilities within the Roseville City limits. The nearest general aviation airport is the Lincoln Airport, located roughly 10 miles north of Roseville along SR 65. Other general aviation airports in the vicinity are McClellan Airport, approximately 7 miles southwest; Auburn Airport, located approximately 20 miles northeast of Roseville near Highway 49 north of I-80; Rio Linda Airport, approximately 11 miles southwest of Roseville; and the Sacramento International Airport, located 25 miles southwest of Roseville along I-5 north of I-80.

4.1.3 REGULATORY SETTING

4.1.3.1 Federal

There are no known federal standards that would directly affect the transportation and circulation aspects of the proposed project.

4.1.3.2 State

The California Department of Transportation's (Caltrans') Transportation Concept Report (TCR) serves as the long-range transportation planning document to evaluate project impacts based on changes to a facility's LOS in comparison to the concept LOS identified in the TCR. The TCR defines Caltrans' goal for the development of the transportation corridor in terms of LOS and type of facilities, and broadly identifies the improvements needed to reach those goals. The TCR for SR 65 indicates that this state highway has an LOS E standard and the TCR for I-80 indicates an LOS E standard.

4.1.3.3 Local

The following local regulations pertain to those adopted by the City of Roseville as well as nearby jurisdictions.

4.1.3.3.1 Level of Service (LOS) Policy

City of Roseville

The City of Roseville's LOS policy stipulates that the City shall maintain a LOS C at a minimum of 70 percent of all signalized intersections in the City during the p.m. peak hour. Compliance with this policy is determined assuming buildout of currently entitled land within the City and 2020 market rate development outside of the City.

City of Rocklin

The City of Rocklin General Plan (April 1991) stipulates the following:

13. To maintain a minimum traffic LOS C for all streets and intersections, except for intersections located within ½ mile from direct access to an interstate freeway where a LOS of D will be acceptable. Exceptions may be made for peak hour traffic where not all movements exceed the acceptable LOS.

Placer County

The Placer County General Plan (August 1994) stipulates the following:

3.A7. The County shall develop and manage its roadway system to maintain the following minimum LOS:

- LOS C on rural roadways, except within one-half mile of state highways where the standard shall be LOS D.
- LOS C on urban/suburban roadways except within one-half mile of state highways were the standard shall be LOS D.

Sacramento County

The Sacramento County General Plan (December 1993) stipulates the following:

CI-22. Policy: Sacramento County shall apply the following LOS standards for planning roads in the unincorporated area:

1. Rural collectors: LOS D
2. Urban area roads: LOS E

Sutter County

The Sutter County General Plan (November 1996) stipulates the following:

2.A-4 The County shall strive to develop and manage its roadway system to maintain a minimum LOS D.

4.1.3.3.2 Improvement Standards

Roadway improvements within the City must conform to a set of standard plans that detail City standards for pavement width, lighting, drainage, sewer, and other roadside facilities. Roadway facilities associated with the proposed project must meet or exceed these standards.

4.1.3.3.3 Long Range Transit Master Plan

The City has developed a Long Range Transit Master Plan to guide development of both inter- and intra-city transit services through year 2010.

4.1.3.3.4 Short Range Transit Plan

The Short Range Transit Plan is a state and federally mandated planning document that describes the plans, programs and goals of the transit operator. It has a 5-year planning horizon and is updated biennially. It focuses on the characteristics and capital needs of the existing system, and on committed (funded) expansion plans.

4.1.3.3.5 Bikeway Master Plan

The General Plan calls for the development of a comprehensive bikeway system that would provide connections between the City's major employment and housing areas and between existing and planned bikeways. The current Bikeway Master Plan was updated in August 2002. It provides guidelines for the development of a citywide network of bicycle facilities and design standards for new bicycle facilities in Roseville.

4.1.3.3.6 Truck Routes

A number of roadways through the City of Roseville have been designated as truck routes. These routes are described in Section 4.1.2.4.

4.1.3.3.7 Transportation System Management

Transportation System Management (TSM) measures are designed to reduce vehicular travel demand and meet air quality goals. Employers of 50 or more employees within the City are required to comply with the City's TSM ordinance and include TSM measures where feasible.

4.1.3.3.8 Pedestrian District

The City has established a Pedestrian District whereby pedestrian safety and access are emphasized over vehicular access, and alternative modes of travel are encouraged. The City has determined that it is not a priority to maintain LOS C at signalized intersections within the Pedestrian District, as this could impede safe pedestrian access.

4.1.4 IMPACTS

4.1.4.1 Method of Analysis

4.1.4.1.1 Roseville's 2020 Capital Improvement Program

The last comprehensive update to the City's CIP is detailed in the *Supplement to the City of Roseville Capital Improvement Program EIR* 2002 (2002 Supplemental EIR). The 2002 Supplemental EIR analyzed future

traffic impacts and roadway needs based on buildout of currently entitled land within the City plus some potential redevelopment of properties within downtown Roseville and 2020 market rate development outside the City limits. The 2002 Supplemental EIR also evaluated impacts associated with a revised roadway LOS policy. The revised policy stipulated that the City shall maintain a LOS C standard at a minimum of 70 percent of all signalized intersections in the City during the p.m. peak hour through year 2020. The revised LOS policy was adopted by the City, and the 2002 Supplemental EIR was certified as complete.

Subsequent to the 2002 Supplement to the City's CIP, several development projects have been approved by the City that have resulted in additional improvements to the City's 2020 CIP in order to mitigate impacts per the City's level of service Policy. The additional improvements were incorporated into the City's current CIP through Mitigation Measures identified in the individual environmental documents certified by the City; however a single document identifying the comprehensive CIP since the 2002 CIP Supplement has not occurred to date.

This 2020 CIP Update includes documentation of these subsequent CIP modifications and also evaluates additional CIP modifications based on revised citywide buildout land use assumptions and an updated travel demand forecasting model.

4.1.4.1.2 Updated Travel Demand Model

The development of transportation system needs and impacts is based on the travel demand model originally developed by DKS Associates in 1992 for the City of Roseville and Placer County. This model has been updated and recalibrated twice since 1992.

The travel demand model was updated as part of the CIP evaluated in 2002, which revalidated the model to 2001 traffic conditions. The model translated land uses into roadway volume projections. Its inputs were estimates of development (i.e., the number of single-family and multi-family dwelling units, and the amount of square footage of various categories of non-residential uses) and descriptions of the roadway and transit systems. The model covered not only the City of Roseville, but also the entire Sacramento region (including the portions of Placer County west of Colfax). The model maintained a general consistency with the trip distribution and mode choice estimates from the regional model used by the Sacramento Area Council of Governments (SACOG).

This 2020 CIP Update involved updating and revalidating the base year model to 2004 traffic conditions. Although this model uses the same basic information to develop roadway volume projections, the data inputs and model software have been updated. The revised land use projections are based on an updated 2004 existing land use inventory derived from Placer County parcel data and input from other jurisdictions. Updated existing traffic volumes in and around the City of Roseville have also been incorporated into the new model.

The travel demand model used for the 2020 CIP evaluated in the 2002 Supplemental EIR used the MINUTP travel demand software for roadway volume projections. The updated model used for the proposed 2020 CIP Update has been modified to take advantage of the more powerful and flexible TP+ software package from CITILABS. This software allows more land use categories and more freedom in roadway network coding. Other jurisdictions, including Placer County, are currently using very similar versions of the updated model.

The updated travel demand model was used to estimate future 2020 traffic volumes with and without the proposed changes in land use forecasts. The outputs of the travel demand model include average daily and peak hour traffic volume forecasts on roadway segments as well as turning movements at intersections. The LOS of Roseville's arterial and collector roadway system is primarily dictated by the capacity and operations of its signalized intersections.

4.1.4.1.3 Analysis Scenarios

Table 4.1-1 identifies the different analysis scenarios incorporated into the No Project and Plus Project conditions for this Draft Subsequent EIR. Appendix E contains the intersection geometries for each of the modeling scenarios. The sections below explain the different traffic modeling scenarios utilized to develop the 2020 baseline No Project and Plus Project conditions for this Draft Subsequent EIR.

2002 Supplemental EIR for the 2020 CIP

The 2002 Supplemental EIR assumed buildout of Roseville and the 2020 market rate absorption outside the City limits. **Table 4.1-4** presents the intersections projected to operate at LOS D or worse with the 2020 CIP improvements evaluated in the 2002 Supplemental EIR. As indicated, 42 of the 144 total intersections analyzed in the 2002 Supplemental EIR were projected to operate at LOS D or worse. This represented less than 30 percent of the total intersections; therefore, over 70 percent of the total intersections were projected to operate at LOS C or better.

Current 2020 CIP (Scenario 3)

As previously mentioned, the City's current 2020 CIP includes additional improvements beyond those identified in the 2002 Supplemental EIR for the 2020 CIP. These additional improvements were incorporated into the City's current CIP as part of the approvals of several development projects, including:

- West Roseville Specific Plan;
- Kaiser Hospital Expansion;
- South Placer Justice Center;
- Longmeadow and Walaire Industrial Rezones;
- Roseville Convention Center;
- Stonepointe Rezone;
- Riverside Gateway Specific Plan and Streetscape Project; and
- Galleria Mall Expansion.

TABLE 4.1-4

CITY OF ROSEVILLE INTERSECTIONS OPERATING AT LOS D OR WORSE: 2002 SUPPLEMENTAL EIR AND CURRENT 2020 CIP

ID	North/South Street	East/West Street	2002 Supplemental EIR		Current 2020 CIP (Scenario 3)	
			LOS	V/C	LOS	V/C
3	Yosemite St	Atlantic St	**D**	0.82	**D**	0.87
18	Vernon St	Cirby Way	**E**	0.91	**E**	1
19	Eureka Rd	Douglas Blvd	**D**	0.89	**D**	0.85
21	Harding Blvd	Douglas Blvd	**E**	0.97	**E**	0.98
23	Judah St	Douglas Blvd	**D**	0.89	B	0.69
26	Riverside Ave/Vernon St	Douglas Blvd	**E**	0.98	**D**	0.89
27	Rocky Ridge Dr	Douglas Blvd	**D**	0.89	**D**	0.87
29	Santa Clara Dr	Douglas Blvd	**D**	0.86	**D**	0.82
30	Sierra College Blvd	Douglas Blvd	**E**	0.93	**E**	0.94
31	Sierra Gardens	Douglas Blvd	**D**	0.85	C	0.78
34	Eureka Rd	Lead Hill Blvd	**D**	0.82	C	0.77
39	Fiddyment Rd	Baseline Rd	**D**	*[1]	C	0.81
44	Foothills Blvd	Blue Oaks Blvd	C	0.79	**D**	0.88
45	Foothills Blvd	Cirby Way	**E**	0.96	**E**	0.93
47	Foothills Blvd	Junction Blvd	**D**	0.86	**D**	0.84
48	Foothills Blvd	Main St/Baseline Rd	**D**	0.85	**D**	0.88
51	Foothills Blvd	Pleasant Grove Blvd	**D**	0.85	**D**	0.84
54	Foothills Blvd	Vineyard Rd	**D**	0.87	C	0.80
56	Galleria Blvd	Berry St	**D**	0.84	**D**	0.87
57	Harding Blvd	Estates Rd	**E**	0.92	**F**	1.20
58	Harding Blvd	Lead Hill Blvd	**E**	0.95	**E**	0.98
59	Harding Blvd	Roseville Square	A	0.50	**E**	0.93
60	Harding Blvd	Wills Rd	**D**	0.86	**E**	0.91
74	Washington Blvd	Pleasant Grove Blvd	**E**	0.91	**E**	0.97
78	Roseville Pkwy	Pleasant Grove Blvd	**E**	0.95	**E**	0.94
79	Riverside Ave	Cirby Way	**E**	0.94	**E**	0.93
80	Riverside Ave	Darling Way	**D**	0.86	**D**	0.83
84	Rocky Ridge Dr	Lead Hill Blvd	**D**	*[1]	B	0.68
91	Roseville Pkwy	Olympus Dr	**D**	*[1]	**D**	0.86
96	Galleria Blvd	Roseville Pkwy	**F**	1.17	**F**	1.18

TABLE 4.1-4
(CONTINUED)

CITY OF ROSEVILLE INTERSECTIONS OPERATING AT LOS D OR WORSE: 2002 SUPPLEMENTAL EIR AND CURRENT 2020 CIP

ID	North/South Street	East/West Street	2002 Supplemental EIR		Current 2020 CIP (Scenario 3)	
			LOS	V/C	LOS	V/C
97	Gibson Blvd	Roseville Pkwy	C	0.79	**E**	0.95
100	Reserve Drive	Roseville Pkwy	**E**	0.97	**E**	0.94
101	Sierra College Blvd	Roseville Pkwy	C	*[1]	**D**	0.85
102	Taylor Rd	Roseville Pkwy	C	0.81	**D**	0.85
110	South Cirby Way	Old Auburn Rd	**D**	0.90	**D**	0.86
117	Sunrise Ave	Cirby Way	**F**	1.02	**F**	1.09
118	Sunrise Ave	Coloma Way	**F**	1.09	**F**	1.08
119	Sunrise Ave	Douglas Blvd	**E**	0.95	**E**	0.94
120	Sunrise Ave	Eureka Rd	**F**	1.09	**F**	1.09
122	Sunrise Ave	Kensington	**D**	0.86	C	0.72
123	Sunrise Ave	Lead Hill Blvd	**F**	1.05	**D**	0.84
124	Sunrise Ave	Oak Ridge Dr	**E**	0.91	**E**	0.93
126	Sunrise Ave	Sierra Gardens	**D**	0.85	C	0.8
128	Taylor Rd	Eureka Rd	**E**	0.91	**D**	0.87
129	Grant St	Vernon St	**E**	0.96	**F**	1.17
130	Judah St	Vernon St	B	0.60	**E**	0.98
131	Lincoln St	Vernon St	**D**	0.88	**D**	0.88
135	Washington Blvd	Junction Blvd	C	*[1]	**D**	0.82
136	Washington Blvd	Main St	**E**	1.00	**E**	0.97
149	Orlando Ave	Riverside Ave	*[2]	*[2]	**E**	Estimated
164	HP East	Blue Oaks Blvd	*[2]	*[2]	**D**	0.86
Total Intersections Analyzed			144		172	
Intersections Operating at LOS C or Better			102		129	
% of Intersections Operating at LOS C or Better			71%[3]		75%[3]	
Total Intersections at LOS "D" or Worse			42		43	

Notes:

Bold and shading represents intersections with LOS D or worse

[1] Mitigated intersection in CIP 2002 Supplemental EIR: no V/C documented

[2] Intersection not analyzed in CIP 2002 Supplemental EIR

[3] Includes intersections estimated to be LOS A–C

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

SOURCE: DKS Associates, 2006

The current 2020 CIP includes 172 existing and planned signalized intersections, rather than the 144 intersections evaluated in the 2002 Supplemental EIR.

This net increase of 28 intersections includes the addition of 32 intersections and the deletion of 4 intersections from the CIP, as identified in **Table 4.1-5.** The additional intersections are a result of a number of new intersections resulting from specific development projects, as well as existing signalized intersections there were not included in previous analyses. The deleted intersections were removed from the analysis because they are no longer assumed to be signalized in the future.

TABLE 4.1-5

INTERSECTIONS ADDED OR REMOVED FROM 2020 CIP SINCE 2002 SUPPLEMENTAL EIR

North/South Street	East/West Street	Intersections Added or Deleted	Signalized Intersections
2002 Supplemental EIR 2020 CIP			144
Target Entrance	Fairway Drive	City added to the CIP in 2003 based on the assumption that they would now become signalized and be designed to accommodate future traffic volumes at an acceptable LOS	+7
Wal Mart Entrance	Lead Hill Blvd		
Pleasant Grove Blvd	Wal Mart Entrance		
Wood Meadow	Blue Oaks Blvd		
New Meadow Dr	Blue Oaks Blvd		
Roseville Pkwy	Trestle Drive		
Woodcreek Oaks	Crimson Ridge		
Fiddyment Rd	Hayden Pkwy N	Added with West Roseville Specific Plan EIR in 2004	+8
Fiddyment Rd	Hayden Pkwy S		
West Side Dr	Blue Oaks Blvd		
Hayden Pkwy	Blue Oaks Blvd		
Fiddyment Rd	Westhills Dr		
Market St	Pleasant Grove Bl		
Monument Dr	Pleasant Grove Bl		
N/S Street	Blue Oaks Blvd		
Gibson	New CC Road	Added with Convention Center in 2005	+1
Woodcreek Oaks	Painted Desert	Added with North Roseville EIR	+1
HP East	Blue Oaks Blvd	Added with HP Master Plan	+1
Sunrise Avenue	Stonepoint	Added With Stonepointe Negative Declaration in 2005	+2
Stonepoint	Rocky Ridge		

TABLE 4.1-5
(CONTINUED)

INTERSECTIONS ADDED OR REMOVED FROM 2020 CIP APPROVED SINCE 2002 SUPPLEMENTAL EIR

North/South Street	East/West Street	Intersections Added or Deleted	Signalized Intersections
Lincoln St	Oak Street	Removed for CIP Update in 2006 (no longer assumed to be signalized)	-4
Prairie Woods	Blue Oaks Blvd		
Fiddyment Rd	Opal		
Foothills Blvd	Atkinson		
Foothills Blvd	HP Central Entrance	Added for CIP Update in 2006 (Already signalized by 2006)	+12
Olympus	Europa		
Orlando	Riverside		
West Side Dr	Pleasant Grove Bl		
Woodcreek Oaks	Trailee		
Michener	Pleasant Grove		
Crocker Ranch	Blue Oaks Blvd		
Woodcreek Oaks	Horncastle		
Corpyard	PFE Rd		
Chase Dr	Roseville Pkwy		
Sierra College Blvd	Miners Ravine		
Scarborough	Secret Ravine		
Total			**172**

SOURCE: DKS Associates, 2006

The resulting list of intersections represents the City's current 2020 CIP. **Table 4.1-4** provides a comparison of the intersections operating at LOS D or worse under the 2002 Supplemental EIR and the City's current 2020 CIP (Scenario 3). The table shows that the number of intersections operating at LOS C or better is over 70 percent under both scenarios.

2020 CIP No Project Conditions (Scenario 4)

The 2020 CIP No Project scenario serves as the base condition from which to measure impacts of the proposed project. This scenario represents the same 2020 land use assumptions and CIP improvements within the City of Roseville that were developed for the City's current CIP; however, outside of Roseville, the 2020 land use forecasts and roadway network assumptions have been updated.

The 2020 No Project conditions (Scenario 4) incorporates the latest 2020 development forecasts for each jurisdiction in Placer County. Buildout of Area 1 of the proposed Placer Vineyards project in west Placer County was assumed to be developed by 2020 and thus was included in this development scenario. Outside of Placer County, the model for 2020 No Project conditions (Scenario 4) used 2020 land use and trip generation estimates prepared by SACOG for the Metropolitan Transportation Plan (MTP), except in south Sutter County, where half of Sutter Pointe was assumed. **Table 4.1-6** presents the 2020 land use assumptions in other jurisdictions for 2020 No Project conditions and compares those assumptions to the assumptions used for the current 2020 CIP.

Outside the City of Roseville, the proposed 2020 CIP Update analysis assumed that all of the 2020 transportation improvements contained in the MTP would be implemented. One of those assumed improvements in the CIP analysis was the widening of Baseline Road by Placer County from two to four travel lanes between Fiddyment Road and the Sutter County line by 2020. Since the CIP was adopted in September 2002, Placer County has informed the City that under the County's CIP, Baseline Road will be widened to six lanes between Fiddyment Road and Watt Avenue by 2020. The Placer Vineyards project proposes to widen Baseline Road adjacent to that development, which would result in six lanes for a portion of Baseline Road west of Watt Avenue.

The above land use and network inputs were incorporated into the updated traffic model/software program and LOS calculated at the signalized CIP intersections. **Table 4.1-7** identifies intersections operating at LOS D or worse for this 2020 No Project scenario (Scenario 4) and compares this information with the current CIP LOS analysis (Scenario 3). The table shows that 119 of 172 intersections (or 69 percent) operate at LOS C or better under 2020 No Project conditions (Scenario 4). This does not fall within the City's CIP policy of maintaining a minimum of 70 percent of signalized intersections at LOS C or better.

TABLE 4.1-6

CHANGES IN 2020 LAND USE FORECASTS OUTSIDE ROSEVILLE UPDATED TRAVEL DEMAND MODEL: CURRENT 2020 CIP AND 2020 NO PROJECT

Area	Residential Dwelling Units		Non-residential Square Footage (1,000 Sq Ft)	
	Current 2020 CIP (Scenario 3)	2020 No Project (Scenario 4)	Current 2020 CIP (Scenario 3)	2020 No Project (Scenario 4)
Lincoln	22,293	21,448	12,302	11,868
Rocklin	22,787	27,994	10,925	11,758
Granite Bay	9,726	7,573	1,296	1,717
Sunset	-	-	6,331	8,645
Dry Creek	2,846	3,153	1,419	1,278
Placer Vineyards	7,657	7,006	3,655	3,657

SOURCE: DKS Associates, 2006

TABLE 4.1-7

CITY OF ROSEVILLE INTERSECTIONS OPERATING AT LOS D OR WORSE: CURRENT 2020 CIP AND 2020 NO PROJECT

ID	North/South Street	East/West Street	Current 2020 CIP (Scenario 3)		2020 No Project (Scenario 4)	
			LOS	V/C	LOS	V/C
3	Yosemite	Atlantic St	**D**	0.87	**D**	0.83
9	Washington Blvd	Blue Oaks Blvd	B	0.68	**E**	0.95
12	Melody	Cirby Way	C	0.71	**D**	0.90
15	Orlando/Marlin	Cirby Way	C	0.72	**E**	0.92
18	Vernon St	Cirby Way	**E**	1.00	**F**	1.19
19	Eureka Rd	Douglas Blvd	**D**	0.85	**E**	0.91
21	Harding Blvd	Douglas Blvd	**E**	0.98	**F**	1.09
26	Riverside Ave/Vernon	Douglas Blvd	**D**	0.89	A	0.50
27	Rocky Ridge Dr	Douglas Blvd	**D**	0.87	**D**	0.84
28	Roseville Pkwy	Douglas Blvd	B	0.67	**D**	0.84
29	Santa Clara Dr	Douglas Blvd	**D**	0.82	C	0.75
30	Sierra College Blvd	Douglas Blvd	**E**	0.94	**F**	1.08
38	Home Depot	Fairway Drive	B	0.65	**D**	0.85
39	Fiddyment Rd	Baseline Rd	C	0.81	**E**	0.94
42	Foothills Blvd	Albertsons	A	0.54	**D**	0.85
44	Foothills Blvd	Blue Oaks Blvd	**D**	0.88	**D**	0.88
45	Foothills Blvd	Cirby Way	**E**	0.93	C	0.81
47	Foothills Blvd	Junction Blvd	**D**	0.84	**E**	0.91
48	Foothills Blvd	Main St/Baseline	**D**	0.88	C	0.80
49	Foothills Blvd	McAnally	C	0.80	**D**	0.82
51	Foothills Blvd	Pleasant Grove	**D**	0.84	**E**	0.95
54	Foothills Blvd	Vineyard Rd	C	0.80	**D**	0.88
55	Galleria	Antelope Creek	C	0.80	**D**	0.87
56	Galleria	Berry	**D**	0.87	**D**	0.82
57	Harding Blvd	Estates Rd	**F**	1.20	C	0.80
58	Harding Blvd	Lead Hill Blvd	**E**	0.98	C	0.78

TABLE 4.1-7
(CONTINUED)

CITY OF ROSEVILLE INTERSECTIONS OPERATING AT LOS D OR WORSE: CURRENT 2020 CIP AND 2020 NO PROJECT

ID	North/South Street	East/West Street	Current 2020 CIP (Scenario 3)		2020 No Project (Scenario 4)	
			LOS	V/C	LOS	V/C
59	Harding Blvd	Roseville Square	**E**	0.93	B	0.68
60	Harding Blvd	Wills Rd	**E**	0.91	**F**	1.03
69	Fiddyment Rd	Pleasant Grove	C	0.72	**F**	1.01
71	SR-65 NB Off	Pleasant Grove	A	0.57	**D**	0.82
74	Washington Blvd	Pleasant Grove	**E**	0.97	**D**	0.82
76	Pleasant Grove Blvd	Fairway Drive	C	0.69	**E**	0.95
78	Roseville Pkwy	Pleasant Grove	**E**	0.94	**F**	1.03
79	Riverside Ave	Cirby Way	**E**	0.93	**E**	0.93
80	Riverside Ave	Darling Way	**D**	0.83	C	0.76
90	Roseville Pkwy	Lead Hill Blvd	B	0.66	**D**	0.85
91	Roseville Pkwy	Olympus Dr	**D**	0.86	**E**	0.94
93	Roseville Pkwy	Secret Ravine	B	0.62	**D**	0.82
96	Galleria	Roseville Pkwy	**F**	1.18	**F**	1.13
97	Gibson	Roseville Pkwy	**E**	0.95	**D**	0.90
100	Reserve Drive	Roseville Pkwy	**E**	0.94	**F**	1.01
101	Sierra College Blvd	Roseville Pkwy	**D**	0.85	**D**	0.82
102	Taylor Rd	Roseville Pkwy	**D**	0.85	**D**	0.84
104	West Mall	Roseville Pkwy	C	0.71	**E**	1.00
105	Sierra College Blvd	Eureka Road	B	0.67	**D**	0.86
110	South Cirby Way	Old Auburn Rd	**D**	0.86	**D**	0.87
115	Stanford Ranch/Galleria	SR-65 SB On	C	0.71	**D**	0.85
117	Sunrise Avenue	Cirby Way	**F**	1.09	**F**	1.13
118	Sunrise Avenue	Coloma Way	**F**	1.08	**F**	1.03
119	Sunrise Avenue	Douglas Blvd	**E**	0.94	**E**	0.93
120	Sunrise Avenue	Eureka Rd	**F**	1.09	**E**	0.92

TABLE 4.1-7
(CONTINUED)

CITY OF ROSEVILLE INTERSECTIONS OPERATING AT LOS D OR WORSE: CURRENT 2020 CIP AND 2020 NO PROJECT

ID	North/South Street	East/West Street	Current 2020 CIP (Scenario 3)		2020 No Project (Scenario 4)	
			LOS	V/C	LOS	V/C
123	Sunrise Avenue	Lead Hill Blvd	**D**	0.84	C	0.80
124	Sunrise Avenue	Oak Ridge Dr	**E**	0.93	A	0.58
125	Sunrise Avenue	Roseville Pkwy	B	0.63	**D**	0.82
126	Sunrise Avenue	Sierra Gardens	C	0.80	**D**	0.86
128	Taylor Rd	Eureka Road	**D**	0.87	**F**	1.03
129	Grant Street	Vernon Street	**F**	1.17	C	0.79
130	Judah	Vernon Street	**E**	0.98	**D**	0.88
131	Lincoln Street	Vernon Street	**D**	0.88	**E**	0.96
135	Washington Blvd	Junction Blvd	**D**	0.82	C	0.78
136	Washington Blvd	Main Street	**E**	0.97	**F**	1.05
139	Woodcreek Oaks	Baseline Rd	C	0.71	**D**	0.85
145	Pleasant Grove Blvd	Wal Mart Entrance	A-C	Estimated	**D**	0.84
146	Foothills Blvd	HP Central Entrance	A-C	Estimated	**D**	0.89
149	Orlando	Riverside	**E**	Estimated	**E**	0.93
164	HP East	Blue Oaks Blvd	**D**	0.86	C	0.79
Total Intersections Analyzed			172		172	
Intersections Operating at LOS C or Better			129		119	
% of Intersections Operating at LOS C or Better			75%		69%	
Total Intersections at LOS D or Worse			43		53	

LOS = Level of Service; V/C = volume to capacity
Bold and shading represents intersections with LOS D or worse
SOURCE: DKS Associates, 2006

Proposed 2020 CIP Update (Scenario 5)

Land Use Forecasts

The proposed project (Scenario 5) reflects an update of land use forecasts and transportation network assumptions, rather than a specific development proposal. Changes in residential land use assumptions from the current CIP to those in the proposed 2020 CIP Update (proposed project) at buildout of the City of Roseville are summarized in **Table 4.1-8**. The table shows that the estimated number of single family and multi-family dwelling units are forecasted to decrease (0.7 percent and 12 percent, respectively) and age-restricted dwelling units increase (by 12.6 percent) compared to estimates used in the current CIP. Total dwelling units citywide are forecasted to decrease by 3.1 percent, primarily due to reductions in the North Central, Northwest, and infill areas. Changes in non-residential land use assumptions in the current CIP to those in the 2020 CIP Update within the City of Roseville are summarized in **Table 4.1-9**. This table shows that the estimated amount of retail square footage is forecasted to decrease by 7.3 percent, office square footage is forecasted to increase by 2.2 percent, industrial square footage is forecasted to decrease by 4.1 percent and high tech square footage is forecasted to increase by 28.5 percent. These land use changes are forecasted to be a result of various rezones and other adjustments intended to create a better overall jobs/housing balance within Roseville and reflect the preservation of more open space and additional parklands as prescribed by the SACOG Blueprint Project and Roseville's Implementation Strategies to Achieve Blueprint Project Objectives.

Table 4.1-10 shows the difference between the current CIP (no project) and the 2020 CIP Update (proposed project) in total daily vehicle trips generated citywide that would use the City's collector and arterial roadway network. The table shows that overall trips would increase by less than 1 percent. The largest changes in trip generation would be in the North Industrial and Northwest areas. Other plan areas would change by less than 10 percent in either direction. 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 included in the new travel demand model, such as hotels, the convention center, and universities.

Development of Roadway and Intersection Improvements

The development of the proposed 2020 CIP Update involved utilizing the updated traffic model/software with the same model data inputs described above under No Project conditions (Scenario 4), with the exception of including the proposed land use revisions within the City of Roseville described above. Using the current CIP improvements as a starting point, intersection levels of service were calculated at each signalized intersection. Intersections that did not meet a LOS C threshold were re-examined to determine if additional improvements were feasible that could provide improved operations. While most of the modifications to the CIP are aimed at improving LOS, City staff also identified some reductions in improvements where the existing CIP improvements have been determined to be infeasible. The resulting proposed CIP modifications are identified in Chapter 3 (**Tables 3-4** and **3-5**).

Table 4.1-12 in Section 4.1.4.3 shows the p.m. peak hour levels of service at all 172 signalized intersections assumed to be in place within the City of Roseville in 2020. This table also shows the breakdown by LOS of all 172 intersections under 2020 No Project conditions. The table shows that under this scenario, 53 (31 percent) of the 172 intersections operate at LOS D or worse. The 2020 No Project conditions show that intersections citywide would not meet the City's 70 percent LOS A-C standard without geometric improvements to a number of intersections, thus indicating that updated growth outside the City of Roseville has considerable impact on the performance of roadways within the City.

TABLE 4.1-8

CITY OF ROSEVILLE
RESIDENTIAL DEVELOPMENT FORECASTS BY PLAN AREA:
CURRENT 2020 CIP AND PROPOSED 2020 CIP UPDATE

Planning Area	Single-Family Dwelling Units			Multi-Family Dwelling Units			Age Restricted Dwelling Units			Total Residential Dwelling Units		
	Current 2020 CIP	2020 CIP Update (Proposed Project)	Change	Current 2020 CIP	2020 CIP Update (Proposed Project)	Change	Current 2020 CIP	2020 CIP Update (Proposed Project)	Change	Current 2020 CIP	2020 CIP Update (Proposed Project)	Change
Del Webb SP	–	–	–	100	100	–	3,222	3,222	–	3,323	3,323	–
Highland Reserve North SP	1,188	1,020	(168)	688	585	(103)	–	–	–	1,876	1,605	(271)
Infill Area	12,568	12,902	334	6,210	4,880	(1,330)	–	–	–	18,778	17,782	(996)
North Central Roseville SP	2,171	2,361	190	2,301	2,154	(147)	–	–	–	4,472	4,515	43
Northeast Roseville SP	966	821	(145)	1,020	690	(330)	–	–	–	1,986	1,511	(475)
North Industrial Area	2,742	2,751	9	210	210	–	–	–	–	2,952	2,961	9
North Roseville SP	4,264	4,153	(111)	806	679	(127)	31	417	386	5,101	5,249	148
Northwest Roseville SP	6,691	6,639	(52)	2,391	2,414	23	–	113	113	9,082	9,166	84
Southeast Roseville SP	1,804	1,719	(85)	1,671	1,471	(200)	–	–	–	3,475	3,190	(285)
Stoneridge SP	2,253	1,989	(264)	629	701	72	–	–	–	2,882	2,690	(192)
West Roseville SP	5,866	5,866	–	1,844	1,844	–	720	720	–	8,430	8,430	–
Total	**40,514**	**40,222**	**(292)**	**17,871**	**15,728**	**(2,143)**	**3,973**	**4,472**	**499**	**62,358**	**60,422**	**(1,936)**
Percent Change	**-0.7%**			**-12.0%**			**+12.6%**			**-3.1%**		

SP - Specific Plan
SOURCE: DKS Associates, 2006

TABLE 4.1-9

CITY OF ROSEVILLE
NON-RESIDENTIAL DEVELOPMENT FORECASTS BY PLAN AREA:
CURRENT 2020 CIP AND PROPOSED 2020 CIP UPDATE

Planning Area	Retail 1,000 Square Feet			Office 1,000 Square Feet			Industrial 1,000 Square Feet			High Tech/ R&D 1,000 Square Feet		
	Current 2020 CIP	2020 CIP Update (Proposed Project)	Change	Current 2020 CIP	2020 CIP Update (Proposed Project)	Change	Current 2020 CIP	2020 CIP Update (Proposed Project)	Change	Current 2020 CIP	2020 CIP Update (Proposed Project)	Change
Del Webb SP	89.3	89.3	0.0	–	–	–	–	–	–	–	–	–
Highland Reserve North SP	1,733.2	1,619.5	(113.7)	–	–	–	–	–	–	–	–	–
Infill Area	4,867.1	4,593.3	(273.8)	2,839.0	3,105.9	266.9	3,248.9	2,951.7	(297.2)	–	–	–
North Central Roseville SP	5,562.3	4,897.7	(664.6)	2,926.6	2,965.6	39.0	797.2	–	(797.2)	–	–	–
Northeast Roseville SP	2,359.9	2,263.8	(96.1)	2,956.8	3,430.3	473.5	–	–	–	–	–	–
North Industrial Area	278.9	462.6	183.7	570.4	639.9	69.5	7,315.4	7,887.5	572.1	3,265.7	4,197.2	931.5
North Roseville SP	455.4	579.6	124.2	184.0	20.9	(163.1)	–	–	–	–	–	–
Northwest Roseville SP	1,122.9	776.9	(346.0)	537.1	78.2	(458.9)	97.1	97.1	(0.0)	–	–	–
Southeast Roseville SP	792.9	605.3	(187.6)	1,131.6	1,208.2	76.6	–	–	–	–	–	–
Stoneridge SP	386.5	424.5	38.0	59.3	–	(59.3)	–	–	–	–	–	–
West Roseville SP	710.0	710.0	(0.0)	60.1	60.1	(0.0)	1,252.4	1,252.4	0.0	–	–	–
Total	**18,358.5**	**17,022.5**	**(1,336.0)**	**11,264.9**	**11,509.1**	**244.2**	**12,711.0**	**12,188.7**	**(522.3)**	**3,265.7**	**4,197.2**	**931.5**
Percent Change	-7.3 %			+2.2 %			-4.1 %			+28.5%		

SP - Specific Plan
SOURCE: DKS Associates, 2006

TABLE 4.1-10

DAILY VEHICLE TRIPS GENERATED IN THE CITY OF ROSEVILLE USING MAJOR ROADWAY NETWORK: 2020 NO PROJECT AND PROPOSED 2020 CIP UPDATE

Plan Area	2020 No Project (Scenario 4)	Proposed 2020 CIP Update (Scenario 5)	Difference	
			Trips	Percent
Del Webb SP	16,100	15,500	(600)	-3.7
Highland Reserve North SP	65,800	70,800	4,900	7.4
Infill Area	413,900	422,100	8,300	2.0
North Central Roseville SP	237,700	254,100	16,400	6.9
Northeast Roseville SP	192,200	180,400	(11,800)	-6.1
North Industrial Area	181,900	155,100	(26,800)	-14.7
North Roseville SP	64,500	61,800	(2,700)	-4.2
Northwest Roseville SP	107,600	124,300	16,700	15.5
Southeast Roseville SP	65,900	71,600	5,700	8.6
Stoneridge SP	37,700	37,200	(400)	-1.1
West Roseville SP	100,400	101,000	600	0.6
Total Citywide	**1,483,700**	**1,493,900**	**10,300**	**0.7**

Note:

Based on daily volumes on model "centroid" connectors, rounded to the nearest 100
SP = specific plan

SOURCE: DKS Associates, 2006

4.1.4.1.4 CIP Funding Sources

The City of Roseville's CIP, which was initially adopted in 1989, defines roadway improvements that would be needed to meet the City's LOS policy through year 2020. The total cost of these roadway improvements is estimated at $350 million. The City of Roseville has adopted a Traffic Mitigation Fee that, in conjunction with other identified funding sources, will fully fund these improvements. As noted in the previous section, the roadway improvements identified in the CIP are intended to mitigate future traffic impacts resulting from buildout of existing entitled land within Roseville and 2020 growth outside the city limits. The City's traffic impact fee program collects funds from new development in the City to finance these improvements. Fees are calculated separately for each of the City's specific plan areas, the North Industrial Area and the Infill Area. The fees vary by land use type in relationship to the relative traffic generated by each type of development. The intent of the fee program is to provide an equitable means of ensuring that future development contributes its fair share to roadway improvements and fully mitigates for its traffic impacts so that the City's General Plan Circulation Policies and quality of life can be maintained.

In addition to traffic impact fees, funding for some CIP improvements will be derived from a number of other identified sources. These include developer funded projects, assessment districts, redevelopment funds, and state and regional sources. Since 1990, about $175 million, or 50 percent, of the roadway improvements identified as being needed by year 2020 have been constructed.

In addition to the City's CIP, four freeway interchanges on SR 65 will be funded through separate traffic impact fees through the Highway 65 Joint Powers Authority (JPA). The benefit area that contributes to the Highway 65 JPA includes the entire cities of Roseville and Rocklin, and the Sunset Industrial Area of Placer County.

4.1.4.2 Standards of Significance

For the purposes of this Draft Subsequent EIR, a significant impact would occur if the proposed project would result in the following:

4.1.4.2.1 City of Roseville Standards

- Cause a signalized intersection identified in the current CIP as functioning at LOS C or better in the p.m. to function at LOS D or worse;

- Cause a signalized intersection identified in the current CIP as functioning at LOS D or E in the p.m. to degrade by one or more LOS category (i.e., from LOS D to LOS E or LOS E to LOS F);

- Cause the overall percentage of intersections meeting LOS C at p.m. peak hour to fall below 70 percent;

  As stated previously, the City's 2002 Supplemental EIR included a modification to the City's LOS policy requiring that the City maintain a minimum of 70 percent of its signalized intersections at LOS C or better during the p.m. peak period. The impacts associated with this modification to the General Plan policy were evaluated in a 2002 Supplemental EIR prepared in conjunction with the 2020 CIP. That EIR identified all intersections projected to function at less than LOS C in year 2020 assuming buildout of the current City limits in 2002.

  As implemented through the CIP, the revised General Plan LOS policy may allow additional intersections beyond those identified in the 2002 Supplemental EIR to function at less than LOS C if the 70 percent is not exceeded. In addition, the 2002 Supplemental EIR identified the potential for intersections that, at that time, functioned at LOS C or better to degrade to a lower standard. Should either of these occur, the City's General Plan requires a formal action by the City Council at a public hearing to modify the projected LOS at these intersections.

  This Draft Subsequent EIR analysis for Roseville City streets uses both aspects of this LOS policy (LOS at individual intersections and maintaining LOS C at 70 percent of City intersections) when determining the significance of impacts.

- Not meet the policies and guidelines of Roseville's Bikeway Master Plan; or

- Have a substantial negative impact on transit operations, travel times, and/or circulation.

4.1.4.2.2 Other Standards

- Cause a state highway that is operating at LOS E or better without the proposed project to operate at LOS F conditions or add traffic to a roadway that is operating at LOS F conditions;

- Within the unincorporated portions of Placer, Sacramento, and Sutter Counties and the City of Rocklin that are in the project study area: (1) cause a roadway or intersection operating at LOS C or better without the proposed project to degrade to LOS D or worse, or (2) cause a roadway or intersection operating at LOS D or worse without the proposed project to degrade by one or more LOS; or

- In unincorporated Placer County, cause a rural two-lane collector or arterial roadway that carries less than 2,000 vehicles per day without the proposed project to carry more than 2,000 vehicles per day.

Placer, Sacramento, and Sutter Counties and the City of Rocklin use a combination of peak hour intersection analysis, plus roadway segment analysis based on daily traffic volumes, to assess their roadway networks. **Table 4.1-11** shows the daily volume thresholds that were used in the roadway segment analysis for those jurisdictions.

TABLE 4.1-11

ROADWAY SEGMENT LEVEL OF SERVICE THRESHOLDS FOR PLACER, SACRAMENTO, AND SUTTER COUNTIES AND CITY OF ROCKLIN

Facility Type	Average Daily Traffic Volume Threshold				
	LOS A	LOS B	LOS C	LOS D	LOS E
Two-Lane Collector	9,000	10,500	12,000	13,500	15,000
Two-Lane Arterial	10,800	12,600	14,400	16,200	18,000
Four-Lane Arterial	21,600	25,200	28,800	32,400	36,000
Six-Lane Arterial	32,400	37,800	43,200	48,600	54,000
Four-Lane Freeway	37,600	52,800	68,000	76,000	80,000
Six-Lane Freeway	56,400	79,200	102,000	114,000	120,000
Eight-Lane Freeway	75,200	105,600	136,000	152,000	160,000

SOURCE: DKS Associates, 2003.

4.1.4.3 Impacts and Mitigation Measures

Impacts and Mitigation Measures for the proposed CIP Update are presented in this section, which evaluates the impacts of Existing Plus Project conditions (Scenario 2) to Existing conditions (Scenario 1) and the impacts of the 2020 Plus Project conditions (Scenario 5) to 2020 No Project conditions (Scenario 4).

4.1.4.3.1 Existing Plus Project Conditions

The Existing Plus Project conditions (Scenario 2) assumes buildout of all entitled land in the City of Roseville and that the proposed 2020 CIP roadway network assumptions (including future intersection geometries and traffic signals) for the City are implemented but conditions outside the City remain the same as today. These buildout conditions are not significantly different from the buildout conditions evaluated in the 2002 Supplemental EIR. The revised buildout levels analyzed in this document reflect a refinement of previously approved development levels and are reflected in the additional land use categories included within the updated traffic model. The Existing Plus Project conditions analysis is required by CEQA. Although required, it represents an unlikely condition, given the magnitude of planned development citywide and outside the City. In reality, the City will develop over a period of years (as dictated by market absorption rates); therefore other developments and improvements outside the City would also occur in this same time frame. The Existing Plus Project conditions analysis reports a worst-case condition to evaluate project-specific impacts for CEQA purposes. The Existing conditions include 150 total signalized intersections and the Existing Plus Project conditions include 179 intersections. The difference in the number of intersections under the Existing Plus Project conditions reflects additional intersections projected to be signalized by the year 2020 and the exclusion of two existing signalized intersections that are incorporated within the Riverside Gateway Pedestrian District Overlay, described in Section 4.1.4.1.3.

IMPACT 4.1-1:	**Increased traffic within and outside of Roseville under Existing Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	General Plan Update LOS Policy
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Significant
MITIGATION MEASURE:	None Identified
RESIDUAL SIGNIFICANCE:	Significant and Unavoidable

A qualitative evaluation comparing Existing Plus Project conditions (Scenario 2) to Existing conditions (Scenario 1) was conducted for this Draft Subsequent EIR for the following reasons:

- The proposed project is not needed to accommodate existing traffic demand. It is intended to reduce expected future traffic congestion levels on the local roadway system in the City of Roseville stemming from future development inside and outside of the City; and

- Construction of the proposed improvements are not expected to occur at one time; rather, they would occur incrementally over an extended period between 2007 and City buildout which is expected to occur by 2020.

Currently, 84 percent of the 150 existing intersections in the City operate at an LOS C or better. Based on the intersection and roadway modifications incorporated into the proposed project, the percentage of intersections operating at an LOS C or better would increase despite increased trips within the City under the Existing Plus Project conditions. As such, the number and percentage of intersections operating at LOS D or worse conditions would decrease under Existing Plus Project conditions based on implementation of the proposed improvements. Since the Existing Plus

Project conditions would maintain an LOS C or better at 70 percent of all signalized intersections within the City, this scenario would comply with the City's LOS policy.

Although there are more intersections that would have an improved (rather than a degraded) LOS with incorporation of the proposed project, there are still intersections where the LOS would degrade from LOS C or better under Existing conditions to LOS D or worse under Existing Plus Project conditions. In addition, there are intersections that have an LOS D or worse under Existing conditions that would further degrade under the Existing Plus Project conditions. These impacts would both be considered significant based on the significance criteria used in this Draft EIR. The City has established overriding findings to allow degradation of LOS at certain intersections in the City. However, these overriding findings do not address all of the intersections that would qualify as significantly impacted. No feasible mitigation is identified to improve the LOS to meet the City standards at these intersections. Therefore, impacts to City of Roseville roadways under Existing Plus Project conditions are considered **significant and unavoidable**.

Impacts to Placer County roadways, Sacramento County roadways, and state highways are expected to be similar to those within the City. While LOS would improve on some roadways outside of the City due to the proposed intersection and roadway improvements, LOS would also degrade on some roadways outside of the City due to anticipated growth within Roseville. These buildout conditions are not significantly different from the buildout conditions evaluated in the 2002 Supplemental EIR. The revised buildout levels analyzed in this document reflect a refinement of previously approved development levels and are reflected in the additional land use categories included within the updated traffic model. While the Existing Plus Project conditions assume growth inside of Roseville, this scenario does not assume any corresponding intersection or roadway modifications in Placer County, Sacramento County, or the state highway system to accommodate for the growth. Further, the Existing Plus Project conditions do not account for growth outside of the City, and therefore, these conditions likely exaggerate the City's contribution to the LOS degradation (since realistically, growth outside of the City would occur in addition to growth inside of the City). Although improvements could be implemented to improve the LOS along Placer County roadways, Sacramento County roadways, and state highways to accommodate projected growth, the City cannot authorize implementation of these improvements, and therefore, impacts to Placer County, Sacramento County, and state highways under Existing Plus Project conditions remain **significant and unavoidable**.

For Rocklin and Sutter County roadways, the LOS may be improved or degraded at certain roadway segments nearest the City, however, the LOS is not expected to degrade from LOS C or better under Existing conditions to LOS D or worse under Existing Plus Project conditions. In addition, intersections currently with an LOS D or worse in these areas are not expected to degrade under Existing Plus Project conditions. This is largely due to the currently low traffic volumes and existing capacities of these roadway systems (when compared to the City, Placer County, Sacramento County, and state highways) Therefore, impacts to Rocklin and Sutter County roadways under the Existing Plus Project conditions would be **less than significant**.

4.1.4.3.2 2020 Plus Project Conditions

The 2020 Plus Project conditions (Scenario 5) assumes the proposed buildout of all entitled land in the City of Roseville and estimates of 2020 development levels outside the City. This scenario also assumes that the proposed 2020 CIP Update roadway network improvements (including future intersection geometries and traffic signals) for the City of Roseville are implemented. To determine

project-related impacts, the 2020 Plus Project conditions (Scenario 5) are compared to 2020 No Project conditions (Scenario 4).

IMPACT 4.1-2:	**Increased traffic on City of Roseville roadways under 2020 Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	General Plan Update LOS Policy
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	City's LOS Policy: Less than Significant Intersection LOS Impact: Significant
MITIGATION MEASURE:	None Identified
RESIDUAL SIGNIFICANCE:	City's LOS Policy: Less than Significant Intersection LOS Impact: Significant and Unavoidable

Table 4.1-12 shows that 69 percent of citywide intersections are projected to operate at LOS C or better under 2020 No Project conditions (Scenario 4), which does not meet the City's adopted 70 percent LOS A through C policy.

Table 4.1-12 also shows the LOS at all signalized intersections in the City of Roseville under 2020 Plus Project conditions (Scenario 5). This table compares the total number and percentage of intersections at each LOS category for 2020 No Project conditions (Scenario 4) and 2020 Plus Project conditions (Scenario 5) and shows that, even with the increased land use assumptions within Roseville, the percentage of intersections operating at LOS C or better under 2020 Plus Project conditions would be higher than under 2020 No Project conditions. This would primarily be due to the numerous intersection geometry improvements assumed as part of the proposed project. Under 2020 Plus Project conditions (Scenario 5), 76 percent of signalized intersections citywide are projected to operate at LOS C or better. **Table 4.1-13** shows the 22 intersections that would have an improved LOS with the proposed project.

Table 4.1-14 shows the four intersections that would have degraded LOS under 2020 Plus Project conditions (Scenario 5). This table shows that two intersections would degrade from LOS C to LOS D, one would degrade from LOS D to LOS E, and one would degrade from LOS D to LOS F.

The City's LOS policy allows the City Council to take an action to except degradation in the LOS of one or more of its signalized intersections from the levels identified in the 2020 CIP as long as 70 percent or more of the total signalized intersections in the City would operate at LOS C or better. With the proposed project, more than 70 percent of the City's signalized intersections would operate at LOS C or better. Therefore, this is a **less than significant** impact.

TABLE 4.1-12

PM PEAK HOUR LEVEL OF SERVICE AT SIGNALIZED INTERSECTIONS: 2020 NO PROJECT AND 2020 PLUS PROJECT

ID	North-South Street	East-West Street	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)	
			LOS	V/C	LOS	V/C
1	Tiger/Center	Atlantic St	B	0.62	B	0.63
2	Wills	Atlantic St	C	0.72	B	0.69
3	Yosemite	Atlantic St	**D**	0.83	C	0.80
4	Junction Blvd	Baseline Rd	B	0.68	B	0.67
5	Del Webb Blvd	Blue Oaks Blvd	A	0.37	A	0.37
6	Diamond Creek	Blue Oaks Blvd	B	0.65	B	0.64
7	Fiddyment Rd	Blue Oaks Blvd	B	0.67	B	0.68
8	SR-65 NB Off	Blue Oaks Blvd	A	0.52	A	0.51
9	Washington Blvd	Blue Oaks Blvd	**E**	0.95	**E**	0.93
10	Woodcreek Oaks	Blue Oaks Blvd	B	0.68	B	0.68
11	Champion Oaks	Cirby Way	B	0.69	B	0.64
12	Melody	Cirby Way	**D**	0.90	**D**	0.83
13	Northridge/Lindsay	Cirby Way	B	0.65	B	0.60
14	Oak Ridge Dr	Cirby Way	C	0.78	C	0.72
15	Orlando/Marlin	Cirby Way	**E**	0.92	C	0.81
16	Parkview	Cirby Way	A	0.53	A	0.52
17	San Simeon	Cirby Way	C	0.77	B	0.69
18	Vernon St	Cirby Way	**F**	1.19	**F**	1.02
19	Eureka Rd	Douglas Blvd	**E**	0.91	**D**	0.86
20	Folsom Rd	Douglas Blvd	C	0.74	C	0.76
21	Harding Blvd	Douglas Blvd	**F**	1.09	**F**	1.14
22	I-80 WB Off	Douglas Blvd	C	0.77	C	0.79
23	Judah	Douglas Blvd	B	0.62	B	0.64
24	Keehner/Donner	Douglas Blvd	A	0.52	A	0.55
25	Park	Douglas Blvd	A	0.40	A	0.43
26	Riverside Ave/Vernon	Douglas Blvd	A	0.50	–	–
27	Rocky Ridge Dr	Douglas Blvd	**D**	0.84	**D**	0.83
28	Roseville Pkwy	Douglas Blvd	**D**	0.84	C	0.80

TABLE 4.1-12
(CONTINUED)

PM PEAK HOUR LEVEL OF SERVICE AT SIGNALIZED INTERSECTIONS:
2020 NO PROJECT AND 2020 PLUS PROJECT

ID	North-South Street	East-West Street	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)	
			LOS	V/C	LOS	V/C
29	Santa Clara Dr	Douglas Blvd	C	0.75	C	0.76
30	Sierra College Blvd	Douglas Blvd	**F**	1.08	**D**	0.86
31	Sierra Gardens	Douglas Blvd	B	0.65	B	0.66
32	Target	Douglas Blvd	C	0.71	C	0.74
33	Eureka Rd	Deer Valley	A	0.50	A	0.50
34	Eureka Rd	Lead Hill Blvd	C	0.72	C	0.76
35	Ashland	Eureka Road	A	0.50	A	0.49
36	Central Park	Fairway Drive	C	0.79	C	0.75
37	Five Star	Fairway Drive	B	0.64	A	0.59
38	Home Depot	Fairway Drive	**D**	0.85	C	0.70
39	Fiddyment Rd	Baseline Rd	**E**	0.94	**E**	0.94
41	Fiddyment Rd	Del Webb Blvd	B	0.61	B	0.61
42	Foothills Blvd	Albertsons	**D**	0.85	C	0.72
44	Foothills Blvd	Blue Oaks Blvd	**D**	0.88	**D**	0.87
45	Foothills Blvd	Cirby Way	C	0.81	C	0.80
46	Foothills Blvd	H.P. South	C	0.73	C	0.71
47	Foothills Blvd	Junction Blvd	**E**	0.91	**D**	0.89
48	Foothills Blvd	Main St/Baseline	C	0.80	C	0.79
49	Foothills Blvd	McAnally	**D**	0.82	C	0.77
50	Foothills Blvd	Mistywood/NEC	A	0.59	B	0.65
51	Foothills Blvd	Pleasant Grove	**E**	0.95	**E**	0.92
52	Foothills Blvd	Rand/Pilgrims	C	0.72	C	0.70
53	Foothills Blvd	Roseville Pkwy/HP	B	0.66	B	0.64
54	Foothills Blvd	Vineyard Rd	**D**	0.88	**D**	0.86
55	Galleria	Antelope Creek	**D**	0.87	**D**	0.82
56	Galleria	Berry	**D**	0.82	**D**	0.82
57	Harding Blvd	Estates Rd	C	0.80	**D**	0.82
58	Harding Blvd	Lead Hill Blvd	C	0.78	C	0.76
59	Harding Blvd	Roseville Square	B	0.68	C	0.71

TABLE 4.1-12
(CONTINUED)

PM PEAK HOUR LEVEL OF SERVICE AT SIGNALIZED INTERSECTIONS: 2020 NO PROJECT AND 2020 PLUS PROJECT

ID	North-South Street	East-West Street	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)	
			LOS	V/C	LOS	V/C
60	Harding Blvd	Wills Rd	**F**	1.03	**F**	1.19
61	I-80 WB On	Atlantic St	C	0.70	C	0.70
62	Americana	Junction Blvd	A	0.35	A	0.33
63	Country Club	Junction Blvd	A	0.59	A	0.53
64	Park Regency	Junction Blvd	A	0.39	A	0.38
65	Porter	Junction Blvd	B	0.60	A	0.56
66	Revere	Junction Blvd	A	0.43	A	0.35
67	Stonecrest	Junction Blvd	A	0.38	A	0.37
68	Country Club	Pleasant Grove	C	0.76	C	0.71
69	Fiddyment Rd	Pleasant Grove	**F**	1.01	**E**	0.93
70	Hallisey	Pleasant Grove	A	0.58	A	0.59
71	SR-65 NB Off	Pleasant Grove	**D**	0.82	C	0.81
72	SR-65 SB Off	Pleasant Grove	C	0.80	C	0.78
73	Sun City Blvd	Pleasant Grove	A	0.47	A	0.45
74	Washington Blvd	Pleasant Grove	**D**	0.82	**D**	0.82
75	Woodcreek Oaks	Pleasant Grove	C	0.76	C	0.77
76	Pleasant Grove Blvd	Fairway Drive	**E**	0.95	**E**	0.93
77	Pleasant Grove Blvd	Highland Drive	C	0.79	A	0.56
78	Roseville Pkwy	Pleasant Grove	**F**	1.03	**E**	1.00
79	Riverside Ave	Cirby Way	**E**	0.93	**D**	0.87
80	Riverside Ave	Darling Way	C	0.76	–	–
81	Riverside Ave	I-80 WB Offramp	B	0.61	B	0.61
82	Rocky Ridge Dr	Cirby Way	C	0.72	B	0.67
83	Rocky Ridge Dr	Eureka Road	C	0.70	B	0.65
84	Rocky Ridge Dr	Lead Hill Blvd	C	0.73	C	0.76
85	Rocky Ridge Dr	Maidu	C	0.71	C	0.72
86	Rocky Ridge Dr	McLaren	B	0.62	B	0.60
87	Rocky Ridge Dr	Professional	C	0.73	C	0.73

TABLE 4.1-12
(CONTINUED)

PM PEAK HOUR LEVEL OF SERVICE AT SIGNALIZED INTERSECTIONS:
2020 NO PROJECT AND 2020 PLUS PROJECT

ID	North-South Street	East-West Street	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)	
			LOS	V/C	LOS	V/C
88	Roseville Pkwy	Alexandra	A	0.53	A	0.52
89	Roseville Pkwy	Eureka Road	C	0.75	C	0.74
90	Roseville Pkwy	Lead Hill Blvd	**D**	0.85	**D**	0.83
91	Roseville Pkwy	Olympus Dr	**E**	0.94	**D**	0.89
92	Roseville Pkwy	Rocky Ridge Dr	B	0.65	B	0.64
93	Roseville Pkwy	Secret Ravine	**D**	0.82	**D**	0.84
94	Roseville Pkwy	Village/Slade	A	0.57	B	0.60
95	Creekside	Roseville Pkwy	C	0.75	C	0.75
96	Galleria	Roseville Pkwy	**F**	1.13	**F**	1.04
97	Gibson	Roseville Pkwy	**D**	0.90	**E**	0.94
98	N. Cirby	Roseville Pkwy	C	0.75	C	0.72
99	Old Auburn Rd	Roseville Pkwy	A	0.44	A	0.44
100	Reserve Drive	Roseville Pkwy	**F**	1.01	**D**	0.83
101	Sierra College Blvd	Roseville Pkwy	**D**	0.82	**D**	0.85
102	Taylor Rd	Roseville Pkwy	**D**	0.84	**D**	0.87
103	Washington Blvd	Roseville Pkwy	C	0.78	C	0.78
104	West Mall	Roseville Pkwy	**E**	1.00	C	0.78
105	Sierra College Blvd	Eureka Road	**D**	0.86	C	0.75
106	Sierra College Blvd	Indigo Creek	C	0.72	B	0.63
107	Sierra College Blvd	Old Auburn Rd	C	0.76	C	0.75
108	Sierra College Blvd	Olympus Drive	B	0.68	B	0.67
109	Sierra College Blvd	Secret Ravine	C	0.79	C	0.75
110	South Cirby Way	Old Auburn Rd	**D**	0.87	C	0.80
111	Stanford Ranch	Fairway Drive	C	0.79	C	0.73
112	Stanford Ranch	Five Star Blvd	C	0.75	C	0.74
113	Stanford Ranch	Highlands Dr	B	0.69	B	0.67
114	Stanford Ranch	SR-65 NB On	C	0.74	C	0.74
115	Stanford Ranch/Galleria	SR-65 SB On	**D**	0.85	**D**	0.84
116	Sunrise Avenue	Automall	C	0.78	C	0.79

TABLE 4.1-12
(CONTINUED)

PM PEAK HOUR LEVEL OF SERVICE AT SIGNALIZED INTERSECTIONS:
2020 NO PROJECT AND 2020 PLUS PROJECT

ID	North-South Street	East-West Street	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)	
			LOS	V/C	LOS	V/C
117	Sunrise Avenue	Cirby Way	**F**	1.13	**F**	1.20
118	Sunrise Avenue	Coloma Way	**F**	1.03	**F**	1.05
119	Sunrise Avenue	Douglas Blvd	**E**	0.93	**E**	0.97
120	Sunrise Avenue	Eureka Rd	**E**	0.92	**D**	0.90
121	Sunrise Avenue	Frances	B	0.65	B	0.63
122	Sunrise Avenue	Kensington	C	0.79	**D**	0.85
123	Sunrise Avenue	Lead Hill Blvd	C	0.80	C	0.78
124	Sunrise Avenue	Oak Ridge Dr	A	0.58	A	0.59
125	Sunrise Avenue	Roseville Pkwy	**D**	0.82	**F**	1.03
126	Sunrise Avenue	Sierra Gardens	**D**	0.86	**D**	0.86
127	Sunrise Avenue	Suntree	B	0.69	B	0.69
128	Taylor Rd	Eureka Road	**F**	1.03	**F**	1.01
129	Grant Street	Vernon Street	C	0.79	C	0.79
130	Judah	Vernon Street	**D**	0.88	**D**	0.87
131	Lincoln Street	Vernon Street	**E**	0.96	**E**	0.98
132	Washington Blvd	Diamond Oaks	C	0.71	C	0.72
133	Washington Blvd	Hallisey	A	0.53	A	0.51
134	Washington Blvd	Industrial Ave	C	0.74	C	0.72
135	Washington Blvd	Junction Blvd	C	0.78	C	0.77
136	Washington Blvd	Main Street	**F**	1.05	**E**	0.93
137	Washington Blvd	Oak Street	B	0.68	B	0.69
138	Washington Blvd	Sawtell	B	0.69	B	0.67
139	Woodcreek Oaks	Baseline Rd	**D**	0.85	**D**	0.86
140	Woodcreek Oaks	Canevari Road	A	0.53	A	0.55
141	Woodcreek Oaks	Junction Blvd	B	0.60	B	0.61
142	Woodcreek Oaks	McAnally	B	0.65	B	0.62
143	Target Entrance	Fairway Drive	A	0.52	A	0.50
144	Wal Mart Entrance	Lead Hill Blvd	A	0.51	A	0.45

TABLE 4.1-12
(CONTINUED)

PM PEAK HOUR LEVEL OF SERVICE AT SIGNALIZED INTERSECTIONS:
2020 NO PROJECT AND 2020 PLUS PROJECT

ID	North-South Street	East-West Street	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)	
			LOS	V/C	LOS	V/C
145	Pleasant Grove Blvd	Wal Mart Entrance	**D**	0.84	C	0.74
146	Foothills Blvd	HP Central Entrance	**D**	0.89	C	0.73
147	Highland Park	Fairway	N/I	N/I	A	0.31
148	Olympus	Europa	A	0.38	A	0.39
149	Orlando	Riverside	**E**	0.93	**E**	0.92
150	Wood Meadow	Blue Oaks Blvd	B	0.64	B	0.64
151	New Meadow Dr	Blue Oaks Blvd	C	0.77	C	0.77
152	Gibson	New CC Road	B	0.65	B	0.64
153	Fiddyment Rd	Hayden Pkwy N	B	0.69	B	0.69
154	Fiddyment Rd	Hayden Pkwy S	B	0.61	A	0.59
155	West Side Dr	Blue Oaks Blvd	A	0.20	A	0.19
156	Hayden Pkwy	Blue Oaks Blvd	A	0.29	A	0.30
157	Fiddyment Rd	Westhills Dr	A	0.59	A	0.56
158	Market St	Pleasant Grv Bl	A	0.28	A	0.27
159	Monument Dr	Pleasant Grv Bl	A	0.34	A	0.33
160	West Side Dr	Pleasant Grv Bl	A	0.35	A	0.23
161	Orchard View Rd	Blue Oaks Blvd	A	0.36	A	0.34
162	Woodcreek Oaks	Painted Desert	A	0.46	A	0.49
163	Woodcreek Oaks	Crimson Ridge	A	0.50	A	0.49
164	HP East	Blue Oaks Blvd	C	0.79	C	0.78
165	Fiddyment Rd	Westlake	N/I	N/I	A	0.58
166	Woodcreek Oaks	Trailee	B	0.61	A	0.59
167	Michener	Pleasant Grove	A	0.55	A	0.50
169	Crocker Ranch	Blue Oaks Blvd	A	0.55	A	0.53
170	Woodcreek Oaks	Northpark	N/I	N/I	A	0.33
171	Woodcreek Oaks	Parkside	N/I	N/I	A	0.36
172	Woodcreek Oaks	Horncastle	A	0.45	A	0.47
173	Corpyard	PFE Rd	B	0.61	B	0.62

TABLE 4.1-12
(CONTINUED)

PM PEAK HOUR LEVEL OF SERVICE AT SIGNALIZED INTERSECTIONS:
2020 NO PROJECT AND 2020 PLUS PROJECT

ID	North-South Street	East-West Street	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)	
			LOS	V/C	LOS	V/C
174	Industrial	Alantown	N/I	N/I	A	0.51
175	Roseville Pkwy	Trestle Drive	B	0.69	B	0.67
176	Gibson W	Roseville Pkwy	N/I	N/I	C	0.80
177	Chase Dr	Roseville Pkwy	C	0.73	C	0.74
178	Washington Blvd	All America	N/I	N/I	B	0.66
179	Cottonwood	Cirby Way	N/I	N/I	A	0.36
182	Sierra College Blvd	Miners Ravine	A	0.55	A	0.54
183	Alexandra Dr	Secret Ravine	N/I	N/I	A	0.33
184	Sunrise Avenue	Stonepoint	B	0.66	B	0.68
185	Stonepoint	Rocky Ridge	A	0.44	A	0.37
186	Scarborough	Secret Ravine	A-C	Estimated	A-C	Estimated
Total intersections			172		179	
Intersections LOS A-C			119		136	
% Intersections LOS A-C			69%		76%	
Intersections LOS D-F			53		43	

Notes:
– = represents intersections included in Pedestrian overlay and, therefore, removed from LOS analysis.
N/I = Not Included; intersections added to CIP as part of proposed project.

TABLE 4.1-13

CITY OF ROSEVILLE INTERSECTIONS WITH IMPROVED LOS: FROM 2020 NO PROJECT TO 2020 PLUS PROJECT

ID	North/South Street	East/West Street	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)	
			LOS	V/C	LOS	V/C
3	Yosemite St	Atlantic St	**D**	0.83	C	0.80
15	Orlando Ave/Marlin	Cirby Way	**E**	0.92	C	0.81
19	Eureka Rd	Douglas Blvd	**E**	0.91	**D**	0.86
28	Roseville Pkwy	Douglas Blvd	**D**	0.84	C	0.80
30	Sierra College Blvd	Douglas Blvd	**F**	1.08	**D**	0.86
38	Home Depot	Fairway Dr	**D**	0.85	C	0.70
42	Foothills Blvd	Albertsons	**D**	0.85	C	0.72
47	Foothills Blvd	Junction Blvd	**E**	0.91	**D**	0.89
49	Foothills Blvd	McAnally Dr	**D**	0.82	C	0.77
69	Fiddyment Rd	Pleasant Grove Blvd	**F**	1.01	**E**	0.93
71	SR-65 NB Off	Pleasant Grove Blvd	**D**	0.82	C	0.81
78	Roseville Pkwy	Pleasant Grove Blvd	**F**	1.03	**E**	1.00
79	Riverside Ave	Cirby Way	**E**	0.93	**D**	0.87
91	Roseville Pkwy	Olympus Dr	**E**	0.94	**D**	0.89
100	Reserve Dr	Roseville Pkwy	**F**	1.01	**D**	0.83
104	West Mall	Roseville Pkwy	**E**	1.00	C	0.78
105	Sierra College Blvd	Eureka Rd	**D**	0.86	C	0.75
110	South Cirby Way	Old Auburn Rd	**D**	0.87	C	0.80
120	Sunrise Ave	Eureka Rd	**E**	0.92	**D**	0.90
136	Washington Blvd	Main St	**F**	1.05	**E**	0.93
145	Pleasant Grove Blvd	Wal Mart Entrance	**D**	0.84	C	0.74
146	Foothills Blvd	HP Central Entrance	**D**	0.89	C	0.73

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

Bold and shading represents intersections with LOS D or worse

SOURCE: DKS Associates, 2006

TABLE 4.1-14

CITY OF ROSEVILLE INTERSECTIONS WITH DEGRADED LOS: FROM 2020 NO PROJECT TO 2020 PLUS PROJECT

ID	North/South Street	East/West Street	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)	
			LOS	V/C	LOS	V/C
57	Harding Blvd	Estates Rd	C	0.80	**D**	0.82
97	Gibson	Roseville Pkwy	**D**	0.90	**E**	0.94
122	Sunrise Ave	Kensington	C	0.79	**D**	0.85
125	Sunrise Ave	Roseville Pkwy	**D**	0.82	**F**	1.03

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

Bold and shading represents intersections with LOS D or worse

SOURCE: DKS Associates, 2006

The City has previously identified Overriding Findings for LOS at three of the four intersections that would have degraded LOS under 2020 Plus Project conditions. **Table 4.1-15** shows that under 2020 Plus Project conditions (Scenario 5), two of the four affected intersections would not meet the City's identified LOS threshold. With the addition of the proposed project under 2020 conditions, the following intersections would not meet the City's LOS standard, and therefore, would require City Council overriding findings for LOS D or worse:

- Gibson Drive and Roseville Parkway
- Sunrise Avenue and Roseville Parkway

TABLE 4.1-15

CITY OF ROSEVILLE INTERSECTIONS WITH DEGRADED LOS AND IDENTIFIED "OVERRIDING FINDINGS": 2020 PLUS PROJECT

ID	North/South Street	East/West Street	2020 Plus Project (Scenario 5)	Previously Identified "Overriding Findings" LOS
57	Harding Blvd	Estates Rd	D	E
97	Gibson Dr	Roseville Pkwy	**E**	D
122	Sunrise Ave	Kensington	D	D
125	Sunrise Ave	Roseville Pkwy	**F**	none

LOS = level of service

Note: **Bold** and shading represents intersections requiring City Council overriding findings

SOURCE: DKS Associates, 2006

No feasible mitigation is identified to improve the LOS to meet the City standards at these two intersections. Therefore, this is considered a **significant and unavoidable** impact.

IMPACT 4.1-3:	**Increased traffic on state highways under 2020 Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	Caltrans Transportation Concept Reports
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Significant
MITIGATION MEASURE:	Mitigation Measure 4.1-1: Participate in any regionally adopted fee program providing for improvements to federal and state facilities
RESIDUAL SIGNIFICANCE:	Significant and Unavoidable

The addition of the proposed project to 2020 conditions would cause changes in traffic volumes on the state highways running through Roseville (I-80 and SR 65). **Table 4.1-16** shows the changes in daily volume on I-80 and SR 65 in Roseville with the proposed project.

TABLE 4.1-16

DAILY VOLUMES ON STATE HIGHWAYS:
2020 NO PROJECT AND 2020 PLUS PROJECT

			2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)		
Facility	**Segment**	**Lanes**	**ADT**	**LOS**	**ADT**	**LOS**	**% Change**
I-80	Sacramento County line to Riverside Ave	8	236,100	F	235,000	F	-0.5%
	Riverside Ave to Douglas Blvd	6	214,600	F	214,300	F	-0.1%
	Douglas Blvd to Eureka Rd	6	213,100	F	212,900	F	-0.1%
	Eureka Rd to Taylor Rd	8	211,300	F	210,300	F	-0.5%
	Taylor Rd to SR 65	8	195,300	F	194,500	F	-0.4%
	SR 65 to Rocklin Rd	6	145,500	F	144,700	F	-0.5%
SR 65	I-80 to Galleria Blvd	4	124,600	F	124,000	F	-0.5%
	Galleria to Pleasant Grove Blvd	4	115,600	F	115,100	F	-0.4%
	Pleasant Grove Blvd to Blue Oaks Blvd	4	120,700	F	119,700	F	-0.8%
	Blue Oaks Blvd to Sunset Blvd	4	99,300	F	**99,600**	F	**+0.3%**

Note:
Roadway segment LOS are based on roadway capacities and LOS criteria in **Table 4.1-11**
Bolded numbers indicate volume increases
ADT = average daily traffic; LOS = level of service

SOURCE: DKS Associates, 2006.

Table 4.1-16 shows that all freeway segments within Roseville are projected to operate at LOS F under 2020 No Project conditions (Scenario 4). The proposed project would cause minor changes to volumes on I-80 and SR 65. As shown, all volume changes are estimated at less than 1 percent. While most segments would decline slightly, one segment would increase slightly. The segment of SR 65 from Blue Oaks Boulevard to Sunset Boulevard is projected to operate at LOS F, and the proposed project would add approximately 300 daily vehicles to this segment. Any additional vehicles added to a highway already operating at LOS F represents a **significant** impact. This impact can be reduced, but not to a less-than-significant level, by implementing Mitigation Measure 4.1-1.

Table 4.1-17 shows the LOS changes at signalized highway ramp locations under 2020 Plus Project conditions (Scenario 5). All but three intersections are projected to operate at LOS C or better under No Project conditions: two intersections would operate at LOS D and one at LOS E. Two of these intersections would remain at the same LOS category and one would improve from LOS D to LOS C with the proposed project.

TABLE 4.1-17

LEVEL OF SERVICE AT SIGNALIZED HIGHWAY RAMP INTERSECTIONS: 2020 NO PROJECT AND 2020 PLUS PROJECT

ID	North/South Street	East/West Street	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)	
			LOS	V/C	LOS	V/C
8	SR-65 NB Off	Blue Oaks Blvd	A	0.52	A	0.51
9	Washington Blvd	Blue Oaks Blvd	**E**	0.95	**E**	0.93
22	I-80 WB Off	Douglas Blvd	C	0.77	C	0.79
61	I-80 WB On	Atlantic St	C	0.70	C	0.70
71	SR-65 NB Off	Pleasant Grove Blvd	**D**	0.82	C	0.81
72	SR-65 SB Off	Pleasant Grove Blvd	C	0.80	C	0.78
81	Riverside Ave	I-80 WB Off-ramp	B	0.61	B	0.61
114	Stanford Ranch	SR-65 NB On	C	0.74	C	0.74
115	Stanford Ranch/Galleria	SR-65 SB On	**D**	0.85	**D**	0.84

LOS = level of service; V/C = volume to capacity ratio
Note: **Bold** and shading represents intersections with LOS D or worse
SOURCE: DKS Associates, 2006

Highway operations could be improved by the addition of HOV, auxiliary and/or mixed-flow lanes on I-80 and SR 65 through Roseville; ramp metering (throughout the I-80 and SR 65 corridors); and regional Transportation Systems Management elements. Such improvements and measures should be resolved on a regional level, through cooperative effort involving SACOG, the Placer County Transportation Planning Agency (PCTPA) and Caltrans. These improvements would not be implemented by a single project or local jurisdiction. Therefore, the timing of the proposed mitigation is not assured, and the impact would remain **significant and unavoidable**.

IMPACT 4.1-4:	**Increased traffic on Placer County roadways under 2020 Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	Placer County LOS Policy
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Significant
MITIGATION MEASURE:	Mitigation Measure 4.1-2: Implement Placer County CIP roadway widenings on Baseline Road and Walerga Road
RESIDUAL SIGNIFICANCE:	Significant and Unavoidable

The addition of the proposed project to 2020 conditions would cause changes in traffic volumes on Placer County roadways. **Table 4.1-18** shows the changes in daily volumes on Placer County roadways with the addition of the proposed project. The table shows that the changes on Placer County roadways are relatively minor, with the maximum increase shown being approximately 4 percent on Walerga Road south of Baseline Road. The table also shows that the level of service on this segment would degrade from LOS E to LOS F. This represents a **significant** impact.

It should be noted that current environmental documents being finalized by Placer County (Placer Vineyards and Riolo Vineyard) have already identified this segment as operating at LOS F in 2025 conditions. The County is considering widening Walerga Road and Fiddyment Road to 6 lanes in the vicinity of their intersections with Baseline Road. Since the volume that can reasonably flow through a roadway segment is largely controlled by the capacity of the intersections at either end, the level of service on this segment could be better than the table shows. Since the City of Roseville has no authority to widen Walerga Road south of Baseline and because the timing of the proposed mitigation cannot be assured, this is considered a **significant and unavoidable** impact.

IMPACT 4.1-5:	**Increased traffic on Rocklin roadways under 2020 Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	Rocklin General Plan LOS Policy
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

The addition of the proposed project to 2020 conditions would cause changes in traffic volumes on Rocklin roadways. **Table 4.1-19** shows the changes in daily volumes on Rocklin roadways with the addition of the proposed project. The table shows that the changes on Rocklin roadways are relatively minor, with the maximum increase shown being approximately 1 percent. Traffic volumes on a number of Rocklin roadways actually decrease with the addition of the proposed project. This is in part due to the redistribution of traffic resulting from relatively minor changes in land use nearby. The table shows that none of the studied Rocklin roadways experiences a significant degradation in level of service with the addition of the proposed project. This represents a **less-than-significant** impact.

TABLE 4.1-18

DAILY VOLUMES ON PLACER COUNTY ROADWAYS:
2020 NO PROJECT AND 2020 PLUS PROJECT

Roadway Segment		Lanes	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)		Percent Change
			Volume	LOS	Volume	LOS	
Baseline Rd	West of Roseville City limit	**6**	47,800	**D**	47,100	**D**	-1%
Watt Ave	South of Baseline Rd	**6**	37,100	B	36,900	B	-1%
Walerga Rd	South of Baseline Rd	**4**	35,400	**E**	36,900	**F**	+4%
Fiddyment Rd	North of Roseville City limit	2	18,800	**F**	19,300	**F**	+3%
Foothills Blvd	North of Roseville City limit	**4**	17,200	A	17,600	A	+2%
Industrial Ave	North of Roseville City limit	2	14,000	C	13,400	C	-4%
Cavitt-Stallman Rd	East of Sierra College Blvd	2	10,800	C	10,700	C	-1%
Olive Ranch Rd	East of Cavitt Stallman Rd	2	2,200	A	2,200	A	0%
Douglas Blvd	East of Sierra College Blvd	4	49,600	**F**	49,100	**F**	-1%
Auburn Folsom Rd	South of Douglas Blvd	**4**	21,500	A	21,500	A	0%
Eureka Rd	East of Roseville City limit	**4**	20,500	A	20,200	A	-1%
E Roseville Pkwy	East of Roseville City limit	2	15,100	**D**	14,800	**D**	-2%

Notes:

Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in **Table 4.1-11**

Lanes in **bold** include assumed additional lanes in future scenarios

Bold and shading represents intersections with LOS D or worse

SOURCE: DKS Associates, 2006.

TABLE 4.1-19

DAILY VOLUMES ON ROCKLIN ROADWAYS:
2020 NO PROJECT AND 2020 PLUS PROJECT

	Roadway Segment	Lanes	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)		Percent Change
			Volume	LOS	Volume	LOS	
Blue Oaks Blvd	East of Roseville City limit	**6**	30,800	A	29,200	A	-5%
Park Drive	North of Roseville City limit	**6**	29,400	A	28,400	A	-3%
Stanford Ranch Rd	North of Roseville City limit	6	31,300	A	30,800	A	-2%
Pacific St	North of Roseville City limit	4	35,900	**E**	35,800	**E**	0%
Sierra College Blvd	North of Roseville City limit	**6**	40,700	C	41,100	C	1%
Sunset Blvd	East of Blue Oaks Blvd	6	37,600	B	37,000	B	-2%
Sunset Blvd	West of Pacific St	**6**	36,500	B	36,200	B	-1%

Notes:

Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in **Table 4.1-11**

Lanes in **bold** include assumed additional lanes in future scenarios

SOURCE: DKS Associates, 2006.

IMPACT 4.1-6:	**Increased traffic on Sacramento County roadways under 2020 Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	Sacramento County LOS Policy
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

The addition of the proposed project to 2020 conditions would cause changes in traffic volumes on Sacramento County roadways. **Table 4.1-20** shows the changes in daily volumes on Sacramento County roadways with the addition of the proposed project. The table shows that the changes on Sacramento County roadways are relatively minor, with most segments experiencing a minor decrease in volume with the addition of the proposed project. One segment does display a slight increase in volume, but this segment is projected to operate at LOS A with or without the proposed project. This represents a **less-than-significant** impact.

IMPACT 4.1-7:	**Increased traffic on Sutter County roadways under 2020 Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	Sutter County LOS Policy
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

The addition of the proposed project to 2020 conditions would cause changes in traffic volumes on Sutter County roadways. **Table 4.1-21** shows the changes in daily volumes on Sutter County roadways with the addition of the proposed project. The table shows that the changes on Sutter County roadways are relatively minor. Traffic volumes on some Sutter County roadways actually decrease with the addition of the proposed project. This is in part due to the re-distribution of traffic resulting from relatively minor changes in land use nearby. The table shows that none of the studied Sutter County roadways experiences a significant degradation in level of service with the addition of the proposed project. This represents a **less-than-significant** impact.

IMPACT 4.1-8:	**Potential inconsistency with City of Roseville Bicycle Master Plan under 2020 Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	City of Roseville Bikeway Master Plan
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measure 4.1-3: Design intersection and roadway improvements to minimize disruption to existing and planned bicycle facilities
RESIDUAL SIGNIFICANCE:	Less than Significant

TABLE 4.1-20

DAILY VOLUMES ON SACRAMENTO ROADWAYS:
2020 NO PROJECT AND 2020 PLUS PROJECT

Roadway Segment		Lanes	2020 No Project		2020 Plus Project		
			Volume	LOS	Volume	LOS	Percent Change
Watt Ave	North of Elverta	4	47,700	**F**	47,400	**F**	-0.6%
Watt Ave	North of Antelope	4	36,100	**F**	36,000	**F**	-0.3%
Walerga Rd	North of Elverta	4	48,800	**F**	48,300	**F**	-1.0%
Walerga Rd	North of Antelope	4	37,600	**F**	37,500	**F**	-0.3%
Antelope Rd North	North of Antelope	4	19,100	A	18,800	A	-1.6%
Roseville Rd	South of County Line	2	21,800	**F**	21,700	**F**	-0.5%
Elverta Rd	West of Watt Ave	**4**	30,900	**D**	30,800	**D**	-0.3%
Elverta Rd	East of Watt Ave	6	31,200	A	31,300	A	0.3%

Notes:

Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in **Table 4.1-11**

Lanes in **bold** include assumed additional lanes in future scenarios

SOURCE: DKS Associates, 2006.

TABLE 4.1-21

DAILY VOLUMES ON SUTTER COUNTY ROADWAYS:
2020 NO PROJECT AND 2020 PLUS PROJECT

Roadway Segment		Lanes	2020 No Project (Scenario 4)		2020 Plus Project (Scenario 5)		Percent Change
			Volume	LOS	Volume	LOS	
Riego Rd	SR 70/99 to Placer County Line	**6**	20,000	A	19,700	A	-2%
Howsley Rd	Pleasant Grove Rd to Placer County Line	2	3,800	A	3,600	A	-5%

Notes:

Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in **Table 4.1-11**

Lanes in **bold** include assumed additional lanes in future scenarios

SOURCE: DKS Associates, 2006.

The City of Roseville has adopted a comprehensive bicycle master plan that includes existing and planned bicycle facilities throughout the City. Bicycle facilities currently exist on most major city streets and are planned for many of those streets that currently do not have such facilities. In accordance with the City of Roseville Bicycle Master Plan, bicycle lanes are typically located on all collector and arterial streets in Roseville, and they are routinely provided on all legs of signalized intersections. **Tables 3-4 and 3-5** in Chapter 3 list the proposed project's roadway and intersection improvements.

In some instances due to the installation of necessary intersection improvements identified by the project, existing bicycle lanes may be modified, removed, or relocated. If bicycle lanes are to be removed as a part of a roadway project and cannot be accommodated because of existing constraints or unusual circumstances, this would not be consistent with the Bicycle Master Plan. This would result in a **potentially significant** impact.

At the time roadway improvements are proposed, the City may secure adequate right-of-way to maintain the bicycle lanes. If, however, existing constraints or unusual circumstances dictate removal of bike lanes, the City will, to the extent practicable, provide signage, alternative routes, or a combination of such measures to ensure that bicycle access is accommodated to the extent possible. This could be accomplished by implementing Mitigation Measure 4.1-3, which would result in a **less-than-significant** impact.

IMPACT 4.1-9:	**Potential inconsistency with the Long Range Transit Master Plan or Short Range Transit Plan under 2020 Plus Project conditions**
APPLICABLE ORDINANCES AND STANDARDS:	Long Range Transit Master Plan and Short Range Transit Plan
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	No impact
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	No impact

The proposed roadway project is being designed to improve traffic flow by implementing capital improvements. Therefore, the project will not negatively impact transit travel times. In fact, it will result in a beneficial impact on travel times by reducing traffic congestion.

4.1.5 MITIGATION MEASURES

Mitigation 4.1-1: Participate in a fee program

This Mitigation Measure applies to Impact 4.1-3.

The City shall participate in any regionally adopted fee program providing for improvements to federal and state facilities.

Mitigation 4.1-2: Implement Placer County CIP roadway widenings

This Mitigation Measure applies to Impact 4.1-4.

The Placer County CIP includes additional travel lanes for all three of these roadway segments. The additional lanes specified in the County's CIP are as follows:

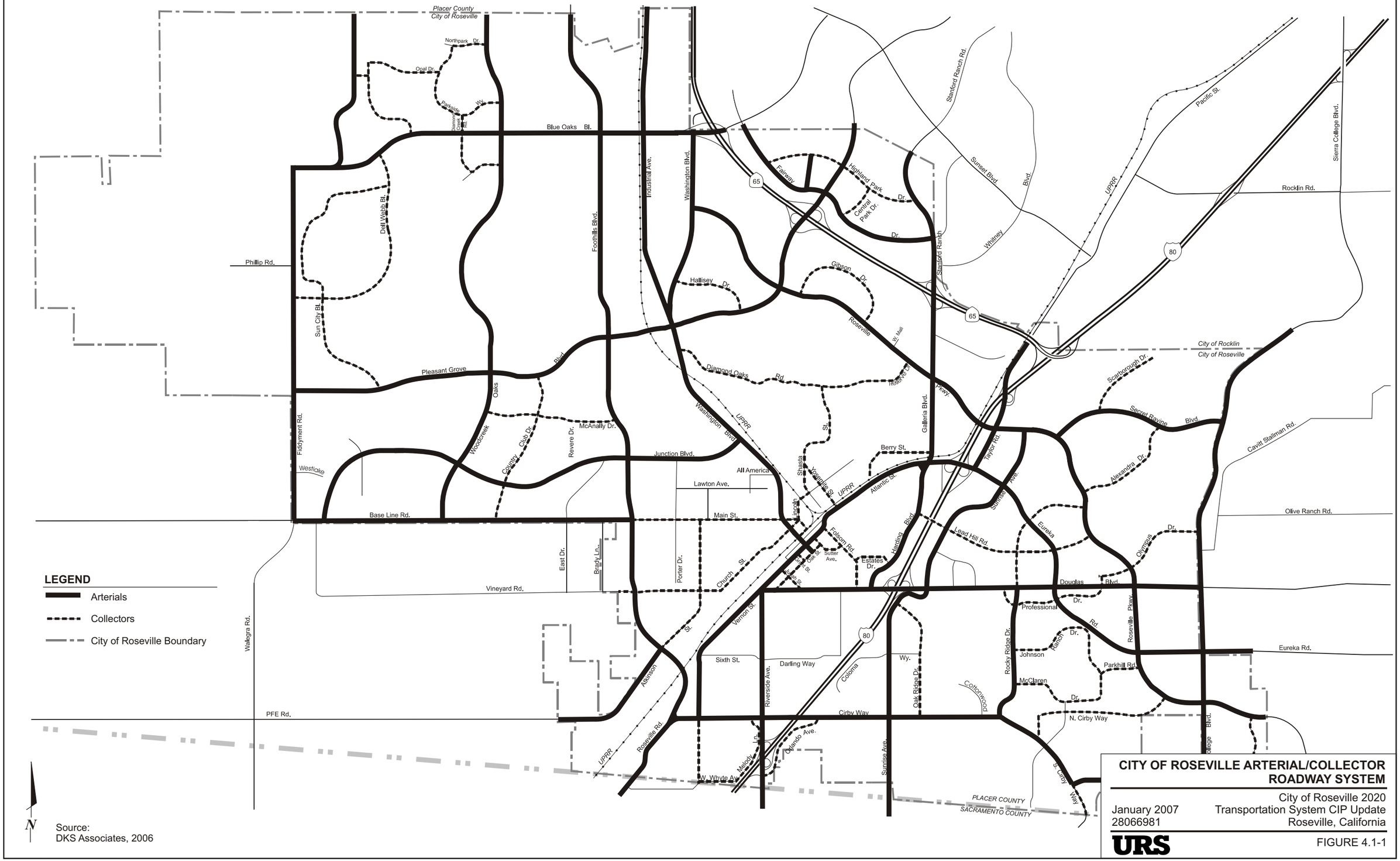
- Baseline Road west of Roseville city limit: widen from 2 lanes to 6 lanes
- Walerga Road south of Baseline: widen from 2 lanes to 4 lanes
- Eureka Road east of Roseville city limit: widen from 2 to 4 lanes

One of these improvements is incorporated into the proposed project since the intersection falls within the City (Intersection 105 widening at Eureka Road and Sierra College Blvd). The implementation of the two additional roadway improvements would reduce Impact 4.1-4 to less than significant; however, since these roadways are not within the City of Roseville, the City has no authority to implement or guarantee the implementation timing of these improvements.

Mitigation Measure 4.1-3: Design improvements to minimize disruption to bicycle facilities

This Mitigation Measure applies to Impact 4.1-8.

The City shall design intersection and roadway improvements to minimize disruption to existing and planned bicycle facilities. At the time roadway improvements are proposed, the City may secure adequate right-of-way to maintain the bicycle lanes. If, however, existing constraints or unusual circumstances dictate removal of bike lanes, the City will, to the extent practicable, provide signage, alternative routes, or a combination of such measures to ensure that bicycle access is accommodated to the extent possible.



CITY OF ROSEVILLE ARTERIAL/COLLECTOR ROADWAY SYSTEM

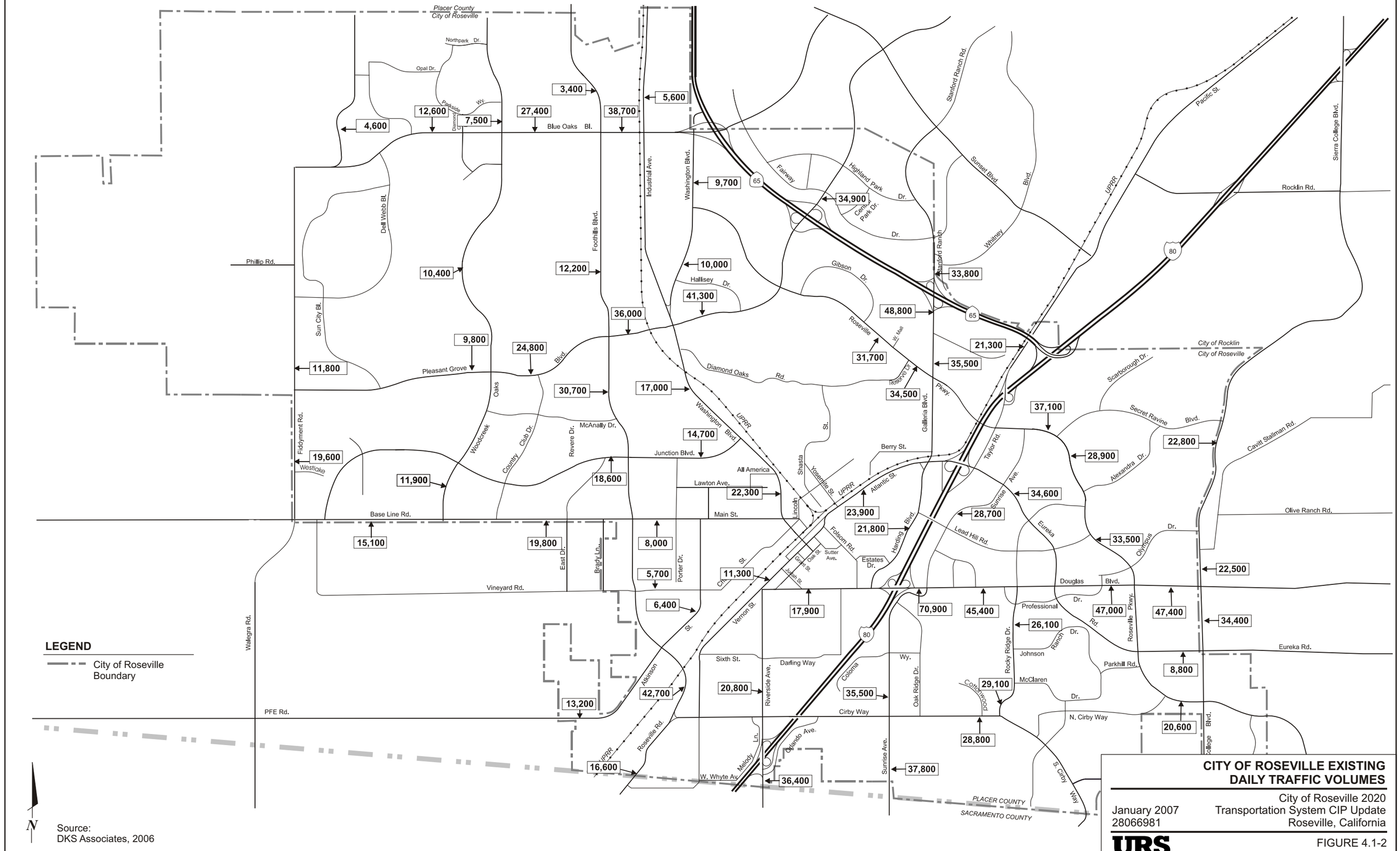
City of Roseville 2020
Transportation System CIP Update
Roseville, California

January 2007
28066981

URS

FIGURE 4.1-1

1/04/07 vsa ..\Roseville Traffic CIP\Graphics\F4.1-1_arterials_final.cdr



CITY OF ROSEVILLE EXISTING DAILY TRAFFIC VOLUMES

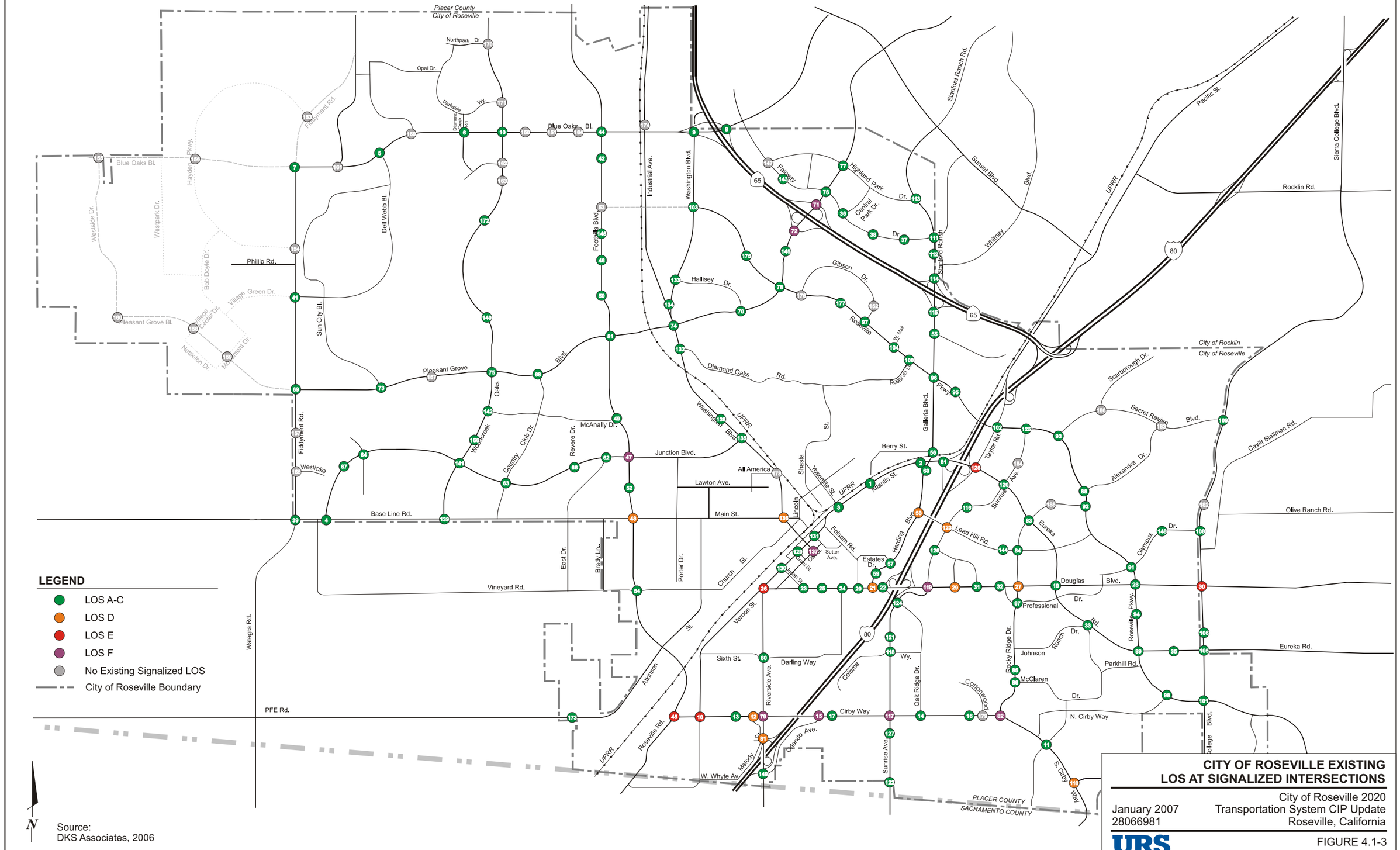
City of Roseville 2020 Transportation System CIP Update
Roseville, California

January 2007
28066981

URS

FIGURE 4.1-2

1/04/07 vsa ..\Roseville Traffic CIP\Graphics\F4.1-2_volume_final.cdr



CITY OF ROSEVILLE EXISTING LOS AT SIGNALIZED INTERSECTIONS

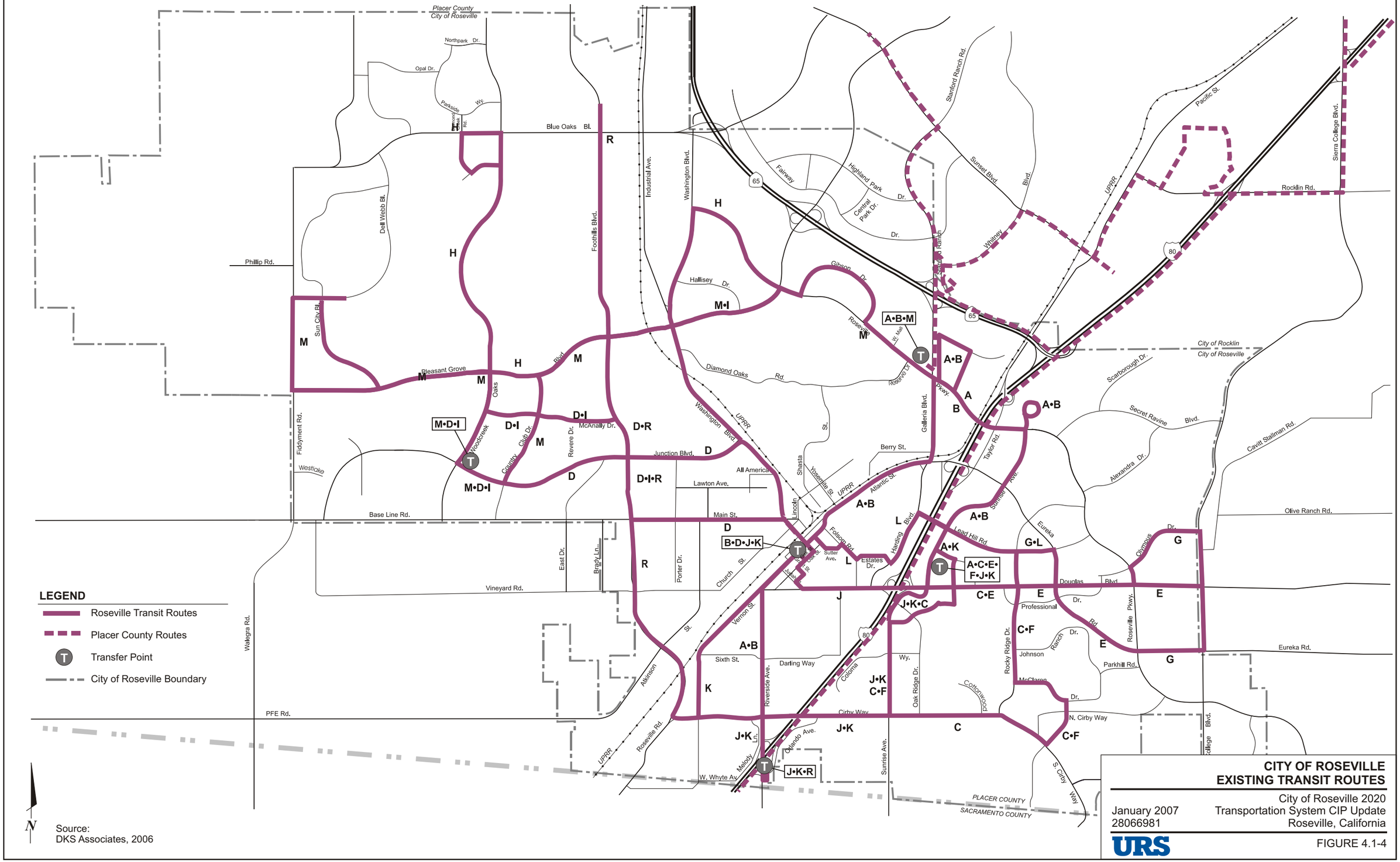
City of Roseville 2020
Transportation System CIP Update
Roseville, California

January 2007
28066981

URS

FIGURE 4.1-3

1/04/07 vsa ..\Roseville Traffic CIP\Graphics\F4.1-3_ex LOS_final.cdr



CITY OF ROSEVILLE
EXISTING TRANSIT ROUTES

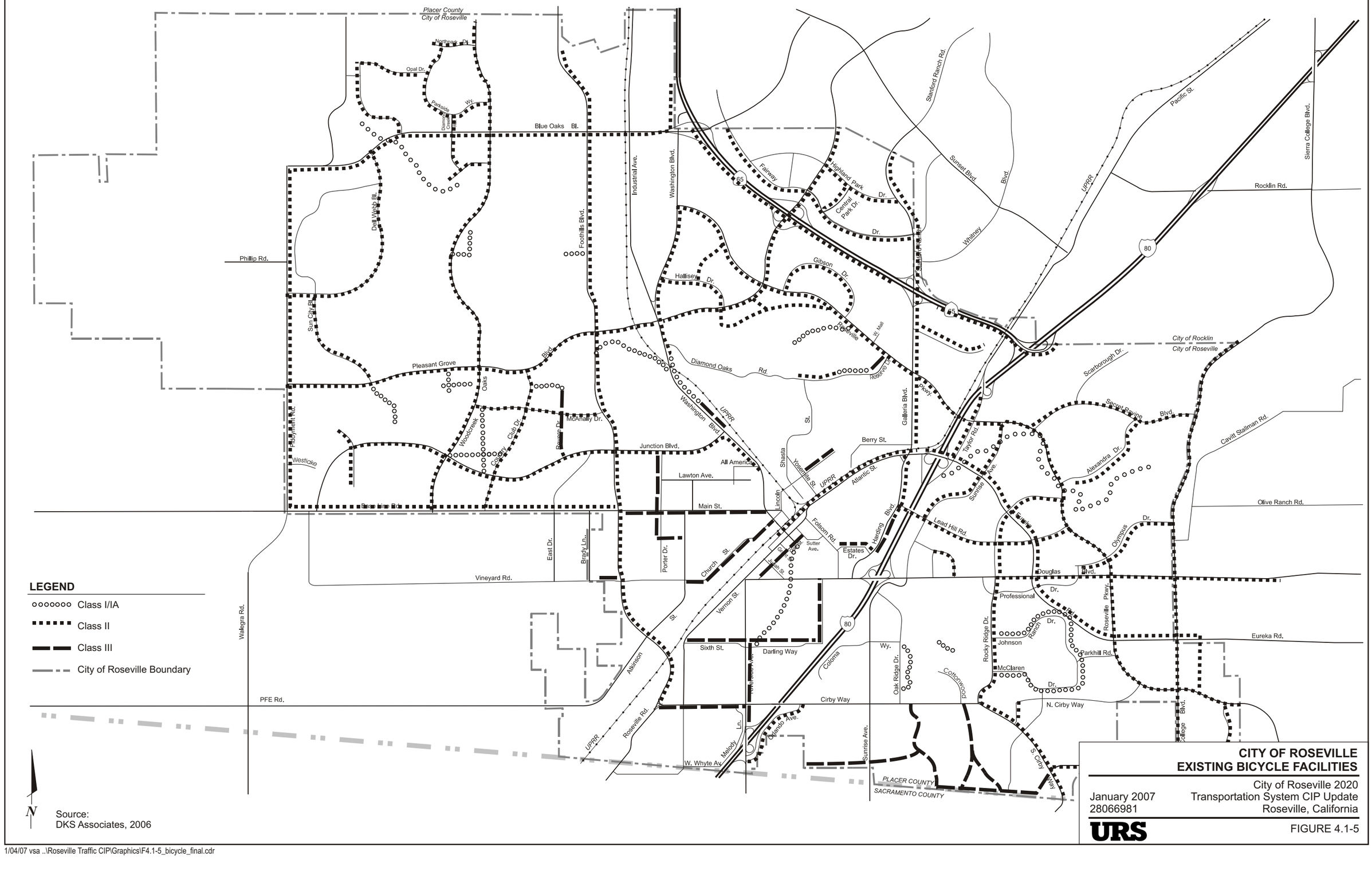
January 2007
28066981

City of Roseville 2020
Transportation System CIP Update
Roseville, California

URS

FIGURE 4.1-4

1/04/07 vsa ..\Roseville Traffic CIP\Graphics\F4.1-4_transit_final.cdr



CITY OF ROSEVILLE
EXISTING BICYCLE FACILITIES

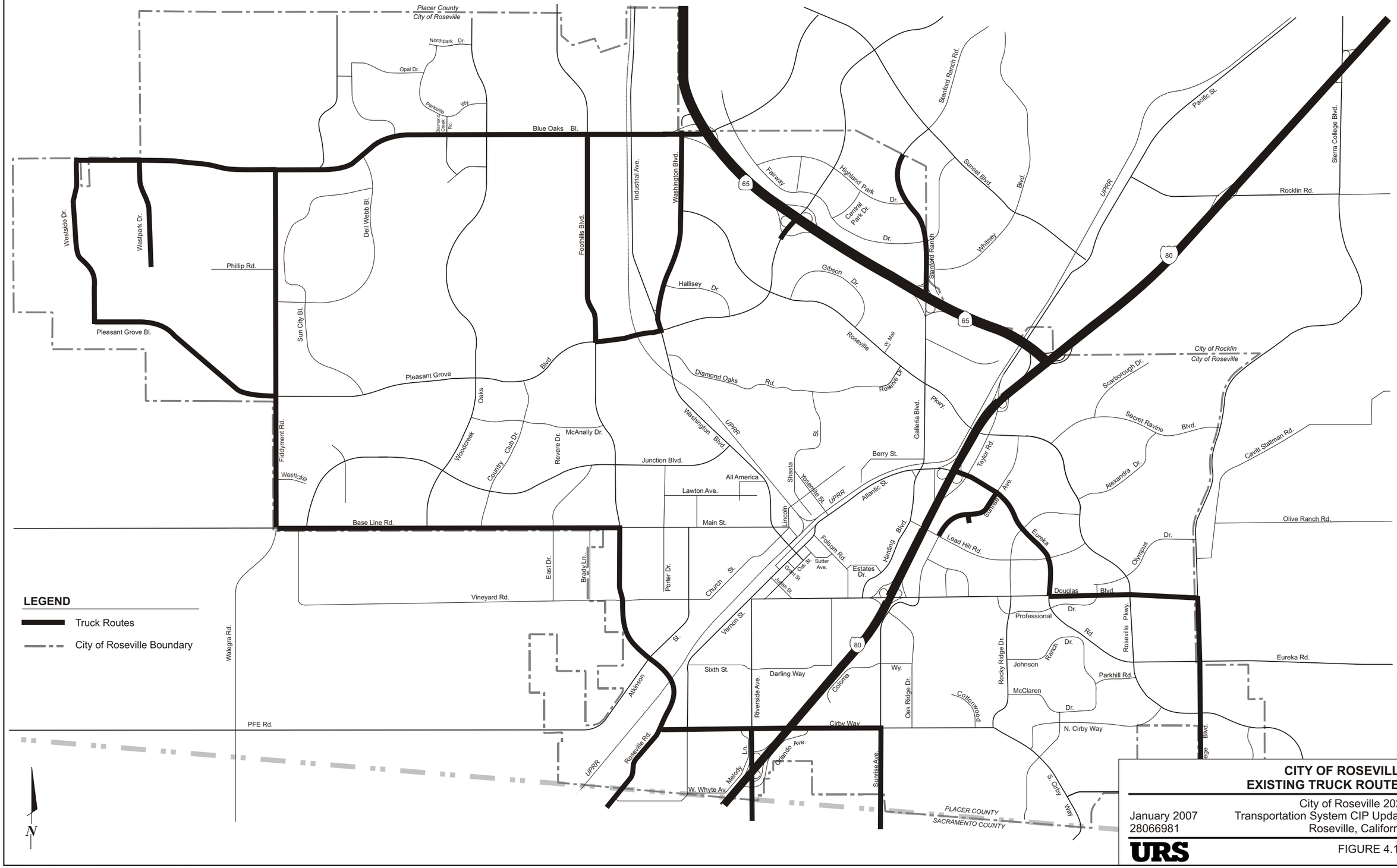
City of Roseville 2020
Transportation System CIP Update
Roseville, California

January 2007
28066981

URS

FIGURE 4.1-5

1/04/07 vsa ..\Roseville Traffic CIP\Graphics\F4.1-5_bicycle_final.cdr



CITY OF ROSEVILLE
EXISTING TRUCK ROUTES

January 2007
28066981

City of Roseville 2020
Transportation System CIP Update
Roseville, California

URS

FIGURE 4.1-6

1/08/07 vsa ..\Roseville Traffic CIP\Graphics\F4.1-6_truck rtes.cdr

4.0 Environmental Analysis

4.0 Environmental Analysis

INTRODUCTION

The Environmental Analysis chapter of this Subsequent EIR discusses the environmental setting, regulatory setting, and impacts and mitigation measures for each of the following topics:

- Traffic and Circulation
- Air Quality
- Noise
- Biological Resources
- Cultural Resources

ANALYSIS ASSUMPTIONS AND SECTION FORMAT

Each section begins with a description of the environmental setting and regulatory setting as it pertains to the particular resource topic. The environmental setting provides a point of reference for evaluating the environmental impacts of the proposed project. For the analysis of Traffic and Circulation, Air Quality and Noise, the year of the City's CIP (2020) was also used as the baseline condition to which the proposed project is added. For these factors, 2020 market conditions present the most conservative ("worst case") scenario for development.

The setting description in each section is followed by an impacts and mitigation discussion. The impact and mitigation portion of each section includes impact statements, which are prefaced by a number in bold-faced type. An explanation of each impact and an analysis of its significance follows each impact statement. Mitigation Measures pertinent to each individual impact appear after the impact section. The degree of relief provided by identified Mitigation Measures is also evaluated. An example of the format is shown below.

IMPACT 4.X-1:	**Statement of impact in bold type**
APPLICABLE ORDINANCES AND STANDARDS:	Identification of ordinance and standard applicable to the impact
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Statement of Significance prior to mitigation (Less than Significant, Significant)
MITIGATION MEASURE:	Mitigation Measure 4.X-1: Identifies Mitigation Measure (summary statement)
RESIDUAL SIGNIFICANCE:	Significance after mitigation

Discussion of impact in paragraph format.

The last section for each resource area restates the Mitigation Measure(s) identified in the Impacts section, and provides additional information regarding the steps to be undertaken in order to implement each measure.

3.0 Project Description

3.0 Project Description

3.1 INTRODUCTION

Pursuant to the California Environmental Quality Act (CEQA) Section 15162, this Draft Subsequent Environmental Impact Report (EIR) has been prepared to evaluate the effects of updating the City of Roseville's (the City) 2020 Transportation System Capital Improvements Program (CIP). The City's CIP identifies the various improvements needed to serve the future transportation demands on the roadway system through the year 2020. The CIP is periodically updated to respond to changing conditions and to ensure the development of an adequate transportation system, consistent with the City's level of service (LOS) policy. The proposed 2020 CIP Update (proposed project) is an update to the current 2020 CIP; this update was prepared using an updated traffic model to reflect revised citywide buildout conditions from that of the current 2020 CIP.

The proposed 2020 CIP Update (SCH#2006062086) involves the following:

- Updating the City's CIP travel demand model, which includes revisions to the citywide buildout land use assumptions and transportation network;
- Identifying modifications to the current 2020 CIP; and
- Documenting changes in LOS at CIP intersections.

The current 2020 CIP is defined as those intersection and roadway improvements included and evaluated in the *Supplement to the City of Roseville Capital Improvement Program EIR* prepared in 2002 for the 2020 CIP as well as additional improvements approved by the City after 2002. For example, there were 144 intersections evaluated in the 2002 Supplemental EIR, whereas there are 172 intersections in the current 2020 CIP. These additional intersections are attributed to several development projects approved by the City since certification of the 2002 Supplemental EIR, including the West Roseville Specific Plan. These additional intersections and roadway improvements were incorporated into the current 2020 CIP through separate environmental documents certified by the City. Section 4.1, Transportation and Circulation, identifies the projects covering each of the additional intersections and roadway improvements added to the current 2020 CIP since the 2002 Supplemental EIR.

The City of Roseville is the lead agency responsible for preparing this Draft Subsequent EIR. Two previous EIRs were prepared for the City's CIP: an EIR certified in 2000 for the 2015 CIP, and the Supplemental EIR (mentioned above) certified in 2002 for the 2020 CIP (SCH#1999122061 for both). The City determined that a Subsequent EIR was the appropriate environmental document for this project under CEQA because the proposed project may have environmental effects not identified in the two previous EIRs. This Draft Subsequent EIR concentrates on new or potentially more severe significant impacts not previously analyzed in these previous environmental documents.

3.2 PROJECT LOCATION AND JURISDICTION

The City of Roseville is shown on **Figure 3-1**. The proposed project encompasses the entire roadway system within the City of Roseville, shown on **Figure 3-2**. One of the intersection improvements (Intersection 105, Sierra College Boulevard/Eureka Road) would affect an area located within unincorporated Placer County, just outside of the City of Roseville's border. In addition, one of the proposed roadway improvements (widening of Fiddyment Road) and two of the proposed intersection improvements (widening of Intersections 69, Fiddyment Road/Pleasant Grove Boulevard and 165, Fiddyment Road/Westlake Drive) are situated in an area subject to a Memorandum of Understanding (MOU) with Placer County (see **Figure 3-3** for locations of these intersections). The MOU was established in 1997 to foster cooperative land use planning and applies to a "Transition Area" west of Fiddyment Road and north of Baseline Road. The MOU sets forth additional requirements for processing project approvals in the Transition Area, including submittal of certain information, input by the Placer County Board of Supervisors regarding annexation, adherence to minimum Development Standards, and mitigation of traffic impacts to less-than-significant levels. If mitigation to less-than-significant levels is infeasible, both the City and the County must so agree. As part of the approval process for the West Roseville Specific Plan, the City and the County agreed that Roseville would accept ownership, control, and maintenance of Fiddyment Road from Baseline Road to Pleasant Grove Boulevard and widen that section to six lanes.

3.3 PROJECT BACKGROUND AND HISTORY

The City of Roseville adopted a Traffic Mitigation Fee program in 1988 to mitigate the impact of development on its transportation system and assist in the implementation of its CIP. The fee program divided the City into benefit districts and established fees to reflect the traffic impact of each district based on the traffic forecasts and a set of criteria. The City periodically updates its CIP to respond to changing conditions within Roseville as well as outside the City limits to ensure that the City's planned transportation system is consistent with the City of Roseville General Plan (General Plan).

As stated previously, the 2015 CIP EIR (certified in 2000) and the 2020 CIP Supplemental EIR (certified in 2002) are the two previous EIRs prepared for the City's CIP. The 2015 CIP EIR was based on 2015 market rate absorption within Roseville and outside of the City and evaluated a revised set of roadway and intersection improvements and amendments to General Plan LOS policy. The 2002 Supplemental EIR was prepared based on the determination that land use absorption in the City was occurring more quickly than previously anticipated. The 2002 Supplemental EIR assumed buildout of Roseville and 2020 market rate absorption outside of the City limits and specifically addressed: (1) an expanded list of intersections that required modification from 2015 levels to citywide buildout levels, and (2) an amendment to the General Plan to modify the City's LOS policy to maintain a LOS C standard at a minimum of 70 percent of all signalized intersections in the City during the p.m. peak hour.

Since approval of the 2020 CIP, the City has determined that a Subsequent EIR should be prepared based on revised citywide buildout conditions, updated 2020 development forecasts outside of Roseville and the use of an updated traffic model. **Table 3-1** shows the differences in land use forecasts within Roseville incorporated into the current CIP traffic model versus this proposed 2020 CIP Update.

TABLE 3-1

LAND USE FORECASTS:
CURRENT 2020 CIP AND PROPOSED 2020 CIP UPDATE

Land Use	2020 No Project CIP Model	2020 CIP Update Model (Proposed Project)	Change
Single-Family (Dwelling Units)	40,514	40,222	-292
Multi-Family (Dwelling Units)	17,871	15,728	-2,143
Age-Restricted (Dwelling Units)	3,973	4,472	+499
Retail (Square Feet)	18,358,500	17,022,500	-1,336,000
Office (Square Feet)	11,264,900	11,509,100	+244,200
Industrial (Square Feet)	12,711,000	12,188,700	-522,300
High Tech/Research and Development (Square Feet)	3,265,700	4,197,200	+931,500

The updated land use forecasts in the model assumes development of 60,422 total residential dwelling units, which is 1,936 dwelling units less than estimated in the current CIP. This reflects completed development projects that actually consist of fewer units than allocated in the current CIP traffic model, which represents a 3.1 percent reduction in the amount of residential dwelling units. Retail use forecasts have decreased to 17,022,500 square feet in the 2020 CIP Update, which is 1,336,000 square feet less than assumed in the current CIP. This is primarily due to reductions in the North Central, Northwest, and infill areas. Some of the land uses formerly allocated to Retail have also been converted to Office use. Industrial uses have decreased to 12,188,700 square feet in the proposed 2020 CIP Update, which is 522,300 square feet less than assumed in the current CIP. In contrast, the proposed 2020 CIP Update assumes development of 11,509,100 square feet of Office use, which is 244,200 square feet more than the current CIP; and 4,197,200 square feet of High Tech/Research and Development use, which is 931,500 square feet more than the current CIP. These land use changes are the result of various rezones and other adjustments intended to create a better overall jobs/housing balance within Roseville and reflect the preservation of more open space and additional parklands, as prescribed by the Sacramento Area Council of Governments (SACOG) Blueprint Project and Roseville's Implementation Strategies to Achieve Blueprint Project Objectives.

Table 3-2 identifies the development projects associated with the land use forecasts. As shown, the updated land use forecasts result in 10,300 more daily vehicle trips than the current 2020 CIP.

TABLE 3-2

DAILY VEHICLE TRIPS GENERATED IN THE CITY OF ROSEVILLE USING MAJOR ROADWAY NETWORK: 2020 NO PROJECT AND PROPOSED 2020 CIP UPDATE

Plan Area	2020 No Project	2020 CIP Update (Proposed Project)	Difference	
			Trips	Percent
Del Webb SP	16,100	15,500	(600)	-3.7
Highland Reserve North SP	65,800	70,800	4,900	7.4
Infill Area	413,900	422,100	8,300	2.0
North Central Roseville SP	237,700	254,100	16,400	6.9
Northeast Roseville SP	192,200	180,400	(11,800)	-6.1
North Industrial Area	181,900	155,100	(26,800)	-14.7
North Roseville SP	64,500	61,800	(2,700)	-4.2
Northwest Roseville SP	107,600	124,300	16,700	15.5
Southeast Roseville SP	65,900	71,600	5,700	8.6
Stoneridge SP	37,700	37,200	(400)	-1.1
West Roseville SP	100,400	101,000	600	0.6
Total Citywide	**1,483,700**	**1,493,900**	**10,300**	**0.7**

Note:

Based on daily volumes on model "centroid" connectors, rounded to the nearest 100
SP = specific plan

SOURCE: DKS Associates, 2006

3.4 PROJECT OBJECTIVES

The primary objective of the proposed project is to update the City's roadway and intersection improvements through the buildout of the City to more accurately represent planned growth in Roseville and surrounding areas. The project objectives for the proposed 2020 CIP Update are identified 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 LOS of C, where feasible and desirable;
- 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.

3.5 PROJECT DESCRIPTION

Since the 2002 Supplemental EIR for the 2020 CIP was certified, the City has determined that a Subsequent EIR should be prepared to update the 2020 CIP. The proposed 2020 CIP Update estimates traffic volumes and LOS under revised citywide buildout conditions using an updated traffic model. The purposes for updating the 2020 CIP include:

- Identifying intersection and roadway improvements not identified in the current CIP;
- Re-evaluating the need and feasibility of roadway and intersection improvements identified in the current CIP;
- Re-evaluating intersection LOS based on new 2020 development levels and modifications to the current CIP; and
- Evaluating consistency of the proposed 2020 CIP Update with General Plan policies.

The proposed project includes changes to intersection and roadway improvements from those identified in the current CIP. These changes are needed to accommodate buildout of entitled land within Roseville and planned market rate development outside the City limits to the year 2020. **Figure 3-3** shows the intersection and roadway modifications incorporated into the proposed project (2020 CIP Update).

In summary, there are modifications to 30 intersections and 6 roadway segments incorporated into the proposed 2020 CIP Update. Of these, 10 intersections and 3 roadway improvements would increase the affected right-of-way area identified in the current CIP; 3 intersections and 3 roadway improvements (adjacent on Cirby Way between Oakridge Drive and Riverside Avenue as shown in **Figure 3-3**) would decrease the affected right-of-way area identified in the current CIP; and 17 intersections would be modified but would not change the affected right-of-way area identified in the current CIP.

The components of the proposed project are described further below.

3.5.1 Revisions to Intersections Incorporated into the CIP

The current CIP includes 172 signalized intersections. The proposed 2020 CIP Update adds 9 existing intersections to the CIP and exempts 2 intersections (identified within a Pedestrian District) from the LOS policy calculations, for a total of 179 intersections subject to the City's LOS policy. The nine additional intersections are identified in **Table 3-3**. The construction of these intersections was initially evaluated in previous environmental documents certified by the City, discussed further in Section 4.1, Transportation and Circulation. For some of these intersections,

additional improvements are proposed as part of the project improvements (including installing signals or adding one lane), described below in Section 3.5.2.

TABLE 3-3

PROPOSED 2020 CIP UPDATE: ADDED INTERSECTIONS

Intersection Number	North-South Street Name	East-West Street Name
147	Highland Park	Fairway Dr
165	Fiddyment Rd	Westlake
170	Woodcreek Oaks Blvd	Northpark Dr
171	Woodcreek Oaks Blvd	Parkside Dr
174	Industrial Ave	Alantown
176	Gibson Dr (West)	Roseville Pkwy
178	Washington Blvd	All America
179	Cottonwood	Cirby Way
183	Alexandra Dr	Secret Ravine Pkwy

The following two intersections removed from the CIP are both within the Riverside Gateway Pedestrian District Overlay:

- Riverside Avenue and Vernon Street/Douglas Boulevard
- Riverside Avenue and Darling Way

The intent of the City's Pedestrian District is to emphasize pedestrian safety and access over vehicular access and encourage alternative modes of travel. The City has determined that it is not a priority to maintain LOS C at signalized intersections within the Pedestrian District Overlay, as this could impede safe pedestrian access. Therefore, these two intersections are excluded from the City's LOS policy and are not included in the total number of intersections for the proposed 2020 CIP Update.

3.5.2 Roadway and Intersection Modifications

Based on the updated land use assumptions used in the City's traffic model as well as the use of an updated traffic model, the City has identified modifications to the current CIP. These modifications are identified in **Tables 3-4** and **3-5**. While most of the modifications are aimed at improving LOS, some reduction in improvements are proposed, where the existing CIP improvements have been determined to be infeasible. Three categories of roadway and intersection improvements are proposed in this 2020 CIP Update:

(1) Improvements that would increase or widen the area identified in the current CIP (identified as Widening projects in **Tables 3-4** and **3-5**);

(2) Improvements that would require modifications of the geometry of the intersection (i.e., changing a through lane to a left turn lane) but would not increase or widen the area identified in the current CIP (identified as Modify; No Widening projects in **Table 3-4**); and

(3) Changes to improvements that would decrease the area identified in the current CIP (identified as Reduction in Width projects in **Tables 3-4** and **3-5**).

TABLE 3-4

PROPOSED 2020 CIP UPDATE: INTERSECTION MODIFICATIONS

Intersection Number	North-South Street Name	East-West Street Name	Category	Proposed 2020 CIP Update Modification	Affected Area
15	Orlando Ave/ Marlin Dr	Cirby Way	Widening	EB: Remove 1 lane WB: Add 1 lane	North and south side of Cirby located east and west of Orlando, and west side of Orlando located south of Cirby
18	Vernon St	Cirby Way	Modify; No Widening	NB: Restriping right lane to right only	No area beyond that identified in the current CIP
19	Eureka Rd	Douglas Blvd	Widening	SB: Add 1 lane	West side of Eureka located south of Douglas, and east side of Eureka located north of Douglas
55	Galleria Blvd	Antelope Creek	Modify; No Widening	EB: Change through lane to left-turn lane	No area beyond that identified in the current CIP
60	Harding Blvd	Wills Rd	Modify; No Widening	EB: Restriping center lane from left/through lane to left only; restriping right lane from right turn only to right/through lane WB: Restriping from left/through/right lane to left/through and right lanes within existing pavement	No area beyond that identified in the current CIP
69	Fiddyment Rd	Pleasant Grove Blvd	Widening	NB: Add 1 through lane SB: Add 1 through lane	West side of Fiddyment
91	Roseville Pkwy	Olympus Dr	Widening	EB: Add 1 lane	South side of Olympus located west of Roseville Pkwy

TABLE 3-4

PROPOSED 2020 CIP UPDATE: INTERSECTION MODIFICATIONS (CONTINUED)

Intersection Number	North-South Street Name	East-West Street Name	Category	Proposed 2020 CIP Update Modification	Affected Area
96	Galleria Blvd	Roseville Pkwy	Modify; No Widening	WB: Convert right turn lane to through lane	No area beyond that identified in the current CIP
97	Gibson Dr	Roseville Pkwy	Modify; No Widening	SB: Convert 3 lefts and through/right to 2 lefts, left/through and right	No area beyond that identified in the current CIP
100	Reserve	Roseville Pkwy	Widening	EB: Add 1 through lane WB: Add 1 through lane	South and north sides of Roseville Parkway located east and west of Reserve Drive
104	West Mall	Roseville Pkwy	Widening	EB: Add 1 through lane WB: Add 1 through lane	South and north sides of Roseville Pkwy located east and west of West Mall
105	Sierra College Blvd	Eureka Rd	Widening	WB: Add 1 left-turn lane	North side of Eureka located east of Sierra College
110	South Cirby Way	Old Auburn Rd	Modify; No Widening	WB: Change right-turn only lane to right/left	No area beyond that identified in the current CIP
117	Sunrise Ave	Cirby Way	Reduction in Width	NB: Remove 1 through lane EB: Remove 1 through lane WB: Remove 1 through lane	Reduced area from that identified in the current CIP
120	Sunrise Ave	Eureka Rd	Reduction in Width	SB: Remove 1 through lane	Reduced area from that identified in the current CIP
121	Sunrise Ave	Frances	Modify; No Widening	NB: Change left/through lane to through lane SB: Change right/through lane to through lane	No area beyond that identified in the current CIP
124	Sunrise Ave	Oak Ridge Dr	Modify; No Widening	NB: Change left/through lane to through lane	No area beyond that identified in the current CIP
125	Sunrise Ave	Roseville Pkwy	Reduction in Width	NB: Remove 1 through lane SB: Remove 1 through lane EB: Remove 1 through lane	Reduced area from that identified in the current CIP

TABLE 3-4

PROPOSED 2020 CIP UPDATE: INTERSECTION MODIFICATIONS (CONTINUED)

Intersection Number	North-South Street Name	East-West Street Name	Category	Proposed 2020 CIP Update Modification	Affected Area
130	Judah St	Vernon St	Modify; No Widening	NB: Change left/through lane to left only; Change right lane to right/through SB: Change right lane to right/through; Change left/through lane to left only	No area beyond that identified in the current CIP
132	Washington Blvd	Diamond Oaks Rd	Modify; No Widening	SB: Change right lane to right/through	No area beyond that identified in the current CIP
136	Washington Blvd	Main St	Modify; No Widening	WB: Change left, through, and right to 2 lefts and through/right	No area beyond that identified in the current CIP
146	Foothills Blvd	HP Center Entrance	Modify; No Widening	SB: Change right lane to right/through	No area beyond that identified in the current CIP
147	Highland Park Dr	Fairway Dr	Modify; No Widening	Signal installation	No area beyond that identified in the current CIP
152	Gibson Dr	New CC	Modify; No Widening	SB: Change right lane to through; change left/through lane to left only	No area beyond that identified in the current CIP
165	Fiddyment Rd	Westlake	Widening	SB: Add 2 lanes	West side of Fiddyment
167	Michener	Pleasant Grove Blvd	Modify; No Widening	NB: Change to left only EB: Change right lane to right/through	No area beyond that identified in the current CIP
170	Woodcreek Oaks Blvd	Northpark Dr	Modify; No Widening	Signal installation WB: Restriping	No area beyond that identified in the current CIP
176	Gibson Dr	Roseville Pkwy	Modify; No Widening	Signal installation	No area beyond that identified in the current CIP
178	Washington Blvd	All America	Widening	NB: Add 1 lane EB: Add new right-turn/decel lane	East side of Washington located south of All America
179	Cottonwood	Cirby Way	Widening	Realign Driveways	South side of Cirby located between two existing driveways

Note:
[1] These modifications are relative to the current CIP geometrics.

TABLE 3-5

PROPOSED 2020 CIP UPDATE: ROADWAY IMPROVEMENTS

Roadway Improvement	Current CIP Travel Lanes	Proposed 2020 CIP Update Travel Lanes	Category	Affected Area
Cirby Way from Riverside Ave to Regency	5	4	Reduction in Width	Reduced area from that identified in the current CIP
Cirby Way from Regency to Sunrise Ave	6	4	Reduction in Width	Reduced area from that identified in the current CIP
Cirby Way from Sunrise Ave to Oakridge Dr	6	4	Reduction in Width	Reduced area from that identified in the current CIP
Fiddyment Rd from Pleasant Grove Blvd to Baseline Rd	4	6	Widening	West side of Fiddyment between Pleasant Grove and Baseline
Roseville Pkwy from Galleria Blvd to West Mall	6	8	Widening	South side of Roseville Pkwy
Roseville Pkwy from West Mall to Gibson Dr	6	7	Widening	North side of Roseville Pkwy

3.5.3 Level of Service

The proposed project would result in changes in LOS at certain intersections in Roseville. The 2020 No Project conditions used for evaluating LOS in Section 4.1, Transportation and Circulation, of this Draft EIR is defined as incorporating development levels outside of Roseville into the updated traffic model but without the proposed roadway and intersection modifications in the 2020 CIP Update. The proposed project revises the citywide buildout assumptions in the updated model, incorporates additional intersections into the model, and incorporates the proposed roadway and intersection modifications.

The proposed project would result in an LOS of A, B, or C at 136 intersections; LOS D at 24 intersections; LOS E at 11 intersections; and LOS F at 8 intersections in Roseville. **Table 3-6** defines the volume to capacity ratio for LOS A through F. The proposed project's additional roadway and intersection improvements would reduce the number of intersections with an LOS D, E, or F from 53 intersections (under No Project conditions) to 43 intersections.

The proposed project would increase the percentage of intersections operating at LOS A, B, or C from 69 percent (under No Project conditions) to 76 percent. The existing General Plan stipulates that the City shall maintain a LOS C standard at a minimum of 70 percent of all signalized intersections in the City during the p.m. peak hour. With implementation of the aforementioned intersection and roadway improvements proposed as part of the 2020 CIP Update, this standard would still be met throughout the City; therefore, no General Plan amendment is proposed.

TABLE 3-6

LEVEL OF SERVICE DEFINITIONS AT SIGNALIZED INTERSECTIONS FOR CITY OF ROSEVILLE

Level of Service (LOS)	Volume to Capacity Ratio[1]	Description
A	0.00-0.59	Free Flow/Insignificant Delays: No approach phase is fully used by traffic and no vehicle waits longer than one red signal.
B	0.60-0.69	Stable Operation/Minimal Delays: An occasional approach phase is fully used. Many drivers begin to feel somewhat restricted within platoons of vehicles.
C[2]	0.70-0.81	Stable Operation/Acceptable Delays: Major approach phases fully used. Most drivers feel somewhat restricted.
D	0.82-0.90	Approaching Unstable/Tolerable Delays: Drivers may have to wait through more than one red signal. Queues may develop but dissipate rapidly, without excessive delays.
E	0.91-1.00	Unstable Operation/Significant Delays: Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream from intersection.
F	Greater than 1.00	Forced Flow/Excessive Delays: Represents jammed conditions. Intersection operates below capacity with low volumes. Queues may block upstream intersections.

Source: Transportation Research Board, 1985

Notes:

1 The ratio of the traffic volume demand at an intersection to the capacity of the intersection.

2 The City of Roseville has established a volume-to-capacity ratio of 0.81 as the LOS C threshold.

3.6 PUBLIC PARTICIPATION IN THE PROJECT APPROVAL PROCESS

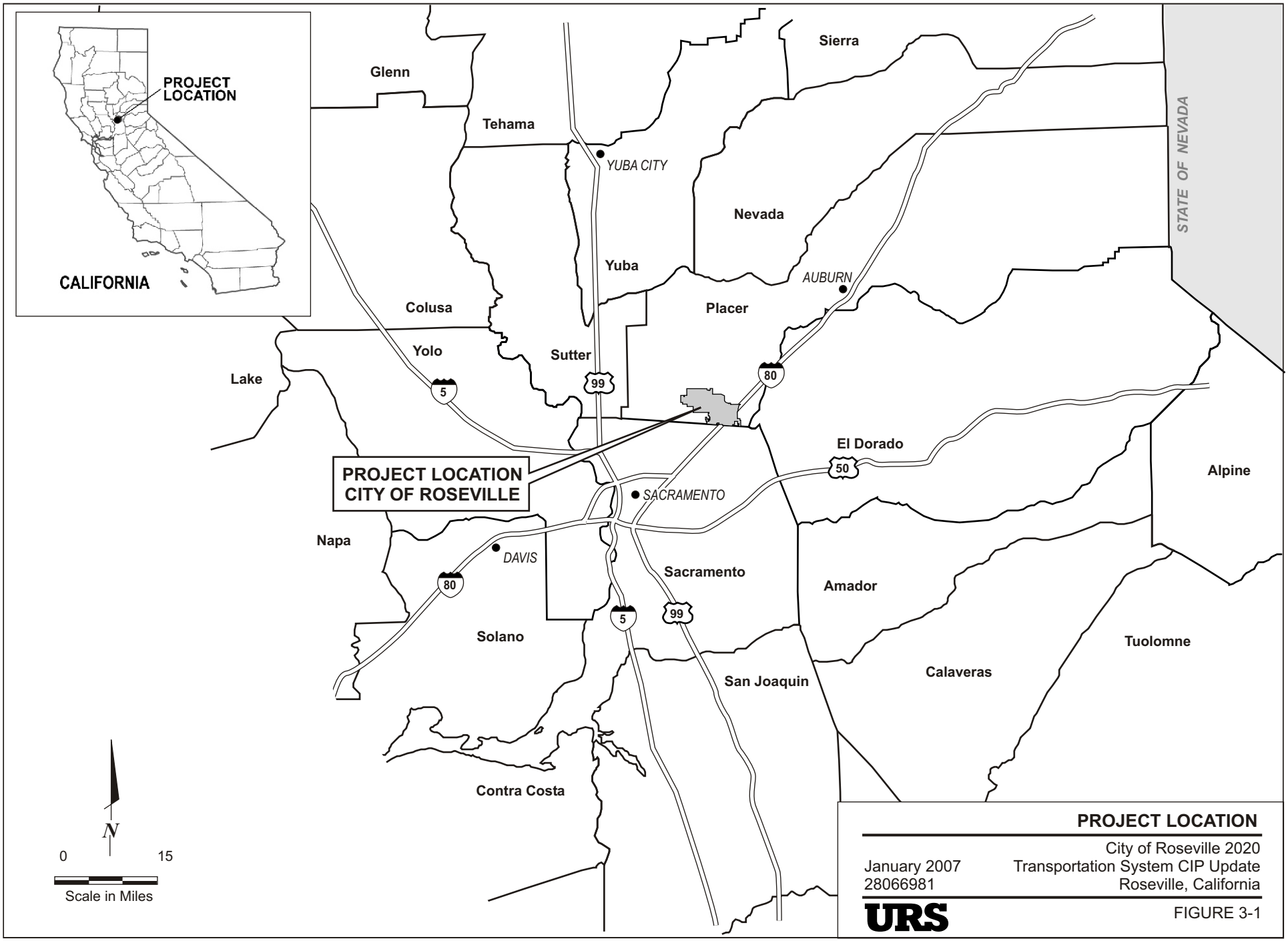
The public will have several opportunities to review and comment on the proposed project. This Draft Subsequent EIR will be available for public review and comment for 45 days. The City of Roseville Transportation Commission will hold a public hearing on the Draft Subsequent EIR, and the City Council will hold a hearing on the Final EIR. Community neighbors and other interested parties can provide written comments at any time during the review period or provide verbal comments at the hearings.

3.7 PROJECT SCHEDULE

The roadway and intersection improvements included within the proposed project covered by this Draft Subsequent EIR for the proposed 2020 CIP Update would be constructed incrementally over an extended period of time (2007–2020), as needed to maintain traffic operations consistent with City policy.

3.8 REQUIRED PERMITS AND APPROVALS

Permit/Approval	Issuing Agency	Comment
Adoption of the Project/Approval of the Subsequent EIR for the 2020 CIP Update	City Council	The City Council has the authority to certify the Subsequent EIR and approve the project.
Encroachment Permit	Public Works Department	The proposed project will comply with the typical requirements of an encroachment permit for construction of roadway and intersection improvements.
Tree Permit	City Council	The proposed project would comply with the mitigation requirements of the City's native oak tree ordinance.
Flood Encroachment Permit	City Council	The proposed project would comply with the mitigation requirements of the City's flood encroachment permit for work in flood-prone areas.
Construction Stormwater Discharge Permit	State Water Resources Control Board Public Works	If construction would involve clearing, grading, and excavation activities that would result in disturbance of one acre or more of land.
Clean Water Act Section 404 Permits	U.S. Army Corps of Engineers	If wetlands are affected.
Streambed Alteration Agreement	California Department of Fish and Game	If construction activities affect stream beds and banks.



PROJECT LOCATION

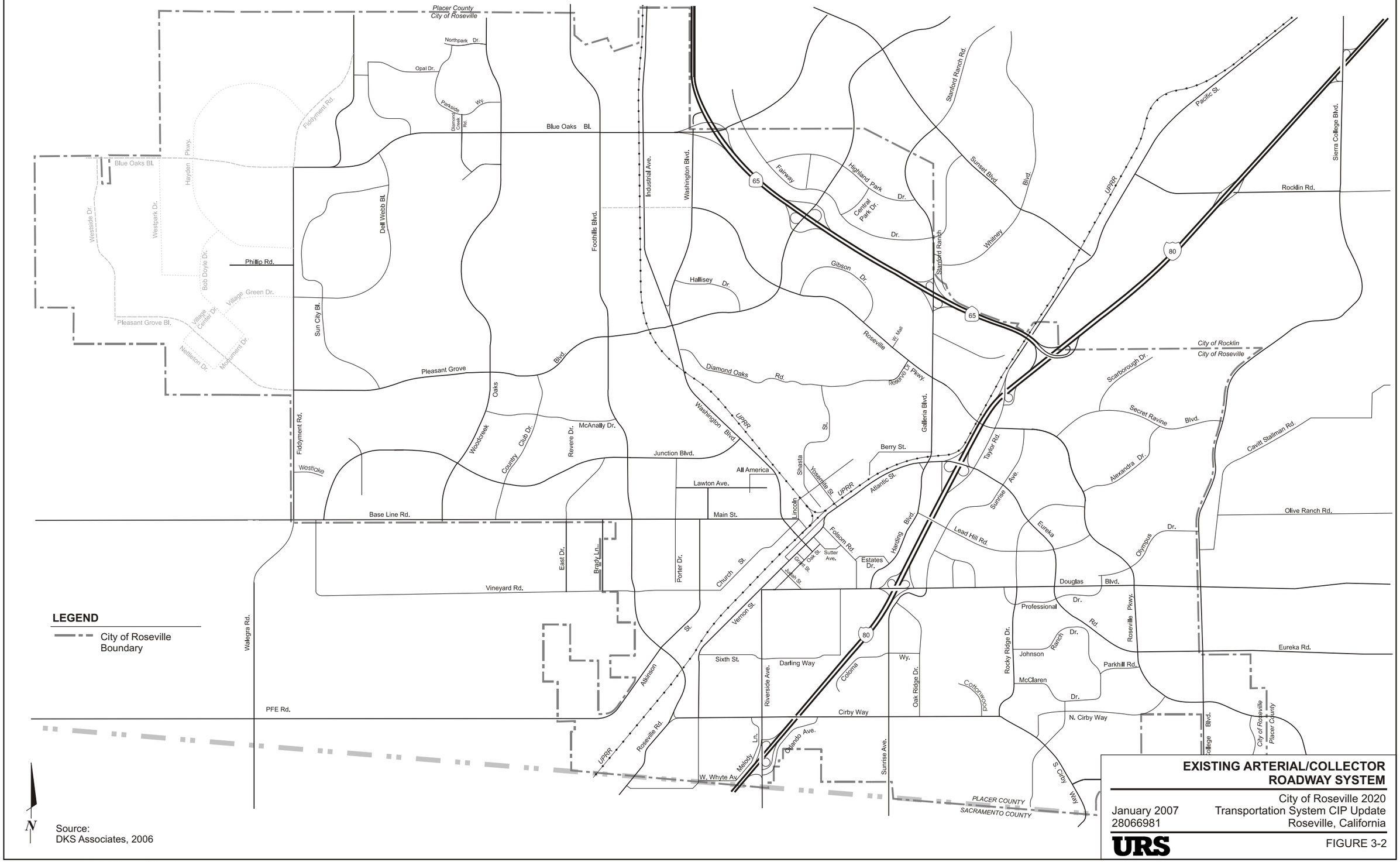
City of Roseville 2020
Transportation System CIP Update
Roseville, California

January 2007
28066981

URS

FIGURE 3-1

1/04/07 vsa ..\Roseville Traffic CIP\Graphics\F3-1_proj loc_V2.cdr



EXISTING ARTERIAL/COLLECTOR ROADWAY SYSTEM

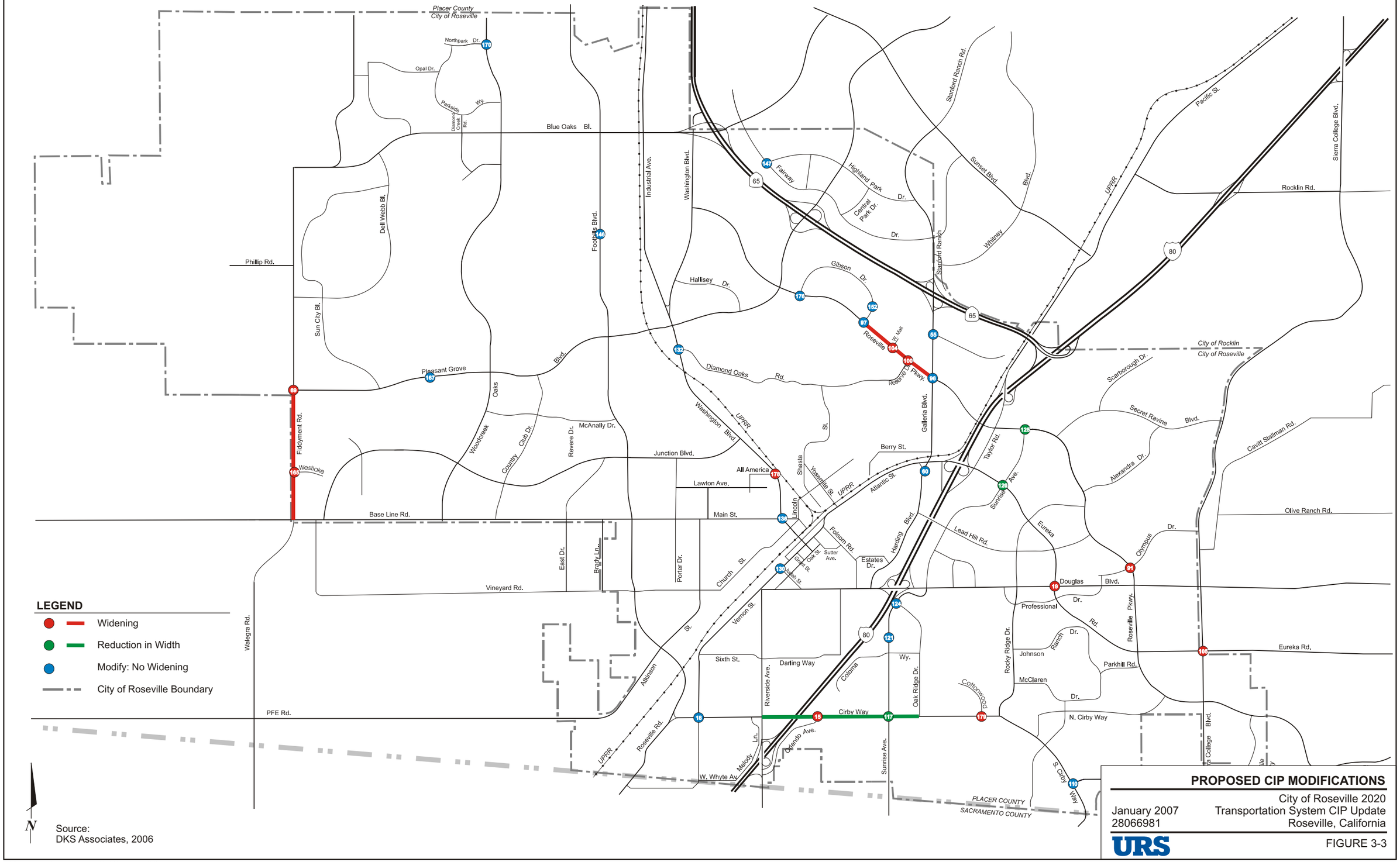
City of Roseville 2020
Transportation System CIP Update
Roseville, California

January 2007
28066981

URS

FIGURE 3-2

1/04/07 vsa ..\Roseville Traffic CIP\Graphics\F3-2_existing roadway_final.cdr



PROPOSED CIP MODIFICATIONS

City of Roseville 2020
Transportation System CIP Update
Roseville, California

January 2007
28066981

URS

FIGURE 3-3

1/25/07 vsa ..\Roseville Traffic CIP\Graphics\F3-3_mods_final.cdr

2.0 Executive Summary

2.0 Executive Summary

2.1. OVERVIEW OF THE PROPOSED PROJECT

The proposed project is an update to the City's current 2020 CIP to reflect revised citywide buildout conditions using an updated traffic model. The proposed project includes the following:

- Updating the City's CIP travel demand model, which includes revisions to the citywide buildout land use assumptions and transportation network;
- Identifying modifications to the current CIP; and
- Documenting changes in levels of service (LOS) at CIP intersections in the City.

The proposed improvements include modifications to 10 intersections and 3 roadway segments that would require widening the affected right-of-way area identified in the current CIP, 17 intersections that would require modification but not widening (i.e., restriping), and 3 intersections and 3 roadway segments where the affected right-of-way identified in the current CIP would be reduced.

This summary provides an overview of the analysis in Chapter 4, Environmental Analysis. This summary also includes discussions of (a) effects found to be less than significant, (b) potential areas of controversy, (c) significant impacts, (d) Mitigation Measures to avoid or reduce identified significant impacts, and (e) unavoidable significant impacts. **Table 2-1** summarizes the analysis contained in Chapter 4, Environmental Analysis. **Table 2-2** provides a comprehensive list of Mitigation Measures to be implemented for the Transportation System CIP (including those identified in the two previous EIRs prepared for the City's Transportation System CIP).

2.2. EFFECTS FOUND TO BE LESS THAN SIGNIFICANT

The City of Roseville released a Notice of Preparation (NOP) for the proposed project on June 16, 2006, for a 30-day public review period. A full copy of the NOP is provided in Appendix A. Comment letters received in response to the NOP are presented in Appendix B. An Initial Study and Environmental Checklist were prepared to evaluate environmental impacts for all resources areas outlined in Appendix G of the CEQA Guidelines. The Initial Study and Environmental Checklist are provided in Appendix C.

The Initial Study and Environmental Checklist determined that **no impacts** would occur from the proposed project in the following areas:

- Agricultural Resources
- Recreation

The Initial Study and Environmental Checklist also determined that **less than significant impacts** would occur from the proposed project in the following areas:

- Aesthetics
- Geology and Soils

- Mineral Resources
- Population and Housing
- Public Services

No mitigation is required for the resource areas where no impacts or less than significant impacts are expected with implementation of the proposed project.

2.3. EFFECTS FOUND TO BE POTENTIALLY SIGNIFICANT

In general, CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial" adverse change in the physical environment. A potential impact is considered significant if a project would substantially degrade the environmental quality of land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance (CEQA Guidelines, 1998). The Initial Study and Environmental Checklist determined that **potentially significant** impacts would occur from the proposed project in the following areas:

- Air Quality
- Biological Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Transportation and Circulation
- Utilities and Service Systems

Potentially significant impacts related to Hazards and Hazardous Materials, Hydrology and Water Quality, and Utilities and Service Systems would be mitigated to less-than-significant levels with implementation of feasible Mitigation Measures identified in the Initial Study and Environmental Checklist (Appendix C). This Draft Subsequent EIR addresses impacts related to the remaining resource areas: Transportation and Circulation, Air Quality, Noise, Biological Resources, and Cultural Resources. Potentially significant impacts to Land Use were identified through potential noncompliance with the City's General Plan LOS policy under cumulative conditions only; therefore, this issue is addressed in this Draft Subsequent EIR under Section 5.2.3, Cumulative Impact Assessment. The impacts identified in the Draft Subsequent EIR as well as associated Mitigation Measures are listed in **Table 2-1**. The Mitigation Monitoring and Reporting Program is included as Appendix I.

2.4. ALTERNATIVES TO THE PROPOSED PROJECT

The alternatives to the proposed project analyzed in this Draft Subsequent EIR include the following:

- **Alternative 1, No Project/No Action**, assumes that land use forecasts incorporated into the travel demand model are not revised and only the roadway and intersections improvements identified in the current 2020 CIP are constructed.

- **Alternative 2, Cumulative Plus Project Conditions with Placer Parkway and Caltrans Improvements**, incorporates additional development projects outside the City of Roseville identified under cumulative conditions, plus improvements to the state highway system and construction of Placer Parkway into the travel demand model.

2.5. UNAVOIDABLE ADVERSE EFFECTS

Potential significant impacts were identified for the following areas where no feasible mitigation was identified; therefore, these impacts remain **significant and unavoidable**:

Existing Plus Project Conditions

- Increased traffic on City of Roseville roadways
- Increased traffic on state highways
- Increased traffic on Placer County roadways
- Increased traffic on Sacramento County roadways
- Growth-inducing impacts

2020 Plus Project Conditions

- Increased traffic on City of Roseville's roadways
- Increased traffic on state highways
- Increased traffic on Placer County roadways
- Growth-inducing impacts

2025 Cumulative Plus Project Conditions

- Increased traffic on City of Roseville roadways
- Increased traffic on state highways
- Increased air emissions
- Loss of biological resources
- Growth-inducing impacts

2.6. POTENTIAL AREAS OF CONTROVERSY

Based on responses received on the NOP (see Appendix B), the public scoping meeting held on July 12, 2006, and the public response to the 2020 CIP evaluated in the *Supplement to the City of*

Roseville Capital Improvement Program EIR prepared in 2002 (2002 Supplemental EIR), no known areas of controversy have arisen.

2.7. SUMMARY TABLE

Information in **Table 2-1**, Summary of Impacts and Mitigation Measures, has been organized to correspond with environmental issues discussed in Chapter 4. The summary table is arranged in four columns:

1) Environmental impacts ("Impact")

2) Level of significance before mitigation ("Proposed Project Level of Significance Prior to Mitigation")

3) Mitigation Measures ("Mitigation Measure")

4) The level of significance after implementation of Mitigation Measures ("Proposed Project Level of Significance After Mitigation")

Information in **Table 2-2**, Complete List of Mitigation Measures for the City of Roseville's CIP, provides a comprehensive list of all Mitigation Measures identified in environmental documents for the previous 2015 and 2020 CIPs as well as the proposed 2020 CIP Update. These environmental documents include the following:

- 2000 EIR prepared for the 2015 CIP
- 2002 Initial Study and Environmental Checklist prepared for the 2020 CIP
- 2002 Supplemental EIR prepared for the 2020 CIP
- 2006 Initial Study prepared for the 2020 CIP Update (Appendix C)
- 2006 Subsequent EIR prepared for the 2020 CIP Update

Modifications to the 2020 CIP since preparation of the 2002 Supplemental EIR have also occurred as a result of subsequent City projects. Additional Mitigation Measures related to those projects are found in the various environmental documents prepared for the projects, as listed in Section 4.1, Transportation and Circulation, of this Draft Subsequent EIR. These Mitigation Measures are separately implemented as a part of the development approvals for those projects.

The City currently implements Mitigation Measures identified in the 2000 and 2002 environmental documents. Upon certification of this Subsequent EIR, the City would also implement Mitigation Measures identified in **Table 2-1** and the 2006 Initial Study. In some cases, Mitigation Measures identified in this Subsequent EIR overlap with measures identified in the previous EIRs (i.e., archaeological surveys). These overlaps are due to different project locations (i.e., different intersection and roadway improvements) and updates to some measures. **Table 2-2** provides a complete list of all Mitigation Measures required for implementation of the City's CIP.

TABLE 2-1

SUBSEQUENT EIR: SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Proposed Project Level of Significance Prior to Mitigation	Mitigation Measure	Proposed Project Level of Significance After Mitigation
Transportation and Circulation			
IMPACT 4.1-1: Increased traffic within and outside of Roseville under Existing Plus Project conditions	Significant	None identified	Significant and Unavoidable
IMPACT 4.1-2: Increased traffic on City of Roseville roadways under 2020 Plus Project conditions	City's LOS Policy: Less than Significant Intersection LOS Impact: Significant	None identified	City's LOS Policy: Less than Significant Intersection LOS Impact: Significant and Unavoidable
IMPACT 4.1-3: Increased traffic on state highways under 2020 Plus Project conditions	Significant	Mitigation Measure 4.1-1: Participate in any regionally adopted fee program providing for improvements to federal and state facilities	Significant and Unavoidable
IMPACT 4.1-4: Increased traffic on Placer County roadways under 2020 Plus Project conditions	Significant	Mitigation Measure 4.1-2: Implement Placer County CIP roadway widenings on Baseline Road and Walerga Road	Significant and Unavoidable
IMPACT 4.1-5: Increased traffic on Rocklin roadways under 2020 Plus Project conditions	Less than Significant	None required	Less than Significant

TABLE 2-1

SUBSEQUENT EIR: SUMMARY OF IMPACTS AND MITIGATION MEASURES (CONTINUED)

Impact	Proposed Project Level of Significance Prior to Mitigation	Mitigation Measure	Proposed Project Level of Significance After Mitigation
IMPACT 4.1-6: Increased traffic on Sacramento County roadways under 2020 Plus Project conditions	Less than Significant	None required	Less than Significant
IMPACT 4.1-7: Increased traffic on Sutter County roadways under 2020 Plus Project conditions	Less than Significant	None required	Less than Significant
IMPACT 4.1-8: Potential inconsistency with City of Roseville Bicycle Master Plan under 2020 Plus Project conditions	Potentially Significant	Mitigation Measure 4.1-3: Design intersection and roadway improvements to minimize disruption to existing and planned bicycle facilities	Less than Significant
IMPACT 4.1-9: Potential inconsistency with the Long-Range Transit Master Plan or the Short-Range Transit Plan	No Impact	None required	No Impact
IMPACT 5.2-1: Increased traffic on City of Roseville roadways under 2025 Cumulative Plus Project conditions	Intersection LOS Impact: Significant City's LOS Policy: Significant	Mitigation Measure 5.2-1: Modify intersection geometries at the following 11 specified intersections to address effects from regional growth outside the City of Roseville: a) Yosemite/Atlantic b) Woodcreek Oaks/Blue Oaks c) Oak Ridge/Cirby	Intersection LOS Impact: Significant and Unavoidable City's LOS Policy: Less than Significant

TABLE 2-1

SUBSEQUENT EIR: SUMMARY OF IMPACTS AND MITIGATION MEASURES (CONTINUED)

Impact	Proposed Project Level of Significance Prior to Mitigation	Mitigation Measure	Proposed Project Level of Significance After Mitigation
		d) Foothills/McAnally e) SR 65 NB Off/Pleasant Grove f) Washington/Roseville Pkwy g) Sierra College/Secret Ravine h) South Cirby/Old Auburn i) Sunrise/Lead Hill j) Washington/Junction k) Crocker Ranch/Blue Oaks These improvements are further detailed in **Table 5.2-2.** Mitigation Measure 5.2-2: Modify intersection geometries at the following 2 specified intersections to address effects from the proposed project: a) Sunrise Ave/Automall Drive b) Gibson Drive West/Roseville Pkwy These improvements are further detailed in **Table 5.2-7.**	

TABLE 2-1

SUBSEQUENT EIR: SUMMARY OF IMPACTS AND MITIGATION MEASURES (CONTINUED)

Impact	Proposed Project Level of Significance Prior to Mitigation	Mitigation Measure	Proposed Project Level of Significance After Mitigation
IMPACT 5.2-2: Increased traffic on State Highways under cumulative conditions	Significant	Mitigation Measure 4.1-1: Participate in any regionally adopted fee program providing for improvements to federal and state facilities	Significant and Unavoidable
IMPACT 5.2-3: Increased traffic on Placer County roadways under cumulative conditions	Less than Significant	None required	Less than Significant
IMPACT 5.2-4: Increased traffic on City of Rocklin roadways under cumulative conditions	Less than Significant	None required	Less than Significant
IMPACT 5.2-5: Increased traffic on Sacramento County roadways under cumulative conditions	Less than Significant	None required	Less than Significant
IMPACT 5.2-6: Increased traffic on Sutter County roadways under cumulative conditions	Less than Significant	None required	Less than Significant
Air Quality			
IMPACT 4.2-1: Construction-related air pollutant emissions	Less than Significant	Mitigation Measure 4.2-1: Implement construction emission control measures	Less than Significant

TABLE 2-1

SUBSEQUENT EIR: SUMMARY OF IMPACTS AND MITIGATION MEASURES (CONTINUED)

Impact	Proposed Project Level of Significance Prior to Mitigation	Mitigation Measure	Proposed Project Level of Significance After Mitigation
IMPACT 4.2-2: Operational air pollutant emissions under Existing Plus Project conditions	Less than Significant	None required	Less than Significant
IMPACT 4.2-3: Operational air pollutant emissions under 2020 Plus Project conditions	Less than Significant	None required	Less than Significant
IMPACT 4.2-4: CO concentration at intersections	Less than Significant	None required	Less than Significant
IMPACT 4.2-5: Consistency with Air Quality Attainment Plans	Less than Significant	None required	Less than Significant
IMPACT 5.2-7: Construction-related air pollutant emissions under cumulative conditions	Significant	None identified	Significant and unavoidable
IMPACT 5.2-8: Operational air pollutant emissions under cumulative conditions	Less than Significant	None required	Less than Significant
Noise			
IMPACT 4.3-1: Construction equipment would generate short-term noise level increases at noise-sensitive locations	Potentially Significant	Mitigation Measure 4.3-1: Develop and implement a Construction Noise Abatement Program	Less than Significant

TABLE 2-1

SUBSEQUENT EIR: SUMMARY OF IMPACTS AND MITIGATION MEASURES (CONTINUED)

Impact	Proposed Project Level of Significance Prior to Mitigation	Mitigation Measure	Proposed Project Level of Significance After Mitigation
IMPACT 4.3-2: Transportation noise sources in excess of an L_{dn} of 60 dBA under Existing Plus Project conditions	Less than Significant	None required	Less than Significant
IMPACT 4.3-3: Transportation noise sources in excess of an L_{dn} of 60 dBA under 2020 Plus Project conditions	Less than Significant	None required	Less than Significant
IMPACT 5.2-9: Construction noise cumulative impacts	Potentially Significant	Mitigation Measure 4.3-1: Develop and implement a Construction Noise Abatement Program	Less than Significant
IMPACT 5.2-10: Operational noise cumulative impacts	Less than Significant	None required	Less than Significant
Biological Resources			
IMPACT 4.4-1: Potential loss of foraging habitat for Swainson's hawk and other legally protected raptors (Intersections 69 and 165; Fiddyment Road from Pleasant Grove Boulevard to Baseline Road)	Potentially Significant	Mitigation Measure 4.4-1: Consult With CDFG and implement appropriate mitigation compensation measures for loss of potential foraging habitat	Less than Significant

TABLE 2-1

SUBSEQUENT EIR: SUMMARY OF IMPACTS AND MITIGATION MEASURES (CONTINUED)

Impact	Proposed Project Level of Significance Prior to Mitigation	Mitigation Measure	Proposed Project Level of Significance After Mitigation
IMPACT 4.4-2: Potential disturbance of burrowing owl (Intersections 69 and 165; Fiddyment Road from Pleasant Grove Boulevard to Baseline Road)	Potentially Significant	Mitigation Measure 4.4-2: Conduct preconstruction burrowing owl surveys and implement measures specified by CDFG, where appropriate	Less than Significant
IMPACT 4.4-3: Potential disturbance or loss of habitat for vernal pool crustaceans (Intersections 69 and 165; Fiddyment Road from Pleasant Grove Boulevard to Baseline Road)	Potentially Significant	Mitigation Measure 4.4-3: Avoid disturbance of potential habitat for vernal pool crustaceans or implement Mitigation Measures in consultation with USFWS	Less than Significant
IMPACT 4.4-4: Potential disturbance or loss of habitat for western spadefoot toad (Intersections 69 and 165; Fiddyment Road from Pleasant Grove Boulevard to Baseline Road)	Potentially Significant	Mitigation Measure 4.4-4: Avoid disturbance of potential breeding habitat for western spadefoot or implement Mitigation Measures in consultation with CDFG	Less than Significant
IMPACT 4.4-5: Potential disturbance of nesting raptors (Intersections 15 and 105)	Potentially Significant	Mitigation Measure 4.4-5: Construct outside of nesting season or conduct preconstruction raptor nesting surveys	Less than Significant

TABLE 2-1

SUBSEQUENT EIR: SUMMARY OF IMPACTS AND MITIGATION MEASURES (CONTINUED)

Impact	Proposed Project Level of Significance Prior to Mitigation	Mitigation Measure	Proposed Project Level of Significance After Mitigation
IMPACT 4.4-6: Loss of seasonal wetlands and/or creek channels (Intersections 69, 105, 165, and 178; Fiddyment Road from Pleasant Grove Blvd to Baseline Road)	Potentially Significant	Mitigation Measure 4.4-6: Comply with agency permitting requirements and provide for no net loss of wetlands	Less than Significant
IMPACT 4.4-7: Potential impacts to Sandford's arrowhead and rose mallow (Intersections 105, 69, 165; Fiddyment Road from Pleasant Grove Boulevard to Baseline Road)	Potentially Significant	Mitigation Measure 4.4-7: Conduct preconstruction rare plant surveys; if required, develop and implement a mitigation plan approved by the CDFG and/or USFWS	Less than Significant
IMPACT 4.4-8: Impacts to protected trees (Intersections 15 and 105)	Less than Significant	None Required	Less than Significant
IMPACT 5.2-11: Cumulative impacts to biological resources	Significant	Mitigation Measures 4.4-1 through 4.4-7	Significant and unavoidable

TABLE 2-1

SUBSEQUENT EIR: SUMMARY OF IMPACTS AND MITIGATION MEASURES (CONTINUED)

Impact	Proposed Project Level of Significance Prior to Mitigation	Mitigation Measure	Proposed Project Level of Significance After Mitigation
Cultural Resources			
IMPACT 4.5-1: Damage to Previously Unrecorded, Potentially Important Cultural Resources	Potentially Significant	Mitigation Measure 4.5-1: Conduct archaeological pedestrian survey of intersections that have not been subject to previous archaeological survey (Intersections 15, 19, 91, 105, 178, and 179) when final design has been developed	Less than Significant
IMPACT 4.5-2: Damage to Previously Unidentified, Potentially Important and/or Unique Archaeological Resources Inadvertently Exposed During Construction	Potentially Significant	Mitigation Measure 4.5-2: Comply with the recommendations of a qualified professional archaeologist if cultural resources are inadvertently exposed during construction	Less than Significant
IMPACT 5.2-12: Cumulative impacts to cultural resources	Potentially Significant	Mitigation Measures 4.5-1 and 4.5-2	Less than Significant

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
2000 EIR	Air Quality	Mitigation Measure 4.2-1	To reduce particulate emissions during earthwork construction, enclose, cover, or water all exposed soils to keep moist at all times to prevent dust.
2000 EIR	Biological Resources	Mitigation Measure 4.4-1	The City shall be required to obtain a Section 404 permit from the U.S. Army Corps of Engineers (Corps) prior to construction activity on any site involving waters of the U.S. A 1601 Streambed Alteration Agreement will be required, in addition, for work involving Pleasant Grove Creek and other intermittent drainages. It is anticipated that compliance with the requirements of these three agencies would minimize the adverse impacts due to loss of wetland habitats. Compliance with the Corps and U.S. Fish and Wildlife Service (USFWS) requirements for "no net loss" of wetlands would ensure that the impact would be reduced to a less-than-significant level. Certified mitigation banks are recognized by the federal government as acceptable mitigation tools. Under CEQA, compliance with the Corps and USFWS requirements is recognized as adequate mitigation to offset the loss of wetland areas. Therefore, after mitigation the impact is considered less than significant. The project site shall be permitted under Clean Water Act Section 404 permit process prior to development. Mitigation would consist of acquiring credits from a wetlands mitigation bank approved by the Corps and the USFWS or other mitigation deemed appropriate to ensure no net loss for the purposes of mitigating impacts on wetlands. The credits shall be in direct proportion to wetlands losses on the property, as determined by a wetland or habitat delineation.

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
			In the event this mitigation is implemented, the City would incur no further obligation for surveys, monitoring, salvage notification, or seedbank salvage, as required by the operation of the approved mitigation bank.
2000 EIR	Biological Resources	Mitigation Measure 4.4-2	To ensure that legally protected birds-of-prey are not taken during project construction, to the extent possible, tree removals shall occur during the period when raptors are not nesting (August through February). If removal of trees during the nesting season is unavoidable, preconstruction raptor nest surveys shall be conducted to determine whether or not legally protected raptor nests are present in trees designated for removal. In the event that nests are present, appropriate protocols shall be developed in consultation with California Department of Fish and Game (CDFG) and followed during the removal or relocation of those nests. Implementation of these measures would reduce impacts on the nesting raptor habitat to a less-than-significant level.
2000 EIR	Biological Resources	Mitigation Measure 4.4-3	A biological monitor shall accompany tree-clearing crews assigned to clear brush and trees along the designated area of road construction. The monitor shall flag all elderberry shrubs in the tree-clearing zone and be present during tree-clearing operations in the vicinity of flagged shrubs to ensure that elderberry shrubs are not cut. If avoidance is not feasible, habitat impacts shall be mitigated in accordance with the Programmatic Biological Opinion for valley elderberry longhorn beetle (VELB), issued by the USFWS Sacramento Field Office in 1996. Implementation of these reasonable and prudent measures would reduce or eliminate potential loss of individuals of VELB.

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
2000 EIR	Cultural Resources	Mitigation Measure 4.5-1(a)	It is recommended that prior to construction activities the City, hire a qualified archaeologist to complete a site-specific archaeological survey along those roadway segments identified under Impact 4.5-1 [damage or destruction of unidentified cultural resources] to determine if there is a likelihood unidentified resources could exist. If there is a likelihood resources could exist, the City shall either follow the recommendations set forth by the archeologist, avoid the resource, or excavate the resource.
2000 EIR	Cultural Resources	Mitigation Measure 4.5-1(b)	In the event of the discovery of buried archaeological deposits, it is recommended that project activities in the vicinity of the find should be temporarily halted and a qualified archaeologist consulted to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data recovery excavations.
2002 Initial Study/Supplemental EIR	Air Quality	Mitigation Measure 1	To reduce particulate emissions during earthwork construction, enclose, cover, or water all exposed soils to keep moist at all times to prevent dust.
2002 Initial Study/Supplemental EIR	Cultural Resources	Mitigation Measure 2	It is required that prior to construction activities, the City hire a qualified archaeologist to complete a site-specific archaeological survey along those intersections slated for widening or improvement identified in the project description to determine if there is a likelihood unidentified resources could exist. If there is a likelihood resources could exist, the City shall either follow the recommendations set forth by the archaeologist, avoid the resource, or excavate the resource.

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
2002 Initial Study/ Supplemental EIR	Cultural Resources	Mitigation Measure 3	In the event of the discovery of buried archaeological deposits, project activities in the vicinity of the find should be temporarily halted and a qualified archaeologist consulted to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data recovery excavations. In addition, Mitigation Measure 3 requires the following: If during project construction, any unique archeological or historical resources are accidentally discovered, the project applicant shall contact a qualified archaeologist to determine the significance of the find. If the find is determined to be significant, appropriate mitigation shall be developed. Work shall continue on the remainder of the site. If, during project construction the project developer discovers any human remains, the following steps should be taken: (1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until: (A) The project developer contacts the City or Roseville and the Placer County Coroner so that Coroner can determine whether any investigation of the cause of death is required, and (B) If the Coroner determines the remains to be Native American: 1. The Coroner shall contact the Native American Heritage Commission within 24 hours

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
			(excluding weekends and state and federal holidays). 2. After hearing from the Coroner, the project developer shall provide the Indian Community the opportunity, within 72 hours (excluding weekends and state and federal holidays) thereafter, to identify the most likely descendant. 3. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American. 4. The most likely descendant, as identified by either the Native American Heritage Commission or the Indian Community, may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or (2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
2006 Initial Study/Subsequent EIR	Hazardous Materials	Mitigation Measure 1	Prior to initiating ground-disturbing activities, the City shall evaluate areas where widening will occur for the potential for historical or existing hazardous materials. This evaluation shall include visual inspections of the site for evidence of hazardous materials releases (i.e., dumping) or evidence of nearby land uses that could indicate the use of hazardous materials or hazardous waste generation (i.e., aboveground storage tanks, placarding). If such evidence is observed, the City shall retain a qualified consultant to evaluate the potential for hazardous materials releases at the site prior to initiating construction to determine whether these releases may constitute a potential recognized environmental condition. If such a condition is determined to exist, the City shall prepare and implement a remediation plan prepared in accordance with the applicable regulatory agency (i.e., Department of Toxic Substances Control or Regional Water Quality Control Board) prior to proceeding with construction.
2006 Initial Study/ Subsequent EIR	Hydrology and Water Quality	Mitigation Measure 2	The project shall comply with the U.S. Army Corps of Engineers "no net loss" policy and the conditions of a Nationwide or Individual Permit authorization by the Corps. As part of these permit requirements, vegetation disturbed during construction shall be replanted and the topography of the sites shall be restored after construction activities have been completed. Where working areas encroach on live or dry streams, lakes, or wetlands, Regional Water Quality Control Board (RWQCB)-approved physical barriers adequate to prevent the flow or discharge of sediment into these systems shall be constructed and maintained between working areas and streams, lakes, and wetlands. Erosion control and sediment detention devices (e.g.,

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
			well-anchored sandbag cofferdams, straw bales, or silt fences) shall be incorporated into the project design, included in the Stormwater Pollution Prevention Plan, and implemented at the time of construction. These devices shall be in place during construction activities, and after if necessary, for the purposes of minimizing sediment impact to the wetlands and input to waters of the United States. These devices shall be placed at all locations where the likelihood of sediment input exists. A supply of erosion control materials shall be kept on hand to cover small sites that may become bare and to respond to sediment emergencies.
2006 Initial Study/ Subsequent EIR	Utilities and Service Systems	Mitigation Measure 3	If the results of the drainage report conclude that modifications are required to existing drainage facilities located downstream of specific intersection improvements, the City shall conduct an environmental evaluation to determine potential impacts from these offsite improvements. The design and construction of modifications to existing drainage facilities shall occur in accordance with the City's Noise Ordinance, Flood Damage Prevention Ordinance, Construction Standards, Improvement Standards, and Tree Ordinance, all of which include standards and policies that are uniformly applied to development projects throughout the City. Construction shall be in compliance with the City's National Pollutant Discharge and Elimination System (NPDES) permit, the City's Urban Stormwater Quality Management and Discharge Control Ordinance and implementation of Best Management Practices. The City shall obtain and comply with permit requirements of the Corps and CDFG, as applicable, for impacts to wetlands, waters of the United States, riparian habitat and threatened and endangered species.

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
2006 Subsequent EIR	Transportation and Circulation	Mitigation Measure 4.1-1	The City shall participate in any regionally adopted fee program providing for improvements to federal and state facilities
2006 Subsequent EIR	Transportation and Circulation	Mitigation Measure 4.1-2	The Placer County CIP includes additional travel lanes for all three of these roadway segments. The additional lanes specified in the County's CIP are as follows: ▪ Baseline Road west of Roseville city limit: widen from 2 lanes to 6 lanes ▪ Walerga Road south of Baseline Road: widen from 2 lanes to 4 lanes ▪ Eureka Road east of Roseville city limit: widen from 2 to 4 lanes One of these improvements is incorporated into the proposed project since the intersection falls within the City (Intersection 105 widening at Eureka Road and Sierra College Boulevard). However, since the two additional roadways are not within the City of Roseville, the City has no authority to implement or guarantee the implementation timing of these improvements.
2006 Subsequent EIR	Transportation and Circulation	Mitigation Measure 4.1-3	The City shall design intersection and roadway improvements to minimize disruption to existing and planned bicycle facilities. At the time roadways improvements are proposed, the City may secure adequate right-of-way to maintain the bicycle lanes. If, however, existing constraints or unusual circumstances dictate removal of bike lanes, the City will, to the extent practicable, provide signage, alternative routes, or a combination of such measures to ensure that bicycle access is accommodated to the extent possible.

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
2006 Subsequent EIR	Transportation and Circulation	Mitigation Measure 5.2-1	Modify intersection geometries at the following 11 specified intersection to address effects from growth outside of Roseville. a) Yosemite/Atlantic b) Woodcreek Oaks/Blue Oaks c) Oak Ridge/Cirby d) Foothills/McAnally e) SR 65 NB Off/Pleasant Grove f) Washington/Roseville Pkwy g) Sierra College/Secret Ravine h) South Cirby/Old Auburn i) Sunrise/Lead Hill j) Washington/Junction k) Crocker Ranch/Blue Oaks These improvements are further detailed in **Table 5.2-2.**
2006 Subsequent EIR	Transportation and Circulation	Mitigation Measure 5.2-2	Modify intersection geometries at Intersection 116 (Sunrise Ave/Automall Drive) and Intersection 176 (Gibson Drive West/Roseville Pkwy) to address effects from the proposed project. These improvements are further detailed in **Table 5.2-7.**

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
2006 Subsequent EIR	Air Quality	Mitigation Measure 4.2-1	Construction emissions associated with the proposed project would not exceed the PCAPCD's significance thresholds and Mitigation Measures are not required. However, the implementation of feasible and applicable control measures listed below would further reduce construction emissions: ▪ Minimize idling time to 10 minutes for all diesel-powered equipment ▪ Apply water to control dust as needed to prevent dust impacts offsite. Operational water truck(s) shall be onsite, as required, to control fugitive dust. Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt from being released or tracked offsite. ▪ Spread soil binders on unpaved roads and employee/ equipment parking areas and wet broom or wash streets if silt is carried over to adjacent public thoroughfares. ▪ Install wheel washers or wash all trucks and equipment leaving the site. ▪ Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service.

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
2006 Subsequent EIR	Noise	Mitigation Measure 4.3-1	Prior to construction plan approval, develop and implement a Construction Noise Abatement Program. The plan shall require that: ▪ All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers; ▪ Stockpiling and/or vehicle staging areas shall be identified on the improvement plans and shall be located as far as is practical from existing occupied dwellings. Specific noise control measures shall be identified that would reduce hourly noise level to 70 dBA or lower where feasible as determined by the Public Works Director during hours or use for schools and churches, and at hospitals. The following potential sensitive receptors are located within 500 feet of the proposed improvements: • One school at Intersection 178 (Washington Blvd/All American) • Two schools at Intersection 179 (Cottonwood Drive/ Cirby Way) • One hospital facility (under construction) with surgical procedures that are potentially noise sensitive at Intersection 19 (Eureka Road/Douglas Blvd). Specific noise control measures shall be identified that would reduce the hourly average noise level to 70 dBA, L_{eq} or lower at other noise-sensitive receptors where feasible. The construction contractor shall consider implementation of the following measures in the construction noise control plan:

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
			1) Select equipment capable of performing the necessary tasks with the lowest noise-emission level and the lowest possible height for the acoustic center of noise emissions. 2) Noise barriers may be required to block the line of sight from noise sources to noise-sensitive receivers of concern or to further reduce noise levels beyond that provided by line-of-sight breaks afforded by topographical features. The noise barriers could be constructed using either plywood sheets or other solid material that provide sufficient mass per unit surface area (perhaps approaching 4 pounds per square foot) and have minimal openings between the top of barrier and ground surface (perhaps as little as 1 percent). Noise barriers of a given height are generally most effective when placed as close to either the source or receiver as possible, and perhaps at two such separate locations. The least desirable location is generally at a middle distance between sources and receptors. The plan should identify the proper height, location, and effectiveness of a noise barrier in terms of the expected hourly average noise level due to construction activity at noise-sensitive receivers of concern with the objective of reducing contributions from construction activity to an hourly average of 70 dBA or less. 3) Disseminate essential information to residences and implement a complaint/response tracking system. The construction contractor shall notify residents within 500 feet of the construction areas of the construction schedule in writing before construction begins. The construction contractor will

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
			designate a noise disturbance coordinator who will be responsible for responding to complaints regarding construction noise. The coordinator will determine the cause of the complaint and will ensure reasonable measures are implemented to correct the problem when feasible. A contact telephone number for the noise disturbance coordinator will be conspicuously posted on construction site fences and will be included in the written notification of the construction schedule sent to nearby residents.
2006 Subsequent EIR	Biological Resources	Mitigation Measure 4.4-1	Prior to project initiation, the CDFG shall be contacted to determine if mitigation for the loss of annual grassland and potential foraging habitat for Swainson's hawk will be required. Implementation of any measures required by CDFG to compensate for the loss of potential foraging habitat will reduce the impact to a less-than-significant level.
2006 Subsequent EIR	Biological Resources	Mitigation Measure 4.4-2	To ensure that direct disturbance of burrowing owls in annual grassland of the study area is avoided, a preconstruction survey will be conducted to determine presence/absence of the species. The survey will be conducted by a qualified biologist within 30 days of proposed ground-disturbing activities. Results of the survey will be submitted to the County and the CDFG. If burrowing owls are found onsite or evidence of their occurrence is observed during the survey, the CDFG will be immediately contacted to determine appropriate avoidance and mitigation measures. Implementation of preconstruction survey and measures specified by CDFG, as necessary, will reduce the impact to a less-than-significant level.

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
2006 Subsequent EIR	Biological Resources	Mitigation Measure 4.4-3	To avoid potential take of federally listed species, including vernal pool tadpole shrimp and vernal pool fairy shrimp, disturbance of the seasonal wetland and swale within the study area will be avoided to the extent feasible. Impacts to federally listed species or their habitats would likely require a permit from the USFWS. In the event that potential habitat within the study area cannot be avoided, the USFWS will be contacted to determine survey responsibilities (to determine presence/absence of a species) and pertinent permitting and mitigation requirements, as necessary. Implementation of measures the 404 permit, secured prior to construction, would mitigate the loss of potential habitat for vernal pool crustaceans and will reduce the impact to a less-than-significant level.
2006 Subsequent EIR	Biological Resources	Mitigation Measure 4.4-4	To avoid potential loss of breeding habitat for western spadefoot, disturbance of the seasonal wetland and swale within the study area will be avoided to the extent feasible. CDFG will be contacted prior to project implementation to determine appropriate survey measures (to determine species presence/absence) and/or mitigation requirements for loss of habitat for western spadefoot. Implementation of measures in consultation with CDFG for mitigating the loss of potential habitat will reduce the impact to a less-than-significant level.
2006 Subsequent EIR	Biological Resources	Mitigation Measure 4.4-5	To avoid disturbance of raptor breeding and nesting activity, including nesting of sensitive raptors, project activities will be avoided during the typical raptor breeding season of March through August, to the extent feasible. If construction must take place during the typical nesting season, preconstruction surveys

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
			will be conducted by a qualified biologist no more than 30 days prior to initiation of proposed development activities. Surveys will be conducted to determine if active nesting is occurring on or directly adjacent to the study area. Survey results will then be submitted to the CDFG. If active nests are found on or immediately adjacent to the site, consultation will be initiated with CDFG to determine appropriate avoidance measures. If no nesting is found to occur, necessary tree removal and other project activities could then proceed. Implementation of preconstruction raptor surveys and appropriate avoidance measures will reduce impacts to a less-than-significant level.
2006 Subsequent EIR	Biological Resources	Mitigation Measure 4.4-6	The City shall comply with all applicable Corps, USFWS, CDFG, and RWQCB permitting and mitigation requirements for intersection widening and construction. The City shall meet the agencies' no net loss of wetlands policy through one of the following measures: ▪ Avoid impacts through project design. ▪ Compensate for impacts by acquiring (through fee title or credits in an approved mitigation bank) replacement habitat. When site-specific designs are available for the roadway and intersection improvements, project-level analysis would require a wetland delineation submitted to the Corps for verification. The City would be required to obtain a Clean Water Act Section 404 Permit from the Corps prior to any construction activity. A wetland delineation report, *Wetland Delineation for Baseline 430* (ECORP 2003), has already been prepared and verified for an area encompassing the widening of Fiddyment Road from Pleasant Grove Boulevard to Baseline Road and the Intersection 165

4.5 Cultural Resources

4.5 Cultural Resources

4.5.1 INTRODUCTION

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. This evaluation of potential impacts to cultural resources focuses on improvements categorized as "widening" projects because these would require an increase in the area of disturbance from that identified (and previously evaluated) in the current 2020 CIP.

The proposed 2020 CIP Update (proposed project) has identified 10 intersections and 3 roadway segments throughout Roseville and a small area of Placer County where improvements would occur that require widening beyond the right-of-way area identified in the current 2020 CIP. These areas of proposed widening are identified on **Tables 3-4 and 3-5** and shown on **Figure 3-3** in Chapter 3, Project Description. New lanes could be up to 14 feet wide, with construction disturbance up to 17 feet from the existing roadway. For intersection widenings, the new lanes would typically affect a distance less than 600 feet in length from the existing intersection.

Impacts to cultural resources are evaluated on a programmatic level in this Draft EIR. It is anticipated that subsequent environmental review may be required when site-specific plans are prepared and more specific roadway alignments and areas of disturbance are identified.

4.5.2 ENVIRONMENTAL SETTING

4.5.2.1 Archaeological Setting

The Roseville vicinity lies directly adjacent to one of the most intensively studied areas in California—the Sacramento/San Joaquin River Delta and adjoining sections of the Sacramento and San Joaquin Valleys. Beginning in the last decade of the nineteenth century, avocational archaeologists recovered thousands of artifacts from numerous sites in the Delta vicinity. A general synthesis of these early works is found in Schenk and Dawson (1929).

The next series of excavations in the general region were conducted by student crews from Sacramento Junior College (SJC). Beginning in 1931, various sites adjacent to the Cosumnes River and Deer Creek confluence were excavated. Joined a few years later by crews from the University of California (UC), the SJC archaeologists continued their excavations within the Delta region. These efforts culminated in the milestone works of Lillard and Purves (1936) and Lillard, Heizer, and Fenenga (1939), both of which identified a sequence of cultural change within the Delta and adjacent vicinities.

The cultural sequence identified by Lillard and his colleagues (1936; 1939) contained three cultural periods (Early, Intermediate/Transitional, Late). These periods were identified based on changes observed within the mortuary patterns and grave furniture recovered from their sample of sites. Lillard, Heizer, and Fenenga (1939) believed that the sequence represented a single cultural progression, the Early Period evolving into the Transitional Period, the Transitional Period evolving into the Late Period.

As more archaeological work was conducted within central California during the 1940s and 1950s, the cultural sequence developed by Lillard and his colleagues (1936; 1939) was refined and expanded to accommodate the additional data. After many debates and numerous revisions, the cultural

sequence for the central California region, first defined by Lillard and his colleagues (1936; 1939), currently stands as follows:

Windmiller Pattern (ca. 3000 B.C. - 500 B.C.)

The artifact assemblage characteristic of this cultural manifestation includes a variety of flaked stone, ground stone, baked clay, and shell items reflecting exploitation of diverse subsistence resources and acquisition of materials from distant geographic areas through trade. The burial pattern of Windmiller cemeteries and grave plots is unique in that virtually all of the interments are ventrally extended, with the head oriented to the west. The primary exception to this burial pattern is that aged females were buried in a flexed position. Social stratification can be inferred from the burial practices of Windmiller peoples. Males appear to generally have higher status than females, as evidenced in their deeper and artifactually richer graves. Social status may have been at least partially inherited, for some female, child, and infant burials contained elaborate grave furniture, while others lacked such wealth (Moratto, 1984:201-207).

Berkeley Pattern (ca. 500 B.C. - A.D. 500)

The Berkeley Pattern represents a gradual shift in adaptation and material culture that appears to have originated within the San Francisco Bay region. The subsistence practices of Berkeley peoples differs from that of the Windmiller peoples in that the use of acorns for food seems to have increased dramatically. The reliance on acorns is evidenced in the increase in mortars and pestles recovered from Berkeley Pattern sites. Other differences in material culture include the occurrence of an extensive bone tool kit, unique knapping techniques, and certain types of shell beads and pendants within Berkeley Pattern sites. Burial practices of Berkeley peoples also differed from those of Windmiller Pattern sites. No longer were corpses placed into graves extended towards the west. Instead, Berkeley Pattern burials are flexed with variable orientation (Moratto, 1984:207-211).

Augustine Pattern (ca. A.D. 500 - A.D. 1880)

The Augustine Pattern reflects local innovation in technology, as well as the incorporation of new developments with traits of the Berkeley Pattern. The artifact assemblages of Augustine Pattern sites indicate an increased reliance on hunting, gathering, and fishing. Acorns appear to have become particularly important. Many burials were flexed; however, cremation became the mortuary practice for high-status burials. Extensive trade networks developed to accommodate the resource and social needs of the burgeoning populations (Moratto, 1984:211-214).

4.5.2.2 Ethnographic Setting

The Roseville vicinity is within the ethnographic territory of the Nisenan, one of three Maiduan speaking tribelets inhabiting the north-eastern half of the Sacramento Valley and the adjoining western slopes of the Sierra Nevada. Also known as the Southern Maidu, the Nisenan inhabited the named villages of *Pichiku* and *Bamuma* near present day Roseville and Lincoln, respectively (Wilson and Towne, 1978: Figure 1).

The Nisenan were the southernmost of three groups (Konkow, Nisenan, and Maidu) who spoke a Maiduan language. Maiduan is one of California's four Penutian languages, the others being Wintuan, Utian, and Yokutsan.

The Nisenan specifically inhabited the area within the American, Bear, Yuba, and lower Feather River watersheds. The region is bordered by the Sierra Nevada crest on the east and the Sacramento

River on the west. The northern boundary is ill-defined due to linguistic and cultural similarities between the Nisenan and their northern neighbors, the Konkow. The southern boundary is also vaguely defined, being situated somewhere between the American and Cosumnes Rivers (Kroeber, 1925; Levy, 1978; Riddell, 1978; Wilson and Towne, 1978).

As stated above, the Nisenan inhabited a village near Roseville (*Pichiku*) and another near Lincoln (*Bamuma*). It is unknown whether these were permanent settlements, although they are both referred to as being a "major village" (Wilson and Towne, 1978: Figure 1). Nisenan villages varied considerably in size, with a large village containing from 40 to 50 houses and more than 500 people. A typical settlement within the lowland areas of the Nisenan territory would be situated upon natural rises along the major rivers and streams (Kroeber, 1925:395; Powers, 1877:316; Wilson and Towne, 1978:388). In addition to the above-mentioned houses, structures occurring within major villages would include brush shelters, sweat house(s), acorn granaries, and a dance house (Kroeber, 1925:407-409; Wilson and Towne, 1978: 388-389).

The principal subsistence activities of the Nisenan were hunting, fishing, and the gathering of wild plants. Subsistence practices relied upon a large variety of food sources, rather than being dependent on a limited number of staples (Kroeber, 1925: 409-411; Wilson and Towne, 1978: 389-390).

The Nisenan were organized similarly to many California Indians in that a certain territory was identified as belonging to a group and that group recognized themselves as a unit (i.e., tribelet). Several affiliated villages may have occurred within the tribelet territory (Kroeber, 1925: 396-398; Wilson and Towne, 1978: 393).

Warfare, though rare, did occur. Fighting could take place between Nisenan tribelets as well as with non-Nisenan peoples. Generally, conflict occurred following trespass or similar territorial violations. An example of intertribelet conflict involved Nisenan from the Roseville area in the 1820s. Evidently, men from the Auburn/Nevada City area were killed in the Roseville vicinity. The hatred and distrust between these peoples lasted for several years (Wilson and Towne, 1978: 388 citing Payen 1961: 23; Wilson 1957-1963).

The Nisenan were affected little by the Spanish and Mexican incursions into California's interior (Wilson and Towne, 1978: 396). They were, however, greatly affected by the above-mentioned epidemic, which ravaged parts of California during the 1830s. Believed to have been brought by fur trappers, this pestilence often killed the population of entire villages. It is estimated that 75 percent of the population died as a result of the epidemic, with many of the survivors retreating to mountain locations (Cook, 1955).

The Nisenan who survived the epidemic were among the most highly affected California groups by the Gold Rush of 1849. It was within Nisenan territory that John Marshall discovered gold at Coloma in 1848. Soon afterwards, hoards of fortune seekers descended on Nisenan and adjoining territories. Within a short time, the lands of the Nisenan were overrun and the wholesale killing of Nisenan by whites began (Chartkoff and Chartkoff, 1984: 279-282; Powers, 1877: 317; Wilson and Towne, 1978: 396).

4.5.2.3 Historic Setting

A review of historic and historical materials revealed that the Roseville area witnessed a great amount of Euro-American use in the early nineteenth century. Although it was not until after the discovery of

gold at Sutter's Mill in 1848 that Euro-American people began entering the region en masse, the general area was visited by non-native peoples prior to that year. Gabriel Moraga, under the flag of Spain, led an expedition from Mission San Jose up to the Cosumnes and Feather Rivers in 1808. In 1813, Jose Arguello reached the Cosumnes River, where he battled a band of hostile Miwok. Narciso Duran and Luis Arguello left San Francisco in 1817 and passed through the region on their expedition (Beck and Haase, 1974; McGowan, 1961). Following the Spanish, this region of California was visited by American trappers looking for new areas to exploit.

Captain John Sutter was granted his roughly 1,000 square mile "New Helvetia" ranch near present-day Sacramento in 1839. It was from Sutter's Mill, near present-day Coloma, that John Marshall discovered gold in 1848. Soon afterwards, the famous gold rush began and the region became quickly populated with prospectors, entrepreneurs, and others seeking easy fortunes (Bean, 1977; Lavender, 1972; McGowan, 1961).

It was not until after these fortune seekers realized that riches were not so easy to come by that the Roseville vicinity became populated by non-native peoples. Many of the prospectors had been farmers prior to their exodus and many returned to agriculture as a means to survive. It was as an agricultural community (primarily the cultivation of fruit trees) that Roseville initially developed. Nearly all fruit production during this period in Placer County was of deciduous fruits such as oranges, apples, peaches and pears. Citrus fruits were not planted extensively until the 1880s. The original orchards were small and usually limited to the grower's personal use.

Railroad development became the next catalyst for growth in the Roseville area. The first railroad through southwestern Placer County was the California Central, started by Marysville businessman Charles Lincoln Wilson in 1857 (whom the community of Lincoln is named after). The goal of the proposed railway was to connect Marysville with Sacramento. Grading for the tracks was completed by 1860, by the autumn of 1861 the tracks were in present-day Roseville, and by the end of the year had reached Lincoln. Unfortunately for the residents of Marysville, the original plan was never realized. Besides dwindling funds, the Central California began having to compete with the Central Pacific Railroad when it reached the Roseville area from Sacramento in January of 1864 (Davis, 1964).

In August 1864, O.D. Lombard drew up the plans for a town centered around the junction of the Central Pacific and California Central Railroads. The site was simply known as the "Junction," and was not referred to as Roseville until the presidential election of 1864. The new community witnessed slow but steady growth through the 1860s. By the close of the decade, the California Central was part of the Central Pacific, which in turn merged with the Southern Pacific Railroad (Davis, 1964).

As noted above, during the early period in Placer County, most horticulturalists raised fruit only as an avocation, earning their living by focusing on more profitable products. However, the transcontinental railroad through Placer County provided a major stimulus for fruit growing. By the 1880s, refrigerated cars, better and faster schedules, and reduced freight rates stimulated the expansion of commercial fruit development in the County, thus allowing for shipments to eastern markets. Successful irrigation programs in Placer County provided adequate amounts of water for fruit-growing production, and Placer County promoted its products through fairs and various other advertising campaigns.

The Pacific Fruit Express Company, a cold storage plant and ice manufacturer founded in 1909, resulted from a successful partnership venture between the Southern and the Union Pacific Railroads. Headquartered in San Francisco, Pacific Fruit Express (PFE) made possible the mass shipment of

8.0 List of Preparers

8.0 List of Preparers

8.1 LEAD AGENCY

City of Roseville
Public Works Department
311 Vernon Street
Roseville, California 95678

Public Works Director	Rob Jensen
Public Works Engineer	Scott Gandler
Public Works Engineer	Bill Moore
Environmental Coordinator	Mark Morse
Senior Planner	Kathy Pease

8.2 URS CORPORATION

URS Corporation
221 Main Street, Suite 600
San Francisco, California 94105

Principal-In-Charge	Denise Heick
Project Manager	Kathy Rushmore
Air Quality	Paul Nguyen
Noise	Todd Busch
Cultural Resources	Mark Hale

8.3 SUBCONSULTANTS

DKS Associates
8950 Cal Center Drive, Suite 340
Sacramento, California 95826

Transportation and Circulation	David Tokarski John Long

North Fork Associates
110 Maple Street, Suite 100
Auburn, California 95603

Biological Resources	Erin Gottschalk Barry Anderson

7.0 References

7.0 References

7.1 EXECUTIVE SUMMARY

EIP Associates. 2000. City of Roseville Capital Improvement Program Draft Environmental Impact Report. State Clearinghouse No. 1999122061. Prepared for the City of Roseville. April.

EIP Associates. 2002. Supplement to the City of Roseville Capital Improvement Program EIR. Prepared for the City of Roseville. June.

EIP Associates. 2002. Final Supplement to the City of Roseville Capital Improvement Program. Findings of Fact and Statement of Overriding Considerations. Prepared for the City of Roseville. August.

7.2 AIR QUALITY

California Air Resources Board (CARB). 2006a. http://www.arb.ca.gov/knowzone/basin/basin.swf, accessed on October 15, 2006.

California Air Resources Board (CARB). 2006b. State Ambient Air Quality Standards, http://www.arb.ca.gov/aqs/aaqs2.pdf, accessed on November 10, 2006. National Ambient Air Quality Standards, http://epa.gov/air/criteria.html, accessed on November 10, 2006.

California Air Resources Board (CARB). 2006c. California Air Quality Data, last updated on August 31, 2006. http://www.arb.ca.gov/aqd/aqdpage.htm, accessed October 15, 2006.

California Air Resources Board (CARB). 2006d. Area Designations Map/State and National, last updated on September 29, 2006. http://www.arb.ca.gov/desig/adm/adm.htm, accessed October 15, 2006.

California Air Resources Board (CARB). 2006e. Almanac Emissions Projection Data. http://www.arb.ca.gov/app/emsinv/emssumcat_query.php?F_DIV=-4&F_DD=Y&F_YR=2005&F_SEASON=A&SP=2006&F_AREA=CO&F_CO=31, accessed October 15, 2006.

California Department of Transportation. 1997. Transportation Project-Level Carbon Monoxide Protocol, Institute of Transportation Studies UCD, Revised 1997.

City of Roseville. 2002. City of Roseville Capital Improvement Program Draft Environmental Impact Report. April.

City of Roseville, California. Planning and Redevelopment webpage. General Plan 2020. http://www.roseville.ca.us/planning/development_guidelines.asp, accessed on October 3, 2006.

City of Roseville. 2002. Supplement to the City of Roseville Capital Improvement Program Environmental Impact Report. June.

DKS Associates. 2006. Summary of Intersection Levels of Service, Vehicle volumes and Roadway configurations.

Gandler, Scott. 2006. City of Roseville Public Works Department. Personal communication with Kathy Rushmore (URS Corporation). October 3.

Sacramento Metropolitan Air Quality Management District's (SMAQMD). 2006. Road Construction Emission Model. http://www.airquality.org/ceqa/index.shtml#PageTop, accessed on October 15, 2006.

Sacramento Metropolitan Air Quality Management District's (SMAQMD). 2006. Sacramento Regional Clean Air Plan Update. http://www.airquality.org/cleanairplan/index.shtml, accessed on November 10, 2006.

U.S. Environmental Protection Agency. 2006. National Ambient Air Quality Standards, http://epa.gov/air/criteria.html, accessed on October 15, 2006.

Western Regional Climatic Center, 2006) http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7516, accessed on October 15, 2006.

7.3 NOISE

City of Roseville. 2000. Capital Improvement Program Draft Environmental Impact Report, April.

City of Roseville. 1992. General Plan 2010. November.

City of Roseville. 2001. Municipal Code, Chapter 9.24 Noise Regulation.

City of Roseville. 2002. Supplement to the Capital Improvement Program Draft Environmental Impact Report, June.

Transportation Research Board. 1994. Highway Capacity Manual.

U.S. Department of Transportation (USDOT). 1998. FHWA Traffic Noise Model User's Guide. Federal Highway Administration (FHWA). FHWA–PD–96–009.

U.S. Department of Transportation (USDOT). 1998. FHWA Traffic Noise Model Technical Manual. Federal Highway Administration (FHWA). FHWA–PD–96–010.

7.4 BIOLOGICAL RESOURCES

California Department of Fish and Game, Wildlife and Habitat Data Analysis Branch. 2006. Natural Diversity Data Base Report (CNDDB). Sacramento, California.

California Native Plant Society (CNPS). 2006. Inventory of Rare and Endangered Plants. An online database maintained by the Native Plant Society.

City of Roseville. 2006. Notice of Mitigated Negative Declaration. NCRSP Parcel 35 – Galleria Mall Expansion/File #MPPMOD 95-01A and MPP 04-02. May.

ECORP Consulting, Inc. 2003. Wetland Delineation for Baseline 430, Placer County, California. Prepared for John Mourier Construction, Inc. March 11.

ECORP Consulting, Inc. August 20, 2003. Wetland Delineation for Baseline 430. Verified by the U.S. Army Corps of Engineers February 17, 2004.

ECORP Consulting, Inc. 2003. Baseline 430 – Revised Wetland Delineation, Placer County, California. September 9.

EIP Associates. 2004. Final Environmental Impact Report for the West Roseville Specific Plan and Sphere of Influence Amendment. State Clearinghouse No. 2002082057. Volume 1, Chapters 1, 2, 3, and 4 (Sections 4.1 through 4.10). January 9.

Hickman, J. (ed). 1993. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, California.

Holland, V.L., and D.J. Keil. 1995. California Vegetation. Kendall/Hunt Publishing Company. Dubuque, Iowa.

Placer County. 2006. Environmental Questionnaire for Eureka Road and Sierra College Boulevard Widening. February 17.

The University and Jepson Herbaria. 2006. The Jepson Interchange. An online database that updates The Jepson Manual.

United States Fish and Wildlife Service. 2006a. Sacramento Fish and Wildlife Office, Species Account: Vernal Pool Fairy Shrimp (Branchinecta lynchi). Sacramento, California.

United States Fish and Wildlife Service. 2006b. Sacramento Fish and Wildlife Office, Species Account: Vernal Pool Tadpole Shrimp (Lepidurus packardi). Sacramento, California.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1988. California's Wildlife, Volume I: Amphibians and Reptiles. State of California, the Resources Agency, Department of Fish and Game, Sacramento, California.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1990a. California's Wildlife, Volume II: Birds. State of California, the Resources Agency, Department of Fish and Game, Sacramento, California.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1990b. California's Wildlife, Volume III: Mammals. State of California, the Resources Agency, Department of Fish and Game, Sacramento, California.

7.5 CULTURAL RESOURCES

Beals, Ralph L. 1933. Ethnology of the Nisenan. University of California Publications in American Archaeology and Ethnology. 31(6): 335-414. Berkeley.

Bean, Walter. 1977. California: An Interpretive History. McGraw-Hill, New York.

Beck, W.A., and Y.D. Haase. Historical Atlas of California. University of Oklahoma Press, Norman.

Chartkoff, J.L., and K.K. Chartkoff. 1984. The Archaeology of California. Stanford University Press, Stanford.

Cook, Sherburne F. 1955. The Epidemic of 1830-1833 in California and Oregon. University of California Publications in American Archaeology and Ethnology. 43(3): 303-326. Berkeley.

Davis, Leonard M. 1964. From Rail to Trail! Being a History of the City of Roseville, California 1864-1909. Roseville Community Projects.

Davis, Leonard M. 1975. Roseville, Yesterday and Today. Roseville Community Projects.

Davis, Leonard M. 1993. A Brief History of Roseville. Roseville Historical Society Newsletter. City of Roseville/Roseville Public Library, http://www.roseville.ca.us/library/history/history.htm.

Derr, Eleanor. 1997. Cultural Resources Survey Report. Cultural Resources Unlimited. Prepared for Environmental Science Associates, Sacramento, California.

Du Bois, Cora A. The 1870 Ghost Dance. University of California Anthropological Records. 3(1):1-151. Berkeley.

Faye, Paul-Louis. 1923. Notes of the Southern Maidu. University of California Publications in American Archaeology and Ethnology. 20(3): 35-53. Berkeley.

Fredrickson, David A. 1973. Early Cultures of the North Coast Ranges, California. PhD. Dissertation, University of California, Davis; Department of Anthropology.

Gifford, Edward W. Southern Maidu Religious Ceremonies. American Anthropologist. 29(3):214-257.

JRP Historical Consulting. 2004. Placer Ranch Historical Resources Inventory and Evaluation Report. Prepared for Northfork Associates. August 30, 2004.

King, Thomas F. 1978. The Archaeological Survey: Methods and Uses. USDI, Heritage Conservation and Recreation Service, Washington D.C.

Kroeber, Alfred L. 1925. Handbook of the Indians. California. Bureau of American Ethnology Bulletin 78. Washington, D.C. [Reprinted, Dover Publications, New York, 1976.]

Kroeber, Alfred L. 1929. The Valley Nisenan. University of California Publications in American Archaeology and Ethnology. 24(4): 263-290. Berkeley.

Kroeber, Alfred L. 1932. The Patwin and Their Neighbors. University of California Publications in American Archaeology and Ethnology. 29(4):253-423. Berkeley.

Lavender, David. 1972. California: Land of New Beginnings. Harper and Row, New York.

Levy, Richard. 1978. Eastern Miwok. In California, edited by Robert F. Heizer, pp. 398-413. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Lillard, J.B., R.F. Heizer, and F. Fenenga. 1939. An Introduction to the Archaeology of Central California. Sacramento Junior College, Department of Anthropology Bulletin 2. Sacramento.

Lillard, J.B., and W.K. Purves. 1936. The Archaeology of the Deer Creek-Cosumnes Area, Sacramento County, California. Sacramento Junior College, Department of Anthropology Bulletin 1. Sacramento.

Lindstrom, Susan. 1991. Cultural Resource Surface Survey of the Stanford Ranch West Project Involving 690 Acres Between Roseville and Lincoln California, Placer County. Prepared for CSW Planning Associates. Auburn, California.

Littlejohn, Hugh W. Nisenan Geography. Manuscript in Bancroft Library, University of California, Berkeley.

McGowan, Joseph A. 1961. History of the Sacramento Valley. Levi's Historical Publishing Company, New York.

Moratto, Michael J. 1984. California Archaeology. Academic Press, New York.

Payen, Louis A.1961. Excavations at Sutter's Fort. Manuscript No. 87, California State Division of Beaches and Parks, Sacramento.

Powers, Stephen. 1877. Tribes of California. Contributions to North American Ethnology Volume III. U.S. Department of the Interior, Geographical and Geological Survey of the Rocky Mountain Region, Washington, D.C. [Reprinted by University of California Press, Berkeley 1976].

Riddell, Francis A. 1978. Maidu and Konkow. In California, edited by Robert F. Heizer, pp. 370-386. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Ritter, E.W., and P. Schulz, eds. Papers on Nisenan Environment and Subsistence. University of California Center for Archaeological Research Publications 3. Davis, California.

Schenk, W.E., and E.J. Dawson. 1929. Archaeology of the Northern San Joaquin Valley. University of California Publications in American Archaeology and Ethnology. 25(4): 289-413. Berkeley.

Shipley, William F. Native Languages of California. In California, edited by Robert F. Heizer, pp. 80-90. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Uldall, H.J., and W.F. Shipley. 1966. Nisenan Texts and Dictionary. University of California Publications in Linguistics, 46. Berkeley.

Wilson, Norman L. 1957-1963. [Nisenan field notes] (Manuscript in Wilson's possession.)

Nisenan. In California, edited by Robert F. Heizer, pp. 387-397, Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

6.0 Project Alternatives

6.0 Project Alternatives

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	Fiddyment 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	Fiddyment 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

		Cumulative Plus Project (Scenario 7)			Alternative 2 (Scenario 7a)			
						ADT		
Facility	Segment	Lanes	ADT	LOS	Lanes	Mainline	HOV	LOS
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 (Fiddyment 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.

TABLE 6-5

SUMMARY OF NOISE LEVELS AT INTERSECTIONS: ALTERNATIVE 2

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.

5.0 Other CEQA Considerations

5.0 Other CEQA Considerations

5.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Under the California Environmental Quality Act (CEQA), an EIR must analyze significant irreversible environmental changes that would occur with implementation of the proposed project [CEQA Guidelines Section 15126.2(c)]. These changes typically involve uses of nonrenewable resources during the initial and continued phases of the project. Primary and secondary impacts (such as highway improvements that provide access to a previously inaccessible area) are to be evaluated, as are environmental accidents associated with the project.

The project proposes to modify 30 intersections and 6 roadway segments. Ten of these intersections and three roadway segments would involve widening the area beyond the right-of-way identified in the current CIP. This would result in the long-term commitment of resources to urban land use. Additional irreversible environmental changes would include the reduction of natural vegetation; increased generation of pollutants associated with project construction; and the short-term commitment of nonrenewable and/or slowly renewable natural and energy resources, such as mineral resources and water resources, during construction. These irreversible impacts, which are unavoidable consequences or urban growth, are described in detail in the appropriate sections of this Draft Subsequent EIR.

5.2 CUMULATIVE IMPACTS

5.2.1 Introduction

This Draft Subsequent EIR provides an analysis of overall cumulative impacts of the proposed project taken together with other past, present, and probable future projects, as required by Section 15130 of the CEQA Guidelines. The goal of this analysis is twofold: (1) to determine whether the overall long-term impacts of all such projects would be cumulatively significant, and (2) to determine whether the proposed project itself would cause a "cumulatively considerable" (and thus significant) incremental contribution to any such cumulatively significant impacts (see State CEQA Guidelines Sections 15130[a]-[b], 15355[b], 15064[h], 15065[c]; *Communities for a Better Environment v. California Resources Agency* [2002] 103 Cal.App.4th 98, 120). In other words, the required analysis first creates a broad context in which to assess the project's incremental contribution to anticipated cumulative impacts, viewed on a geographic scale well beyond the project site itself, and then determines whether the project's incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e., "cumulatively considerable").

"Cumulative impacts" refers to two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts (CEQA, Section 15355, 1992). The individual effects could be changes resulting from a single project or many separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant impacts taking place over time.

Consistent with CEQA Guidelines Section 15130(a), the discussion of cumulative impacts in this Draft Subsequent EIR focuses on significant and potentially significant cumulative impacts. Section 15130(b) of the CEQA Guidelines in part, provides that, "The discussion of cumulative

impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great a level of detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact."

5.2.2 Development Considered In Cumulative Impact Analysis

Cumulative conditions represent a year 2025 condition where a number of major proposed projects are assumed to be either partially or fully built out. Notices of Preparation (NOPs) for these major projects have been filed with their respective lead agencies. These projects include the following:

- Placer Vineyards Specific Plan: Buildout of Phase 1 (same as 2020 scenarios)
- Placer Ranch Specific Plan (Placer County 2025 development levels)
- Regional University and Community Specific Plan: Buildout of residential and non-residential land uses
- City of Lincoln General Plan Update: Residential buildout under existing General Plan plus 10,000 dwelling units in expanded Sphere of Influence area

Outside of Placer County, the cumulative scenarios assume the Sacramento Area Council of Government's (SACOG) 2025 levels of development except in South Sutter County, where about half of the potential development in the proposed Sutter Pointe Specific Plan was assumed.

The cumulative scenarios (Scenarios 6 and 7) have been designed to be largely consistent with the 2025 scenarios recently used in a number of environmental documents outside the City of Roseville. These studies include Placer County projects (Placer Vineyards, Regional University, Placer Ranch and Riolo Vineyard) and City of Lincoln projects (Lincoln General Plan Update). The cumulative scenarios in this document, however, do not include two projects (Sierra Vista and Creekview Specific Plans) that have been assumed to be in place in those Placer County studies because NOPs have not yet been filed for these projects.

5.2.3 CUMULATIVE IMPACT ASSESSMENT

5.2.3.1 Transportation and Circulation

The 2025 Cumulative No Project conditions (Scenario 6) are based on assuming that the additional growth mentioned above (beyond 2020) occurs without the implementation of the proposed project. Therefore the impacts associated with this scenario are based on regional growth outside the City of Roseville. **Table 5.2-1** shows the intersections within the City of Roseville projected to operate at LOS D or worse under 2025 Cumulative No Project (Scenario 6) conditions. The table compares these to the projected LOS for the same intersections under 2020 No Project (Scenario 4) conditions. This comparison shows increased traffic due to cumulative regional growth outside of Roseville. As shown, regional growth outside the City of Roseville between 2020 and 2025 Cumulative conditions leads to significantly degraded LOS at 34 intersections and improved LOS at 4 intersections. The percentage of intersections projected to operate at LOS C or better drops from 69 percent to 56 percent between 2020 No Project conditions and 2025 Cumulative No Project conditions. Neither of these no project scenarios conforms to the City's General Plan LOS policy.

TABLE 5.2-1

CITY OF ROSEVILLE INTERSECTIONS WITH LOS D OR WORSE: 2020 NO PROJECT AND 2025 CUMULATIVE NO PROJECT

ID	N/S Street	E/W Street	2020 No Project (Scenario 4)		2025 Cumulative No Project (Scenario 6)	
			LOS	V/C	LOS	V/C
3	Yosemite	Atlantic St	D	0.83	D	0.87
9	**Washington Blvd**	**Blue Oaks Blvd**	E	0.95	**F**	**1.04**
10	**Woodcreek Oaks**	**Blue Oaks Blvd**	B	0.68	**E**	**0.91**
12	**Melody**	**Cirby Way**	D	0.90	**E**	**0.91**
14	**Oak Ridge Dr**	**Cirby Way**	C	0.78	**D**	**0.86**
15	*Orlando/Marlin*	*Cirby Way*	E	0.92	*D*	*0.88*
18	Vernon St	Cirby Way	F	1.19	F	1.27
19	*Eureka Rd*	*Douglas Blvd*	E	0.91	*D*	*0.87*
21	Harding Blvd	Douglas Blvd	F	1.09	F	1.15
22	**I-80 WB Off**	**Douglas Blvd**	C	0.77	**D**	**0.85**
26	**Riverside Ave/Vernon**	**Douglas Blvd**	A	0.50	**D**	**0.86**
27	Rocky Ridge Dr	Douglas Blvd	D	0.84	D	0.85
28	Roseville Pkwy	Douglas Blvd	D	0.84	D	0.82
30	*Sierra College Blvd*	*Douglas Blvd*	F	1.08	D	0.90
38	Home Depot	Fairway Drive	D	0.85	D	0.87
39	Fiddyment Rd	Baseline Rd	E	0.94	E	1.00
42	Foothills Blvd	Albertsons	D	0.85	D	0.89
44	**Foothills Blvd**	**Blue Oaks Blvd**	D	0.88	**F**	**1.11**
45	**Foothills Blvd**	**Cirby Way**	C	0.81	**D**	**0.88**
47	Foothills Blvd	Junction Blvd	E	0.91	E	0.94
48	**Foothills Blvd**	**Main St/Baseline**	C	0.80	**D**	**0.88**
49	Foothills Blvd	McAnally	D	0.82	D	0.86
51	Foothills Blvd	Pleasant Grove	E	0.95	E	1.00
54	**Foothills Blvd**	**Vineyard Rd**	D	0.88	**E**	**0.95**
55	Galleria	Antelope Creek	D	0.87	D	0.88
56	Galleria	Berry	D	0.82	D	0.86
57	**Harding Blvd**	**Estates Rd**	C	0.80	**D**	**0.85**
58	**Harding Blvd**	**Lead Hill Blvd**	C	0.78	**D**	**0.82**
60	Harding Blvd	Wills Rd	F	1.03	F	1.05
69	*Fiddyment Rd*	*Pleasant Grove*	F	1.01	*E*	*0.96*

TABLE 5.2-1
(CONTINUED)

CITY OF ROSEVILLE INTERSECTIONS WITH LOS D OR WORSE:
2020 NO PROJECT AND 2025 CUMULATIVE NO PROJECT

ID	N/S Street	E/W Street	2020 No Project (Scenario 4)		2025 Cumulative No Project (Scenario 6)	
			LOS	V/C	LOS	V/C
71	SR 65 NB Off	Pleasant Grove	D	0.82	D	0.87
72	**SR 65 SB Off**	**Pleasant Grove**	C	0.80	**D**	**0.84**
74	Washington Blvd	Pleasant Grove	D	0.82	D	0.87
75	**Woodcreek Oaks**	**Pleasant Grove**	C	0.76	**D**	**0.86**
76	Pleasant Grove Blvd	Fairway Drive	E	0.95	E	0.99
77	**Pleasant Grove Blvd**	**Highland Drive**	C	0.79	**D**	**0.87**
78	Roseville Pkwy	Pleasant Grove	F	1.03	F	1.15
79	Riverside Ave	Cirby Way	E	0.93	E	0.94
80	**Riverside Ave**	**Darling Way**	C	0.76	**D**	**0.83**
89	**Roseville Pkwy**	**Eureka Road**	C	0.75	**D**	**0.86**
90	Roseville Pkwy	Lead Hill Blvd	D	0.85	D	0.85
91	Roseville Pkwy	Olympus Dr	E	0.94	E	0.96
93	Roseville Pkwy	Secret Ravine	D	0.82	D	0.85
96	Galleria	Roseville Pkwy	F	1.13	F	1.25
97	**Gibson**	**Roseville Pkwy**	D	0.90	**E**	**0.92**
100	Reserve Drive	Roseville Pkwy	F	1.01	F	1.06
101	Sierra College Blvd	Roseville Pkwy	D	0.82	D	0.85
102	Taylor Rd	Roseville Pkwy	D	0.84	D	0.89
103	**Washington Blvd**	**Roseville Pkwy**	C	0.78	**D**	**0.89**
104	**West Mall**	**Roseville Pkwy**	E	1.00	**F**	**1.02**
105	Sierra College Blvd	Eureka Road	D	0.86	D	0.87
107	**Sierra College Blvd**	**Old Auburn Rd**	C	0.76	**D**	**0.82**
109	**Sierra College Blvd**	**Secret Ravine**	C	0.79	**D**	**0.84**
110	**South Cirby Way**	**Old Auburn Rd**	D	0.87	**E**	**0.91**
111	**Stanford Ranch**	**Fairway Drive**	C	0.79	**D**	**0.83**
115	Stanford Ranch/Galleria	SR 65 SB On	D	0.85	D	0.89
117	Sunrise Avenue	Cirby Way	F	1.13	F	1.14
118	Sunrise Avenue	Coloma Way	F	1.03	F	1.09
119	Sunrise Avenue	Douglas Blvd	E	0.93	E	1.00
120	Sunrise Avenue	Eureka Rd	E	0.92	E	0.96

TABLE 5.2-1
(CONTINUED)

CITY OF ROSEVILLE INTERSECTIONS WITH LOS D OR WORSE:
2020 NO PROJECT AND 2025 CUMULATIVE NO PROJECT

ID	N/S Street	E/W Street	2020 No Project (Scenario 4)		2025 Cumulative No Project (Scenario 6)	
			LOS	V/C	LOS	V/C
122	**Sunrise Avenue**	**Kensington**	C	0.79	**E**	**0.99**
123	**Sunrise Avenue**	**Lead Hill Blvd**	C	0.80	**D**	**0.82**
125	Sunrise Avenue	Roseville Pkwy	D	0.82	D	0.88
126	Sunrise Avenue	Sierra Gardens	D	0.86	D	0.87
128	Taylor Rd	Eureka Road	F	1.03	F	1.05
129	**Grant Street**	**Vernon Street**	C	0.79	**D**	**0.84**
130	**Judah**	**Vernon Street**	D	0.88	**E**	**0.96**
131	**Lincoln Street**	**Vernon Street**	E	0.96	**F**	**1.07**
135	**Washington Blvd**	**Junction Blvd**	C	0.78	**D**	**0.86**
136	Washington Blvd	Main Street	F	1.05	F	1.15
139	**Woodcreek Oaks**	**Baseline Rd**	D	0.85	**E**	**0.99**
145	Pleasant Grove Blvd	Wal Mart Entrance	D	0.84	D	0.85
146	**Foothills Blvd**	**HP Central Entrance**	D	0.89	**E**	**0.91**
149	Orlando	Riverside	E	0.93	E	0.99
160	**West Side Dr**	**Pleasant Grv Bl**	A	0.35	**E**	**0.96**
169	**Crocker Ranch**	**Blue Oaks Blvd**	A	0.55	**D**	**0.83**
Intersections With Degraded LOS			**34**			
Intersections with Improved LOS			*4*			
Total Intersections Analyzed			172		172	
Intersections Operating at LOS C or Better			119		96	
% of Intersections Operating at LOS C or Better			69%		56%	
Total Intersections at LOS D or Worse			53		76	

Note: Intersections in **Bold** are projected to degrade between 2020 No Project and 2025 Cumulative No Project conditions.
Intersections in *Italics* are projected to improve between 2020 No Project and 2025 Cumulative No Project conditions.
SOURCE: DKS Associates, 2006

IMPACT 5.2-1:	**Increased traffic on City of Roseville roadways under 2025 Cumulative Plus Project conditions**
ORDINANCES AND STANDARDS:	City of Roseville General Plan Update LOS Policy
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Intersection LOS Impact: Significant City's LOS Policy: Significant
MITIGATION MEASURE:	Mitigation Measure 5.2-1: Modify intersection geometries at the following eleven specified intersections to address effects from regional growth outside the City of Roseville: a) Yosemite/Atlantic b) Woodcreek Oaks/Blue Oaks c) Oak Ridge/Cirby d) Foothills/McAnally e) SR 65 NB Off/Pleasant Grove f) Washington/Roseville Pkwy g) Sierra College/Secret Ravine h) South Cirby/Old Auburn i) Sunrise/Lead Hill j) Washington/Junction k) Crocker Ranch/Blue Oaks Mitigation Measure 5.2-2: Modify intersection geometries at the following two specified intersections to address effects of the proposed project: a) Sunrise Ave/Automall Drive b) Gibson Drive West/ Roseville Parkway
RESIDUAL SIGNIFICANCE:	Intersection LOS Impact: Significant City's LOS Policy: Less than Significant

As shown on **Table 5.2-1** above, regional growth outside the City of Roseville between 2020 and 2025 Cumulative conditions leads to significantly degraded LOS at 34 intersections and improved LOS at 4 intersections. In addition, Cumulative No Project conditions do not conform to the City's General Plan LOS policy, with 56 percent of the signalized intersections operating at LOS C or better. City staff has identified feasible modifications at 11 of the 34 degraded intersections. Mitigation Measure 5.2-1 would ensure implementation of these modifications. None of these intersection modifications requires widening outside of existing right-of-way. **Table 5.2-2** identifies the specific modifications and shows that 9 of the modifications improve the intersection's projected LOS from D or worse to C or better, 7 of the intersections improve from LOS D to LOS C, and 2 of the intersections improve from LOS E to LOS C. Two of the modifications improve the V/C at the intersections, but the LOS remains at D. The table also shows that the percentage of intersections projected to operate at LOS C or better improves from 56 percent to 61 percent, which is still below the City's LOS standard of 70 percent.

TABLE 5.2-2

CITY OF ROSEVILLE INTERSECTIONS MODIFICATIONS IDENTIFIED BY CITY (MITIGATION MEASURE 5.2-1): 2025 CUMULATIVE NO PROJECT CONDITIONS

ID	North/South Street	East/West Street	Modification	LOS Before Modification		LOS After Modification	
				LOS	V/C	LOS	V/C
3	Yosemite St	Atlantic St	Restripe southbound to have left and shared left/right lanes	**D**	0.87	**D**	0.84
10	Woodcreek Oaks Blvd	Blue Oaks Blvd	Add 4th westbound through lane	**E**	0.91	C	0.78
14	Oak Ridge Dr	Cirby Way	Restripe to provide left and shared through/ right on northbound and southbound approaches	**D**	0.86	C	0.77
49	Foothills Blvd	McAnally	Add right turn pocket to southbound approach	**D**	0.86	**D**	0.83
71	SR 65 NB Off	Pleasant Grove Blvd	Provide northbound off-ramp triple left	**D**	0.87	C	0.79
103	Washington Blvd	Roseville Pkwy	Provide third east-bound through lane	**D**	0.89	C	0.79
109	Sierra College Blvd	Secret Ravine Pkwy	Provide dual north-bound left turn lanes	**D**	0.84	C	0.78
110	South Cirby Way	Old Auburn Rd	Provide dual south-bound left turn lanes	**E**	0.91	C	0.73
123	Sunrise Ave	Lead Hill Blvd	Provide dual eastbound and westbound left turn lanes	**D**	0.82	C	0.75
135	Washington Blvd	Junction Blvd	Provide third south-bound through lane	**D**	0.86	C	0.73
169	Crocker Ranch	Blue Oaks Blvd	Re-stripe southbound as left and left/right	**D**	0.83	C	0.77
Total Intersections Analyzed				172		172	
Intersections Operating at LOS C or Better				96		105	
Percent of Intersections Operating at LOS C or Better				56%		61%	
Total Intersections at LOS "D" or Worse				76		67	

Note: **Bold** and shaded text indicates LOS D or worse
LOS = level of service; V/C = volume to capacity ratio
SOURCE: DKS Associates, 2006

The 2025 Cumulative Plus Project conditions (Scenario 7) is based on assuming that the proposed buildout land uses and 2020 roadway network assumptions (including future intersection geometries and traffic signals) for the City of Roseville are implemented. In order to determine project-related impacts on City roadways and roadways in surrounding jurisdictions, the 2025 Cumulative Plus Project conditions are compared to Cumulative No Project conditions (Scenario 6). Impacts and Mitigation Measures for the proposed 2020 CIP Update under 2025 Cumulative conditions are discussed below.

It should be noted that, for this comparative analysis, both 2025 Cumulative No Project and 2025 Cumulative Plus Project conditions include the intersection improvements identified in Mitigation Measure 5.2-1 and shown on **Table 5.2-2** above.

Based on the significance criteria established for this Draft Subsequent EIR (presented in Section 4.1.4.2 in Traffic and Circulation), a significant impact would occur if the proposed project would result in the following:

- Cause the overall percentage of intersections meeting LOS C at p.m. peak hour to fall below 70 percent;
- Cause a signalized intersection identified in the current CIP as functioning at LOS C or better in the p.m. to function at LOS D or worse; or
- Cause a signalized intersection identified in the current CIP as functioning at LOS D or E in the p.m. to degrade by one or more LOS category (i.e., from LOS D to LOS E of LOS E to LOS F).

Cumulative Impacts Related to Individual Intersection LOS Standards (LOS C or better)

Table 5.2-3 shows all City of Roseville intersections projected to operate at LOS D or worse under both 2025 Cumulative No Project conditions (Scenario 6) and 2025 Cumulative Plus Project conditions (Scenario 7). This table shows that many intersections are projected to operate at LOS D or worse under 2025 Cumulative conditions with or without the proposed project.

Table 5.2-4 shows the 13 intersections where LOS would improve with the proposed project under cumulative conditions: 9 intersections would improve from LOS D or worse to LOS C or better, 2 intersections would improve from LOS E to LOS D, one would improve from LOS F to LOS D, and one would improve from LOS F to LOS E. These improvements would largely be due to the intersection geometry improvements defined as part of the proposed project (see **Tables 3-4 and 3-5** for a list of these improvements).

Table 5.2-5 shows six intersections under 2025 Cumulative Plus Project conditions (Scenario 7) where the LOS would degrade when compared to 2025 Cumulative No Project conditions (Scenario 6). One of these intersections, not analyzed under 2025 Cumulative No Project conditions, would operate at LOS D (Gibson Dr West/Roseville Parkway). In addition, two intersections would degrade from LOS C to LOS D, one would degrade from LOS D to LOS E, one would degrade from LOS D to LOS F, and one would degrade from LOS E to LOS F.

TABLE 5.2-3

CITY OF ROSEVILLE INTERSECTIONS WITH LOS D OR WORSE: 2025 CUMULATIVE NO PROJECT AND 2025 CUMULATIVE PLUS PROJECT

ID	N/S Street	E/W Street	2025 Cumulative No Project (Scenario 6)		2025 Cumulative Plus Project (Scenario 7)	
			LOS	V/C	LOS	V/C
3	Yosemite	Atlantic St	**D**	0.84	**D**	0.82
9	Washington Blvd	Blue Oaks Blvd	**F**	1.04	**F**	1.06
12	Melody	Cirby Way	**E**	0.91	**D**	0.89
15	Orlando/Marlin	Cirby Way	**D**	0.88	**D**	0.86
18	Vernon St	Cirby Way	**F**	1.27	**F**	1.05
19	Eureka Rd	Douglas Blvd	**D**	0.87	**D**	0.88
21	Harding Blvd	Douglas Blvd	**F**	1.15	**F**	1.17
22	I-80 WB Off	Douglas Blvd	**D**	0.85	**D**	0.85
26	Riverside Ave/Vernon	Douglas Blvd	**D**	0.86	N/A	
27	Rocky Ridge Dr	Douglas Blvd	**D**	0.85	**D**	0.85
28	Roseville Pkwy	Douglas Blvd	**D**	0.82	**D**	0.82
30	Sierra College Blvd	Douglas Blvd	**D**	0.90	**D**	0.89
38	Home Depot	Fairway Drive	**D**	0.87	C	0.73
39	Fiddyment Rd	Baseline Rd	**E**	1.00	**E**	1.00
42	Foothills Blvd	Albertsons	**D**	0.89	C	0.77
44	Foothills Blvd	Blue Oaks Blvd	**F**	1.11	**F**	1.12
45	Foothills Blvd	Cirby Way	**D**	0.88	**D**	0.87
47	Foothills Blvd	Junction Blvd	**E**	0.94	**E**	0.95
48	Foothills Blvd	Main St/Baseline	**D**	0.88	**D**	0.86
49	Foothills Blvd	McAnally	**D**	0.83	C	0.79
51	Foothills Blvd	Pleasant Grove	**E**	1.00	**E**	0.99
54	Foothills Blvd	Vineyard Rd	**E**	0.95	**E**	0.93
55	Galleria	Antelope Creek	**D**	0.88	**D**	0.84
56	Galleria	Berry	**D**	0.86	**D**	0.86
57	Harding Blvd	Estates Rd	**D**	0.85	**D**	0.87

TABLE 5.2-3
(CONTINUED)

CITY OF ROSEVILLE INTERSECTIONS WITH LOS D OR WORSE:
2025 CUMULATIVE NO PROJECT AND 2025 CUMULATIVE PLUS PROJECT

ID	N/S Street	E/W Street	2025 Cumulative No Project (Scenario 6)		2025 Cumulative Plus Project (Scenario 7)	
			LOS	V/C	LOS	V/C
58	Harding Blvd	Lead Hill Blvd	**D**	0.82	**D**	0.82
60	Harding Blvd	Wills Rd	**F**	1.05	**F**	1.19
69	Fiddyment Rd	Pleasant Grove	**E**	0.96	**D**	0.86
74	Washington Blvd	Pleasant Grove	**D**	0.87	**D**	0.88
75	Woodcreek Oaks	Pleasant Grove	**D**	0.86	**D**	0.86
76	Pleasant Grove Blvd	Fairway Drive	**E**	0.99	**E**	0.98
77	Pleasant Grove Blvd	Highland Drive	**D**	0.87	B	0.62
78	Roseville Pkwy	Pleasant Grove	**F**	1.15	**F**	1.13
79	Riverside Ave	Cirby Way	**E**	0.94	**E**	0.95
90	Roseville Pkwy	Lead Hill Blvd	**D**	0.85	**D**	0.85
91	Roseville Pkwy	Olympus Dr	**E**	0.96	**E**	0.91
93	Roseville Pkwy	Secret Ravine	**D**	0.85	**D**	0.87
96	Galleria	Roseville Pkwy	**F**	1.25	**F**	1.12
97	Gibson	Roseville Pkwy	**E**	0.92	**E**	0.96
100	Reserve Drive	Roseville Pkwy	**F**	1.06	**D**	0.89
101	Sierra College Blvd	Roseville Pkwy	**D**	0.85	**D**	0.89
102	Taylor Rd	Roseville Pkwy	**D**	0.89	**E**	0.93
104	West Mall	Roseville Pkwy	**D**	0.83	C	0.80
105	Sierra College Blvd	Eureka Road	**D**	0.87	C	0.79
107	Sierra College Blvd	Old Auburn Rd	**D**	0.82	**D**	0.83
111	Stanford Ranch	Fairway Drive	**D**	0.83	C	0.76
115	Stanford Ranch/Galleria	SR 65 SB On	**D**	0.89	**D**	0.88
116	Sunrise Avenue	Automall	C	0.81	**D**	0.82
117	Sunrise Avenue	Cirby Way	**F**	1.14	**F**	1.26

TABLE 5.2-3
(CONTINUED)

CITY OF ROSEVILLE INTERSECTIONS WITH LOS D OR WORSE:
2025 CUMULATIVE NO PROJECT AND 2025 CUMULATIVE PLUS PROJECT

ID	N/S Street	E/W Street	2025 Cumulative No Project (Scenario 6)		2025 Cumulative Plus Project (Scenario 7)	
			LOS	V/C	LOS	V/C
118	Sunrise Avenue	Coloma Way	**F**	1.09	**F**	1.10
119	Sunrise Avenue	Douglas Blvd	**E**	1.00	**F**	1.01
120	Sunrise Avenue	Eureka Rd	**E**	0.96	**E**	0.94
122	Sunrise Avenue	Kensington	**E**	0.99	**E**	0.99
125	Sunrise Avenue	Roseville Pkwy	**D**	0.88	**F**	1.11
126	Sunrise Avenue	Sierra Gardens	**D**	0.87	**D**	0.87
128	Taylor Rd	Eureka Road	**F**	1.05	**F**	1.04
129	Grant Street	Vernon Street	**D**	0.84	**D**	0.85
130	Judah	Vernon Street	**E**	0.96	**E**	0.91
131	Lincoln Street	Vernon Street	**F**	1.07	**F**	1.10
136	Washington Blvd	Main Street	**F**	1.15	**E**	1.00
139	Woodcreek Oaks	Baseline Rd	**E**	0.99	**E**	0.95
145	Pleasant Grove Blvd	Wal Mart Entrance	**D**	0.85	C	0.80
149	Orlando	Riverside	**E**	0.99	**E**	0.99
160	West Side Dr	Pleasant Grv Bl	**E**	0.96	A	0.44
176	Gibson W	Roseville Pkwy	N/I		**D**	0.82
177	Chase Dr	Roseville Pkwy	N/I		**D**	0.83
Total Intersections Analyzed			172		179	
Intersections Operating at LOS C or Better			105		123	
% of Intersections Operating at LOS C or Better			61%		69%	
Total Intersections at LOS D or Worse			67		56	

Note: **Bold** and shaded text indicates LOS D or worse
LOS = level of service; V/C = volume to capacity ratio; N/A = Not applicable
N/I = not included; intersections added to CIP as part of proposed project
SOURCE: DKS Associates, 2006

TABLE 5.2-4

CITY OF ROSEVILLE INTERSECTIONS WITH IMPROVED LOS: FROM 2025 CUMULATIVE NO PROJECT TO 2025 CUMULATIVE PLUS PROJECT

ID	N/S Street	E/W Street	2025 Cumulative No Project (Scenario 6)		2025 Cumulative Plus Project (Scenario 7)	
			LOS	V/C	LOS	V/C
12	Melody	Cirby Way	**E**	0.91	**D**	0.89
38	Home Depot	Fairway Drive	**D**	0.87	C	0.73
42	Foothills Blvd	Albertsons	**D**	0.89	C	0.77
49	Foothills Blvd	McAnally	**D**	0.83	C	0.79
69	Fiddyment Rd	Pleasant Grove	**E**	0.96	**D**	0.86
77	Pleasant Grove Blvd	Highland Drive	**D**	0.87	B	0.62
100	Reserve Drive	Roseville Pkwy	**F**	1.06	**D**	0.89
104	West Mall	Roseville Pkwy	**D**	0.83	C	0.80
105	Sierra College Blvd	Eureka Road	**D**	0.87	C	0.79
111	Stanford Ranch	Fairway Drive	**D**	0.83	C	0.76
136	Washington Blvd	Main Street	**F**	1.15	**E**	1.00
145	Pleasant Grove Blvd	Wal Mart Entrance	**D**	0.85	C	0.80
160	West Side Dr	Pleasant Grv Bl	**E**	0.96	A	0.44

Note: **Bold** and shaded text indicates LOS D or worse
LOS = level of service; V/C = volume to capacity ratio
SOURCE: DKS Associates, 2006

TABLE 5.2-5

CITY OF ROSEVILLE INTERSECTIONS WITH DEGRADED LOS: FROM 2025 CUMULATIVE NO PROJECT TO 2025 CUMULATIVE PLUS PROJECT

ID	North/South Street	East/West Street	2025 Cumulative No Project (Scenario 6)		2025 Cumulative Plus Project (Scenario 7)	
			LOS	V/C	LOS	V/C
102	Taylor Rd	Roseville Pkwy	**D**	0.89	**E**	0.93
116	Sunrise Ave	Automall	C	0.81	**D**	0.82
119	Sunrise Ave	Douglas Blvd	**E**	1.00	**F**	1.01
125	Sunrise Ave	Roseville Pkwy	**D**	0.88	**F**	1.11
176	Gibson Dr West	Roseville Pkwy	N/I		**D**	0.82
177	Chase Dr	Roseville Pkwy	C	0.81	**D**	0.83

Note: **Bold** and shaded text indicates LOS D or worse
LOS = level of service; V/C = volume to capacity ratio; N/A = Not applicable
N/I = not included; intersection added to CIP as part of proposed project
SOURCE: DKS Associates, 2006

The City has previously identified Overriding Findings for two of these intersections: LOS D for Taylor Road/Roseville Parkway and LOS E for Sunrise Avenue/Douglas Boulevard (**Table 5.2-6**). With the proposed project under cumulative conditions, these intersections would degrade further to LOS E and F, respectively.

TABLE 5.2-6

CITY OF ROSEVILLE INTERSECTIONS WITH DEGRADED LOS AND IDENTIFIED OVERRIDING FINDINGS 2025 CUMULATIVE PLUS PROJECT

ID	North/South Street	East/West Street	2025 Cumulative Plus Project (Scenario 7)	Previously Identified "Overriding Findings" LOS
102	Taylor Rd	Roseville Pkwy	**E**	D
116	Sunrise Ave	Automall Dr	**D**	None
119	Sunrise Ave	Douglas Blvd	**F**	E
125	Sunrise Ave	Roseville Pkwy	**F**	None
176	Gibson Dr West	Roseville Pkwy	**D**	None
177	Chase Dr	Roseville Pkwy	**D**	None

Note: **Bold** and shaded text indicates LOS D or worse
SOURCE: DKS Associates, 2006

Mitigation Measure 5.2-2 identifies feasible improvements at two of these intersections to bring them into compliance with the City's LOS standard (Sunrise Avenue/Automall Drive and Gibson Dr West/Roseville Parkway). Neither of these intersection modifications requires widening outside of the existing right-of-way. These improvements and the resulting LOS are shown in **Table 5.2-7**. No feasible mitigation is identified for the other four intersections. Because the proposed project would cause these four intersections to drop to LOS D or worse under Cumulative Plus Project conditions (Scenario 7), the proposed project's contribution to these significant impacts would be cumulatively considerable. Cumulative impacts related to LOS D or worse associated with the proposed project are therefore **significant**.

Cumulative Impacts Related to General Plan LOS Policy (LOS C or better at minimum of 70 percent of all signalized intersections)

Table 5.2-3 shows that 61 percent of citywide intersections are projected to operate at LOS C or better under 2025 Cumulative No Project conditions (Scenario 6) with the intersection improvements of Mitigation Measure 5.2-1 assumed to be implemented. This percentage does not meet the City's adopted LOS policy to maintain an LOS C or better at a minimum of 70 percent of all signalized intersections in the City.

TABLE 5.2-7

CITY OF ROSEVILLE INTERSECTION MODIFICATIONS (MITIGATION MEASURE 5.2-2): 2025 CUMULATIVE PLUS PROJECT

ID	North/ South Street	East/West Street	Modifications	LOS Before Modification		LOS After Modification	
				LOS	V/C	LOS	V/C
116	Sunrise Ave	Automall Dr	Reconfigure westbound approach to have left-, left/through-, and right-turn lanes	**D**	0.82	C	0.71
176	Gibson Dr West	Roseville Pkwy	Provide dual eastbound left-turn lanes	**D**	0.82	C	0.71
102	Taylor Rd	Roseville Pkwy	None Identified	**E**	0.93	No Mitigation Identified	
119	Sunrise Ave	Douglas Blvd	None Identified	**F**	1.01		
125	Sunrise Ave	Roseville Pkwy	None Identified	**F**	1.11		
177	Chase Dr	Roseville Pkwy	None Identified	**D**	0.83		
Total Intersections Analyzed				179		179	
Intersections Operating at LOS C or Better				123		125	
Percent of Intersections Operating at LOS C or Better				69%		70%	
Total Intersections at LOS D or Worse				56		54	

Note: **Bold** and shaded text indicates LOS D or worse
LOS = level of service; V/C = volume to capacity ratio
SOURCE: DKS Associates, 2006

Table 5.2-3 compares the breakdown percentage of intersections projected to operate at LOS A-C for 2025 Cumulative No Project conditions (Scenario 6) and 2025 Cumulative Plus Project conditions (Scenario 7). The table shows that even with the increased trip generation within the City of Roseville, the percentage of intersections operating at LOS C or better under 2025 Cumulative Plus Project conditions is higher than under 2025 Cumulative No Project conditions. This is primarily due to the intersection geometry improvements assumed as part of the proposed project. Under 2025 Cumulative Plus Project conditions, 69 percent of signalized intersections citywide are projected to operate at LOS C or better. This is still less than the 70 percent threshold set forth by the City's current LOS policy.

The City's LOS policy allows the City Council to take an action to accept degradation in the LOS of one or more of its signalized intersections from the levels identified in the 2020 CIP as long as 70 percent or more of the total signalized intersections in the City would operate at LOS C or better. Under both cumulative conditions (Scenarios 6 and 7), less than 70 percent of the City's signalized intersections would operate at LOS C or better with or without the proposed project. Therefore, with or without the proposed project, intersections citywide would not be in conformance with the City's General Plan. However, the proposed project would improve the LOS conditions when compared to 2025 Cumulative No Project conditions, and therefore, the proposed project does not represent a cumulatively considerable contribution to this impact associated with the General Plan LOS policy noncompliance. This would be considered a **less than significant** cumulative impact.

In addition, the intersection improvements identified in Mitigation Measure 5.2-2 would increase the percentage of intersections operating at LOS C or better to 70 percent, which would ensure compliance with the City's General Plan policy.

IMPACT 5.2-2:	**Increased traffic on state highways under cumulative conditions**
ORDINANCES AND STANDARDS:	California Department of Transportation (Caltrans) Transportation Concept Reports
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Significant
MITIGATION MEASURE:	Mitigation Measure 4.1-1: Participate in any regionally adopted fee program providing for improvements to federal and state facilities
RESIDUAL SIGNIFICANCE:	Significant and Unavoidable

The addition of the proposed project to cumulative conditions would cause changes in traffic volumes on the state highways running through the City of Roseville, including Interstate 80 (I-80) and State Route (SR) 65. **Table 5.2-8** shows the changes in daily volume on I-80 and SR 65 in Roseville with the addition of the proposed project.

TABLE 5.2-8

DAILY VOLUMES ON STATE HIGHWAYS:
2025 CUMULATIVE NO PROJECT AND 2025 CUMULATIVE PLUS PROJECT

Facility	Segment	Lanes	2025 Cumulative No Project (Scenario 6)		2025 Cumulative Plus Project (Scenario 7)		
			ADT	LOS	ADT	LOS	Percent Change
I-80	Sacramento County line to Riverside Ave	8	247,700	F	246,700	F	-0.4%
	Riverside Ave to Douglas Blvd	6	223,100	F	222,600	F	-0.2%
	Douglas Blvd to Eureka Rd	6	222,700	F	221,700	F	-0.4%
	Eureka Rd to Taylor Rd	8	222,200	F	221,200	F	-0.5%
	Taylor Rd to SR 65	8	208,400	F	207,400	F	-0.5%
	SR 65 to Rocklin Rd	6	147,900	F	147,400	F	-0.3%
SR 65	I-80 to Galleria Blvd	4	129,300	F	128,800	F	-0.4%
	Galleria Blvd to Pleasant Grove Blvd	4	119,600	F	119,300	F	-0.3%
	Pleasant Grove Blvd to Blue Oaks Blvd	4	125,600	F	124,700	F	-0.7%
	Blue Oaks Blvd to Sunset Blvd	4	105,700	F	**106,000**	F	+0.3%

Note: Roadway segment LOS are based on roadway capacities and LOS criteria in **Table 4.1-11**
ADT = average daily traffic; LOS = level of service
Bolded numbers indicate volume increases.
SOURCE: DKS Associates, 2006.

Table 5.2-8 shows that all freeway segments within the City of Roseville are projected to operate at LOS F under Cumulative No Project conditions (Scenario 6); therefore, cumulative impacts associated with freeway segments would be significant. The addition of the proposed project (Scenario 7) would cause minor changes to volumes on I-80 and SR 65. **Table 5.2-8** also shows that all volume changes are estimated at less than 1 percent. While most segments would decline slightly, one segment would increase slightly. The segment of SR 65 from Blue Oaks Boulevard to Sunset Boulevard is projected to operate at LOS F, and the addition of the proposed project would add approximately 300 daily vehicles to this segment. Any additional vehicles added to a highway already operating at LOS F represent a cumulatively considerable contribution to this significant impact. Because sufficient fee programs are not yet in place to construct the needed improvements, cumulative impacts related to increased traffic on state highways with the proposed project would therefore be **significant.**

Highway operations could be improved by the addition of HOV, auxiliary, and/or mixed-flow lanes on I-80 and SR 65 through Roseville; ramp metering (throughout the I-80 and SR 65 corridors); and regional TSM/TDM elements. Such improvements and measures should be resolved on a regional level, through cooperative efforts involving SACOG, the Placer County Transportation Planning Agency (PCTPA), and Caltrans. These improvements would not be implemented by a single project or local jurisdiction. Mitigation Measure 4.1-1 (identified in Section 4.1 of this Draft Subsequent EIR) requires the City of Roseville to participate in any regionally adopted fee program providing for improvements to federal and state facilities. If implemented, this would reduce this impact; however, because funding and timing are uncertain and because this mitigation measure would not be controlled by the City, impacts would remain cumulatively **significant**.

Table 5.2-9 shows the LOS changes at signalized highway ramps under Cumulative Plus Project conditions. **Table 5.2-9** shows no change in LOS at all but one intersection with the addition of the proposed project. One intersection would improve slightly from LOS D to LOS C with the addition of the proposed project. The proposed project would therefore not have a cumulatively considerable contribution to LOS D or worse at signalized highway ramp locations. Therefore, cumulative impacts related to LOS on state highways with the proposed project would be **less than significant**.

TABLE 5.2-9

LEVEL OF SERVICE AT SIGNALIZED HIGHWAY RAMP INTERSECTIONS: 2025 CUMULATIVE NO PROJECT AND 2025 CUMULATIVE PLUS PROJECT

ID	North/South Street	East/West Street	2025 Cumulative No Project (Scenario 6)		2025 Cumulative Plus Project (Scenario 7)	
			LOS	V/C	LOS	V/C
8	SR 65 NB Off	Blue Oaks Blvd	B	0.63	B	0.64
9	Washington Blvd	Blue Oaks Blvd	**F**	1.04	**F**	1.06
22	I-80 WB Off	Douglas Blvd	**D**	0.85	**D**	0.85
61	I-80 WB On	Atlantic St	C	0.71	C	0.73
71	SR 65 NB Off	Pleasant Grove Blvd	**D**	0.87	**D**	0.85
72	SR 65 SB Off	Pleasant Grove Blvd	**D**	0.84	C	0.80
81	Riverside Ave	I-80 WB Off-ramp	B	0.63	B	0.63
114	Stanford Ranch	SR 65 NB On	C	0.77	C	0.76
115	Stanford Ranch/Galleria Blvd	SR 65 SB On	**D**	0.89	**D**	0.88

Note: **Bold** and shaded text indicates LOS D or worse
LOS = level of service; V/C = volume to capacity ratio
SOURCE: DKS Associates, 2006

IMPACT 5.2-3:	**Increased traffic on Placer County roadways under cumulative conditions**
ORDINANCES AND STANDARDS:	Placer County LOS Policy
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None Required
RESIDUAL SIGNIFICANCE:	Less than Significant

Cumulative traffic conditions on Placer County roadways would be cumulatively significant, as shown by the number of roadways projected to operate at LOS D or worse (**Table 5.2-10**). The addition of the proposed project to cumulative conditions would change traffic volumes on Placer County roadways. **Table 5.2-10** shows the changes in daily volumes on Placer County roadways under cumulative conditions with the addition of the proposed project. The changes on Placer County roadways would be relatively minor, and the maximum increase would be approximately 1 percent on East Roseville Parkway east of the City. **Table 5.2-10** also shows that there would be no significant changes in LOS at any of the analyzed roadway segments. Therefore, the proposed project's contribution to this cumulative impact would not be cumulatively considerable and would be a **less-than-significant** cumulative impact.

TABLE 5.2-10

DAILY VOLUMES ON PLACER COUNTY ROADWAYS:
2025 CUMULATIVE NO PROJECT AND 2025 CUMULATIVE PLUS PROJECT

Roadway Segment		Lanes	2025 Cumulative No Project (Scenario 6)		2025 Cumulative Plus Project (Scenario 7)		
			Volume	LOS	Volume	LOS	Percent Change
Baseline Rd	West of Roseville City limit	**6**	52,100	E	51,600	E	-1%
Watt Ave	South of Baseline Rd	**6**	48,500	D	48,200	D	-1%
Walerga Rd	South of Baseline Rd	**4**	39,300	F	38,800	F	-1%
Fiddyment Rd	North of Roseville City limit	2	45,300	F	45,300	F	0%
Foothills Blvd	North of Roseville City limit	**4**	37,000	F	36,900	F	0%
Industrial Ave	North of Roseville City limit	2	16,000	D	15,800	D	-1%
Cavitt-Stallman Rd	East of Sierra College Blvd	2	11,500	C	11,400	C	-1%
Olive Ranch Rd	East of Cavitt Stallman Rd	2	2,100	A	2,100	A	0%
Douglas Blvd	East of Sierra College Blvd	4	49,800	F	49,500	F	-1%
Auburn Folsom Rd	South of Douglas Blvd	**4**	22,100	B	22,200	B	0%
Eureka Rd	East of Roseville City limit	**4**	21,200	A	20,900	A	-1%
E Roseville Pkwy	East of Roseville City limit	2	16,200	E	16,300	E	1%

Notes:
Roadway segment LOS are based on roadway capacities and LOS criteria in **Table 4.1-11**
Lanes in **bold** include assumed additional lanes in future scenarios
LOS = level of service
SOURCE: DKS Associates, 2006.

IMPACT 5.2-4:	**Increased traffic on City of Rocklin roadways under cumulative conditions**
ORDINANCES AND STANDARDS:	Rocklin General Plan LOS Policy
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

Cumulative traffic conditions on City of Rocklin roadways would be cumulatively significant, as shown by the number of roadways projected to operate at LOS D or worse (**Table 5.2-11**). The addition of the proposed project to cumulative conditions would cause changes in traffic volumes on Rocklin roadways. **Table 5.2-11** shows the changes in daily volumes on Rocklin roadways under cumulative conditions with the addition of the proposed project. The changes on Rocklin roadways would be relatively minor, and the maximum increase would be approximately 1 percent. Traffic volumes on a number of Rocklin roadways would actually decrease with the proposed project, in part due to the redistribution of traffic resulting from relatively minor changes in land use nearby. **Table 5.2-11** shows that none of the studied Rocklin roadways would experience a significant degradation in LOS with the proposed project. Therefore, the proposed project's contribution to this cumulative impact would not be cumulatively considerable. This represents a **less-than-significant** cumulative impact associated with the proposed project.

TABLE 5.2-11

DAILY VOLUMES ON ROCKLIN ROADWAYS:
2025 CUMULATIVE NO PROJECT AND 2025 CUMULATIVE PLUS PROJECT

Roadway Segment		Lanes	2025 Cumulative No Project (Scenario 6)		2025 Cumulative Plus Project (Scenario 7)		
			Volume	LOS	Volume	LOS	Percent Change
Blue Oaks Blvd	East of Roseville city limit	**6**	32,500	B	31,400	A	-3%
Park Dr	North of Roseville city limit	**6**	31,200	A	31,000	A	-1%
Stanford Ranch Rd	North of Roseville city limit	6	33,400	B	33,000	B	-1%
Pacific St	North of Roseville city limit	4	40,300	F	40,200	F	0%
Sierra College Blvd	North of Roseville city limit	**6**	44,900	D	45,300	D	1%
Sunset Blvd	East of Blue Oaks Blvd	6	45,700	D	45,800	D	0%
Sunset Blvd	West of Pacific St	**6**	43,900	D	43,400	D	-1%

Notes:
Roadway segment LOS are based on roadway capacities and LOS criteria in **Table 4.1-11**
Lanes in **bold** include assumed additional lanes in future scenarios
LOS = level of service
SOURCE: DKS Associates, 2006.

IMPACT 5.2-5:	**Increased traffic on Sacramento County roadways under cumulative conditions**
APPLICABLE ORDINANCES AND STANDARDS:	Sacramento County LOS Policy
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

The addition of the proposed project 2025 cumulative conditions would cause changes in traffic volumes on Sacramento County roadways. **Table 5.2-12** shows the changes in daily volumes on Sacramento County roadways with the addition of the proposed project. The table shows that the changes on Sacramento County roadways are relatively minor, with some segments experiencing a minor decrease in volume with the addition of the proposed project. Therefore, the proposed project's contribution to this cumulative impact would not be cumulatively considerable. This represents a **less-than-significant** cumulative impact associated with the proposed project.

TABLE 5.2-12

DAILY VOLUMES ON SACRAMENTO ROADWAYS:
2025 CUMULATIVE NO PROJECT AND 2025 CUMULATIVE PLUS PROJECT

Roadway Segment		Lanes	2025 Cumulative No Project (Scenario 6)		2025 Cumulative Plus Project (Scenario 7)		
			Volume	LOS	Volume	LOS	Percent Change
Watt Ave	North of Elverta	4	55,200	F	54,900	F	-1%
Watt Ave	North of Antelope	4	38,800	C	38,600	C	-1%
Walerga Rd	North of Elverta	4	54,300	F	54,100	F	0%
Walerga Rd	North of Antelope	4	39,800	C	39,900	C	0%
Antelope Rd North	North of Antelope	4	24,100	A	23,500	A	-2%
Roseville Rd	South of County Line	2	22,600	A	22,500	A	0%
Elverta Rd	West of Watt Ave	4	31,700	A	31,700	A	0%
Elverta Rd	East of Watt Ave	6	38,200	C	37,900	C	-1%

Notes:
Roadway segment levels of service (LOS) are based on roadway capacities and LOS criteria in **Table 4.1-11**
SOURCE: DKS Associates, 2006.

IMPACT 5.2-6:	**Increased traffic on Sutter County roadways under cumulative conditions**
ORDINANCES AND STANDARDS:	Sutter County LOS Policy
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

Cumulative traffic conditions on Sutter County roadways would not be cumulatively significant, as shown on **Table 5.2-13.** The addition of the proposed project to cumulative conditions would cause changes in traffic volumes on Sutter County roadways. **Table 5.2-13** shows the changes in daily volumes on Sutter County roadways with the addition of the proposed project and shows that the changes on Sutter County roadways would be relatively minor. Traffic volumes on some Sutter County roadways would actually decrease with the proposed project, which would be due in part to the redistribution of traffic resulting from relatively minor changes in land use nearby. **Table 5.2-13** shows that none of the studied Sutter County roadways would experience a significant degradation in LOS with the addition of the proposed project. Since the cumulative traffic conditions on Sutter County roadways would be less than significant, the proposed project could not cause a cumulatively considerable contribution to a significant impact. Cumulative impacts on Sutter County roadways would therefore be **less than significant**.

TABLE 5.2-13

DAILY VOLUMES ON SUTTER COUNTY ROADWAYS:
2025 CUMULATIVE NO PROJECT AND 2025 CUMULATIVE PLUS PROJECT

Roadway Segment		Lanes	2025 Cumulative No Project (Scenario 6)		2025 Cumulative Plus Project (Scenario 7)		
			Volume	LOS	Volume	LOS	Percent Change
Riego Rd	SR 70/99 to Placer County Line	**6**	32,100	A	31,600	A	-2%
Howsley Rd	Pleasant Grove Rd to Placer County Line	2	11,500	C	11,500	C	0%

Notes:
Roadway segment LOS are based on roadway capacities and LOS criteria in **Table 4.1-11**
Lanes in **bold** include assumed additional lanes in future scenarios
LOS = level of service
SOURCE: DKS Associates, 2006.

5.2.3.2 Air Quality

IMPACT 5.2-7:	**Construction-related air pollutant emissions under cumulative conditions**
ORDINANCES AND STANDARDS:	Placer County APCD significance thresholds
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Significant
MITIGATION MEASURE:	None identified
RESIDUAL SIGNIFICANCE:	Significant and unavoidable

Construction emissions of air pollutant emissions under Cumulative No Project conditions would exceed Placer County Air Pollution Control District's (PCACPD) significance thresholds due to the large number of projects that could be under construction simultaneously. For example, construction impacts from just one project, the Placer Vineyards Specific Plan, would alone exceed these thresholds (Quad Knopf, 2006). Other large proposed specific plans would also contribute to air pollutant emissions during construction within the 2020 time horizon of the proposed project. The implementation of all feasible and applicable control measures would reduce emissions as much as possible during construction activities. Despite implementation of these measures, construction activities would generate unavoidable, temporary increases in the nonattainment pollutants and their precursors on air quality. This would be a **significant** cumulative impact.

Although construction emissions from individual widening improvements under the proposed 2020 CIP would not by themselves exceed the PACPCD significance thresholds for air pollutant emissions, the project would contribute to this cumulatively significant condition. Because the air basin is not in attainment for some pollutants, this incremental addition is considered cumulatively considerable. This would be a **significant** cumulative impact of construction.

IMPACT 5.2-8:	**Operational air pollutant emissions under cumulative conditions**
ORDINANCES AND STANDARDS:	Placer County APCD significance thresholds
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

Cumulative Plus Project conditions (Scenario 7) would account for the cumulative effect of proposed land modifications within the City and the proposed project area in 2025. Similar to cumulative construction impacts, air pollutant emissions under Cumulative No Project conditions would exceed PCAPCD's significance thresholds due to the large number of stationary and mobile source emissions generated as a result of the Cumulative No Project scenario. For example, mobile and stationary source air pollutants from just one project, the Placer Vineyards Specific Plan, would increase total air pollution emissions to a significant and unavoidable level, even with implementation of identified mitigation measures (Quad Knopf, 2006). Other large proposed specific plans would contribute to air pollutant emissions within the 2020 time horizon of the proposed project as well. This would be a **significant** cumulative impact.

The proposed project would accommodate future buildout conditions within the City of Roseville, but would not of itself add to air pollutant emissions. The proposed project would include modifications and widening improvements at intersections and roadways to accommodate future citywide buildout conditions within Roseville and adhere to the City's LOS policy. These improvements are designed to reduce vehicular traffic congestion and improve LOS in Roseville, thereby resulting in less idling time and consequently reduced air pollutant emissions. **Table 5.2-1** above indicates that the percentage of intersections in Roseville operating at LOS C or better under Cumulative Plus Project conditions (Scenario 7) would be higher than under Cumulative No Project

conditions. Outside of Roseville, traffic would generally improve under the Cumulative Plus Project conditions, with the minor additions of traffic at a few locations which, overall, are surpassed by the improvements in LOS. The proposed project would therefore not represent a cumulatively considerable contribution to cumulatively significant air quality impacts. Therefore, these cumulative impacts on air quality would be **less than significant**.

5.2.3.3 Noise

IMPACT 5.2-9:	**Construction noise cumulative impacts**
ORDINANCES AND STANDARDS:	City of Roseville Noise Ordinance
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measure 4.3-1: Develop and implement a Construction Noise Abatement Program
RESIDUAL SIGNIFICANCE:	Less than Significant

Similar to air quality, construction noise impacts under Cumulative No Project conditions (Scenario 6) would exceed significance thresholds due to the large number of projects that could be undergoing simultaneous construction. Noise impacts from construction would result from the operation of construction equipment. The magnitude of impact would depend on the type of construction activity, the noise level generated by various pieces of construction equipment, the number of sources operating concurrently, the duration of the construction phase, the distance between the noise source and receptor, and the presence or absence of noise barriers such as topographical features that will change as project construction activity progresses. If additional projects are constructed concurrent to the proposed project in the vicinity of the proposed improvements, construction noise would further increase. Therefore, construction noise impacts would be cumulatively **significant**.

During construction of proposed project improvements, the City would adhere to their Noise Ordinance that allows construction activity on weekdays only between 7 a.m. and 7 p.m. and on weekends only between 8 a.m. and 8 p.m. In accordance with the Municipal Code, all construction equipment shall be fitted with factory-installed muffling devices or better and all construction equipment shall be maintained in good working order. However, even with implementation of the City's Noise Ordinance, construction activities near sensitive noise receptors (i.e., schools and hospitals) during allowed construction hours could potentially contribute to this cumulatively significant condition. The development of a Construction Noise Abatement Program identified in Mitigation Measure 4.3-1 would reduce these potential noise impacts to sensitive receptors. After mitigation, the incremental noise contribution of the proposed project during construction would be limited to a small number of widenings and some modifications to lanes spread over a substantial period of time in localized areas, and would be individually less than significant. For these reasons and due to the temporary nature of the impact, this incremental addition is not considered cumulatively considerable. Therefore, cumulative impacts related to construction noise would be **less than significant**.

IMPACT 5.2-10:	Operational noise cumulative impacts
ORDINANCES AND STANDARDS:	City of Roseville Noise Element
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Less than Significant
MITIGATION MEASURE:	None required
RESIDUAL SIGNIFICANCE:	Less than Significant

In assessing the significance of cumulative noise exposure for residential land uses, the predicted cumulative noise level was compared to predicted 2020 No Project (Scenario 4) ambient noise conditions. When the projected 2020 day-night noise exposure level (L_{dn}) exceeds 60 dBA for residential uses, the impact criterion for allowable increases of future, cumulative L_{dn} of 3 dBA or less would be applicable.

Table 5.2-14 summarizes the results of the analysis for the cumulative impact scenarios. The results show the L_{dn} of a representative set of receivers for each intersection proposed to be widened. The calculated exposures of the Cumulative Plus Project conditions (Scenario 7) range from 60 dBA to 70 dBA, which is similar to 2020 No Project conditions (Scenario 4). Scenario 7 is compared for conservatism because it would be worse than the 2020 Plus Project conditions (Scenario 5). As shown on **Table 5.2-14**, a 3 dBA increase would not occur at any of the intersections under Cumulative Plus Project conditions. Therefore, cumulative noise impacts would be less than significant. Given that cumulative impacts related to noise from the proposed project and related projects would not be significant, the proposed project alone could not cause a cumulatively considerable incremental impact. Therefore, the proposed project's cumulative impacts related to noise would be **less than significant**.

5.2.3.4 Biological Resources

IMPACT 5.2-11:	Cumulative impacts to biological resources
ORDINANCES AND STANDARDS:	California Endangered Species Act and Fish and Game Code Sections 3511 and 3503.5; Fish and Game Code Sections 3511 and 3503.5; Federal Endangered Species Act; Species of Special Concern; Section 404 of the Clean Water Act
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Significant
MITIGATION MEASURE:	Mitigation Measures 4.4-1 through 4.4-7
RESIDUAL SIGNIFICANCE:	Significant and unavoidable

TABLE 5.2-14

SUMMARY OF NOISE LEVELS AT INTERSECTIONS: 2025 CUMULATIVE PLUS PROJECT

Intersection ID	Calculated Noise Exposure, L_{dn}, dBA				
	2020 No Project (Scenario 4)	2025 Cumulative No Project (Scenario 6)	2025 Cumulative Plus Project (Scenario 7)	Change Scenario 7 minus Scenario 4	Change Scenario 7 minus Scenario 6
15	65	65	65	0	0
19	70	70	70	0	0
69	62	62	62	0	0
91	67	67	67	0	0
100	66	66	66	0	0
104	68	68	68	0	0
105	65	65	65	0	0
165	—	—	70	—	—
178	—	—	60	—	—
179	—	—	66	—	—

— = not applicable

Under cumulative conditions, development within and outside of the City of Roseville would convert large quantities of open space and agricultural uses to developed land. This would substantially reduce biological resources and habitat for plants and animals, including special-status species. The City's General Plan contains numerous policies relating to protection and enhancement of biological resources, including preserving and rehabilitating continuous riparian corridors, limiting access to sensitive areas, and preserving native oak trees and oak woodlands. Impacts of cumulative development on biological resources would be reduced with implementation of General Plan policies and other regulatory programs (e.g., Section 404 permitting, endangered species protection, etc.). Despite compliance with General Plan policies and implementation of the identified Mitigation Measures, disturbance and loss of biological resources would be a **significant and unavoidable** impact of cumulative development.

The proposed project could result in significant cumulative impacts to biological resources. Mitigation Measures presented in Section 4.3 would reduce impacts to biological resources associated with the proposed project to less-than-significant levels. These measures include conducting preconstruction surveys, avoiding sensitive areas, and compensating for loss of habitat. Although construction from individual widening improvements under the proposed 2020 CIP Update could by themselves be mitigated to less-than-significant levels, the project would contribute to cumulatively significant impacts by contributing to the potential loss of oak and riparian

woodlands; loss of seasonal wetlands and/or creek channels; as well as loss of habitat for Swainson's hawk, vernal pool crustaceans, and western spadefoot toad. Therefore, this incremental addition to biological resource impacts is considered cumulatively considerable. This would be a **significant** cumulative impact to biological resources.

5.2.3.5 Cultural Resources

IMPACT 5.2-12:	**Cumulative impacts to cultural resources**
ORDINANCES AND STANDARDS:	California Environmental Quality Act; California Public Resources Code (PRC) Sections 5097.98 and 21083.2; National Historic Preservation Act
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measures 4.5-1 and 4.5-2
RESIDUAL SIGNIFICANCE:	Less than Significant

The proposed project combined with other development projects considered under Cumulative Plus Project conditions (Scenario 7) would convert large quantities of open space and agricultural uses to developed land. All of the development projects included in the cumulative conditions would involve construction activities that could result in the disturbance of previously unknown surface or subsurface cultural resources. Considering the cumulative impact scenario of which the proposed project is a part, cumulative impacts to cultural resources would be **potentially significant.**

Mitigation Measures 4.5-1 and 4.5-2 would ensure that surveys are conducted for the widening projects incorporated into the proposed 2020 CIP Update prior to initiating construction, and would ensure that appropriate measures are implemented if buried archaeological artifacts, exotic rock (non-native), or unusual amounts of shell or bone, including human remains, were discovered. Based on the quantity of cultural resources that could be affected by the proposed project when compared to the large development projects considered under cumulative and the mitigation measures that would manage the discovery of any new resources that could be identified during construction, the proposed project's contribution to cumulative impacts on cultural resources is not considered cumulatively considerable. Therefore, the proposed project's cumulative impact on cultural resources would be **less than significant.**

5.2.3.6 Mitigation Measures for Cumulative Impacts

Mitigation Measure 5.2-1: Modify intersection geometries at the following 11 intersections to address effects from regional growth outside the City of Roseville:

a) Yosemite/ Atlantic
b) Woodcreek Oaks/ Blue Oaks
c) Oak Ridge/ Cirby
d) Foothills/ McAnally
e) SR 65 NB Off/ Pleasant Grove

f) Washington/ Roseville Pkwy
g) Sierra College/ Secret Ravine
h) South Cirby/ Old Auburn
i) Sunrise/ Lead Hill
j) Washington/ Junction
k) Crocker Ranch/ Blue Oaks

Table 5.2-2 identifies the specific modifications to be implemented.

This Mitigation Measure applies to Impact 5-1.

Mitigation Measure 5.2-2: Modify intersection geometries at Intersection 116 (Sunrise Ave/Automall Drive) and Intersection 176 (Gibson Drive West/ Roseville Parkway)

This Mitigation Measure applies to Impact 5-1.

The City has identified feasible mitigation measures at two of the affected intersections to address effects of the proposed project, as indicated below:

a) Intersection 116 (Sunrise Avenue/Automall Drive): Reconfigure the westbound approach to have a left-, left/through-, and right-turn lanes to improve this intersection from LOS D to LOS C.

b) Intersection 176 (Gibson Drive West /Roseville Parkway): Provide dual eastbound left-turn lanes to improve this intersection from LOS D to LOS C.

Mitigation Measure 4.1-1: Participate in a fee program

This Mitigation Measure applies to Impact 5.2-2.

The City shall participate in any fee program providing for improvements to federal and state facilities that is adopted by the City.

Mitigation Measure 4.3-1: Develop and implement a Construction Noise Abatement Program

This Mitigation Measure applies to Impact 5.2-9.

Prior to construction plan approval for each improvement, develop and implement a Construction Noise Abatement Program. The plan shall require that:

- All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers;

- Stockpiling and/or vehicle staging areas on the improvement plans and shall be located as far as is practical from existing occupied dwellings;

Specific noise control measures shall be identified that would reduce the hourly noise level of construction activity to 70 dBA or lower where feasible as determined by the Public Works Director

during hours of use for schools and churches, and at hospitals. These potential sensitive receptors located within 500 feet of proposed construction are as follows:

- One school at Intersection 178 (Washington Boulevard/All America).
- Two schools at Intersection 179 (Cottonwood Drive/Cirby Way).
- One hospital facility (under construction) with surgical procedures that are potentially noise sensitive at Intersection 19 (Eureka Road/Douglas Boulevard).
- A church, the "Light of the Gospel," at Intersection 15 (Orlando Avenue/Cirby Way).

Specific noise control measures shall be identified that would reduce the hourly average noise level of construction activity to 70 dBA, L_{eq} or lower at other noise-sensitive receptors where feasible. The construction contractor shall consider implementation of the following measures in the construction noise control plan:

1) Select equipment capable of performing the necessary tasks with the lowest feasible noise-emission level and the lowest feasible height for the acoustic center of noise emissions.

2) Noise barriers may be required to block the line of sight from noise sources to noise-sensitive receivers of concern or to further reduce noise levels beyond that provided by line-of-sight breaks afforded by topographical features. The noise barriers could be constructed using either plywood sheets or other solid material that provide sufficient mass per unit surface area (perhaps approaching 4 pounds per square foot) and have minimal openings between the top of barrier and ground surface (perhaps as little as 1 percent). Noise barriers of a given height are generally most effective when placed as close to either the source or receiver as possible, and perhaps at two such separate locations. The least desirable location is generally at a middle distance between sources and receptors. The plan should identify the proper height, location, and effectiveness of a noise barrier in terms of the expected hourly average noise level due to construction activity at noise-sensitive receivers of concern, with the objective of reducing construction activity noise that contributes to an hourly average of 70 dBA or less.

3) Disseminate essential information to residences and implement a complaint/ response tracking system. The construction contractor shall notify residents within 500 feet of the construction areas of the construction schedule in writing before construction begins. The construction contractor will designate a noise disturbance coordinator who will be responsible for responding to complaints regarding construction noise. The coordinator will determine the cause of the complaint and will ensure reasonable measures are implemented to correct the problem when feasible. A contact telephone number for the noise disturbance coordinator will be conspicuously posted on construction site fences and will be included in the written notification of the construction schedule sent to nearby residents.

Mitigation Measure 4.4-1: Consult with California Department of Fish and Game and implement appropriate mitigation compensation measures for loss of potential foraging habitat

This Mitigation Measure applies to Impact 5.2-11.

Prior to project initiation, the California Department of Fish and Game (CDFG) shall be contacted to determine if mitigation for the loss of annual grassland and potential foraging habitat for Swainson's hawk will be required. Implementation of any measures required by CDFG to compensate for the loss of potential foraging habitat will reduce the impact to a less-than-significant level.

Mitigation Measure 4.4-2: Conduct preconstruction burrowing owl surveys and implement measures specified by CDFG, where appropriate

This Mitigation Measure applies to Impact 5.2-11.

To ensure that direct disturbance of burrowing owls in annual grassland of the study area is avoided, a preconstruction survey will be conducted to determine presence/absence of the species. The survey will be conducted by a qualified biologist within 30 days of proposed ground-disturbing activities. Results of the survey will be submitted to the County and the CDFG. If burrowing owls are found onsite or evidence of their occurrence is observed during the survey, the CDFG will be immediately contacted to determine appropriate avoidance and mitigation measures. Implementation of preconstruction survey and measures specified by CDFG, as necessary, will reduce the impact to a less-than-significant level.

Mitigation Measure 4.4-3: Avoid disturbance of potential habitat for vernal pool crustaceans or implement mitigation measures in consultation with the U.S. Fish and Wildlife Service

This Mitigation Measure applies to Impact 5.2-11.

To avoid potential take of federally listed species, including vernal pool tadpole shrimp and vernal pool fairy shrimp, disturbance of the seasonal wetland and swale within the study area will be avoided to the extent feasible. Impacts to federally listed species or their habitats would likely require a permit from the U.S. Fish and Wildlife Service (USFWS). If potential habitat within the study area cannot be avoided, the USFWS will be contacted to determine survey responsibilities (to determine presence/absence of a species) and pertinent permitting and mitigation requirements, as necessary. Implementation of measures specified by the 404 permit specified prior to construction would mitigate the loss of potential habitat for vernal pool crustaceans will reduce the impact to a less-than-significant level.

Mitigation Measure 4.4-4: Avoid disturbance of potential habitat for western spadefoot toad or implement mitigation measures on consultation with CDFG

This Mitigation Measure applies to Impact 5.2-11.

To avoid potential loss of breeding habitat for western spadefoot toad, disturbance of the seasonal wetland and swale within the study area will be avoided to the extent feasible. CDFG will be contacted prior to project implementation to determine appropriate survey measures (to determine

species presence/absence) and/or mitigation requirements for loss of habitat for western spadefoot. Implementation of measures in consultation with CDFG for mitigating the loss of potential habitat will reduce the impact to a less-than-significant level.

Mitigation Measure 4.4-5: Construct outside of nesting season or conduct preconstruction raptor nesting surveys

This Mitigation Measure applies to Impact 5.2-11.

To avoid disturbance of raptor breeding and nesting activity, including nesting of sensitive raptors, project activities will be avoided during the typical raptor breeding season of March through August, to the extent feasible. If construction must take place during the typical nesting season, preconstruction surveys will be conducted by a qualified biologist no more than 30 days prior to initiation of proposed development activities. Surveys will be conducted to determine whether active nesting is occurring on or directly adjacent to the study area. Survey results will then be submitted to the CDFG. If active nests are found on or immediately adjacent to the site, consultation will be initiated with CDFG to determine appropriate avoidance measures. If no nesting is found to occur, necessary tree removal and other project activities could then proceed. Implementation of preconstruction raptor surveys and appropriate avoidance measures will reduce impacts to a less-than-significant level.

Mitigation Measure 4.4-6: Comply with agency permitting requirements and provide for no net loss of wetlands

This Mitigation Measure applies to Impact 5.2-11.

The City shall comply with all applicable U.S. Army Corps of Engineers (Corps), USFWS, CDFG, and Regional Water Quality Control Board permitting and mitigation requirements for intersection widening and construction. The City shall meet the agencies' no net loss of wetlands policy through one of the following measures:

- Avoid impacts through project design.
- Compensate for impacts by acquiring (through fee title or credits in an approved mitigation bank) replacement habitat.

When site-specific designs are available for the roadway and intersection improvements, project-level analysis would require that a wetland delineation be submitted to the Corps for verification. The City would be required to obtain a Clean Water Act Section 404 Permit from the Corps prior to any construction activity.

A wetland delineation report, *Wetland Delineation for Baseline 430* (ECORP 2003), has already been prepared and verified for an area encompassing the widening of Fiddyment Road from Pleasant Grove Boulevard to Baseline Road and the Intersection 165 (Fiddyment Road/Westlake) improvement area. This verification is valid for five years; therefore, the Fiddyment Road widening and Intersection 165 improvements would not require a new delineation before this 5-year period is over.

Mitigation Measure 4.4-7: Conduct preconstruction rare plant surveys

This Mitigation Measure applies to Impact 5.2-11.

To avoid impacts to potentially occurring special-status plant species, the City shall conduct preconstruction floristic rare plant surveys along Intersections 105, 69, and 165 and along the west side of Fiddyment Road from Pleasant Grove Boulevard to Baseline Road. Two special-status plants (Sanford's arrowhead and rose mallow) have the potential to occur within these improvement areas. Floristic surveys shall be conducted (according to agency guidelines) within in the project sites to determine presence or absence of special-status plant species. Should any individual special status plant species be located, the applicant shall retain a qualified botanist to develop and implement a mitigation plan; appropriate measures could include transplanting for species that are not federally or state listed as threatened or endangered (such as Sanford's arrowhead and rose mallow, which are on California Native Plant Society List 1B.2 and List 2, respectively). The CDFG would review and approve the mitigation plan, except if the plan or portion of the plan addresses federally listed species. In that case, the mitigation plan would be reviewed by the USFWS.

Mitigation Measure 4.5-1: Conduct Cultural Resources Inventory Surveys

This Mitigation Measure applies to Impact 5.2-12.

As many of the proposed project locales have not been previously subject to cultural resources inventory efforts (i.e., Intersections 15, 19, 91, 105, 178, and 179), it is recommended that cultural resources inventory surveys be completed prior to construction activities in compliance with both federal and state regulations. The studies must include establishment of Areas of Potential Effect (APE) or formalized study areas, Native American consultation, pedestrian surveys, and a technical report that includes recommendations for additional work, if necessary. Additional measures, including resource avoidance, evaluation (i.e., determine California Register of Historic Resources and/or National Register of Historic Properties eligibility), and data recovery excavation could become necessary if cultural resources are identified within the APE of any of the proposed project components as a result of these studies.

Mitigation Measure 4.5-2: Comply with the recommendations of a qualified professional archaeologist if cultural resources are inadvertently exposed during construction

This Mitigation Measure applies to Impact 5.2-12.

If buried archaeological artifacts, exotic rock (non-native), or unusual amounts of shell or bone, including human remains are discovered, it is recommended that project activities in the vicinity of the find be immediately stopped and a qualified professional archaeologist consulted to assess the resource and provide proper management recommendations. If the find is determined to be a historical or unique archaeological resource, contingency funding and a time allotment to allow for implementation of avoidance measures or appropriate mitigation shall be made available, as provided in Section 15064.5 of the CEQA Guidelines.

The archaeologist shall evaluate any potential effects on any historical resource or unique archaeological resource, and where such effects would be significant shall recommend potential mitigation to the City for its consideration. The City will assess the feasibility of any proposed

mitigation (e.g., avoidance of the historical resource) and impose the mitigation where feasible in light of factors such as the nature of the find, project design, costs, General Plan policies and land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted.

5.3 GROWTH-INDUCING IMPACTS

The CEQA Guidelines require an EIR to evaluate indirect or secondary effects of a project, which may include growth-inducing effects. Section 15126(g) of the CEQA Guidelines states that a project could be considered growth inducing if it could "foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." A development project may have growth-inducing potential if, for example, it extends infrastructure (e.g., water, sewer, roads) to undeveloped areas or increases the capacity of existing infrastructure, promotes similar development to occur on adjacent parcels, increases the area's housing supply, or introduces new employment to an area.

In the absence of other favorable conditions, however, it is unlikely that any one of these components could induce significant growth. A mix of economic, political, physical, and social factors ultimately determines the magnitude, location, and timing of growth. Variables including regional economic trends, housing demand, land availability and cost, quality of infrastructure and public services, proximity to employment centers, and regulatory considerations affect the way in which growth occurs.

Section 15126 of the CEQA Guidelines identifies criteria for evaluating the extent to which growth could be induced, accelerated, intensified, or shifted as a result of any proposed project. Subsection (g) provides the framework for a discussion of these potential growth-inducing impacts, as follows:

- Would the project foster economic or population growth or the construction of additional housing?
- Would the project remove obstacles to population growth?
- Would the project tax existing community facilities?
- Would the project encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

Implementation of the proposed project would require updating the City's CIP to accommodate revised citywide buildout conditions using an updated traffic model. The proposed project includes widening existing roadways throughout the City and improving intersections to accommodate development of entitled land within Roseville. All improvements would be made to existing intersections and roadways; the CIP does not include the construction of new intersections or roadways nor would it make currently undeveloped areas accessible. Adoption of the proposed project could, however, indirectly increase pressure to develop areas adjacent to the proposed improvements by facilitating the flow of traffic throughout the City and by improving localized traffic conditions. Since the proposed project's improvements would increase the capacity of the City's roadway system, this would be considered a **significant and unavoidable** growth-inducing impact.

5.4 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

The potential environmental impacts that would result from implementation of the proposed project are summarized in **Table 2-1** in Chapter 2 of this Draft Subsequent EIR. In some cases, impacts that have been identified would be less than significant. In other instances, incorporation of Mitigation Measures identified in this Draft Subsequent EIR would reduce the impacts to levels that are less than significant. However, the following impacts cannot be feasibly mitigated to a less-than-significant level, and therefore, would remain as unavoidable significant environmental impacts:

Existing Plus Project Conditions (Scenario 2)

- Increased traffic on City of Roseville roadways
- Increased traffic on state highways
- Increased traffic on Placer County roadways
- Increased traffic on Sacramento County roadways
- Growth-inducing impacts

2020 Plus Project Conditions (Scenario 5)

- Increased traffic on City of Roseville's roadways
- Increased traffic on state highways
- Increased traffic on Placer County roadways
- Growth-inducing impacts

2025 Cumulative Plus Project Conditions (Scenario 7)

- Increased traffic on City of Roseville roadways
- Increased traffic on state highways
- Increased air emissions
- Loss of biological resources
- Growth-inducing impacts

perishable fruit and vegetables, opening up California for greater agricultural development. This company lent its name to the road bordering the southern edge of the study area.

Roseville grew into a city during the first decade of the twentieth century. Its sudden growth was due to the Southern Pacific Railroad's decision to move its roundhouse, repair facilities, and switching yard from nearby Rocklin to Roseville. The construction of these railroad facilities in Roseville took two years, from 1906 to 1908. During this period, many railroad employees in Rocklin moved to Roseville, and the latter's population grew to more than 2,000. The downtown business district swelled, and new subdivisions were laid out to accommodate the larger population (Davis, 1964; 1993).

Growth stimulated a need for public services, such as fire protection, a sewer system, an electric power system, and a bridge across Dry Creek. In 1909, Roseville citizens voted to incorporate, giving them power to levee taxes on themselves and to choose a Board of Trustees and a mayor. In 1910, a bond measure was passed to provide city services (Davis, 1975; 1993).

Roseville continued to grow, from 2,600 in 1910 to nearly 4,500 in 1920. The Southern Pacific Railroad facilities, and the ability of the railroad to serve agriculture, continued to be the main reasons for this growth. Perhaps the largest employer in Roseville, other than the railroad, was the PFE plant located next to the railroad tracks. Railroads loaded with California produce would pull alongside PFE facilities for supplies of ice before continuing east, across the Sierra Nevada mountains and on to eastern markets. In 1913, PFE doubled its cold storage capacity from 15,000 to 30,000 tons, making it, according to one source, the largest ice plant in the world. PFE expanded its Roseville plant again in 1924 and built another plant between Roseville and Antelope in 1926/1927. Southern Pacific kept pace with PFE, laying many miles of new track for PFE use. In 1926, Southern Pacific also began construction of a $1.5 million car shop. By the end of the 1920s, the Southern Pacific shops and yards in Roseville employed 1,225 men and was perhaps the largest rail complex west of the Mississippi (Davis, 1975; 1993).

The depression dampened construction activity during the 1930s, and during World War II construction all but ceased, with two exceptions. Roseville suffered a housing shortage during the war, and so a few housing developments were built for war workers. Due to large troop movements and the moving of war material through Roseville during the war, the Southern Pacific Railroad also expanded its rail yards at this time (Davis, 1975; 1993).

Roseville remained primarily a railroad town through the 1940s, but major changes came in the 1950s. Automobiles and interstate trucks began to displace trains. New transportation projects were auto-oriented; these included the Seawall Underpass (which provided tunnel access underneath the Southern Pacific tracks, connecting the two sides of Roseville) and the improvement of Highway 40 (now Interstate 80) to freeway status. In 1955, Folsom Dam was enlarged as part of the state's Central Valley Project. At PFE, refrigerated cars replaced icing machines in the 1960s (Davis, 1975; 1993).

As rail jobs declined, jobs were created in other areas of commerce and industry. These included the construction of retail shopping centers and corporate headquarters along Douglas Boulevard and Harding Boulevard, east of the old center of town, and industry along Highway 65, north of the old city. In general, there has been a major shift in population and construction to outlying areas of Roseville, especially to the east. The railroad is still an important part of Roseville's economy, but it is far from the dominant factor that it was from 1906 through the 1940s (Davis, 1975; 1993).

4.5.3 EXISTING CONDITIONS

In order to establish baseline conditions, a record search was completed at the North Central Information Center (NCIC) in October of 2006 (NCIC File No. PLA-06-122). The record search indicated that two cultural resources have been previously identified within the areas proposed for widening; these are discussed individually below.

4.5.3.1 Fiddyment Road

The course of Fiddyment Road was recorded by Derr (1997) and was subsequently given the State Trinomial CA-PLA-1102/H. Fiddyment Road is approximately eight miles in length from Baseline Road at the south to Moore Road at the north. This two-lane rural road has very narrow shoulders and is lined by ditches on both the east and west sides of the road. The current 8-mile length of the road was established by 1913.

This historic-era resource bisects the footprint of three components of the proposed project: the widening of Fiddyment Road from four to six lanes between Pleasant Grove Boulevard and Baseline Road, and improvements to Intersections 69 (Fiddyment Road/Pleasant Grove Boulevard) and 165 (Fiddyment Road/Westlake). Fiddyment Road was previously determined to be ineligible for inclusion to the California Register of Historic Resources (CRHR) (JRP, 2004).

4.5.3.2 Spring Valley Ranch Rock Walls

A number of rock walls, collectively given the State Trinomial CA-PLA-647/H, have been recorded in the vicinity of Intersections 100 (Roseville Pkwy/Reserve) and 104 (Roseville Pkwy/West Mall) as well as the two proposed areas for widening along the Roseville Parkway. These walls of local volcanic boulders were reportedly constructed between 1875 and 1880 (Miller, 1969) and subdivided George Whitney's Spring Valley Ranch.

A recent cultural resource investigation along the course of the Roseville Parkway found no evidence of the previously documented rock walls (Leach-Palm and Waechter, 2006a, 2006b). The authors suggest that they may have been destroyed by modern development (Leach-Palm and Waechter, 2006b: 16).

4.5.3.3 Previous Cultural Resources Surveys

The record search also revealed that the most of the project locations where widening is proposed have not been previously inventoried for cultural resources. Of the 10 intersections and 3 roadway sections subject to proposed improvements, neighboring Intersections 100 and 104 as well as the road widenings along Roseville Parkway were subjected to inventory efforts by Far Western (Leach-Palm and Waechter, 2006) while Intersections 69 and 165 as well as the proposed widening of Fiddyment Road were inventoried by Cultural Resource Unlimited (Derr, 1996) and Jones & Stokes (Jones & Stokes, 2002).

4.5.3.4 Native American Consultation

To acquire more information about potential cultural resources located in or near the areas proposed for widening, a request for information was submitted to the Native American Heritage Commission (NAHC) (Appendix H). In their response, the NAHC stated that the Sacred Land Files did not indicate the presence of cultural resources in the immediate vicinity of the individual project areas. In

their transmittal, the NAHC also enclosed a list of Native American individuals and/or organizations that might have knowledge of cultural resources in the project area and suggested that all on the list be contacted. URS notified all those listed, as suggested by the NAHC (Appendix H). A single response was received from the United Auburn Indian Community of the Auburn Rancheria. The response did not identify any known areas of importance to their community; the response requested copies of project-related archaeological studies and environmental documents (Appendix H).

4.5.4 REGULATORY SETTING

4.5.4.1 Historical Resources and Unique Archaeological Resources

Numerous laws, regulations, and statutes on both the federal and state levels seek to protect and target the management of cultural resources. These include the Antiquities Act of 1906; Historic Sites Act of 1935; Reservoir Salvage Act of 1960; National Historic Preservation Act of 1966; National Environmental Policy Act of 1969; Executive Order 11593 (Projection and Enhancement of the Cultural Environment, 1971); 36 CFR 800 and CFR 60 (Advisory Council on Historic Preservation: Protection of Historic and Cultural Properties, Amendments to Existing Regulations, 1/30/1979; National Register of Historic Places, Nominations by States and Federal Agencies, Rules and Regulations, 1/9/1976); Revisions to 36 CFR 800 (Protection of Historic Properties, 1/10/1986); Archaeological and Historical Preservation Act of 1974; American Indian Religious Freedom Joint Resolution of 1978; Archaeological Resources Protection Act of 1979; Native American Graves Protection and Repatriation Act of 1990; and the California Environmental Quality Act (1970). Collectively these regulations and guidelines establish a comprehensive program for the identification, evaluation, and treatment of cultural resources.

4.5.4.2 Federal Significance Criteria

The four evaluation criteria to determine a resource's eligibility to the NRHP, in accordance with the regulations outlined in 36 CFR 800, are identified by 36 CFR 60.4. These evaluation criteria, listed below, are used to help determine what properties should be considered for protection from destruction or impairment resulting from project-related activities (36 CFR 60.2).

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- Resources that are associated with events that have made a significant contribution to the broad patterns of our history; or
- Resources that are associated with the lives of persons significant in our past; or
- Resources that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Resources that have yielded, or may be likely to yield, information important in prehistory or history (36 CFR 60.4).

4.5.4.3 State Significance Criteria

In considering impact significance under CEQA, the significance of the resource itself must first be determined. At the state level, consideration of significance as a unique archaeological resource is measured by cultural resource provisions considered under Public Resources Code Section 21083.2, CEQA Guidelines Sections 15064.5 and 15126.4, and the criteria regarding resource eligibility to the CRHR.

Generally under CEQA, a historical resource (these include built-environment historic and prehistoric archaeological resources) is considered significant if it meets the criteria for listing on the CRHR. These criteria are set forth in CEQA Section 15064.5 and defined as any resource that:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

Section 15064.5 of CEQA also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed under California Public Resources Code (PRC) Section 5097.98. Specifically, CEQA Guidelines Section 15064.5, subdivision (e), requires that excavation activities be stopped whenever human remains are uncovered and that the coroner be called in to assess the remains. If the coroner determines that the remains are those of Native Americans, the Native American Heritage Commission must be contacted within 24 hours. At that time, Section 15064.5, subdivision (d), directs the lead agency to consult with the appropriate Native Americans as identified by the Native American Heritage Commission and directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

Impacts to "unique archaeological resources" are also considered under CEQA, as described under PRC 21083.2. If an archaeological site does not meet the criteria for inclusion on the CRHR but does meet the definition of a unique archeological resource as outlined in the California Public Resource Code (Section 21083.2), it is entitled to special protection or attention under CEQA. A unique archaeological resource implies an archaeological artifact, object, or site about which it can be clearly demonstrated that—without merely adding to the current body of knowledge—there is a high probability that it meets one of the following criteria:

- The archaeological artifact, object, or site contains information needed to answer important scientific questions, and there is a demonstrable public interest in that information;
- The archaeological artifact, object, or site has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
- The archaeological artifact, object, or site is directly associated with a scientifically recognized important prehistoric or historic event or person.

A non-unique archaeological resource indicates an archaeological artifact, object, or site that does not meet the above criteria. Impacts to non-unique archaeological resources and resources that do not qualify for listing on the CRHR receive no further consideration under CEQA.

Under CEQA Section 15064.5, a project potentially would have significant impacts if it would cause substantial adverse change in the significance of one of the following:

- A historical resource (i.e., a cultural resource eligible for the CRHR);
- An archaeological resource (defined as a unique archaeological resource which does not meet CRHR criteria);
- A unique paleontological resource or unique geologic feature (i.e., where the project would directly or indirectly destroy a site or resources); or
- Human remains (i.e., where the project would disturb or destroy burials).

A non-unique archaeological resource is given no further consideration, other than the simple recording of its existence, by the lead agency.

Section 15065.4(e)(1) and (2) of the CEQA Guidelines provides the following guidance with regard to the accidental discovery of human remains:

> In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:
>
> 1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
>
> a. The coroner of the County must be contacted to determine that no investigation of the cause of death is required, and
>
> b. If the coroner determines the remains to be Native American:
>
> i. The coroner shall contact the Native American Heritage Commission within 24 hours.
>
> ii. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
>
> iii. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or
>
> 2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission;

b. The descendent identified fails to make a recommendation; or

c. The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Senate Bill (SB)-18 (Government Code Section 65352.3) now requires local governments to consult with Native American tribes before the adoption or amendment of a general plan or specific plan proposed on or after March 1, 2005. The Governor's Office of Planning and Research recommends that local government should send a written request to the Native American Heritage Commission asking for a list of tribes with whom to consult at the earliest opportunity. A tribal consultation list request form is available on the Native American Heritage Commission website. A sample form is also available from the Office of Planning and Research.

4.5.4.4 Conformity of Federal and State Evaluation Criteria

The criteria for eligibility for the California Register of Historic Resources (CRHR) are very similar to those that qualify a property for the National Register of Historic Properties (NRHP), which is the significance assessment tool used under the National Historic Preservation Act of 1966 (NHPA). The criteria of the NRHP apply when a project has federal involvement that includes issuance of permits. State cultural resources significance criteria may also apply when resources fall under the jurisdiction of a state and/or local agency.

A property that is eligible for the NRHP is also eligible for the CRHR. All potential impacts to significant resources under a federal agency must be assessed and addressed under the procedures of Section 106 of the NHPA, set forth at 36 CFR 800. All resources encountered during the project, with the exception of isolate artifacts and isolate features that appear to lack integrity or data potential, will be evaluated for significance vis-à-vis Section 106.

4.5.5 LOCAL REGULATIONS

4.5.5.1 City of Roseville General Plan

In addition to cultural resources as recognized by Section 106 of the NRHP and CEQA, the City of Roseville's General Plan contains policies addressing cultural resources including:

Policy OD-1 When items of historical, cultural or archaeological significance are discovered within the City, a qualified archaeologist or historian shall be called to evaluate the find and to recommend a proper action.

Policy OD-2 Significant archaeological sites shall, when feasible, be incorporated into open space areas.

Policy OD-3 Subject to appropriate Federal, State and local agencies, artifacts which are discovered and subsequently determined to be "removable," shall be offered for dedication to Maidu park Native American Interpretive Center.

Policy OD-5 Establish standards for the designation, improvement and protection of buildings, landmarks and sites of cultural and historic character.

4.5.6 IMPACTS

This section identifies and discusses the environmental impacts resulting from the proposed project, and suggests mitigation measures to reduce the levels of impact. A detailed discussion of Mitigation Measures is included in Section 4.5.7.

4.5.6.1 Significance Criteria

For the proposed project, potential significant impacts to cultural resources including inadvertent discoveries have been evaluated using the criteria listed below. Under criteria based on CEQA Guidelines, the project would be considered to have a significant impact on cultural resources if it would result in any of the following:

- A substantial adverse change in the significant of a historical resource that is either listed or eligible for listing on the National Register of Historic Places, the California Register of Historic Resources, or a local register of historic resources;
- A substantial adverse change in the significance of a unique archaeological resource;
- Disturbance or destruction of unique paleontological resource or site or unique geological feature; or
- Disturbance of any human remains, including those interred outside of formal cemeteries.

Under CEQA, only those archaeological resources deemed important (e.g., CRHR- or NRHP-eligible) or unique can be significantly affected (i.e., impacted) with project implementation. As archaeological sites are generally only physically affected, only impacts resulting from project-related construction are discussed. Indirect impacts from project operation are not expected to occur.

4.5.6.2 Impacts and Mitigation Measures

IMPACT 4.5-1:	**Damage to Previously Unrecorded, Potentially Important Cultural Resources**
APPLICABLE ORDINANCES AND STANDARDS:	California Environmental Quality Act, National Historic Preservation Act
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measure 4.5-1: Conduct archaeological pedestrian survey of intersections that have not been subject to previous archaeological survey (Intersections 15, 19, 91, 105, 178, and 179) when final design has been developed
RESIDUAL SIGNIFICANCE:	Less than Significant

As many of the proposed project locales have not been previously subject to cultural resources inventory efforts, it is recommended that such studies, including establishment of Areas of Potential Effect (APE),

Native American consultation, pedestrian surveys, and recommendations for additional work, if necessary, be completed prior to construction activities in compliance with both federal and state regulations. It should be noted if cultural resources are identified within the APE of any of the proposed project components during these studies, additional measures may be necessary, including resource avoidance, evaluation (i.e., determine CRHR and/or NRHP eligibility), and data recovery excavation. With implementation of Mitigation Measure 4.5-1, impacts to previously unrecorded, potentially important cultural resources identified during such studies would be reduced to a **less-than-significant** level.

IMPACT 4.5-2	**Damage to Previously Unidentified, Potentially Important, and/or Unique Archaeological Resources Inadvertently Exposed During Construction**
APPLICABLE ORDINANCES AND STANDARDS:	California Environmental Quality Act; California Public Resources Code (PRC) Sections 5097.98 and 21083.2; National Historic Preservation Act; City of Roseville General Plan Policy OD-1
SIGNIFICANCE WITH ORDINANCES AND STANDARDS:	Potentially Significant
MITIGATION MEASURE:	Mitigation Measure 4.5-2: Comply with the recommendations of a qualified professional archaeologist if cultural resources are inadvertently exposed during construction
RESIDUAL SIGNIFICANCE:	Less than Significant

During construction of any of the proposed project improvements, previously undiscovered cultural resources could be inadvertently exposed during grading or excavation activities. This would be a **potentially significant** impact of the proposed project.

This potential impact would be mitigated to a **less-than-significant** level by halting ground-disturbing activities temporarily until a qualified professional archaeologist is consulted. If the discovery includes human remains, the Coroner and Native American Heritage Commission must also be contacted. As stated in the City of Roseville's General Plan, a qualified archaeologist or historian called to evaluate the find must recommend a proper action. This action could include resource evaluation (i.e., determine CRHR and/or NRHP eligibility), data recovery excavations, or some form of further resource avoidance.

4.5.7 MITIGATION MEASURES

Mitigation Measure 4.5-1: Conduct archaeological pedestrian survey of intersections that have not been subject to previous archaeological surveys (Intersections 15, 19, 91, 105, 178, and 179) when final design has been developed

This Mitigation Measure applies to Impact 4.5-1.

As many of the proposed widening locations have not been previously subject to cultural resources inventory efforts (i.e., Intersections 15, 19, 91, 105, 178, and 179), it is recommended that cultural resources inventory surveys be completed prior to construction activities in compliance with both federal and state regulations. The studies must include establishment of APE or formalized study

areas, Native American consultation, pedestrian surveys, and a technical report that includes recommendations for additional work, if necessary. Additional measures, including resource avoidance, evaluation (i.e., determine CRHR and/or NRHP eligibility), and data recovery excavation, may be necessary if cultural resources are identified within the APE of any of the proposed project improvements as a result of these studies.

Implementation of Mitigation Measure 4.5-1, including those measures recommended in the requisite technical report, will reduce this potential impact to a less-than-significant level.

Mitigation Measure 4.5-2: Comply with the recommendations of a qualified professional archaeologist if cultural resources are inadvertently exposed during construction

This Mitigation Measure applies to Impact 4.5-2.

In the event of the discovery of buried archaeological artifacts, exotic rock (non-native), or unusual amounts of shell or bone (including human remains), City of Roseville General Plan Policy OD-1 requires that a qualified archaeologist or historian shall be called to evaluate the find and to recommend a proper action. Mitigation Measure 4.5-2 requires that construction activities in the vicinity of the find be immediately stopped until this consultation occurs, and management recommendations are provided and implemented. If the find is determined to be a historical or unique archaeological resource, contingency funding and a time allotment to allow for implementation of avoidance measures or appropriate mitigation shall be made available, as provided in Section 15064.5 of the CEQA Guidelines.

The archaeologist shall evaluate any potential effects on any historical resource or unique archaeological resource and, where such effects would be significant, shall recommend potential mitigation to the City for its consideration. The City will assess the feasibility of any proposed mitigation (e.g., avoidance of the historical resource) and impose the mitigation where feasible in light of factors such as the nature of the find, project design, costs, General Plan policies and land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. If the discovery includes human remains, the Coroner and Native American Heritage Commission must also be contacted.

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
			(Fiddyment Road/Westlake) improvement area. This verification is valid for five years; therefore, the Fiddyment Road widening and Intersection 165 improvements would not require a new delineation before that time.
2006 Subsequent EIR	Biological Resources	Mitigation Measure 4.4-7	To avoid impacts to potentially occurring special-status plant species, the City shall conduct preconstruction floristic rare plant surveys along Intersections 105, 69, and 165 and along the west side of Fiddyment Road from Pleasant Grove Boulevard to Baseline Road. Two special-status plants (Sanford's arrowhead and rose mallow) have the potential to occur within these improvement areas. Floristic surveys shall be conducted (according to agency guidelines) within the project sites to determine the presence or absence of special-status plant species. Should any individual special-status plant species be located, the applicant shall retain a qualified botanist to develop and implement a mitigation plan; appropriate measures could include transplanting for species that are not federally or state listed as threatened or endangered (such as Sanford's arrowhead and rose mallow, which are on California Native Plant Society List 1B.2 and List 2, respectively). The CDFG would review and approve the mitigation plan, except if the plan or portion of the plan addresses federally listed species. In that case, the mitigation plan would be reviewed by the USFWS. Appropriate measures may include transplanting for species that are not federally or state listed as threatened or endangered (such as Sanford's arrowhead and rose mallow).

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
2006 Subsequent EIR	Cultural Resources	Mitigation Measure 4.5-1	As many of the proposed widening locations have not been previously subject to cultural resources inventory efforts (i.e., Intersections 15, 19, 91, 105, 178, and 179), it is recommended that cultural resources inventory surveys be completed prior to construction activities in compliance with both federal and state regulations. The studies must include establishment of Areas of Potential Effect (APE) or formalized study areas, Native American consultation, pedestrian surveys, and a technical report that includes recommendations for additional work, if necessary. Additional measures including resource avoidance, evaluation (i.e., determine California Register of Historic Resources and/or National Register of Historic Places eligibility), and data recovery excavation may become necessary if cultural resources are identified within the APE of any of the proposed project components as a result of these studies.
2006 Subsequent EIR	Cultural Resources	Mitigation Measure 4.5-2	In the event of the discovery of buried archaeological artifacts, exotic rock (non-native), or unusual amounts of shell or bone, including human remains, City of Roseville General Plan Policy OD-1 requires that a qualified archaeologist or historian shall be called to evaluate the find and to recommend a proper action. Mitigation Measure 4.5-2 requires that construction activities in the vicinity of the find be immediately stopped until this consultation occurs, and management recommendations are provided and implemented. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment to allow for implementation of avoidance measures or appropriate mitigation shall be made available, as

TABLE 2-2

COMPLETE LIST OF MITIGATION MEASURES FOR THE CITY OF ROSEVILLE'S CIP (CONTINUED)

Environmental Document	Resource Area	Mitigation Measure	Detailed Description
			provided in Section 15064.5 of the CEQA Guidelines. The archaeologist shall evaluate any potential effects on any historical resource or unique archaeological resource, and where such effects would be significant, shall recommend potential mitigation to the City for its consideration. The City will assess the feasibility of any proposed mitigation (e.g., avoidance of the historical resource) and impose the mitigation where feasible in light of factors such as the nature of the find, project design, costs, General Plan policies and land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. If the discovery includes human remains, the Coroner and Native American Heritage Commission must also be contacted.