DRAFT

Environmental Impact Report
City of Perris General Plan 2030

State Clearinghouse # 2004031135

Prepared for:

City of Perris
Department of Community Development
135 North "D" Street
Perris, CA 92570

Contact: Brad Eckhardt, Associate Planner

Prepared by:

Hogle-Ireland, Inc.
42 Corporate Park, Suite 250
Irvine, CA 92606
949.553.1427

Contact: David Lepo, Senior Project Manager

HOGLE-IRELAND INC.
A Land Planning & Development Consulting Firm

October 2004

Table of Contents

List of Appendices

This Page Left Blank Intentionally

I. SECTION 1.0: INTRODUCTION

Table of Contents

1.1 STATUTORY REQUIREMENTS FOR AN ENVIRONMENTAL IMPACT REPORT

This Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the adoption and implementation of the City of Perris General Plan 2030. The City of Perris is the lead agency for the preparation of this EIR. This document is prepared in conformance with CEQA (California Public Resources Code Section 21000 et. seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et. seq.).

General Plan 2030 has been determined to be a project under CEQA as defined in Section 15060 of the Guidelines. Initial review by the City of Perris, as the Lead Agency with authority to approve, modify, or reject the project, indicated that the project may have a significant adverse impact on the environment, thus requiring preparation of the Environmental Impact Report.

CEQA requires that an EIR include the following specific sections:

- Table of Contents
- Introduction
- Executive Summary
- Project Description
- Environmental Setting
- Significant Environmental Impacts and Mitigation Measures
- Cumulative Impacts
- Growth-Inducing Impacts
- Significant Unavoidable Adverse Impacts
- Effects Found Not to be Significant
- Alternatives to the Proposed Project
- Areas of Known Controversy
- Organizations and Persons Consulted

This EIR was prepared by Hogle-Ireland, Inc. a consultant under contract to the City of Perris. Prior to public review, it was reviewed and evaulated by the City of Perris. This EIR reflects the independent judgment and analysis of the City of Perris as required by CEQA. Lists of organizations and persons consulted and the report preparation personnel are provided in Sections 8.0 of this EIR.

1.2 LEAD AGENCY AND RESPONSIBLE AGENCIES

CEQA Guidelines Section 15367 identifies the lead agency responsible for preparation of an EIR as ". . . the public agency, which has the principal responsibility for carrying out or

approving a project." The City of Perris is responsible for preparation, adoption, and implementation of General Plan 2030 and is, therefore, the Lead Agency for the EIR.

CEQA Guidelines Section 15381 define a responsible agency as ". . . a public agency which proposes to carry out or approve a project, for which lead agency is preparing or has prepared an EIR . . ." and ". . . includes all public agencies other than the lead agency which have discretionary approval power over the project." The City of Perris is the only agency with the authority to carry out or approve the proposed project.

1.3 TYPE OF EIR

The EIR for General Plan 2030 is a Program EIR intended to provide information at a more general level of detail on potential impacts of all development likely to occur with implementation of General Plan 2030.

As described in Section 15168(a) of the CEQA guidelines, a Program EIR is one that may evaluate a series of actions that can be characterized as one large project and that are related either: (1) geographically; (2) as logical parts in the chain of contemplated actions; (3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar effects that can be mitigated in similar ways. Because General Plan 2030 will establish policies and regulatory criteria for future growth and development throughout the City of Perris, a Program level EIR is the appropriate framework within which to address environmental impacts associated with this project.

1.4 SCOPE OF THE EIR

This EIR addresses the potential environmental effects of General Plan 2030. The scope of the EIR includes environmental issues identified in the Initial Study (IS) and the Notice of Preparation (NOP) issued by the City, comments obtained during a public scoping meeting, as well as issues raised by agencies and the public in response to the IS/NOP, as described in Sections 1.6 and 1.7.

1.5 SCOPING PROCESS

In compliance with State GEQA Guidelines, the City of Perris has taken steps to maximize the public's opportunity to participate in the environmental process. The IS/NOP was distributed on March 19, 2004 via certified mail to agencies and other interested parties to solicit comments and inform the public of General Plan 2030. A public scoping meeting was held on August 25, 2004, to obtain further input from the public on the scope of the environmental document. Agencies, organizations, and interested parties not previously contacted or who

did not respond to the IS/NOP currently have the opportunity to comment during the 45-day public review period on the draft EIR and subsequent public hearings on the project and EIR.

1.6 AREAS OF ANALYSIS

Pursuant to *Guidelines for Implementation of the California Environmental Quality Act*, an Initial Study (Appendix A) was prepared to determine if adoption and implementation of the General Plan may result in any significant impacts on the environment. On the basis of the Initial Study, the City has concluded that adoption of General Plan 2030 has the potential to result in certain significant impacts. Accordingly, the EIR focuses on the following areas of analysis:

- Aesthetics
- Air Quality
- Hazards
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population, Housing and Employment
- Public Services
- Recreation
- Transportation/Circulation
- Utilities and Service Systems

1.7 IMPACTS FOUND NOT TO BE SIGNIFICANT

Preparation of the Environmental Impact Report for General Plan 2030 included consultation with interested parties including adjacent cities. In accordance with Sections 15063 and 15082 of the State CEQA Guidelines, the City, as lead agency prepared a Notice of Preparation (NOP) of the Draft EIR. The NOP was circulated to the appropriate public agencies, organizations, and interested groups and individuals for a 30-day period that extended from March 19, 2004 to April 18, 2004. The NOP (Appendix B) provided each with a description of the project and the time for submitting comments. A copy of the Initial Study was included with the NOP. The NOP was also submitted to the State Clearinghouse at the California Office of Planning and Research, and to the Clerk of Riverside County for posting. A scoping meeting to receive input from these affected parties was held on August 25, 2004.

Based on input received and the analysis included in the Initial Study, General Plan 2030 was determined to have a less than significant impact, or no impact, in the following topical areas:

- Agriculture Resources
- Biological Resources
- Cultural Resources

- Geology and Soils
- Mineral Resources

1.8 ORGANIZATION OF THE ENVIRONMENTAL IMPACT REPORT

This Program EIR has been designed for easy use and reference. To help the reader locate information of particular interest, a brief summary of the content of each section of the Program EIR is provided. The Program EIR is organized into the following chapters:

Section 1 – Introduction The Introduction provides background information related to General Plan 2030, discusses procedural matters related to CEQA, and presents document format and organization.

Section 2 – Executive Summary The Executive Summary contains a summary of the proposed project, as well as an overview of the scope of the Program EIR. This section provides a summary of environmental impacts, proposed mitigation, level of significance after mitigation, and unavoidable impacts.

Section 3 – Project Description A project description that provides the appropriate level of information necessary for the evaluation and review of environmental impacts is required under CEQA (Guidelines 15124). The project description provides a detailed description of General Plan 2030, including a description of the project location, environmental setting, project background, EIR objectives and project characteristics.

Section 4 – Existing Conditions, Project Impacts and Mitigation Measures This section describes the current environmental conditions relevant to each of the topical areas of impact analysis. In each area of impact analysis, potential impacts resulting from the project are considered, mitigation measures appropriate to minimizing or eliminating potential project impacts are identified , thresholds are defined for determining the level of significance of impacts after mitigation, and the resulting significance of impacts are determined.

Section 5 – Other CEQA Considerations This section provides a summary of significant environmental impacts, including unavoidable, irreversible, and growth inducing.

Section 6 – Impacts Found Not to be Significant Pursuant to Section 15128 of the CEQA Guidelines, this section briefly discusses those impact areas that were determined in the Initial Study for General Plan 2030 not to result in significant environmental impacts.

Section 7 – Alternatives to the Project This section provides a comparative analysis of three alternatives. The purpose of this chapter is to provide decision makers with an assessment of the comparative effects of the alternatives, focusing on the significant impacts and on mitigation of such impacts. An "environmentally superior" alternative is identified pursuant to Guidelines 15126(e)(2).

Section 8 – References References used in the preparation of the EIR are presented in this chapter. References include personal communications and documented materials. This chapter also lists individuals who participated in the preparation of the EIR, organized by organization/agency.

Appendices - The appendices contain additional technical information for the document.

1.9 LEAD AGENCY CONTACT

Comments and questions on the Environmental Impact Report may be directed to:

Brad Eckhardt, Associate Planner
City of Perris
Department of Community Development
135 North "D" Street
Perris, CA 92570
E-mail: beckhardt@perris-ca.org
Tel: (951) 943-5003 ext. 272
Fax: (951) 943-8379

1.10 AVAILABILITY OF THE ENVIRONMENTAL IMPACT REPORT

The EIR for the proposed adoption of Perris General Plan 2030 is being distributed directly to numerous organizations and interested groups for comment during the formal review period for the EIR. The EIR is available for review or purchase at the City Department of Community Development. Contact information is listed below.

Brad Eckhardt, Associate Planner
City of Perris
Department of Community Development
101 North "D" Street
Perris, CA 92507-1998
(951) 943-5003 ext. 272

During the public review period, the Draft EIR is also available for public review at:

City of Perris Cesar E. Chavez Library
163 E. San Jacinto Avenue
Perris, CA 92507
(951) 657-2358

Comments on the Draft EIR should be addressed to:

Brad Eckhardt, Associate Planner
City of Perris
Department of Community Development
135 North "D" Street
Perris, CA 92570-1998

Comments may be submitted electronically to:

Brad Eckhardt, Associate Planner
E-mail: beckhardt@perris-ca.org

II. SECTION 2.0: EXECUTIVE SUMMARY

Table of Contents

List of Tables

This section summarizes the characteristics of the proposed City of Perris General Plan 2030, the environmental impacts, mitigation measures and impacts associated with the proposed project.

2.1 PROJECT OVERVIEW

The Project that is the subject of this Environmental Impact Report is General Plan 2030 for the City of Perris. General Plan 2030 is the blueprint for future physical development of the City through the year 2030. General Plan 2030 guides decisions about the built environment. General Plan 2030 establishes City policy, and identifies planned land uses and infrastructure. The Zoning, Subdivision, and Municipal Facilities Fee Ordinances, the City's Capital Improvement Program, annual budget and work programs are the primary vehicles for implementing General Plan 2030. Amendment of these documents consistent with General Plan 2030 is anticipated.

General Plan 2030 characterizes the City of Perris in the year 2002 in terms of Land Use, Circulation, Open Space, Conservation, Safety and Noise. Each of these topical areas is the subject of a State Mandated Element, or chapter, in the General Plan. Anticipated future physical development of the City through 2030, consistent with implementation of General Plan 2030 policies, is described. Municipal programs and services needed to support physical development will be shaped by the "Strategy for Action" and subsequent Goals, Policies and Implementation Measures in each of the General Plan Elements. A seventh State-mandated component, the Housing Element, was adopted in 2001 and is incorporated into the revised General Plan Document.

2.2 POTENTIAL LAND USE CHANGES

Implementation of General Plan 2030 would result in development of vacant lands in the City, and redevelopment of existing sites in the downtown. Development of vacant lands consistent with General Plan 2030 is projected to result in the following growth in the City throughout the year 2030:

- Approximately 13,700 additional residential units, representing an estimated 134 percent increase in total housing units by 2030
- Approximately 1,973,640 additional square feet of commercial uses, representing an estimated 134 percent increase in retail and office uses by 2030
- Approximately 7,077,360 additional square feet of industrial uses, representing an estimated 217 percent increase in industrial uses by year 2030

The Land Use Element of the General Plan includes a Land Use Plan indicating future distribution and locations of land uses in the following categories:

- R-20,000, Single-Family Residential 20,000 sq ft lot (up to 2 dwelling units per acre)

- R-10,000, Single-Family Residential 10,000 sq ft lot (up to 4 dwelling units per acre)
- R-8,400, Single-Family Residential 8,400 sq ft lot (up to 5 dwelling units per acre)
- R-7,200, Single-Family Residential 7,200 sq ft lot (up to 6 dwelling units per acre)
- R-6,000, Single-Family Residential 6,000 sq ft lot (up to 7 dwelling units per acre)
- MFR-14, Multiple-Family Residential (up to 14 dwelling units per acre)
- MFR-22, Multiple-Family Residential (up to 22 dwelling units per acre)
- Neighborhood Commercial
- Commercial Community
- Professional Office
- Business Park
- Light Industrial
- General Industrial
- Specific Plan
- Parks/Recreation/Open Space
- Public/Semi-Public Facilities/Utilities
- Special Study Area Overlay

Potential environmental effects associated with adoption and implementation of General Plan 2030 will result principally from future development at intensities and for such uses as are consistent with the Land Use Element.

While all Elements of the General Plan are equally important, the Land Use Element is often the core around which the other Elements develop. The Land Use Plan of the Land Use Element of General Plan 2030 reflects changes in land use designations of parcels as indicated in Table 2.0-1.

Table 2.0-1: General Plan 2030 Land Use Designation Changes

General Plan 2030 Land Use Designation Changes			
Location/Description	**Acres**	**1991 GP Land Use Designation**	**New Land Use Designation**
Planning Area 1			
Oleander/Nance to the north, Perris Blvd. to the west, Perry to the	145	R7	BP
Markham to the north, Perris Valley Channel to the west, Ramona Expressway to the	132	R4	BP
Oleander to the north, Perris Valley Channel to the west, Markham to the south, City limits	137	R4	LI
Ramona Expressway to the south, Evans to the	5	CC	BP
150' north and south of the centerline on Ramona Expressway, with extended widths at			Ramona Expressway Overlay
150' north and south of centerline on Oleander Ave.			Oleander Road Overlay
Oleander to the north, Redlands to the west, Ramona Expressway to south, City limits to the	465	CC, R7, R4	SP
Planning Area 2			
MWD Aqueduct to the north, Wilma to the east	1	OS	P
Bradley to the west, Rider to the south, Main to the east	17	RR/A	MFR-14
Rider to the north, Bradley to the west, Main to the east	14	RR/A	R-10,000

General Plan 2030 Land Use Designation Changes			
Location/Description	**Acres**	**1991 GP Land Use Designation**	**New Land Use Designation**
150' north and south of the centerline on Ramona Expressway, with extended widths at			Ramona Expressway Overlay
Planning Area 3			
Rider to the north, Wilson to the east	11	CN	LI
150' north and south of the centerline on Ramona Expressway, with extended widths at			Ramona Expressway Overlay
Planning Area 4			
Placentia to the north, Indian to the west, Orange to the south,	75	BP	SP
Planning Area 5			
Rider to the north, Perris to the west, Lakeview to the east	35	R4	R-6,000
800-feet north of Avocado between Perris and Medical	2	CC	MFR-14
North of Nuevo, south of Citrus, east of Redlands	47	R4	MFR-14
Southeast corner of Nuevo & Wilson	2	PO	R-6,000
Northwest corner of San Jacinto &Murrieta	10	CC	R-6,000
Northeast corner of Citrus & Evans	4	R4	R-6,000
Northeast corner of Nuevo & Evans	38	CC,R4	R-6,000
Southeast corner of Nuevo & Perris Valley Storm Drain	35	CC	R-6,000

General Plan 2030 Land Use Designation Changes			
Location/Description	**Acres**	**1991 GP Land Use Designation**	**New Land Use Designation**
Sunset to the north, Nuevo to the south, Perris Valley Storm	21	PO	R-10,000
North of Orange between Redlands and	10	R4	P
From eastern City Limit to the west along the San Jacinto River			MSHCP Overlay
Planning Area 6			
Northwest corner of future 9th Street right-of-way and Perris Blvd.	1	LI	R-6,000
Planning Area 7			
Kruse to the west, 3rd Street to the south, Park to the east	10	R4	P
4th Street to the north and west, Park to the east	24	CC	R-10,000
Northwest corner of SR-74 and Navajo Rd.	1	R7	**NC**
Northwest corner of Ellis and A Street	4	CC	R-6,000
Metz to the north, Sioux to the east, Clayton to the south, City limit to the west		R-5	R-6,000
Planning Area 8			
From eastern City Limit to the west along the San Jacinto River			MSHCP Overlay
Planning Area 9			
I-215 to the north and east, Case Rd. to the south, San Jacinto River to the west	137, 252	Riverglen Specific Plan	BP, LI

General Plan 2030 Land Use Designation Changes			
Location/Description	**Acres**	**1991 GP Land Use Designation**	**New Land Use Designation**
Vista to the north, San Jacinto River to the west, Mapes to the south, Sherman to the east	40	P	BP
150' north and south of the centerline, with an extended northern width to Watson from I-215 to the east and River to the west			Ethanac Road Overlay
From eastern City Limit to the west along the San Jacinto River			MSHCP Overlay
Planning Area 10			
150' north and south of the centerline, with an extended northern width to Watson from I-215 to the east and River to the west			Ethanac Road Overlay
From eastern City Limit to the west along the San Jacinto River			MSHCP Overlay

2.3 SUMMARY OF REGULATORY/ POLICY CONSISTENCY

Section 15125(d) of the CEQA Guidelines requires the EIR to discuss "any inconsistencies between the proposed project and applicable General Plans and regional plans." This EIR considers adoption of General Plan 2030 which must be consistent with regional plans such as the Southern California Association of Governments Regional Comprehensive Plan and Guide. All Elements of the General Plan must also be consistent with one another and promote achievement of the overall environment desired for the City of Perris through the year 2030.

The Circulation Element of the General Plan describes the transportation network and improvements required through the year 2030 consistent with projected physical development and population and employment growth. Parks needed to support anticipated population growth are identified in the Open Space Element. The Conservation Element provides an inventory of cultural and natural resources including plants and wildlife and the means to protect and preserve these for the benefit of the Perris community even as new development occurs.

The noise environment in Perris at the time of preparation of General Plan 2030 is characterized in the Noise Element. Future noise levels associated with increases in the number of both stationary and mobile sources through the year 2030 are characterized and used to define appropriate mitigation measures. Potential sources of personal injury and property damage that may result from both natural disaster and human caused occurrences, and the measures necessary to minimize risks to life and property, are discussed in the Safety Element.

Subject to General Plan 2030 Safety Element Implementation Measure I.D.3, development consistent with General Plan 2030 may be consistent with the intent and purposes of the ALUP, but will not be consistent with the ALUP adopted in 1986. Mitigation of the impact associated with inconsistency of General Plan 2030 and the 1986 ALUP requires adoption by the Riverside County Airport Land Use Commission of a revised ALUP reflecting current technology and land use patterns. Such action is not within the purview of the City of Perris as lead agency for General Plan 2030.

2.4 CLASSIFICATION OF ENVIRONMENTAL IMPACTS

Potential environmental impacts have been classified in the following categories:

- **No Impact –** Results in no adverse change to the existing environment.
- **Less Than Significant –** Results in no substantial adverse change to the environment.
- **Significant and Unavoidable –** Constitutes a substantial adverse change to the environment that cannot be fully mitigated by implementation of all feasible mitigation measures, or maybe avoided or minimized by the selection of an environmentally superior project alternative.

2.5 SUMMARY OF ALTERNATIVES

In accordance with Section 15126(d) of the CEQA Guidelines, Section 5.0 of this EIR includes a comparative analysis of the proposed project with alternatives to the project. Additionally, the alternatives are discussed in terms of achieving the project objectives. This EIR includes an evaluation of the following alternatives to the proposed project:

- **Alternative 1 – "No Project"**
  CEQA requires that the No Project alternative be evaluated. Under this alternative, General Plan 2030 would not be adopted and development would proceed consistent with the existing General Plan.
- **Alternative 2 – "Floodplain Preservation Alternative"**
  Under the alternative, only development of very low density and intensity would be permitted within floodplains. This would preclude development of much of the undeveloped area of the City east of Perris Boulevard.
- **Alternative 3 – "Northeast Residential Alternative"**
  Approximately 465 acres north of the Ramona Expressway between Redlands Avenue and Lake Perris Recreation Area, designated in General Plan 2030 primarily for future Business Park and Industrial development, are designated for future residential development at R-6,000 and MFR-14 densities.

2.6 POTENTIAL IMPACTS FOUND NOT TO BE SIGNIFICANT

A preliminary review of potential impacts associated with adoption of the Perris General Plan was completed prior to preparation of the Environmental Impact Report. The results of this review are included in an Initial Study (Appendix A). Based on information in the Initial Study, it was determined that an Environmental Impact Report was required to assess those impacts indicated as "potentially significant."

The Initial Study also identifies and assesses other potential impacts determined to be "less than significant" or of "no impact." Such impacts are found to be not significant and are not included for further evaluation in the Environmental Impact Report.

Areas of "no impact" or "less than significant" impacts are as follow:

- Agriculture
- Biological Resources
- Cultural Resources
- Geology and Soils
- Mineral Resources

Discussion of each of these areas and the rationale for finding no impact or less than significant impact is included in the Initial Study.

2.7 AREAS OF KNOWN CONTROVERSY/ ISSUES TO BE RESOLVED

The area of controversy associated with the proposed project is the selection among the project and alternatives.

2.8 MITIGATION MONITORING PROGRAM

CEQA requires agencies to set up monitoring programs for the purpose of ensuring compliance with the mitigation measures adopted as conditions of approval in order to mitigate or avoid significant environmental effects as identified in the EIR. A mitigation monitoring program, incorporating the mitigation measures set forth in this document, will be adopted at the time of certification of the EIR.

2.9 SUMMARY OF ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES

Section 4.0, Existing Conditions, Project Impacts, and Mitigation Measures, of this EIR describes in detail the environmental impacts that will result from the adoption and implementation of General Plan 2030. Table 2.0-2, Executive Summary, summarizes the impacts of General Plan 2030 and mitigation measures for those impacts. Impacts that are noted in the summary as "significant" after mitigation will require the adoption of a statement of overriding considerations, if the project is approved as proposed (CEQA Section 15093).

In Table 2.0-2, impacts of the project are classified as: (1) No Impact (no adverse effect); (2) Less than Significant (adverse effects that are not substantial, according to CEQA, but may include recommended mitigation); or (3) Significant and Unavoidable, (Substantial adverse changes in the environment). Mitigation measures are listed, as applicable, for each impact.

Table 2.0-2: Executive Summary

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Population, Housing and Employment (Section 4.1) Adoption and implementation of General Plan 2030 would indirectly induce substantial population growth through increased residential development, resulting in a significant impact.	No mitigation measures are appropriate.	Significant and unavoidable
Aesthetics (Section 4.2) Light and glare from new development associated with adoption and implementation of the General Plan will not adversely affect day or	No mitigation measures are required	Less than significant
Air Quality (Section 4.3) Adoption and implementation of General Plan 2030 will contribute to an existing and projected	Mandatory compliance with SCAQMD's Rule 403 that includes Best Available Control measures.	Significant and unavoidable
Adoption and implementation of General Plan 2030 will result in a cumulatively considerable net increase of criteria pollutants for which the region is in non-attainment.	**AQ-1** Project applicants shall provide construction site electrical hook ups for electric hand tools such as saws, drills, and compressors, to eliminate the need for diesel powered electric generators or provide evidence that electrical hook ups at construction sites are not practical or	Significant and unavoidable
Adoption and implementation of General Plan 2030 does not expose sensitive receptors to substantial pollutant concentrations	**AQ-2** All development projects greater than 19 single-family residential units, 40 multifamily residential units, or retail/commercial/industrial land uses greater than 45,000 square feet of floor space shall apply paints using either high volume low pressure (HVLP) spray equipment or by hand application.	Less than significant

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Continued - Air Quality (Section 4.3)	**AQ-3** Prior to issuance of any area grading permits, all applicants shall submit a traffic control plan that will describe in details safe detours and provide temporary traffic control during construction activities. **AQ-4** For all development projects, all applicants must abide by the South Coast Air Quality Management District's Rule 404 concerning Best Management Practices for construction sites in order to reduce emissions during the construction phase. Measures may include: ❖ Development of a construction traffic management program that includes, but is not limited to, rerouting construction related traffic off congested streets, consolidating truck deliveries, and providing temporary dedicated turn lanes for movement of construction traffic to and from site; ❖ Sweep streets an the end of the day if visible soil material is carried onto adjacent paved public roads; ❖ Wash off trucks and other equipment	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Continued - Air Quality (Section 4.3)	leaving the site; ❖ Replace ground cover in disturbed areas immediately after construction; ❖ Keep disturbed/loose soil moist at all times; ❖ Suspend grading activities when wind speeds exceed 25 miles per hour. ❖ Enforce a 15 miles per hour speed limit on unpaved portions of the construction site. **AQ-5** Prior to issuance of any grading permits, all Applicants shall submit evidence to the City of Perris that construction equipment is and will be properly maintained, including proper tuning and timing of the engines. **AQ-6** Building and grading permits shall include a restriction to limit idling of construction equipment on site to no more than ten minutes. **AQ-7** New residential development shall be prohibited from installing wood burning fireplaces, unless builders can demonstrate that these will be equipped with pollution control devices that significantly reduce emissions of	
Hazards (Section 4.4)	No measures are required	Less than significant

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Adoption and implementation of General Plan 2030 includes future development in areas subject to Riverside County Airport Land Use Plan, but will not result in a safety hazard for people residing or working in the project area.		
Hydrology and Water Quality (Section 4.5) Adoption and implementation of General Plan 2030 will not require or result in the construction/expansion of new storm drain facilities that would cause significant environmental effects.	No measures are required	Less than significant
Adoption and implementation of General Plan 2030 will not result in a substantial increase in the rate or amount of surface runoff in a manner which would result in flooding.	No measures are required	Less than significant
Continued - Hydrology and Water Quality (Section 4.5) Adoption and implementation of General Plan 2030 would result in additional development that could increase the numbers of people and structures at risk of loss from flooding but Implementation Measures included in General Plan 2030 will reduce impacts associated with flooding to a less than significant level.	No measures are required	Less than significant
Adoption and implementation of General Plan 2030 would result in additional development that	No measures are required	Less than significant

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
could increase the numbers of people and structures at risk of loss from seiche, tsunami, or mudflow but Implementation Measures included in General Plan 2030 will reduce impacts associated with these phenomona to a less than significant level.		
Public Services (Section 4.6) Adoption and implementation of General Plan 2030 will indirectly result in the need for new or expanded police facilities in order to maintain acceptable service levels and response times, but the physical impacts associated with construction of new or expanded police facilities are determined to be less than significant.	No mitigation measures are required	Less than significant
Continued - Public Services (Section 4.6) Adoption and implementation of General Plan 2030 will indirectly result in the need for new fire stations in order to maintain acceptable service levels and response times, but the physical impacts associated with construction of new fire stations are determined to be less than Adoption and implementation of General Plan 2030 will indirectly result in the need for new or expanded health care and emergency medical facilities, but the physical impacts associated with construction and operation of new or	No mitigation measures are required No mitigation measures are required	Less than significant Less than significant

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
expanded health care facilities are determined to be less than significant.		
Adoption and implementation of General Plan 2030 will indirectly result in the need for new or expanded school facilities, but the physical impacts associated with construction and operation of new or expanded schools are determined to be less than significant.	No mitigation measures are required	Less than significant
Adoption and implementation of General Plan 2030 will indirectly result in the need for expansion of Cesar Chavez Library, but the physical impacts associated with construction and operation of an expanded library are determined to be less than significant.	No mitigation measures are required	Less than significant
Adoption and implementation of General Plan 2030 will indirectly result in the need for new or expanded municipal administration facilities, but the physical impacts associated with construction and operation are determined to be less than	No mitigation measures are required	Less than significant
Noise (Section 4.7) Adoption and implementation of General Plan 2030 may generate or expose persons to noise levels in excess of City standards.	No mitigation measures are required	Less than significant
Adoption and implementation of General Plan 2030 may result in substantial permanent increases in ambient noise levels.	No mitigation measures are required	Less than significant

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Adoption and implementation of General Plan 2030 may expose people residing or working in close proximity to excessive noise levels from a public use airstrip.	No mitigation measures are required	Less than significant
Adoption and implementation of General Plan 2030 may expose people residing or working in close proximity to excessive noise levels from a private use airstrip.	No mitigation measures are required	Less than significant
Parks and Recreation (Section 4.8) Adoption and implementation of General Plan 2030 will indirectly result in the need for new or expanded park and recreational facilities, but the physical impacts associated with construction of new or expanded park and recreational facilities are determined to be less than significant.	No mitigation measures are required	Less than significant
Transportation and Circulation (Section 4.9) Implementation of General Plan 2030 would result in substantial increases in traffic and reductions in Levels of Service	No mitigation measures are indicated or proposed.	Significant and unavoidable
Continued - Transportation and Circulation (Section 4.9) Implementation of General Plan 2030 will not adversely impact emergency access	No mitigation measures are required..	Less than significant
Implementation of General Plan 2030 will not conflict with adopted policies, plans, or programs supporting alternative transportation	No mitigation measures are required	No impact

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Utilities and Service Systems (Section 4.10) Population increases and new development associated with General Plan 2030 would indirectly result in the need for new or expanded water supply facilities within the Eastern Municipal Water District (EMWD) service area, but the physical impacts associated with construction and operation of new or expanded water supply facilities are determined to be less than significant.	No mitigation measures are required	Less than significant
Implementation of General Plan 2030 would not exceed wastewater treatment requirements of the Regional Water Quality Board	No mitigation measures are required	Less than significant
Development associated with General Plan 2030 would not increase sewer demand beyond the capacity of existing wastewater treatment	No mitigation measures are required	Less than significant
Implementation of General Plan 2030 will not result in insufficient landfill capacity to accommodate the increased demand for solid waste service provided to the City.	No mitigation measures are required	Less than significant
Continued - Utilities and Service Systems (Section 4.10) Implementation of General Plan 2030 would	No mitigation measures are required	Less than significant

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
result in increased demand for energy which may result in a need for new or expanded facilities which may have significant effects on the environment. Subject to CEAQ and regulatory requirements, the effects of such construction resulting from adoption and implementation of General Plan 2030 are deemed to be less than significant.		
Implementation of General Plan 2030 will result in increased demand for telecommunication services that could result in the need for expansion or construction of new facilities which could cause significant environmental impacts. Impacts of facilities construction resulting from adoption and implementation of General Plan 2030 are deemed to be less than significant.	No mitigation measures are required	Less than significant
Land Use and Planning (Section 4.11) General Plan 2030 is not consistent with the Riverside County Airport Land Use Plan.	Mitigation of the impact associated with inconsistency of General Plan 2030 and the 1986 ALUP requires adoption by the Riverside County Airport Land Use Commission of a revised ALUP reflecting current technology and land use patterns. Such action is not within the purview of the City of Perris as lead agency for General Plan 2030.	Significant and unavoidable

This Page Left Blank Intentionally

III. SECTION 3.0: PROJECT DESCRIPTION

Table of Contents

List of Tables

List of Exhibits

The project analyzed in this EIR is the proposed City of Perris General Plan 2030. A City's general plan has been described as a constitution for development and the framework within which decisions on how to grow, provide public services and facilities, and protect and enhance the environment must be made.

Under California Government Code Section 65300 et seq., cities are required to prepare a general plan that establishes policies and standards for future development, housing affordability, and resource protection for the entire planning area. By law, a general plan must be an integrated, internally consistent statement of city policies. Section 65302 requires that the general plan include the following elements: Land Use, Circulation, Housing, Conservation, Open Space, Noise and Safety. Additional elements may be included in the general plan as well, at the discretion of the city.

Upon adoption, Perris General Plan 2030 will provide the City's decision makers with guidance in revision and implementation of the zoning ordinance, in administration of the Subdivision Ordinance, in preparation of capital improvement programs, and in development of municipal services options.

This chapter provides the background information regarding the regional location of Perris, as well as the policy development process and key themes of General Plan 2030. Additional details are provided in the City of Perris General Plan 2030 itself.

3.1 PROJECT LOCATION AND SETTING

Located in the Perris Valley midway between the San Jacinto and the Santa Ana Mountains, the City of Perris encompasses approximately forty (40) square miles in northwestern Riverside County. (Exhibits 3.0-1 and 3.0-2). An additional estimated seventeen (17) square miles are included as the City's Sphere of Influence as defined by Riverside County Local Agency Formation Commission (LAFCO). Perris is bordered on the north by the City of Moreno Valley and the March Air Reserve Base/ March Globalport. On the south, it is bordered by the unincorporated communities of Quail Valley and Sun City, on the southwest by the City of Canyon Lake, on the east by unincorporated areas of Riverside County, and on the west by the unincorporated community of Mead Valley and unincorporated Riverside County. One major freeway and one railroad transect Perris. Interstate 215 (I-215) runs north/south near the eastern edge of the City and the Burlington Northern Santa Fe Southern line from Riverside traverses through the City along I-215 in the north and transitions southeast along Case Road.

3.2 PROJECT COMPONENTS AND CHARACTERISTICS

The project is adoption of a General Plan for the City of Perris with a planning horizon year of 2030. The General Plan is the blueprint for the community's future. It provides goals, policies and implementation measures to guide the City's decisions about growth through 2030.

Preparation of the General Plan included a series of community workshops to receive input on issues and opportunities to be addressed in the General Plan. Based on this information, six of the seven State-mandated elements that comprise the General Plan were prepared and considered at monthly public meetings of the General Plan Advisory Committee. The Housing Element was revised in 2001 and will be amended only as needed to be consistent with the General Plan elements.

The Land Use Element of General Plan 2030 will change existing land use designations and is the principal source of potential environmental impacts. The Land Use Plan of the General Plan indicates the general locations and distribution of land uses. Long-term outcomes associated with adoption and implementation of General Plan 2030 are summarized in Table 3.0-1, "2030 Project Outcomes."

Data and analysis of both existing and contemplated future development, and matters of municipal concern related to this development, are included in Background Reports and Policy Documents in each of seven State-mandated components, or "Elements," of the General Plan discussed below.

Table 3.0- 1: General Plan 2030 Outcomes

	Existing (2002)	2030 Projections	Build-Out Projections
Population	35,848	83,570	155,866
Employment	11,857	23,973	70,350
Dwelling Units	10,204	23,877	44,533
Non-Residential Building Area (Sq. Ft.)	4,743,256	13,794,253	47,652,878

LAND USE ELEMENT

The Land Use Element addresses the requirements of 65302(a) of the Government Code. The Land Use Element establishes a blueprint for the distributions, locations, and intensity of future residential development. The Land Use Plan map included in the Land Use Element designates properties consistent with their anticipated future use. The Land Use Element will be reflected in and implemented largely through the Zoning and Subdivision Ordinances.

CIRCULATION ELEMENT

The Circulation Element addresses the requirements of 65302(b) of the Government Code. The Circulation Element describes the general location and extent of existing and proposed streets and arterial highways, transportation routes, transit facilities, pedestrian and bicycle routes, and infrastructure for providing potable water, conveying sewage, and stormwater, and for

public utilities including electricity and natural gas. The Circulation Element identifies infrastructure required in each of these areas to meet future needs associated with development defined in the Land Use Element and throughout the General Plan.

CONSERVATION ELEMENT

The Conservation Element addresses the requirements of 65302(d) of the Government Code. The Conservation Element identifies important natural resources in the community including water and wildlife and defines strategies for protecting each. In urbanized areas such as Perris, waste management issues are included together with historical, paleontological and archaeological resources.

OPEN SPACE ELEMENT

The Open Space Element addresses the requirements of 65560 of the Government Code. The Open Space Element includes an inventory of sites which provide both passive and active recreational opportunities and those which provide visual relief from urban development. The means of maintaining open space consistent with State-recommended guidelines and community demands are indicated.

NOISE ELEMENT

The Noise Element addresses noise as required by Government Code 65302(f). The Noise Element identifies and assesses the sources of noise, both mobile and stationary, within the community. The extent and distribution of noise from these sources are indicated. Projected noise levels guide land use decisions so as to avoid exposure of residents to excessive noise levels. The Noise Element is instrumental in ensuring that new buildings comply with State noise insulation standards.

SAFETY ELEMENT

The Safety Element addresses safety as required in Government Code Section 65302(g). The Safety Element identifies forces of nature and events resulting from human action that have potential for causing significant harm to life and property. The Safety Element includes measures for preemptory action to avert or minimize loss of life and property damage particularly as they relate to physical development.

Exhibit 3.0-1: Regional Map

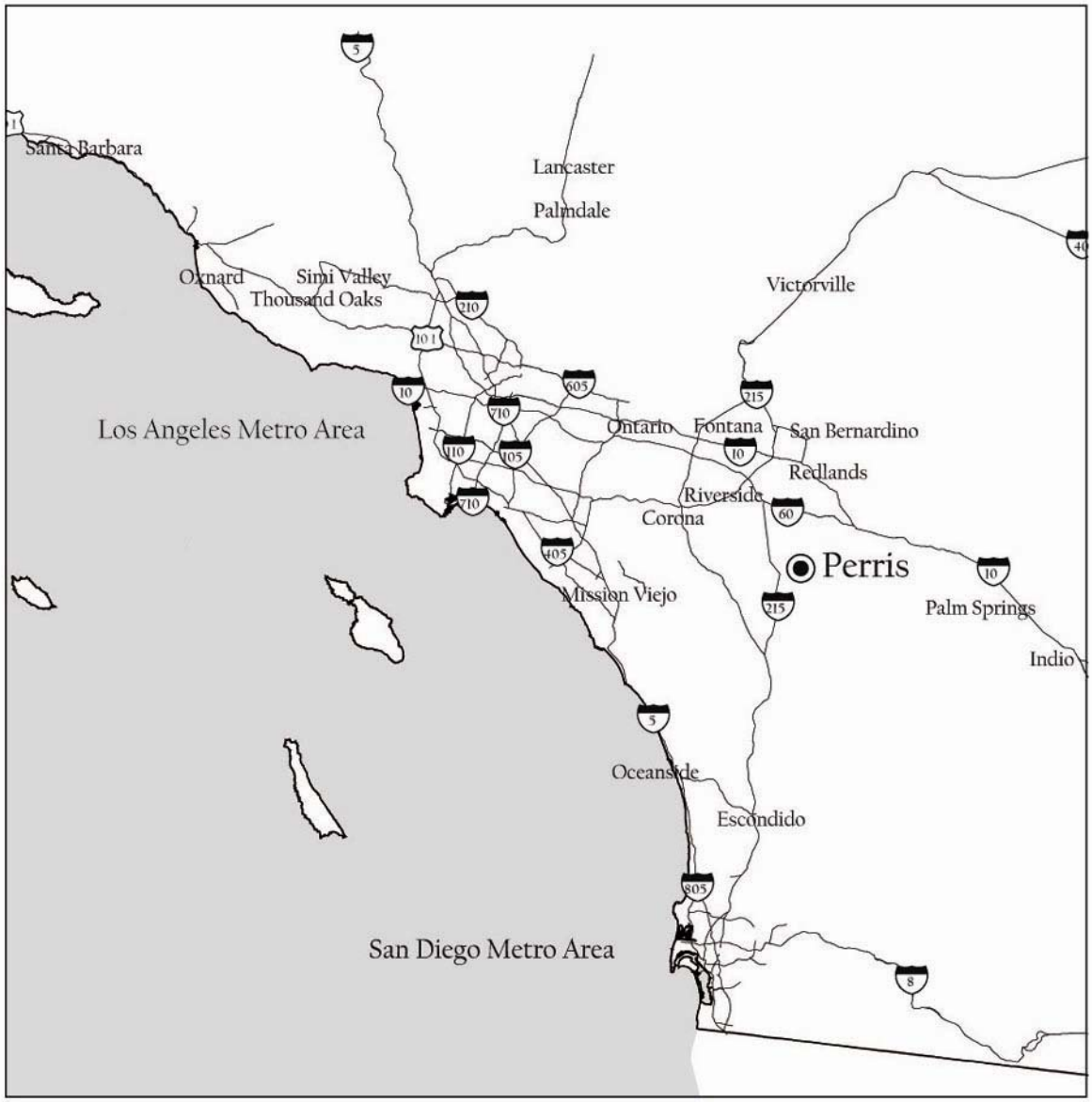
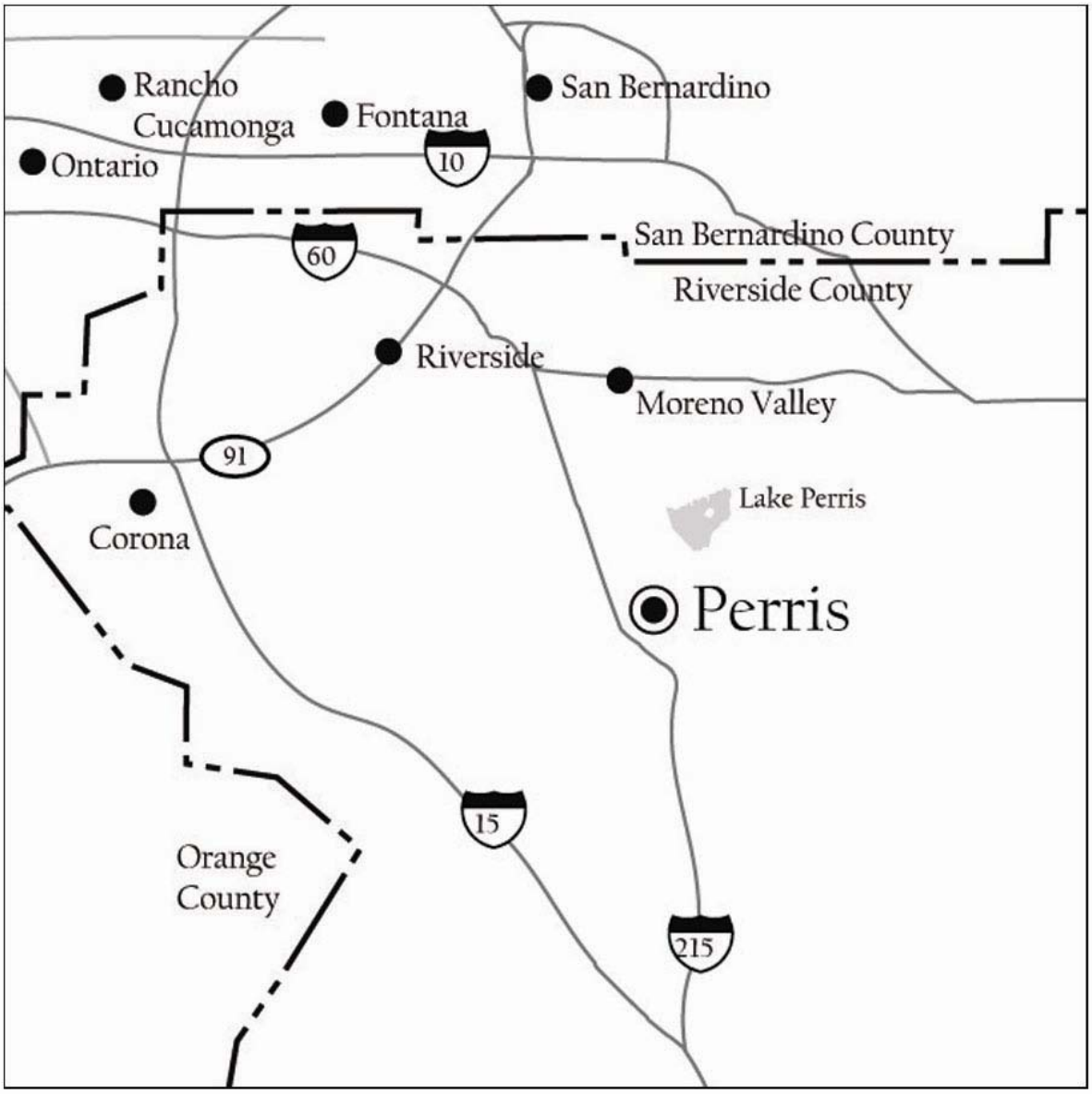


Exhibit 3.0-2: Vicinity Map



3.3 OBJECTIVES OF THE PROJECT

The primary objective of a general plan is to guide a jurisdiction's growth over a 20 to 30 year period, in a manner consistent with the community's vision of its long-term physical form and development. The General Plan is intended to reflect the community's expression of quality of life and community values, satisfy the mandates of State law, and serve as the basis for community decision-making regarding the location and distribution of land uses and infrastructure and the programs necessary to support both the existing and future uses and population.

The City's mission statement is a clear reflection of the values that lead the community: "The City of Perris will promote a high quality of life for its residents, businesses, and institutions. The City will accomplish this by improving and creating opportunities in the areas of safety, employment, business attraction and retention, and recreation." Consistent with the mission statement, General Plan 2030 objectives further define the most basic goals and values of the City. The City of Perris General Plan 2030 was prepared in order to achieve the following:

- Recognize and adapt to changes conditions since preparation of the previous General Plan;
- Provide for balance in the types and acreages of land uses necessary for people to live, work, play and shop in Perris;
- Promote quality housing in attractive neighborhoods for households at all income levels and stages in life;
- Accommodate new development consistent with infrastructure capacity and municipal services capabilities;'
- Attract commerce and industry to provide jobs for residents at all economic levels;
- Facilitate upgrading of existing infrastructure including master storm drain improvements;
- Develop recreational opportunities for all segments of the community; and
- Implement the Multi-Species Habitat Conservation Plan (MSHCP).

3.4 INTENDED USES OF THE EIR

The City is undertaking a number of related actions that would amend documents that implement General Plan 2030. These actions will ensure that implementing documents will be consistent with proposed General Plan 2030. As the lead agency, the Perris City Council will consider certification of the final program EIR for General Plan 2030; adoption of the amendments to the existing General Plan and Land Use Diagram, Zoning Ordinance, Map of Zoning Districts, Subdivision ordinance, and Park Master Plan. Preparation and adoption of a new Specific Plan ordinance and implementation of the Capital Improvement Program including new roads is also anticipated. This EIR may also be used as the basis for project-level environmental review for future development consistent with General Plan 2030. No

additional environmental analysis will be required at the project level for impacts of future development to the extent that the respective potential project impacts have been analyzed in this EIR.

This Page Left Blank Intentionally

IV. SECTION 4.0: EXISTING CONDITIONS, PROJECT IMPACTS, AND MITIGATION MEASURES

Table of Contents

List of Tables

List of Exhibits

This chapter of the EIR contains an analysis of environmental impacts relative to development and implementation of the City of Perris General Plan 2030. The environmental setting for each topic of environmental impact is described. In each area of impact analysis, potential impacts resulting from the project are considered, mitigation measures appropriate to minimizing or eliminating potential project impacts are identified, thresholds are defined for determining the level of significance of impacts, and the significance of impacts are determined. The significance criteria are based on City policy for implementation of CEQA and are consistent with State CEQA guidelines.

Many policies in General Plan 2030 are designed to reduce environmental impacts. In this way, the General Plan is self-mitigating. In the discussion of impacts, the policies in the City of Perris General Plan 2030 that would reduce the impacts are presented and discussed. The environmental analysis assumes full implementation of the City of Perris General Plan 2030 indicating new development projects, road and infrastructure improvements, and new community facilities and parks.

4.1 POPULATION, HOUSING AND EMPLOYMENT

This section of the EIR addresses impacts associated with induced population growth. The analysis includes the extent to which General Plan 2030 accommodates projected housing needs and effects improvement in the local jobs-housing imbalance. Impacts related to General Plan 2030 are analyzed based on population, employment, and housing changes compared to current conditions.

4.1.1 EXISTING CONDITIONS

Table 4.1-1, *Regional Population Projections*, presents population data and projections for the years 2000 and 2030 for the City of Perris, Riverside County, the Western Riverside Council of Governments subregion, and the Southern California Association of Governments (SCAG) region which includes Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. The Western Riverside Council of Governments (WRCOG) subregion is comprised of 14 cities (Banning, Beaumont, Calimesa, Canyon Lake, Corona, Hemet, Lake Elsinore, Moreno Valley, Murrieta, Norco, Perris, Riverside, San Jacinto, and Temecula) and portions of unincorporated western Riverside County. The data has been obtained from SCAG's 2004 Regional Transportation Plan (RTP) growth projections.

POPULATION

According to the 2004 Regional Transportation Plan, Perris had a population of 36,304 residents in 2000. The population of Riverside County is 1,559,482. The median age of Perris' residents is 25, which is contrasted with the county-wide median age of 33 years. Perris' median age reflects the relatively large number of households with children.[1]

Within a regional context, Perris' population accounted for 3.0 percent of WRCOG's 1,205,301 residents and 0.2 percent of SCAG's 16,629,209 residents. WRCOG's population represents 7.2 percent of the total SCAG region.

HOUSING

The number of households in Perris is 9,684. This is a small portion of the countywide total of 509,311 households, as indicated in the 2004 Regional Transportation Plan. The relatively large number of children per household in the City of Perris is also reflected in the average household size, which is 3.73 persons contrasted with an average for Riverside County of 2.98 persons per household.[2]

[1] 2000 Census.
[2] 2000 Census.

Within a regional context, Perris total households accounted for 2.5 percent of WRCOG's 385,947 households and 0.1 percent of SCAG's 5,399,859 households. WRCOG's total represents 7.2 percent of the total households in the SCAG region.

EMPLOYMENT

Approximately 11,715 persons were employed within the City of Perris in 2000, which is approximately 2.2 percent of Riverside County's employment base of 526,541 jobs. Regionally, Perris represents 3.0 percent of 388,141 employees in WRCOG's region and only 0.1 percent of total employment of 7,482,172 with the SCAG region. WRCOG also represents a small portion (5.2 %) of the total employment base for the SCAG region.

Table 4.1-1: Regional Population Projections 2000-2030

	Year		Total Growth 2000-2030	Percentage Growth 2000-2030
	2000[1]	2030[1]		
Population				
Perris	36,304	88,683	52,379	144.3%
WRCOG Subregion	1,205,301	2,413,467	1,208,166	100.2%
Riverside County	1,559,482	3,143,468	1,583,986	101.6%
SCAG Region	16,629,209	22,890,797	6,261,588	37.7%
Households				
Perris	9,684	24,362	14,675	151.5%
WRCOG Subregion	385,947	860,168	474,221	122.9%
Riverside County	509,311	1,127,780	618,469	121.4%
SCAG Region	5,399,859	7,660,107	2,260,248	41.9%
Employment				
Perris	11,715	30,168	18,453	157.5%
WRCOG Subregion	388,141	918,640	530,499	136.7%
Riverside County	526,541	1,188,976	662,435	125.8%
SCAG Region	7,482,172	10,527,202	3,045,030	40.7%

[1] Southern California Association of Governments (SCAG) RTP growth projections, 2004.

4.1.2 REGULATORY AND PLANNING FRAMEWORK

Southern California Association of Governments Regional Comprehensive Plan and Guide (RCPG)
Projects of regional significance, including General Plans, are subject to review by the Southern California Association of Governments (SCAG) to evaluate conformity with the Regional Comprehensive Plan and Guide. The Regional Comprehensive Plan and Guide identifies strategies for local government actions that have regional implications e.g. adoption and implementation of land use policies in a General Plan.

Southern California Association of Governments Regional Housing Needs Assessment (RHNA) The Regional Housing Needs Assessment, required by Section 65584 of the California Government Code, quantifies the City's share of existing and future housing needs. The General Plan must identify sufficient land to accommodate construction of new housing for households at all economic levels commensurate with the City's identified share of projected regional population growth.

Southern California Association of Governments Regional Transportation Plan (RTP)
The Regional Transportation Plan (RTP) is a multi-modal, long-range planning document prepared by the Southern California Association of Governments (SCAG), in coordination with federal, State, and local agencies in southern California. The RTP identifies programs, policies, and funding priorities for congestion management, transit, bicycle and pedestrian facilities, roadways, and freight movement within the SCAG region. These programs and policies are predicated upon RTP population growth projections. These forecast numbers are used by SCAG's Modeling section to forecast travel demand and air quality for planning activities such as the Regional Transportation Plan (RTP), the Air Quality Management Plan (AQMP), and the Regional Transportation Improvement Program (RTIP).

4.1.3 THRESHOLDS OF SIGNIFICANCE

This EIR is a "Program EIR," which evaluates the broad-scale impacts of future development consistent with General Plan 2030. Program EIRs are typically prepared for an agency plan, program, or series of actions that can be characterized as one large project, such as a General Plan. "Tiering" refers to the concept of a multi-level approach to preparing environmental documents (CEQA Guidelines, Sections 15152 and 15168). A General Plan Program EIR, addressing the impacts of citywide policy decisions can be thought of as a "first tier" document. It evaluates the large-scale impacts on the environment that can be expected to result from the adoption of General Plan 2030, but does not address the site-specific impacts of the individual development projects that will follow. CEQA requires that subsequent development projects be evaluated for their particular site-specific impacts. These site-specific analyses are typically encompassed in second-tier documents such as Project EIRs, Focused

EIRs, or Negative Declarations, which typically evaluate the impacts of a single development project within the larger context provided by the General Plan.

In accordance with CEQA, a project is evaluated to determine if it will result in a significant adverse impact on the environment. An EIR is required to focus on these impacts and define mitigation measures to reduce or avoid any significant impacts that are identified. The criteria used to determine the significance of impacts may vary depending on the nature of project. Adoption of General Plan 2030 and development consistent with General Plan 2030 could have a significant impact on population, housing and employment if any of the following occur:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads and other infrastructure);

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere*(refer to Section 6.0, Impacts Found Not To Be Significant)*; or

- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere *(refer to Section 6.0, Impacts Found Not To Be Significant)*.

4.1.4 PROJECT IMPACTS

Threshold ***Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads and other infrastructure)***

POPULATION GROWTH

Implementation of General Plan 2030 would indirectly induce substantial population growth by establishing a Land Use Plan and requisite infrastructure improvements that accommodate development of currently undeveloped land areas. Population increase in Perris indirectly attributable to adoption and implementation of the General Plan is projected to include approximately 47,720 additional residents by 2030 and 120,000 additional persons at build-out after the year 2030. The actual population increase will depend upon the number of new dwelling units actually constructed and the average size of new households at build-out.

As shown in Table 4.1-2, General Plan 2030 population figures (83,570 by 2030) are consistent with SCAG's projected citywide population growth (88,683 by 2030) over the same period. The General Plan population projections accommodated by the development projected to occur by year 2030 would not exceed SCAG population projections for the City in the same time period. The difference in 2030 population projections likely results from differences in

assumed household size and rate of new dwelling unit construction. SCAG uses the 2000 Census data of 3.73 persons per household. General Plan 2030 assumes a reduction in household size, using 3.5 persons per household.

Table 4.1-2: Proposed General Plan 2030 Population Compared with SCAG Projections

General Plan 2030 Population	SCAG 2030 Population Projection[1]	Difference
83,570	88,683	5,113

[1] Southern California Association of Governments (SCAG) RTP growth projections, 2004.

HOUSING AND EMPLOYMENT

Total potential future development facilitated in General Plan 2030 includes up to approximately 1.9 million additional square feet of commercial and professional office building area, up to approximately 7.0 million additional square feet of industrial building area and up to approximately 13,600 additional dwelling units by year 2030. Allowing for variations in employment intensity over the 30-year planning period, General Plan 2030 could indirectly facilitate an increase of approximately 12,000 employment opportunities in Perris with total city-wide employment reaching approximately 24,000 by 2030.

As shown in Table 4.1-3, the SCAG RTP projections and General Plan 2030 projections in year 2030 reveal different trends. The General Plan 2030 employment projection of 23,973 for Perris falls short of SCAG projections by an estimated 6,195 jobs. The difference in projected employment for the year 2030 is a result of differing rates of employment growth. Because the General Plan projection assumes significant, yet-to-be developed commercial and industrial land in 2030, employment growth consistent with SCAG projections can and will be accommodated.

Table 4.1-3: Proposed General Plan Employment Growth Compared with Projections

General Plan 2030 Employment	SCAG 2030 Employment Projection[1]	Difference
23,973	30,168	6,195

[1] Southern California Association of Governments (SCAG) RTP growth projections, 2004.

Table 4.1-4 compares proposed General Plan 2030 and SCAG RTP 2030 jobs-to-housing ratios. The jobs-housing ratio measures the extent to which job opportunities in a given geographic area are sufficient to meet employment of area residents. This ratio identifies the number of

jobs available in a given region compared to the number of housing units in the same region as a measure of potential imbalances between housing and employment opportunities. In theory, if households have job opportunities closer to where they live, this can potentially reduce overall commuting. The jobs-to-housing ratios are higher for SCAG RTP 2030 projections than for General Plan 2030.

Currently, western Riverside County is rich in housing and poor in jobs. This means that residents of western Riverside County are traveling to surrounding counties to work. Though the numbers between SCAG and General Plan 2030 vary, General Plan 2030 still has a beneficial impact
on the jobs-housing balance for the SCAG region and General Plan 2030 would create substantial sources of employment opportunities.

Table 4.1-4: Projected Jobs-Housing Balance

General Plan 2030			SCAG 2030 Projections[1]		
Households	**Jobs**	**Jobs-Housing Ratio**	**Households**	**Jobs**	**Jobs-Housing Ratio**
23,877	23,973	1.00	24,362	30,168	1.23

[1] Southern California Association of Governments (SCAG) RTP growth projections, 2004.

Population and employment growth accommodated in General Plan 2030 is consistent with SCAG projections used to formulate programs and policies for guiding regional growth. This is an indication that local decisions consistent with General Plan 2030 will not produce unanticipated outcomes on a regional scale. This is specifically applicable to transportation and transit planning and efforts to improve air quality in the southern California region. Adoption and implementation of General Plan 2030 will induce population and employment growth consistent with and included in regional plans based on SCAG population projects. Accordingly, the impact associated with induced population growth will be significant.

Impact: **Adoption and implementation of General Plan 2030 would indirectly induce substantial population growth through increased residential and non-residential development, resulting in a significant impact.**

4.1.5 MITIGATION MEASURES

No mitigation measures are appropriate. Reduction of the level of significance of the growth-inducing impact is dependent upon adoption and implementation of an alternative to General Plan 2030. See Section 7, "Alternative to the Proposed Project".

4.1.6 SIGNIFICANCE AFTER MITIGATION

Significant and unavoidable.

4.2 AESTHETICS

This section evaluates the visual character of Perris and assesses the potential for visual impacts associated with implementation of General Plan 2030. Impacts to scenic views, scenic highways, and the existing visual character, along with development that would result in additional light and glare effects, are analyzed in this section. Applicable proposed General Plan Goals, Policies and Implementation Measures are also presented.

4.2.1 EXISTING CONDITIONS

PHYSICAL ENVIRONMENT

Located in the Perris Valley midway between the San Jacinto and the Santa Ana Mountains, the City of Perris encompasses approximately forty (40) square miles in northwestern Riverside County. The City is bordered on the north by the March Air Reserve Base/March Globalport and by the City of Moreno Valley, on the south by the unincorporated communities of Quail Valley and Sun City, on the southwest by the City of Canyon Lake, on the east by unincorporated areas of Riverside County, and on the west by the unincorporated community of Mead Valley and unincorporated Riverside County. Although the central, downtown area was developed around a railway station by the early 20th Century, the vast majority of land area now comprising the City of Perris was committed to agricultural production. With the diminution of agriculture and the rapid population growth of southern California, new housing was developed at a fast pace in the late 1980's and early 1990's. Residential-serving commercial uses followed. Recent non-residential development has been dominated by large regional product distribution centers. Vast land areas within the City remain undeveloped.

Typical of southern California suburban subdivisions, new housing in Perris has been predominantly single-family detached units. Their architecture largely echoes design styles used throughout the region, with Spanish and Mediterranean derivatives, surfaced with stucco, and painted in earth tones. As areas dedicated for common open space increased in later developments, the lot sizes tended to be reduced, increasing the visual sense of neighborhood bulk and mass.

Community-serving commercial centers were developed at major street intersections. Typically, these contain a mix of retail and convenience goods and services with a major anchor tenant, typically a grocery store. Generally, buildings are set back from the street with intervening areas developed as large asphalt parking lots. There are few internal sidewalks, places that support activity (e.g., plazas and courtyards), or pedestrian connections with adjoining residential neighborhoods. Architecturally, the buildings are simply designed using design idioms that are comparable with the surrounding residential neighborhoods, emphasizing Spanish and Mediterranean motifs.

The third major element contributing to Perris's urban form and character is the City's industrial corridors and districts. A broad corridor of industrial uses extends across the north portion of the City. The corridor encompasses large parcels containing a diversity of industrial uses in buildings of variable physical form and quality. Older industrial uses for manufacturing purposes are housed in "box-like" buildings with little or no architectural treatment. Sites were often not landscaped and used for outdoor manufacturing or storage, with minimal decorative screening or walls. Later industrial development has been single industrial buildings. These have improved the visual quality of the built environment through the use of articulated building elevations, integrated signage, and site landscaping.

VISUAL CHARACTERISTICS OF PERRIS

The bulk of developable land within the City of Perris is located in a flat, broad basin. Rolling foothills lie to the east and west of this basin. Owing to the flatness of the basin, the view corridors extend for miles along current and planned roadways preserving scenic vistas from the broad basin to the surrounding foothills. The San Jacinto River traverses the area in a northeast-southwest direction. Large rocks scattered among undeveloped, rolling topography in the west-central area of the City of Perris are an obvious presence in the visual landscape. However, no one rock or collection of rocks in this landscape is notable by virtue of unique formation, size, or character. These landforms represent pleasing features that offer variation to the landscape. The planning area's hillsides and rock outcroppings have been incorporated into the City's development plan. Agricultural uses are present on the edges of the City and immediately south of the Ramona Expressway.

The San Bernardino Mountains, one of Southern California's Transverse Ranges, are located north of the City. In the western and eastern horizon are rolling hills. The slopes of the mountains provide a contrast to the generally flat topography within the City.

Much of the built environment within the City consists of low-rise buildings that preserve the views. Significant vistas include:

- The western, eastern and northern view of the surrounding foothills
- The view north to the San Bernardino Mountains

4.2.2 REGULATORY AND PLANNING FRAMEWORK

CALTRANS SCENIC HIGHWAYS

Caltrans defines a State Scenic Highway as any freeway, highway, road, or other public right-of-way, that traverses an area of exceptional scenic quality. Suitability for designations as a State Scenic Highway is based on vividness, intactness, and unity[3]:

[3] Caltrans Guidelines for Official Designation of Scenic Highways, 1995.

- Vividness is the extent to which the landscape is memorable. This is associated with the distinctiveness, diversity, and contrast of a visual element. A vivid landscape makes an immediate and lasting impression to the viewer.
- Intactness is the integrity of visual order in the landscape and the extent to which the natural landscape is free from visual intrusions (i.e., buildings, structures, equipment, grading).
- Unity is the extent to which development is sensitive to and in visual harmony with the natural landscape.

ORDINANCE NUMBER 1051 CITY OF PERRIS ZONING ORDINANCE

Section 19.02.110 A and B, and 19.69.030.C.5.h of the City of Perris Zoning Ordinance requires the use of certain types of light fixtures on non-residential properties This requirement minimizes the amount of light cast on adjoining properties, the public right-of-way, and into the night sky

RIVERSIDE COUNTY ORDINANCE 655

The County of Riverside adopted an ordinance to restrict the permitted use of certain light fixtures that emit light into the night sky. The primary intent of the ordinance is the protection of astronomical observation and research.

RIVERSIDE COUNTY INTEGRATED PLAN (RCIP)

The RCIP includes a range of land use policies that would help preserve scenic resources and visual quality. Although these policies would not apply to development within the City, development in the Sphere of Influence areas would occur under County policy framework; consequently, edge conditions of the urban areas would be affected, and scenic resources, such as the foothills, that lie outside the City limits but within the City's viewsheds would be similarly affected. Relevant County policies generally emphasize concentrating growth near or within existing urban boundaries, permanently preserving important natural and scenic resources, incorporating open space within urban areas, ensuring compatibility of historic and new development, conserving view corridors, skylines, and scenic vistas, and imposing restrictions on development activities that may adversely affect scenic resources.

4.2.3 THRESHOLDS OF SIGNIFICANCE

Implementation of General Plan 2030 and subsequent development may result in a potentially significant impact if any one of the following would occur:

- Create substantial adverse effects on a scenic vista *(refer to Section 6.0, Impacts Found Not To Be Significant);*

- Degrade the existing visual quality of an area *(refer to Section 6.0, Impacts Found Not To Be Significant);*

- Substantially degrade scenic resources within a state-or locally designated scenic highway *(refer to Section 6.0, Impacts Found Not To Be Significant)*; or

- Create substantial new sources of light and glare which would adversely affect day or nighttime views in the area.

4.2.3 PROJECT IMPACTS

Under the California Environmental Quality Act, an impact on the visual and aesthetic nature of the project area is considered significant if General Plan 2030:

Threshold ***Creates substantial new sources of light and glare which would adversely affect day or nighttime views in the area***

Potential future development facilitated in the General Plan includes up to 9,420,849 square feet of commercial and professional office building area, up to 33,488,773 square feet of industrial building area and up to 34,330 dwelling units by 2030. These uses could create new sources of light from exterior building illumination, lighted recreation/athletic facilities, and parking lots or structures, as well as glare from reflective building surfaces or the headlights of vehicular traffic. As a result, these new sources of light could affect nighttime views of the sky and the hills and mountains on the horizon.

The City of Perris is largely undeveloped and a significant amount of ambient light from urban uses will be introduced with new development. The majority of new development will be located on large pieces of undeveloped land. Minimal infill on vacant lands and intensification and reuse of existing sites is expected. Where development is proposed for large vacant areas, low-density residential uses would be included, which would result in new sources of light or glare. Industrial and commercial uses will include lighted parking areas. Interior and exterior lighting, as well as headlights of vehicular traffic, associated with proposed commercial uses would have adverse effects on the adjacent residential uses. Although additional light sources may not be individually significant, the cumulative increase could be a potential significant impact.

Future development projects will be subject to environmental and design review on a site-specific basis to ensure that glare impacts would not substantially impact adjacent uses. The City recognizes impacts associated with light and glare and provides guidelines pertaining to lighting in their Zoning Code. Sections 19.02.110 A and B and 19.69.030.C.5.h of the City of Perris Zoning Code provide regulations for safe and secure, yet adequate lighting. The Code states that all lighting, including security lighting shall be directed away from adjoining properties and the public right-of-way. The code prohibits the use of certain light fixtures

emitting into the night sky undesirable light rays which have an effect on astronomical observation and research. The Code also establishes the type and operation of lighting fixtures in commercial and industrial parking areas.

The City of Perris established Implementation Measures in the Land Use Element of General Plan 2030 that provide development guidelines to protect adjacent properties from obtrusive light and glare. Implementation Measure I.A.1 strives for compatible and well designed developments adjacent to one another, so that sensitive receptors are not subject to obtrusive light and glare impacts.

Implementation Measures in General Plan 2030, along with project specific environmental and design review by the City will reduce lighting and glare impacts to a less than significant level.

Future development within the City of Perris accommodated by General Plan 2030 and development in surrounding areas would result in the intensification of existing urban uses as well as conversion of open space into urban land uses. The intensification of existing urban uses would contribute to a cumulative effect related to aesthetics as a result of changes to light/glare. Future development accommodated by adoption and implementation of General Plan 2030 will occur in accordance with the Implementation Measures in the General Plan and subject to zoning ordinance standards of the City of Perris that address light and glare.

Upon compliance with the standard regulatory requirements of the City of Perris (e,g, Section 19.02.110 of the City of Perris Zoning Code and General Plan 2030 Policies) the potential cumulative impacts due to the creation of new sources of substantial light and glare which would adversely affect day or nighttime views in the project vicinity would be reduced to a less than significant level.

Impact: **Light and glare from new development associated with adoption and implementation of General Plan 2030 will not adversely affect day or nighttime views.**

4.2.4 MITIGATION MEASURES

No mitigation measures are required.

4.2.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.3 AIR QUALITY

This section evaluates air quality associated with short-and long-term impacts resulting from implementation of the City of Perris General Plan 2030. Information in this section is based primarily on the "CEQA Air Quality Handbook", prepared by the South Coast Air Quality Management District (SCAQMD), April 1993, for quantification of emissions and evaluation of potential impacts to air resources. As recommended by SCAQMD staff, URBEMIS 2002 version 7.4.2 and EMFAC2002 version 2.2 computer programs, developed and approved by the California Air Resources Board (CARB), were used to quantify project-related emissions.

4.3.1 EXISTING CONDITIONS

The City of Perris General Plan 2030 project area is located in western Riverside County within the South Coast Air Basin (SCAB). The SCAB consists of Orange County, together with the coastal and mountain portions of Los Angeles, Riverside, and San Bernardino counties. Regionally, the interaction of land (offshore) and sea (onshore) breezes controls local wind patterns in the area: daytime onshore flows and evening offshore flows. Air stagnation may occur during the early evening and early morning during periods of transition between day and nighttime flows. The region also experiences periods of hot, dry winds from the desert known as Santa Ana winds.

Locally, the prevailing wind is generally from the northwest to the southeast. The dominant daily wind pattern is an onshore 8 to 12 mph daytime breeze and an offshore 3 to 5 mph nighttime breeze. The typical wind flow pattern fluctuates only with occasional winter storms or strong northeasterly Santa Ana winds from the mountains and deserts northeast of the SCAB. Summer wind flow patterns represent worst-case conditions, as this is the period of higher temperatures and more sunlight, which results in ozone formation.

Topographic features such as the San Gabriel and San Bernardino Mountains form a natural barrier to the dispersion of air contaminants and the primary meteorological influence is a semi-permanent high pressure cell that hovers over Southern California. During the late spring, summer, and early fall, descending warm air is derived from this area of high pressure and blankets a layer of air that is cooler and closer to the ground. This weather occurrence, coupled with stable air temperatures, limits the vertical rise and dispersion of air pollutants. These pollutants are then trapped within the basin created by mountain ranges as the ocean breezes push eastward from the Pacific Ocean.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are carbon monoxide and oxides of nitrogen because of extremely low inversions and air

stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and oxides of nitrogen to form photochemical smog.[4]

The combination of topographic and meteorological characteristics of the basin results in a gradual degradation of air quality from coastal areas to inland areas, which is most evident with the photochemical pollutants such as ozone. The greatest ozone problems are recorded at those South Coast Air Quality Management District (SCAQMD) monitoring stations located at the base of the San Gabriel and San Bernardino mountains, ranging from the City of Santa Clarita, east to the City of San Bernardino.

The City of Perris is within the SCAQMD Source Receptor Area (SRA) 24. The most recent published data for SRA 24 is from 1992 to 2002. This data shows that the baseline air quality conditions in the project area include occasional events of very unhealthful air. Even so, the frequency of smog alerts has dropped significantly in the last decade. The greatest recognized air quality problem in the SCAB is ozone. The yearly monitoring records show that prior to 1995, a violation of state hourly ozone standards occurred approximately one-third or more days each year. Ozone pollution decreased in recent years with violations occurring on only ten of the days in 1999. However, this downward trend reversed slightly in 2000 through 2002.

Ambient concentrations of particulate matter smaller than 10 microns in diameter (PM-10 and PM-2.5) have also been a problem for SRA-24. The sources contributing to particulate matter pollution include road dust, windblown dust, agriculture, construction, fireplaces, and wood burning stoves, and vehicle exhaust. Specifically, SCAQMD data indicates the largest component of PM-10 in the SRA-24 comes from road and windblown dust, whereas the largest component of PM-2.5 is vehicle exhaust.

Over the last decade, the state air quality standard for PM-10 has been consistently exceeded in the area, and the Federal standard has been exceeded in six of the last 10 years. SCAQMD monitoring data shows that the Federal annual and 24-hour standards for PM-2.5 have been exceeded in SRA-24 since SCAQMD began monitoring this air pollutant in 1999. State standards for PM-2.5 adopted in June of 2003 and a comparison of the air quality in the project areas with the new standards is not yet available.

4.3.2 AGENCY JURISDICTION AND REGULATIONS

FEDERAL CLEAN AIR ACT (CCA)

In November 1990, Congress enacted a series of amendments to the Federal Clean Air Act (CAA) of 1970 intended to intensify air pollution control efforts across the nation. The

[4] Riverside County Integrated Project, Riverside County General Plan Final Program Environmental Impact Report, October, 2003.

primary goal of these amendments was an overhaul of the provisions for areas not meeting National Ambient Air Quality Standards. The CAA amendments identify specific emission reduction goals, require a demonstration of reasonable further progress and attainment through Federal Attainment Plans, and incorporate more stringent sanctions for basins that fail to attain or meet standards. The United States Environmental Protection Agency (EPA) is responsible for establishing and enforcing the national standards.

The Clean Air Act requires states to develop State Implementation Plans (SIP) that set forth the goals and objectives for achieving CAA requirements. SIPs are a compilation of new and previously developed plans, programs, district rules, State regulations, and Federal controls. California's SIP relies on the same core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations and limits on emissions from consumer products. The California Air Resources Board is the lead agency in the development of a SIP, and the EPA has the ultimate approval authority.

CALIFORNIA CLEAN AIR ACT (CCAA)

Enacted in 1988 the California Clean Air Act (CCAA) requires regulations and other control measures to achieve and maintain the State's air quality standards for ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide. The CCAA directs the districts to focus on reducing emissions from mobile sources such as motor vehicles, and stationary sources such as air conditioners, restaurants, and industrial facilities. Under the CCAA, air quality management plans are required to achieve a five percent annual reduction in the emissions of each non-attainment pollutant or its precursors. The California Air Resources Board (CARB) is responsible for ensuring implementation of the CCAA, attainment of Federal standards and the State Implementation Plan (SIP).

State of California requirements for air quality management are incorporated into the SIP for those pollutants stipulated in the Federal Clean Air Act. The development of a SIP is typically a joint effort by the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board working with Federal, State, and local agencies. The SIPs set forth the goals and objectives for achieving Federal CAA air quality standards, and then regional air quality management plans are prepared to implement control measures necessary to comply with the Federal and State requirements.

REGIONAL AIR QUALITY MANAGEMENT

Perris is located in the South Coast Air Basin, which is under the jurisdiction of California Air Resources Board (CARB) and the South Coast Air Quality Management District (SCAQMD). The 1977 Lewis Air Quality Act, renamed in 1988 as the Lewis-Presley Air Quality Management Act, created the South Coast Air Quality Management District. The act merged four air pollution agencies into one regional district and designated it as the principal agency responsible for air pollution control in southern California. The SCAQMD encompasses the 10,743 square-mile, four-county area that includes Riverside, San Bernardino, Los Angeles,

and Orange Counties. Perris is located in the South Coast Air Basin which is a sub region of the SCAQMD and covers an area of 6,745 square miles, and includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. Table 4.3-1 lists agencies and their principal responsibilities related to improving air quality.

2003 AIR QUALITY MANAGEMENT PLAN

To ensure continued progress toward clean air and comply with state and Federal requirements, the South Coast Air Quality Management District (AQMD) in conjunction with the California Air Resources Board (CARB), the Southern California Association of Governments (SCAG) and the U.S. Environmental Protection Agency (U.S. EPA) prepared the 2003 revision to its Air Quality Management Plan (AQMP). The 2003 AQMP employs up-to-date science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on-road and off-road mobile sources and area sources.[5]

The 2003 AQMP updates the demonstration of attainment with the Federal standards for ozone and PM-10, replaces the 1997 attainment demonstration for the Federal carbon monoxide (CO) standard and provides a basis for a maintenance plan for CO for the future. and updates the maintenance plan for the Federal nitrogen dioxide (NO2) standard that the South Coast Air Basin has met since 1992.

[5] South Coast Air Quality Management District, 2003 Air Quality Management Plan, Executive Summary.

Table 4.3-1: Agencies Responsible for Implementation of the 2003 AQMP

Agency	Principal Responsibilities
EPA	❖ Forty-nine State mobile vehicle emission standards; ❖ Airplanes, trains, and ships; ❖ Mobile-operating construction & farm equipment below 175 hp; and, ❖ Off-shore oil development
CARB	❖ On-road/Off-road vehicles; ❖ Motor vehicle fuels; and, ❖ Consumer products
SCAQMD	❖ Stationary (industry/commerce) & area sources; ❖ Some mobile sources
SCAG	❖ AQMP conformity assessment; ❖ Regional Transportation Improvement Program
LOCAL GOVERNMENTS	❖ Transportation and local government actions; ❖ Transportation facilities

Source: 2003 Air Quality Management Plan

The 2003 AQMP proposes policies and measures to achieve Federal and state standards for healthful air in the Basin. This revision to the AQMP also addresses several State and Federal planning requirements and incorporates significant new scientific data, primarily in the form of updates in emissions inventories, ambient measurements, new meteorological episodes and new air quality modeling tools. The 2003 AQMP is consistent with and builds upon the approaches taken in the 1997 AQMP and the 1991 Amendments to the Ozone State Improvement Plan (SIP) for the South Coast Air Basin for attainment of the Federal ozone air quality standard. However, this revision points to the urgent need for additional emission reductions (beyond those incorporated in the 1997/99 Plan) from all sources, specifically those under the jurisdiction of the CARB and U.S. EPA which account for approximately 80 percent of the ozone precursor emissions in the Basin.[6]

The key improvements incorporated in the 2003 AQMP are summarized as follows:

[6] South Coast Air Quality Management District, 2003 Air Quality Management Plan, Executive Summary.

- Revised emissions inventory projections using 1997 as the base year, the CARB on-road motor vehicle emissions model EMFAC2002 and SCAG 2001 Regional Transportation Plan (RTP) forecast assumptions;
- Revised control strategy that updates remaining control measures from the 1997/1999 SIP and incorporation of new control measures based on current technology assessments
- Reliance on 1997 ozone episodes and updated modeling tools for attainment demonstration relative to ozone and PM-10; and
- An initial assessment of progress toward the new Federal 8-hour ozone and PM-2.5 standards.

4.3.3 THRESHOLDS OF SIGNIFICANCE

This EIR is a "Program EIR" which evaluates the broad impacts associated with adoption, and implementation over a 25-year planning term, of the General Plan. Cumulative impacts on the environment, primarily as a result of future physical development consistent with General Plan 2030, are evaluated.

Certain site-specific impacts that may result from projects approved in the future cannot be anticipated or addressed at the General Plan Program EIR level; detailed characteristics of such projects are not known and attempts to identify development project level impacts would be speculative. Consistent with CEQA, each development project will be evaluated upon application and prior to approval, to determine the nature and extent of site-specific impacts that may result. These site-specific analyses are typically evaluated in an Initial Study which evaluates the impacts of a single activity undertaken pursuant to the General Plan. The Initial Study determines whether an EIR< Mitigated Negative Declaration or Negative Declaration is warranted.

Air quality impacts resulting from future, cumulative development consistent with General Plan 2030 could be considered significant if they cause any of the following to occur:

- Conflict with or obstruct implementation of the 2003 Air Quality Management Plan (*refer to Section 6.0, Impacts Found Not To Be Significant)*;

- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard;

- Exposes sensitive receptors to substantial pollutant concentrations; or

- Create objectionable odors affecting a substantial number of people (*refer to Section 6.0, Impacts Found Not To Be Significant).*

The SCAQMD recommends that projects be evaluated in terms of air pollution control thresholds established by the SCAQMD and published in the "CEQA Air Quality Handbook." These thresholds were developed by the SCAQMD to provide quantifiable pollutant levels against which projects can be compared. The following quantifiable thresholds are used to determine the significance of air quality impacts associated with General Plan 2030.

THRESHOLDS RELATED TO CONSTRUCTION ACTIVITIES

Projects in the South Coast Air Basin with construction-related emissions that exceed any of these thresholds should be considered significant:

Table 4.3-2: Construction-Related Emission Thresholds

Criteria Pollutants	Threshold Criteria
Reactive Organic Compounds (ROC)	75 lbs/day
Nitrogen Dioxide (NO^2)	100 lbs/day
Fine Particulate Matter (PM10)	150 lbs/day
Sulfur Dioxide (S02)	150 lbs/day
Carbon Monoxide (CO)	550 lbs/day

Source: SCAQMD CEQA Air Quality Handbook, November 1993

THRESHOLDS RELATED TO LONG-TERM DAILY EMISSIONS

Specific criteria for determining whether the potential air quality impacts of a project are significant are set forth in the SCAQMD Handbook. The criteria for these emissions thresholds include compliance with the State and national air quality standards and conformity with existing Air Quality Management Plan (AQMP) for the South Coast Air Basin. The daily operational emissions "significance" thresholds are:

Table 4.3-3: Daily Operational Emissions Threshold Criteria

Criteria Pollutants	Threshold Criteria
Reactive Organic Compounds (ROC)	55 lbs/day
Nitrogen Dioxide (NO^2)	55lbs/day
Fine Particulate Matter (PM10)	150 lbs/day
Sulfur Dioxide (S02)	150 lbs/day
Carbon Monoxide (CO)	550 lbs/day

Source: SCAQMD CEQA Air Quality Handbook, November 1993

4.3.4 PROJECT IMPACTS

The following information summarizes General Plan 2030 air quality impacts, and provides a discussion of project consistency with the 2003 AQMP.

Under the California Environmental Quality Act, air quality impacts may be considered significant if General Plan 2030:

Threshold ***Violates any air quality standard or contributes substantially to an existing or projected air quality violation***

Implementation of General Plan 2030 would result in new emissions being generated from construction activities and the operation of new land uses. Under General Plan 2030, a substantial amount of construction and development would occur every year until build-out of General Plan 2030. Many of the individual projects will be small and generate construction or operational emissions that do not exceed the SCAQMD's recommended thresholds of significance. Other projects will be large enough to generate construction and/or operational emissions that exceed these thresholds. Through the environmental review process, the City will evaluate individual development projects to identify site-specific air quality impacts and require mitigation measures for these projects as may be required to reduce emissions and potential impacts.

Development consistent with General Plan 2030 is expected to result in pollutant emissions attendant to construction and operation of new residential and non-residential land uses within the City. Table 4.3-4 indicates that construction emissions throughout the General Plan area during a hypothetical day would exceed the applicable SCAQMD thresholds for NOx, ROG, and PM-10, even with implementation of recommended construction project pollutant reduction measures. This represents a significant impact.

Impact: **Adoption and implementation of General Plan 2030 will contribute to an existing and projected air quality violation.**

Table 4.3-4: Hypothetical and Mitigated Daily Construction Emissions

Pollution Source	Non-Mitigated/Hypothetical			Mitigated		
	NOx	ROG	PM-10	NOx	ROG	PM-10
Daily Totals	374.53 lbs	1,554.85 lbs	443.51 lbs.	293.27 lbs (-81.3 lbs)	600.42 (-954.4 lbs.)	230.80 lbs. (-212.7 lbs)
Quarterly Emissions Totals	12.17 tons	50.53 tons	14.41 tons	9.53 tons (-2.6 tons)	19.51 tons (-31 tons)	7.50 tons (-6.9 tons)

SCAQMD Thresholds	100 lbs/day	75 lbs/day	150 lbs/day	100 lbs/day	75 lbs/day	150 lbs/day
Exceed SCAQMD Thresholds?	YES	YES	YES	YES	YES	YES
Notes: Quarterly emission totals for all criteria pollutants 65 workdays per quarter.						

Source: Air Quality Impact Analysis Report for the City of Perris General Plan Update, Perris, California, Michael Brandman Associates, January 2004.

Threshold ***Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard***

The project area is designated a non-attainment area for ozone and PM-10. As discussed in the preceding paragraph, construction activities are projected to result in significant levels of NOx and ROG, both ozone precursors, and PM-10. Feasible measures to reduce these impacts to less than significant levels have not been identified.

SCAQMD has set recommended thresholds for construction related emissions based on factual data it has obtained and data within the Clean Air Act. Emission rates higher than the SCAQMD suggested short-term thresholds not only demonstrate significant impacts on an individual basis but combined with short-term emissions from all of the other projects within the air basin constitute a significant cumulative impact. Therefore, NOx, ROG, and PM-10 emissions during construction activities represent a significant cumulative impact.

As shown in Table 4.3-5, long-term daily emissions associated with projected levels of growth through 2030 would substantially exceed daily thresholds for ROG, SOx, both ozone precursors, and also PM-10. Levels of NOx, also an ozone precursor, are projected to be below current levels, primarily due to anticipated improvements in automotive fuels, and cleaner burning engines that will significantly reduce automotive exhaust emissions. Emission of ROG and Sox in excess of established thresholds for long-term daily emissions represents a significant cumulative impact.

In accordance with CEQA, actions that have impacts that are individually limited, but cumulatively considerable, may be significant. Although there is no standard directly applicable to adoption and implementation of General Plan 2030, cumulative emissions resulting from development associated with General Plan 2030 will contribute criteria pollutants to the South Coast Air Basin, which is currently a non-attainment area, and in violation of air quality standards. As a result implementation of General Plan 2030 will result in cumulative significant impacts.

Impact: **Adoption and implementation of General Plan 2030 will result in a cumulatively considerable net increase of criteria pollutants for which the region is in non-attainment.**

Table 4.3-5: Long Term Daily Emissions Comparison – Existing and Year 2030 Build-out

Pollution Source	NOx (lbs/day)	CO (lbs/day)	ROG (lbs/day)	SOx (lbs/day)	PM-10 (lbs/day)
Existing Conditions					
Mobile Emissions	5,615.33	42,112.73	3,437.03	28.57	2,827,41
Natural Gas Consumption	143.63	60.70	11.02	NG	0.27
Wood Stoves	418.71	21,388.86	2,669.25	69.78	3,489.21
Fireplace	129.74	12,604.80	11,427.15	19.96	1,726.55
Landscape Emissions	NG	NG	NG	NG	NG
Consumer Products	NG	NG	499.11	NG	NG
Total Existing Emissions	6,307.41	76,167.09	18,043.56	118.31	8,043.44
Year 2030					
Mobile Emissions	3,188.23	25,432.68	2,354.51	67.09	12,907.05
Natural Gas Consumption	673.84	282.08	51.20	NG	1.27
Wood Stoves	1,667.31	85,171.79	10,629.11	277.89	13,875.22
Fireplace	516.64	50,193.08	45,503.63	79.48	6,875.22
Landscape Emissions	NG	NG	NG	NG	NG
Consumer Products	NG	NG	1,987.50	NG	NG
Total Build-out Emissions (pounds/day)	6,046.02	161,079.63	60,525.95	424.46	33,677.80
Net Change (pounds/day).	-261.39	**84,912.54**	**42,482.39**	**306.15**	**25,634.36**
SCAQMD Thresholds	55 lbs/day	550 lbs/day	55 lbs/day	150 lbs/day	150 lbs/day
Note: NG designates criteria pollutants that have estimated negligible values					

Source: Air Quality Impact Analysis Report for the City of Perris General Plan Update, Perris, California, Michael Brandman Associates, January 2004.

Threshold ***Project-generated emissions expose sensitive receptors to substantial pollutant concentrations***

Sensitive receptors include existing and future residential uses, school playgrounds, child care facilities, athletic facilities, hospitals, and long-term health care facilities within the City of Perris. The projected emissions of NOx, ROG and PM-10 will be above the applicable SCAQMD thresholds during construction activities. However, the majority of these emissions would be concentrated at construction sites and would be dispersed along truck routes leading into and out of construction sites. These emissions would further dissipate and be

diluted by the atmosphere downwind of the emission sources. Considering the dispersion of the short-term emissions, the project will not expose sensitive receptors to substantial pollutant concentrations.

Over the long-term, implementation of General Plan 2030 will allow for substantial population and employment growth and development of a variety of new land uses, throughout the planning area. As a result, there will be a significant increase in the number of sensitive receptors found in the planning areas, which could be exposed to potentially significant pollutant concentration. Such concentrations typically occur near a stationary source, such as a heavy industrial operation that emits pollutants, a waste processing facility that emits pollutants, including potential toxic air contaminants, various manufacturing facilities, automobile body repair and paint shops, etc.

General Plan 2030 separates residential areas from industrial areas, which will do much to avoid locating sensitive receptors near potential sources of air pollution. Review of individual industrial land use proposals will be necessary to ensure that those proposals involving activities that generate significant levels air pollutants are carefully designed and regulated to ensure that such emissions are reduced to less than significant levels and not concentrated near sensitive receptors.

Vehicular emissions can also be concentrated near sensitive receptors, primarily where there is a significant level of congestion that slows the flow of traffic and allows for build up of emissions in a localized area, particularly at busy intersections. The General Plan 2030 Circulation Element is intended to develop a street network and intersection improvements that will avoid serious congestion and maintain a smooth flow of traffic. This will also minimize concentrations of pollutants in vehicle exhausts that could collect near sensitive receptors located along roadways and intersections. Regular assessment of the air quality impact of new development projects along with transportation improvements will be necessary to monitor air pollutant levels near sensitive receptors and to determine whether such projects and improvements could increase pollutant levels. If pollutant levels are increased, measures shall be identified to avoid significant increases that could violate State or Federal air quality standards.

Impact: **Adoption and implementation of General Plan 2030 does not expose sensitive receptors to substantial pollutant concentrations.**

4.3.5 MITIGATION MEASURES

MITIGATION INTENDED TO REDUCE CONSTRUCTION RELATED EMISSIONS:

AQ-1 Project applicants shall provide construction site electrical hook ups for electric hand tools such as saws, drills, and compressors, to eliminate the need for

diesel powered electric generators or provide evidence that electrical hook ups at construction sites are not practical or prohibitively expensive.

AQ-2 All development projects greater than 19 single-family residential units, 40 multifamily residential units, or retail/commercial/industrial land uses greater than 45,000 square feet of floor space shall apply paints using either high volume low pressure (HVLP) spray equipment or by hand application.

AQ-3 Prior to issuance of any area grading permits, all applicants shall submit a traffic control plan that will describe in details safe detours and provide temporary traffic control during construction activities.

AQ-4 For all development projects, all applicants must abide by the South Coast Air Quality Management District's Rule 404 concerning Best Management Practices for construction sites in order to reduce emissions during the construction phase. Measures may include:

- Development of a construction traffic management program that includes, but is not limited to, rerouting construction related traffic off congested streets, consolidating truck deliveries, and providing temporary dedicated turn lanes for movement of construction traffic to and from site;
- Sweep streets an the end of the day if visible soil material is carried onto adjacent paved public roads;
- Wash off trucks and other equipment leaving the site;
- Replace ground cover in disturbed areas immediately after construction;
- Keep disturbed/loose soil moist at all times;
- Suspend grading activities when wind speeds exceed 25 miles per hour.
- Enforce a 15 miles per hour speed limit on unpaved portions of the construction site.

AQ-5 Prior to issuance of any grading permits, all Applicants shall submit evidence to the City of Perris that construction equipment is and will be properly maintained, including proper tuning and timing of the engines.

AQ-6 Building and grading permits shall include a restriction to limit idling of construction equipment on site to no more than ten minutes.

MITIGATION MEASURES TO REDUCE LONG-TERM EMISSIONS:

AQ-7 New residential development shall be prohibited from installing wood burning fireplaces, unless builders can demonstrate that these will be equipped with

pollution control devices that significantly reduce emissions of CO, ROG, and PM-10.

4.3.6 LEVELS OF SIGNIFICANCE AFTER MITIGATION

Significant and unavoidable.

4.4 HAZARDS

This section evaluates the impacts of adoption and implementation of General Plan 2030 relative to hazards within the City of Perris.

4.4.1 EXISTING CONDITIONS

AIRCRAFT HAZARDS

The City of Perris has two airports within or near its City limits: 1) March Air Reserve Base (ARB), and 2) Perris Valley Airport.

March ARB

In the 1990s, the Federal Government ceased or reduced military operations at several military bases throughout the United States. The bases were "realigned" for civilian use and/or military reserve uses. Subsequent to the base realignment process in 1996, March Air Force Base (AFB) became March Air Reserve Base (ARB), and portions of the former Air Force base were reserved for use as a commercial airport. The March Joint Powers Authority (JPA) was created to oversee conversion and operation of the commercial airport, March GlobalPort. The JPA includes members of the Riverside County Board of Supervisors and city council Members from adjacent cities.

In 1998, the Department of the Air Force completed an Air Installation Compatible Use Zone (AICUZ) study. The objective of the AICUZ is to achieve compatible uses of public and private lands in the vicinity of military airfields. The study accomplished three important tasks:

- Identification of Accident Potential Zones (APZ) and the Clear Zone;
- Identification of Noise Impact Zones;
- Identification of compatible uses within the above-mentioned zones (Table 4.4 -1).

In addition to the AICUZ, Airport Influence Area boundaries around March AFB were adopted by the County of Riverside Airport Land Use Commission (ALUC) in May, 1986 (Exhibit 4.4-1), and became part of the County's Airport Land Use Plan (ALUP). The ALUP has not been updated since the base realignment process in the mid-1990s and does not reflect changes in aircraft operations or aircraft types.

Influence Area 1 outlines the area beneath heaviest air traffic volumes. Noise levels are highest in these zones. High risk and sensitive land uses are prohibited in Influence Area 1, where residential uses are limited to areas not in the actual flight path and areas where aircraft have gained sufficient altitude so as to no longer pose a relative safety threat. At

March ARB, Influence Area 1 is co-extensive with the AICUZ Accident Potential Zones 1 and 2, and the Clear Zone.

Influence Area 2 encompasses larger land areas. Residential development is to be limited to one dwelling unit per each two and one half acres. Agricultural, industrial and commercial uses are permitted. The boundaries follow general flight paths, and coincide with areas where aircraft would be turning and applying or reducing power.

Exhibit 4.4-1: March ARB Influence Areas

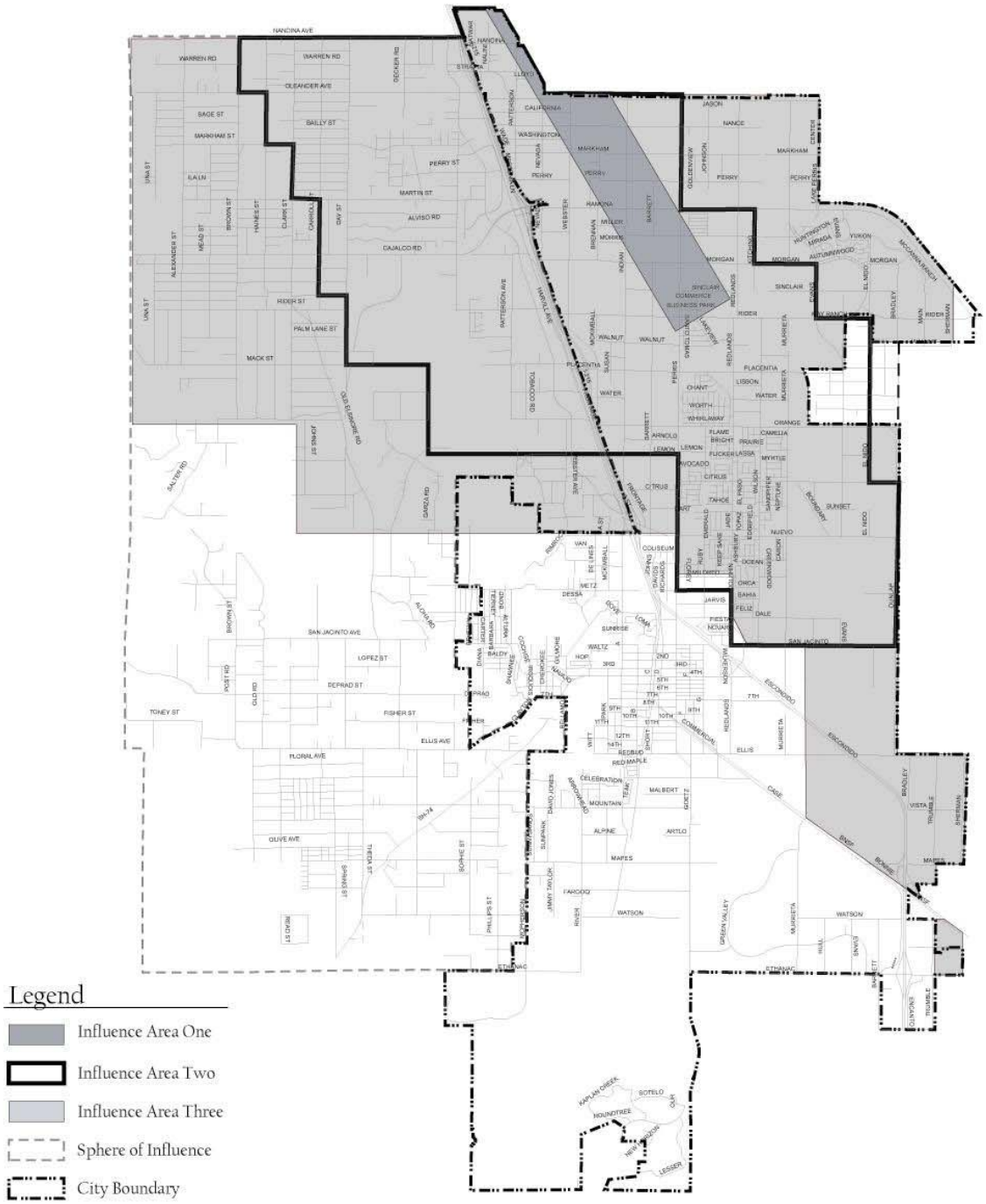


Table 4.4-1: Land Use Compatibility Guidelines for Development within the Accident Potential Zones and Noise Zones for March Air Reserve Base AICUZ

Land Use	Accident Potential			Noise Zones (DNL)				
	Clear Zone	APZ I	APZ II	60-65	65-70	70-75	75-80	80+
Residential								
Single family detached	N	N	Y[1]	Y[X]	A[11]	B[11]	N	N
All others	N	N	N	Y[X]	A[11]	B[11]	N	N
Manufacturing								
Food & kindred products, manufacturing	N	N[2]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Textile mill products, manufacturing	N	N[2]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Apparel and other finished products made from fabric	N	N	N[2]	Y	Y	Y[12]	Y[13]	Y[14]
Lumber and wood products, except furniture	N	Y[2]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Furniture and fixtures	N	Y[2]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Paper & allied products	N	Y[2]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Printing, publishing and allied industries	N	Y[2]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Chemicals and allied products	N	N	N[2]	Y	Y	Y[12]	Y[13]	Y[14]
Petroleum refining and related industries	N	N	Y	Y	Y	Y[12]	Y[13]	Y[14]
Rubber and miscellaneous plastic products	N	N[2]	N[2]	Y	Y	Y[12]	Y[13]	Y[14]
Stone, clay, and glass products manufacturing	N	N[2]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Primary metal industries	N	N[2]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Fabricated metal products	N	N[2]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks manufacturing	N	N	N[2]	Y	Y	A	B	N
Miscellaneous manufacturing	N	Y[2]	Y[2]	Y	Y	Y[12]	Y[13]	Y[14]
Transportation, Communication and Utilities								

Land Use	Accident Potential			Noise Zones (DNL)				
	Clear Zone	APZ I	APZ II	60-65	65-70	70-75	75-80	80+
Railroad, rapid transit and street railroad transportation	N[3]	Y[4]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Motor vehicle transportation	N[3]	Y	Y	Y	Y	Y[12]	Y[13]	Y[14]
Aircraft transportation	N[3]	Y[4]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Marine craft transportation	N[3]	Y[4]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Highway & street right-of-way	N[3]	Y	Y	Y	Y	Y[12]	Y[13]	Y[14]
Automobile parking	N[3]	Y[4]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Communications	N[3]	Y[4]	Y	Y	Y	A[15]	B[15]	N
Utilities	N[3]	Y[4]	Y	Y	Y	Y	Y[12]	Y[13]
Other transportation, communications and utilities	N[3]	Y[4]	Y	Y	Y	A[15]	B[15]	N
Trade								
Wholesale	N	Y[2]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Retail—building materials, hardware and farm equipment	N	Y[2]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Retail—general merchandise	N	N[2]	Y[2]	Y	Y	A	B	N
Retail—food	N	N[2]	Y[2]	Y	Y	A	B	N
Retail—automotive, marine craft, aircraft, and accessories	N	Y[2]	Y[2]	Y	Y	A	B	N
Retail—apparel and accessories	N	N[2]	Y[2]	Y	Y	A	B	N
Furniture, home furnishings and equipment	N	N[2]	Y[2]	Y	Y	A	B	N
Eating, and drinking establishments	N	N	N[2]	Y	Y	A	B	N
Other Retail	N	N[2]	Y[2]	Y	Y	A	B	N
Services								
Finance, insurance and real estate services	N	N	Y[6]	Y	Y	A	B	N
Personal services	N	N	Y[6]	Y	Y	A	B	N
Cemeteries	N	Y[7]	Y[7]	Y	Y	Y[12]	Y[13]	Y[14, 21]
Business services	N	Y[8]	Y[8]	Y	Y	A	B	N

Land Use	Accident Potential			Noise Zones (DNL)				
	Clear Zone	APZ I	APZ II	60-65	65-70	70-75	75-80	80+
Repair services	N	Y[2]	Y	Y	Y	Y[12]	Y[13]	Y[14]
Professional services	N	N	Y[6]	Y	Y	A	B	N
Hospitals, nursing homes	N	N	N	Y	A*	B*	N	N
Other medical facilities	N	N	N	Y	Y	A	B	N
Contract construction services	N	Y[6]	Y	Y	Y	A	B	N
Governmental services	N	N	Y[6]	Y	Y*	A*	B*	N
Educational services	N	N	N	Y	A*	B*	N	N
Miscellaneous services	N	N[2]	Y[2]	Y	Y	A	B	N
Cultural, Entertainment and Recreation;								
Cultural activities (including churches)	N	N	N[2]	Y*	A*	B*	N	N
Nature exhibits	N	Y[2]	Y	Y*	Y*	N	N	N
Public Assembly	N	N	N	Y	Y	N	N	N
Auditoriums, concert halls	N	N	N	Y	A	B	N	N
Outdoor music shell, amphitheaters	N	N	N	Y*	N	N	N	N
Outdoor sports arenas, spectator sports	N	N	N	Y	Y[17]	Y[17]	N	N
Amusements	N	N	Y8	Y	Y	Y	N	N
Recreational activities (including golf courses, riding stables, water recreation	N	Y[8,9,10]	Y	Y*	Y*	A*	B*	N
Resorts and group camps	N	N	N	Y*	Y*	Y*	N	N
Parks	N	Y[8]	Y[8]	Y*	Y*	Y*	N	N
Other cultural, entertainment and recreation	N	Y[9]	Y[9]	Y*	Y*	Y*	N	N
Resources production and extraction								
Agriculture (except livestock)	Y[16]	Y	Y	Y	Y[18]	Y[19]	Y[20]	Y[2021],
Livestock farming and animal breeding	N	Y	Y	Y	Y[18]	Y[19]	Y[20]	Y[20,21]
Agriculture elated activities	N	Y[5]	Y	Y	Y[18]	Y[19]	N	N
Forestry activities and related services	N[5]	Y	Y	Y	Y[18]	Y[19]	Y[20]	Y[20,21]
Fishing activities and related services	N[5]	Y[5]	Y	Y	Y	Y	Y	Y

Land Use	Accident Potential			Noise Zones (DNL)				
	Clear Zone	APZ I	APZ II	60-65	65-70	70-75	75-80	80+
Mining activities	N	Y[5]	Y	Y	Y	Y	Y	Y
Other resources production and extraction	N	Y[5]	Y	Y	Y	Y	Y	Y

Legend:
Y- (Yes) Land use related structures are compatible without restriction
N- (No) Land use related structures are not compatible and should be restricted
Y* (Yes w/restrictions) Land use related structures are generally compatible
*see notes 1-21
N* (no w/exceptions) *see notes 1-21
NLR - (Noise Level Reduction) - NLR (outdoor to indoor) to be achieved through incorporation of noise attenuation measures into the design and construction of the structures.
A, B, or C - Land use and related structures generally compatible; measures to achieve NLR for A (DNL 66-70), B (DNL 71-75), or C (DNL 76-80) need to be incorporated into the design and construction of structures. See Appendix E, Vol. IL
A*, B*, and C* - Land use generally compatible with NLR. However, measures to achieve an overall noise level reduction do not necessarily solve noise difficulties and additional evaluation is warranted.
* - The designation of these uses as "compatible" in this zone reflects individual federal agency and program consideration of general cost and feasibility factors, as well as past community experiences and program objectives. Localities, when evaluating the application of these guidelines to specific situations, may have different concerns or goals to consider.

Notes:
1. Suggested maximum density of 1 -2 dwelling units per acre, possibly increased under a Planned Unit Development (PUD) where maximum lot coverage is less than 20 percent.
2. Within each land use category, uses exist where further definition may be needed due to the variation of densities in people and structures.
3. The placing of structures, buildings, or above-ground utility lines in the clear zone is subject to severe restrictions. In a majority of the clear zones, these items are prohibited.
4. No passenger terminals and no major aboveground transmission lines in APZ I.
5. Factors to be considered: labor intensity, structural coverage, explosive characteristics, and air pollution.
6. Low-intensity office uses only. Meeting places, auditoriums, etc. are not recommended,
7. Excludes chapels.
8. Facilities must be low intensity.
9. Clubhouse not recommended.
10. Areas for gatherings of people are not recommended.
11. a. Although local conditions may require residential use, it is discouraged in DNL 66-70 dB and strongly discouraged in DNL 71-75 dB. An evaluation should be conducted prior to approvals, indicating that a demonstrated community need for residential use would not be met if development were prohibited in these zones, and that there are no viable alternative locations.
a. Where the community determines the residential uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) for DNL 66-70 dB and DNL 71-75 dB should be incorporated into building codes and considered in individual approvals.
b. NLR criteria will not eliminate outdoor noise problems. However, building location and site planning, and design and use of berms and barriers can help mitigate outdoor exposure, particularly from near ground level sources. Measures that reduce outdoor noise should be used whenever practical in preference to measures which only protect interior spaces.

1. Measures to achieve the same NLR as required for facilities in the DNL 66-70 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
2. Measures to achieve the same NLR as required for facilities m the DNL 71-75 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
3. Measures to achieve the same NLR as required for facilities m the DNL 76-80 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low,
4. If noise sensitive, use indicated NLR. If not, the use is compatible.
5. No buildings
6. Land Use is compatible provided special sound reinforcement systems are installed
7. Residential buildings require the same NLR required for facilities in the DNL 66-70 dB range.
8. Residential buildings require the same NLR required for facilities in the DNL 71-75 dB range.
9. Residential buildings are not permitted
10. Land use is not recommended. If the community decides the use is necessary, personnel should wear hearing protection device

Influence Area 3 is larger than Influence Area 2. Avigation Easements are required on all properties in Influence Area 3. These Easements provide "constructive notice" to prospective purchasers of noise and other impacts related to airport operations.

Perris Valley Airport

Perris is also home to the Perris Valley Airport, a small, private airport that is a premiere location for skydiving and ballooning enthusiasts. Perris Airport has only an Influence Area 1 (Exhibit 4.4-2). Residential uses are to be limited to areas not in the actual flight path and to areas where aircraft have gained sufficient altitude so as to no longer pose a relative safety threat.

Airport Land Use Planning In Perris

Development in Perris has not always conformed to the ALUP or the AICUZ land use and density restrictions. The City is currently a participant in the March Operation Assurance Task Force to resolve the inconsistencies between local development regulation and AICUZ and ALUP policies.

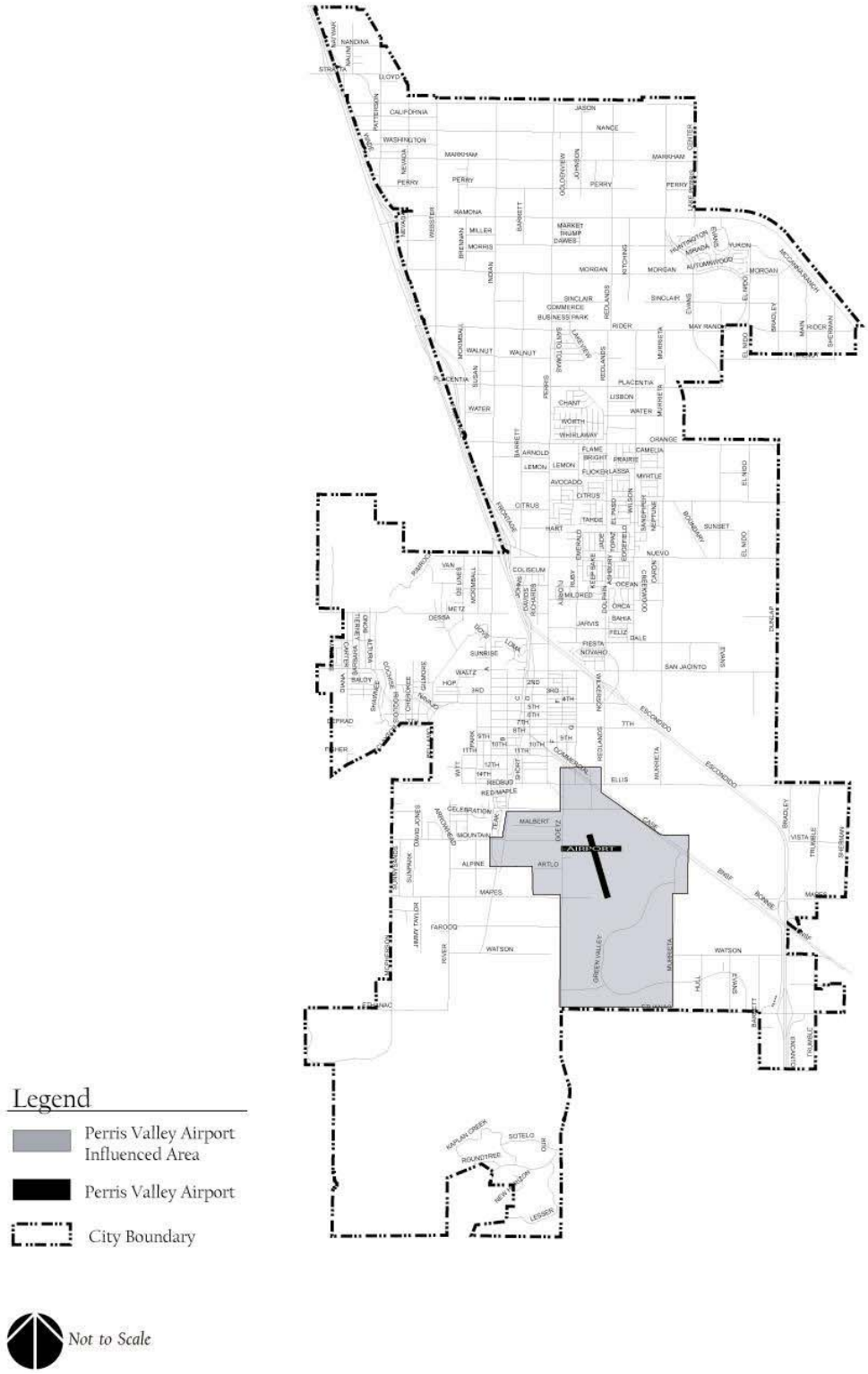
Additional information on noise impacts associated with aircraft overflights is included in the Noise Section (4.7) of the EIR.

4.4.2 EXISTING POLICIES AND REGULATIONS

STATE AERONAUTICS ACT (CALIFORNIA PUBLIC UTILITIES CODE, SECTION 21670 ET SEQ.)

The State Aeronautics Act created the requirement for an Airport Land Use Commission (ALUC) in each county and establishes statewide requirements for the conduct of airport land use compatibility planning. State statutes require that, once an ALUC has adopted or amended an airport land use compatibility plan, the county—where it has land use jurisdiction within the airport influence area—and any affected cities must update their General Plans and any applicable specific plans to be consistent with the ALUC's plan (Government Code, Section 65302.3). The *California Airport Land Use Planning Handbook* is published by the California Department of Transportation Division of Aeronautics and its purpose is to support and amplify the State article.

Exhibit 4.4-2: Perris Valley Airport Influence Areas



4.4.3 THRESHOLDS OF SIGNIFICANCE

Implementation of General Plan 2030 may result in a potentially significant impact relative to hazards and hazardous materials if the project would cause any of the following results:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials *(refer to Section 6.0, Impacts Found Not To Be Significant)*;

- Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment *(refer to Section 6.0, Impacts Found Not To Be Significant)*;

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school *(refer to Section 6.0, Impacts Found Not To Be Significant)*;

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result, would create a significant hazard to the public or the environment *(refer to Section 6.0, Impacts Found Not To Be Significant)*;

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;

- For a project within vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan *(refer to Section 6.0, Impacts Found Not To Be Significant)*; or

- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands *(refer to Section 6.0, Impacts Found Not To Be Significant).*

4.4.4 PROJECT IMPACTS

Threshold ***For a project located within an airport land use plan, the project results in a safety hazard for people residing or working in the project area***

The Airport Land Use Plan (ALUP) of the County of Riverside includes the City of Perris within its planning area. The ALUP defines "Influence Areas" wherein land use restrictions are to be applied to minimize interference of new development with airport and flight operations. The ALUP includes Influence Area 1 adjacent to March Air Reserve Base which extends southeasterly from the end of the runway into the City of Perris.

Influence Area 1 is co-extensive with Accident Potential Zones I and II delineated in the Air Installation Compatible Use Zone (AICUZ) study completed by the Department of the Air Force in 1998. Influence Area 1 reflects the air corridor with the highest volume of air traffic; all pass through this corridor on approach or departure from March Air Reserve Base. Aircraft are more likely to have problems within Influence Area 1 due to changes in aircraft power settings associated with take-offs or landings. The convergence of all aircraft take-offs and landings within Influence Area 1 result in the highest noise levels in this Area.[7] For these reasons, high risk and sensitive uses including residential uses are prohibited in this area consistent with both the ALUP and the AICUZ. Development standards for the City of Perris reflect restrictions on use and density and intensity standards within this Influence Area and are consistent with the ALUP and AICUZ for Influence Area 1.

Influence Areas 2 and 3 encompass much of the City of Perris east of Interstate I-215. Hazards in Influence Area 2 are similar to those in Influence Area 1, but the influence of take-off and noise are not as severe and the aircraft are higher in altitude. Therefore, the limitations are not as stringent as in Influence Area 1. Restrictions on residential densities in the ALUP for Influence Area 2 include a minimum residential lot size of 2 ½ acres and permit agricultural, industrial, and commercial uses.

Aircraft flights into and out of March Air Reserve Base have less impact on uses in ALUP Influence Area 3 than in Influence Areas 1 and 2 Within Influence Area 3, Avigation Easements are to be granted by land purchasers to airport operators to preclude legal actions by property owners to abate nuisances, including noise and vibration. In exchange for Avigation Easements, development of subject properties are to be permitted.

Influence Areas as currently defined were adopted as part of the County of Riverside ALUP in 1986. Up until that time, much of the airport planning area within the City of Perris was agricultural and large-lot, rural residential development. With the explosive growth in southern California since that time, the demand for housing resulted in development at much higher densities than previously existed. Conformity with the 1986 ALUP would have precluded much of the development in the City that began during the late 1980's and continues to the present. ALUP Influence Areas 2 and 3 extend far beyond the Crash Potential Zones established for March Field. Moreover, the ALUP does not reflect changes in

[7] Riverside County Airport Land Use Plan. Riverside County Airport Land Use Commission, April, 26, 1984.

the types and numbers of aircraft operations at March Air Reserve Base that resulted from base realignment.

Development and development standards for the City of Perris do not reflect the land use restrictions set forth in the ALUP for Influence Areas 2 and 3. The City of Perris is currently participating as a member of a multi-jurisdictional committee working with the "March Operations Assurance Task Force" to resolve inconsistencies between ALUP policies and restrictions and the land development policies and standards of affected local jurisdictions.

Policies and Implementation Measures in General Plan 2030 are intended to reduce impacts associated with airport safety hazards to acceptable levels:

> ***Safety Element***
> **Goal I**
> Reduce risk of damage to property or loss of life due to natural or man-made disasters
> **Policy I.D: Aircraft**
> Consult the AICUZ Land Use Compatibility Guidelines and ALUP, Airport Influence Area development restrictions when considering development project applications.
> **Implementation Measures**
> **I.D.1** Participate in March Operations Assurance Task Force to resolve inconsistencies between local land use regulations and AICUZ and ALUP policies.
> **I.D.2** Continue to notify March Air Reserve Base of new development project applications and consider their input prior to making land use decisions.
> **I.D.3** Development on property within Perris Valley Airport Interim Influence Area 1 shall be subject to prior determination, in consultation with the ALUC, and subsequent adoption of appropriate use and development restrictions necessary to minimize the potential for loss of life and property.

The Land Use Plan of General Plan 2030 identifies the Accident Potential Zones associated with March Air Reserve Base and designates land uses for properties within these Zones for development with industrial and business park uses consistent with AICUZ guidelines. Residential uses are not permitted. Continued compliance with General Plan provisions relative to the Clear Zone and Crash Zones and consultation with representatives of March Air Reserve Base on new development proposals will limit the number of people at risk consistent with AICUZ guidelines. Accordingly, the risk of injury and loss of life and/or property from aircraft hazards at March Globalport/March Air Reserve Base is considered to be less than significant.

Perris Valley Airport is a small, private airport with uses that include skydiving and hot air ballooning. In October 1975, the Airport Land Use Plan (ALUP) of the County of Riverside Airport Land Use Commission (ALUC) designated an area around Perris Valley Airport as Interim Influence Area 1. According to a representative of the Riverside County Land Use

Commission, the determining factors for establishing the Influence Area are technically outdated and largely unknown. There is no written rationale for determining the Influence area for Perris Valley Airport.[8] ALUP standards that preclude high risk and sensitive uses including residential uses in this area are obsolete. Subject to General Plan 2030 Safety Element Implementation Measure I.D.3, the potential impact associated with risks to persons and properties as a result of development in Perris Valley Interim Area a will be reduced to a level determined to be less than significant.

Impact: **Adoption and implementation of General Plan 2030 includes future development in areas subject to the County of Riverside Airport Land Use Plan, but will not result in a safety hazard for people residing or working in the project area.**

4.4.5 MITIGATION MEASURES

No mitigation measures are required.

4.4.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

[8] Downs, Keith. Verbal communication with Planner at Riverside County Airport Land Use Commission. August 6, 2004.

4.5 HYDROLOGY AND WATER QUALITY

This section of the EIR describes existing conditions related to hydrology within the City of Perris. Flood and dam inundation hazards are also discussed. Identification of hydrologic impacts that could result from implementation of General Plan 2030 and appropriate mitigation measures are provided.

4.5.1 EXISTING CONDITIONS

HYDROLOGY

San Jacinto River Watershed

The City of Perris is located within the San Jacinto River Watershed, which drains an approximately 540-square-mile area of western Riverside County. The San Jacinto River flows from the San Jacinto Mountains, across the San Jacinto Valley, through the City of Perris, to Railroad Canyon Reservoir, and finally to its terminus in Lake Elsinore, southwest of Perris. Several tributaries flow into the San Jacinto River upstream of the City of Perris. These drainages include Poppet, Potrero, Laborde, Lamb, and Jackrabbit Creeks, which are ephemeral streams associated with major canyons of the San Jacinto Mountain Range.

The only major tributary to the San Jacinto River within the City of Perris is the 250-foot wide, earthen Perris Valley Channel (PVC), which drains an approximately 38-square mile area that includes the City of Perris, the City of Moreno Valley, and March Air Reserve Base (unincorporated Riverside County). The channel flows from north to south through southern Moreno Valley and Perris Valley before converging with the San Jacinto River.

San Jacinto River Improvement Project

The San Jacinto River receives a majority of the outflows from the PVC, at their confluence just north of the I-215 Freeway. A master plan for the San Jacinto River Improvement Project (SRIP) was initially proposed in 1974, which included a series of channelization and other flood control improvements. Due to the potential impacts on sensitive plants and wildlife from the proposed improvements, the master plan has not yet been implemented.

To balance species protection, flood control, and private property rights, channelization strategies have been identified in the *Western Riverside County Multiple Species Habitat Conservation Plan* (MSHCP). In the Final MSHCP, the SRIP is included as one of the flood control facilities covered under an MSHCP directive to allow such improvements. These improvements include: a Ramona Expressway bridge and culvert, a Nuevo Road bridge, a San Jacinto Avenue crossing, an I-215 bridge and levee, a Case Road Bridge, a Burlington Northern Santa Fe Railroad bridge, a Goetz Road bridge, an Ethanac Road bridge, and improvements to the San Jacinto River channel, the Perris Valley Storm Drain Channel and the Romoland Channel.

While the MSHCP provides clearance for the master planned improvements along PVC, it does not define a particular alternative for the SJRIP as the "covered activity." Instead, it defines conservation criteria that must be met by whatever improvement plan is ultimately agreed upon by all involved. The Final MSHCP notes that adjustments to the conservation criteria may be necessary to accommodate a design alternative that achieves the best compromise of flood control and conservation benefits.

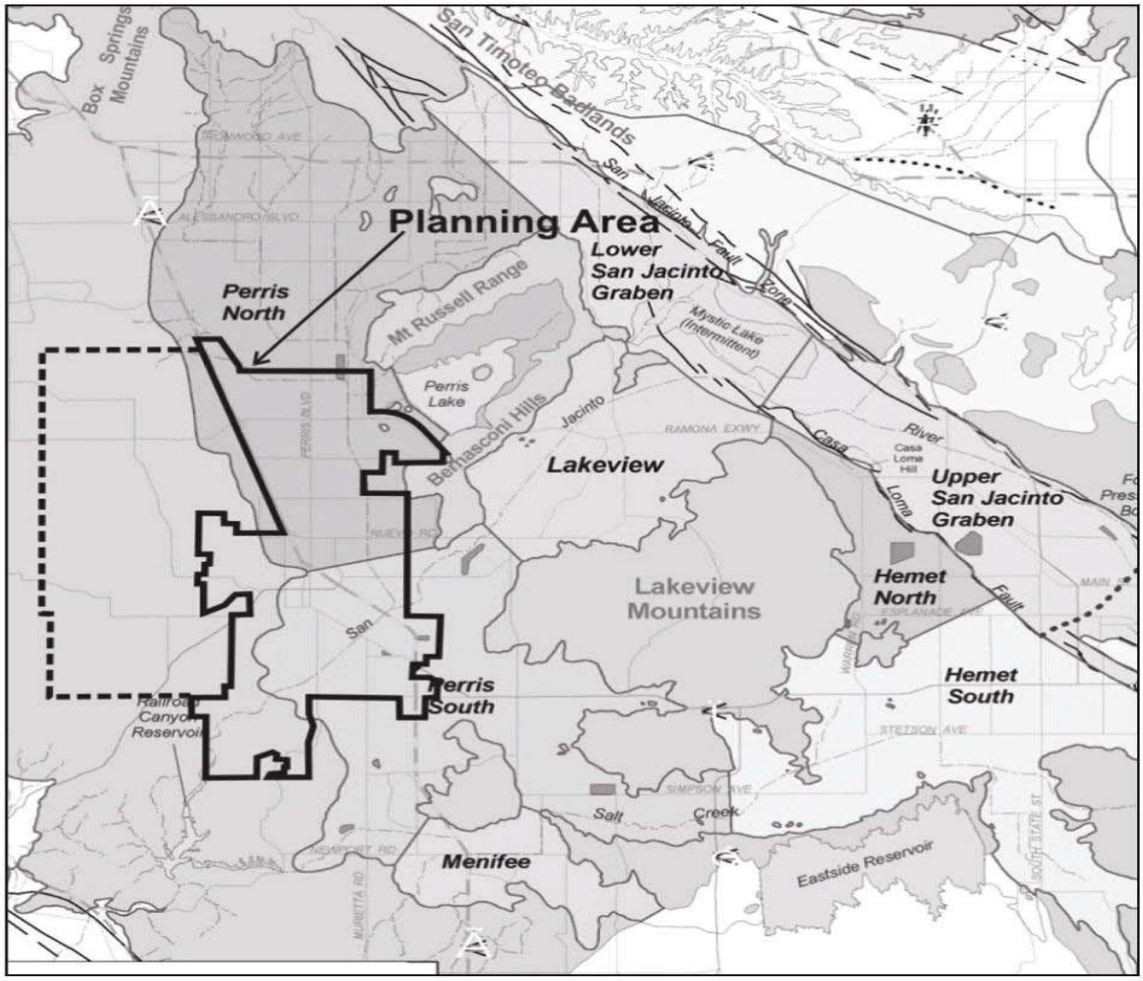
Ground Water

The Santa Ana River Water Quality Control Plan (WQCP) divides the San Jacinto Watershed into 14 groundwater subbasins. The City of Perris lies above Perris South I, Perris South II, and Perris South III sub-basins. The Santa Ana Watershed Project Authority's combines these three sub-basins into two groundwater management zones, referred to as Perris North and Perris South (Exhibit 4.5-1, Groundwater Management Zones).

Perris South I, Perris South II and Perris South III groundwater sub-basins are listed for municipal and agricultural beneficial uses. Water quality objectives have only been established for total dissolved solids (TDS) for each of the three sub-basins. The TDS level objective is 2,000 mg/L for Perris South I , 1,500 mg/L for Perris South II, and 1,200 mg/L for Perris South III.

Groundwater quality in the Perris sub-basin is generally of poor quality due to high concentrations of TDS and nutrients resulting from past and present agricultural runoff. Due to high TDS and nutrient levels, groundwater is no longer used for domestic purposes and only partially used to meet agricultural demand. The Eastern Municipal Water District supplements agricultural needs with low TDS water imported from the State Water Project.

Exhibit 4.5-1: Groundwater Management Zones



Flooding

The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968 to allow property owners in participating communities to purchase federal insurance protection against flood losses. A community may participate in the NFIP by agreeing to adopt and enforce a floodplain management ordinance to reduce future flood risk due to new construction in floodplains. This insurance serves as an alternative to disaster assistance to reduce the growing costs of repairing properties damaged by floods.

The NFIP identifies Special Flood Hazard Areas (SFHAs) which are areas within a floodplain subject to a 1-percent or greater chance of flooding in any given year, known as the 100-year flood. Buildings in SFHAs of participating communities are required by law to have flood insurance.

NFIP delineates the nation's floodplains in a map referred to as a Flood Insurance Rate Map (FIRM). FIRMs are intended to assist communities in managing floodplain development and to assist insurance agents and property owners in identifying those areas where the purchase of flood insurance is advisable. The City of Perris is located in FIRM Flood Zones AE, A, X, and X500 as identified in Exhibits 4.5-2 through 4.5-11, Flood Inundation Areas. Flood zones are located in the lower, flatter lands within the City of Perris.

Zone AE signifies areas of the 100-year floodplain for which base flood elevations and flood hazards have been determined. Mandatory flood insurance purchase requirements apply to any development within this zone.

Zone A signifies areas of the 100-year floodplain for which base flood elevations and flood hazards have not been determined. Mandatory flood insurance purchase requirements apply to any development within this zone.

Zone X signifies areas subject to flooding in the event of a 500-year flood, areas of a 100-year sheet flow flooding with average depths of less than one foot, areas of a 100-year storm flood with contributing drainage areas less than one square mile, and areas protected from a 100-year flood by levees. Flood insurance purchase requirements do not apply to developments in this zone.

Zone X500 corresponds to the areas outside of the 500-year flood plain. Flood insurance purchase requirements do not apply in this zone for any development.

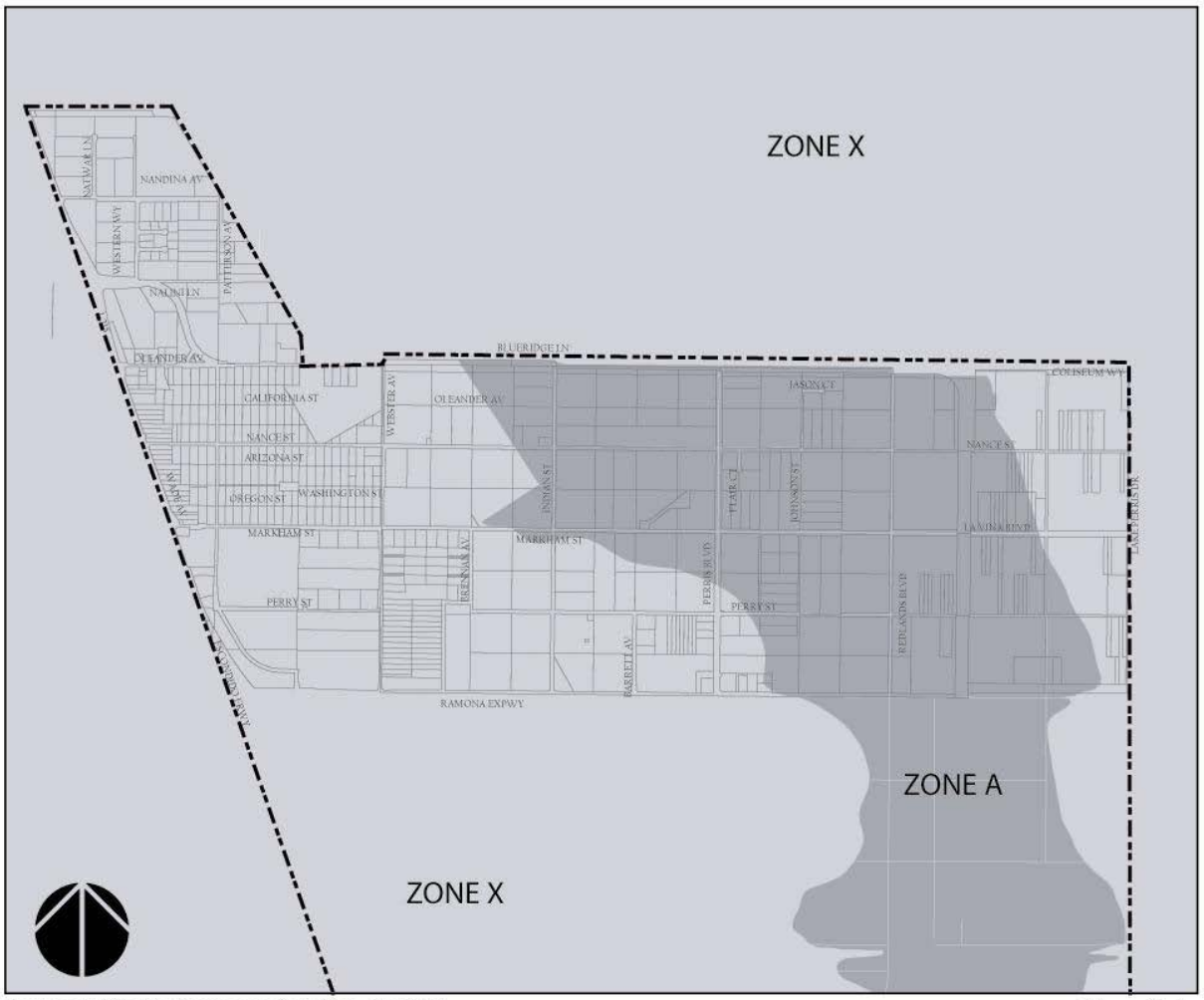
The 250-foot wide, earthen Perris Valley Channel (PVC) is the backbone of the City's storm drainage system insofar as it is the primary collector of storm water in the northern part of Perris, and is also the primary collector for the City of Moreno Valley. The storm channel was built by Riverside County Flood Control and Water Conservation District (RCFCWCD) in the

mid 1950's to alleviate drainage problems associated with the expanding March Air Force Base and the frequency of overland flow in the Perris Valley during periods of high runoff. RCFCWCD owns and maintains the channel.

The channel travels from Heacock Street in the City of Moreno Valley through the City of Perris to the San Jacinto River. All existing City storm drains flow laterally into the PVC from the east and west. The 100-year flow rate for the Perris Valley Channel increases from 12,800 cubic feet per second (cfs) at Mariposa Avenue in the City of Moreno Valley to 18,900 cfs near I-215 in Perris. At build-out of the General Plan, the resultant increase in impervious surface will contribute to a greater volume and higher velocities of storm flow in the Perris Valley Channel.

The 24-mile long San Jacinto River enters southern Perris from the east, at approximately the intersection of I-215 and Ellis Avenue, and runs approximately six miles, to the extreme southwesterly boundary of the City. Upstream of the City of Perris, the San Jacinto River meanders along its natural drainage course but is improved as an approximately 500-foot wide earthen channel within the City limits. Its flood plain is over one-and-a half miles wide as it passes through the City of Perris. The San Jacinto River collects storm water from the PVC and conveys it to Railroad Canyon Reservoir, which, in turn, discharges to Lake Elsinore.

Exhibit 4.5-2: Planning Area 1 Flood Zones



Source: FEMA Flood Insurance Rate Map, July 1992

Not to Scale

Legend

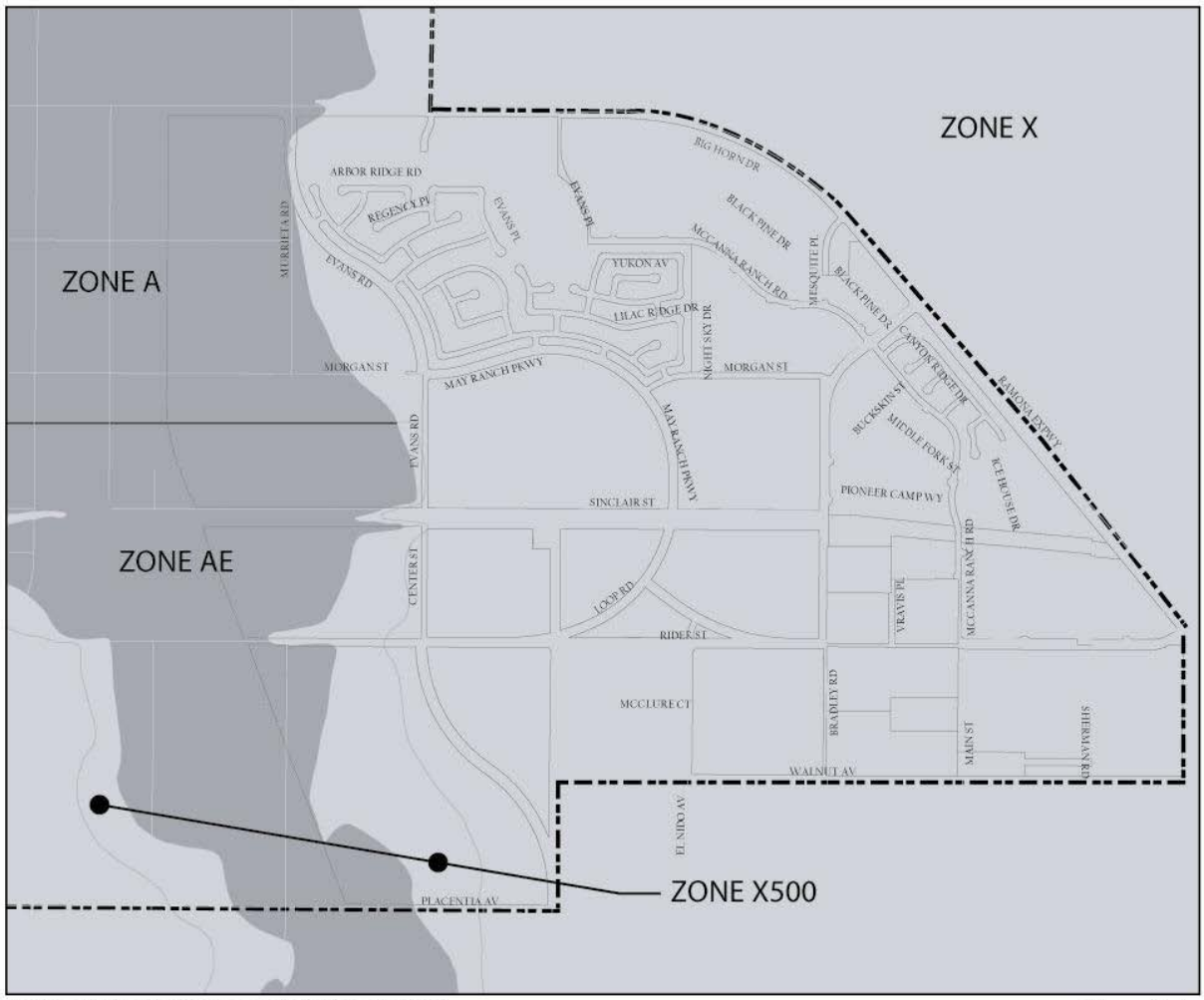
- Special Flood Hazard Areas Inudated by 100- Year Flood
- 500-Year flood area
- Other Areas
- City Boundary
- Planning Area

Zones

Zone A:	No base flood elevation determined.
Zone AE:	Base flood elevation determined
Zone X:	Areas of 500-year flood; areas of 100-year flood with average depths of less than I foot or with drainage areas less that I square mile; and areas protected by levees from 100-year flood area.
Zone X500:	Areas Determined to be outside 500-year flood plan

Key Map

Exhibit 4.5-3: Planning Area 2 Flood Zones



Source: FEMA Flood Insurance Rate Map, July 1992

Not to Scale

Legend

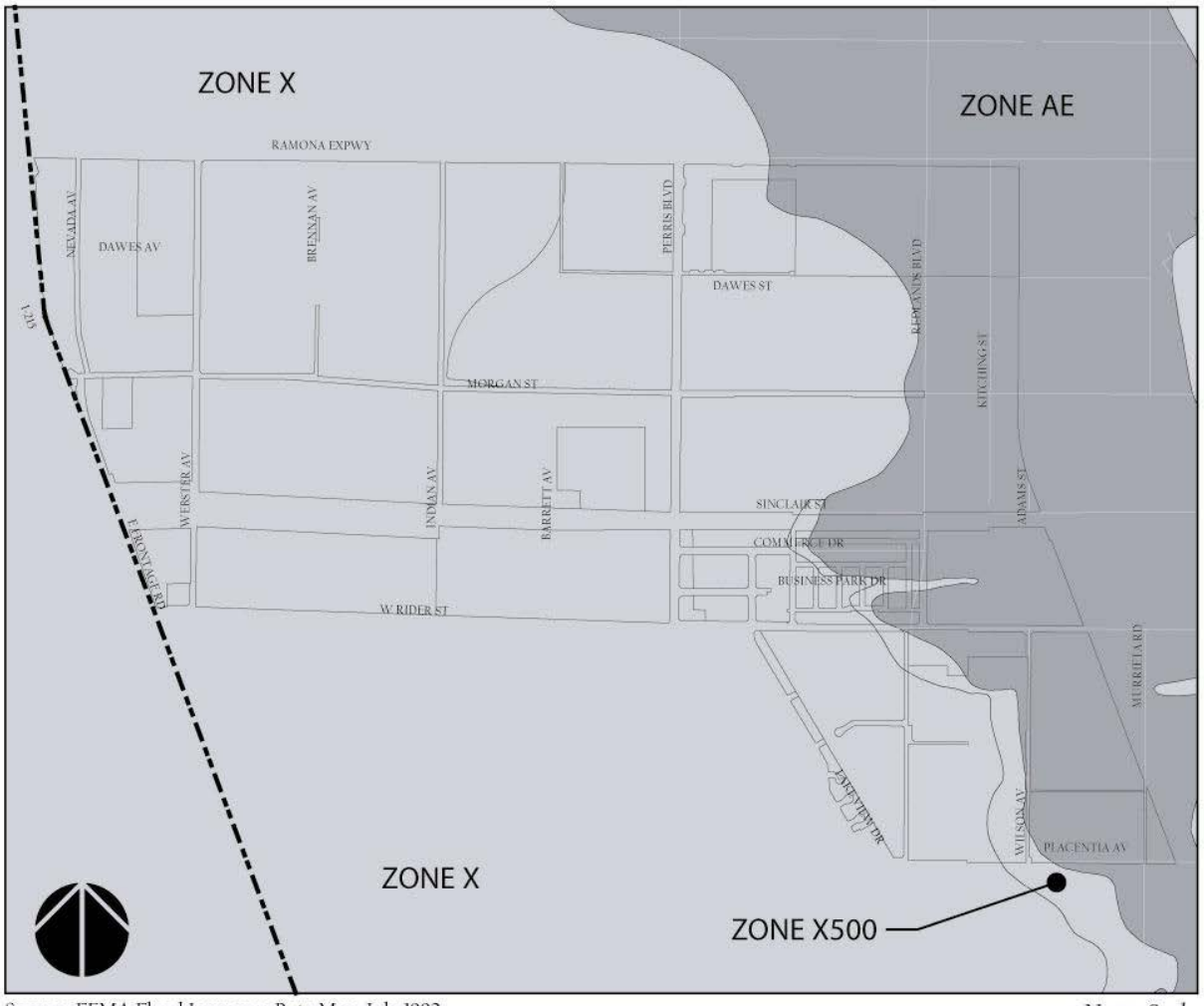
- Special Flood Hazard Areas Inudated by 100- Year Flood
- 500-Year flood area
- Other Areas
- City Boundary
- Planning Area

Zones

Zone A:	No base flood elevation determined.
Zone AE:	Base flood elevation determined
Zone X:	Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less that 1 square mile; and areas protected by levees from 100-year flood area.
Zone X500:	Areas Determined to be outside 500-year flood plan

Key Map

Exhibit 4.5-4: Planning Area 3 Flood Zones



Source: FEMA Flood Insurance Rate Map, July 1992

Not to Scale

Legend

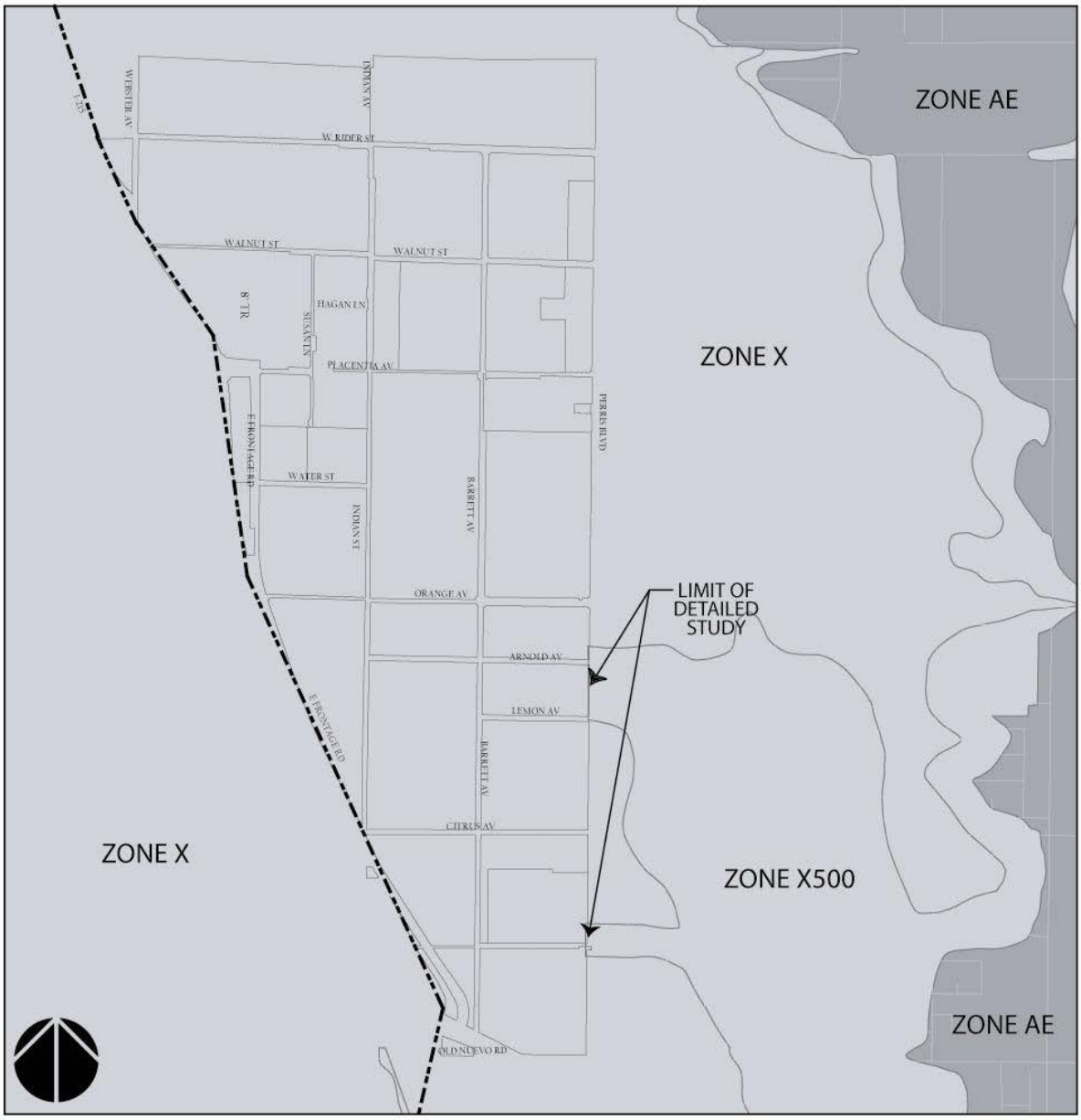
- Special Flood Hazard Areas Inudated by 100- Year Flood
- 500-Year flood area
- Other Areas
- City Boundary
- Planning Area

Zones

Zone A:	No base flood elevation determined.
Zone AE:	Base flood elevation determined
Zone X:	Areas of 500-year flood; areas of 100-year flood with average depths of less than I foot or with drainage areas less that I square mile; and areas protected by levees from 100-year flood area.
Zone X500:	Areas Determined to be outside 500-year flood plan

Key Map

Exhibit 4.5-5: Planning Area 4 Flood Zones



Source: FEMA Flood Insurance Rate Map, July 1992

Not to Scale

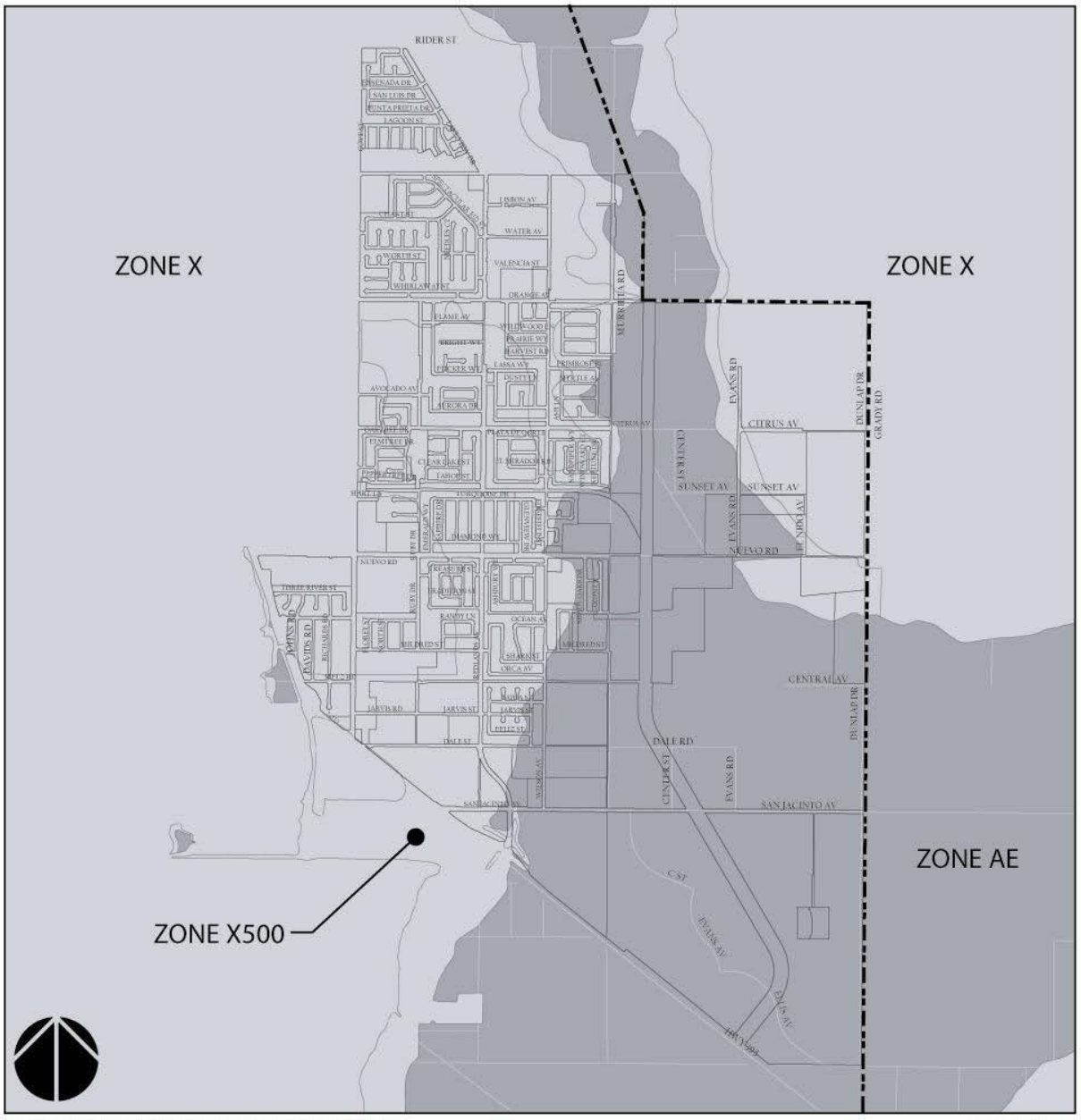
Legend

- Special Flood Hazard Areas Inudated by 100- Year Flood
- 500-Year flood area
- Other Areas
- City Boundary
- Planning Area

Zones

Zone A:	No base flood elevation determined.
Zone AE:	Base flood elevation determined
Zone X:	Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less that 1 square mile; and areas protected by levees from 100-year flood area.
Zone X500:	Areas Determined to be outside 500-year flood plan

Exhibit 4.5-6: Planning Area 5 Flood Zones



Source: FEMA Flood Insurance Rate Map, July 1992

Not to Scale

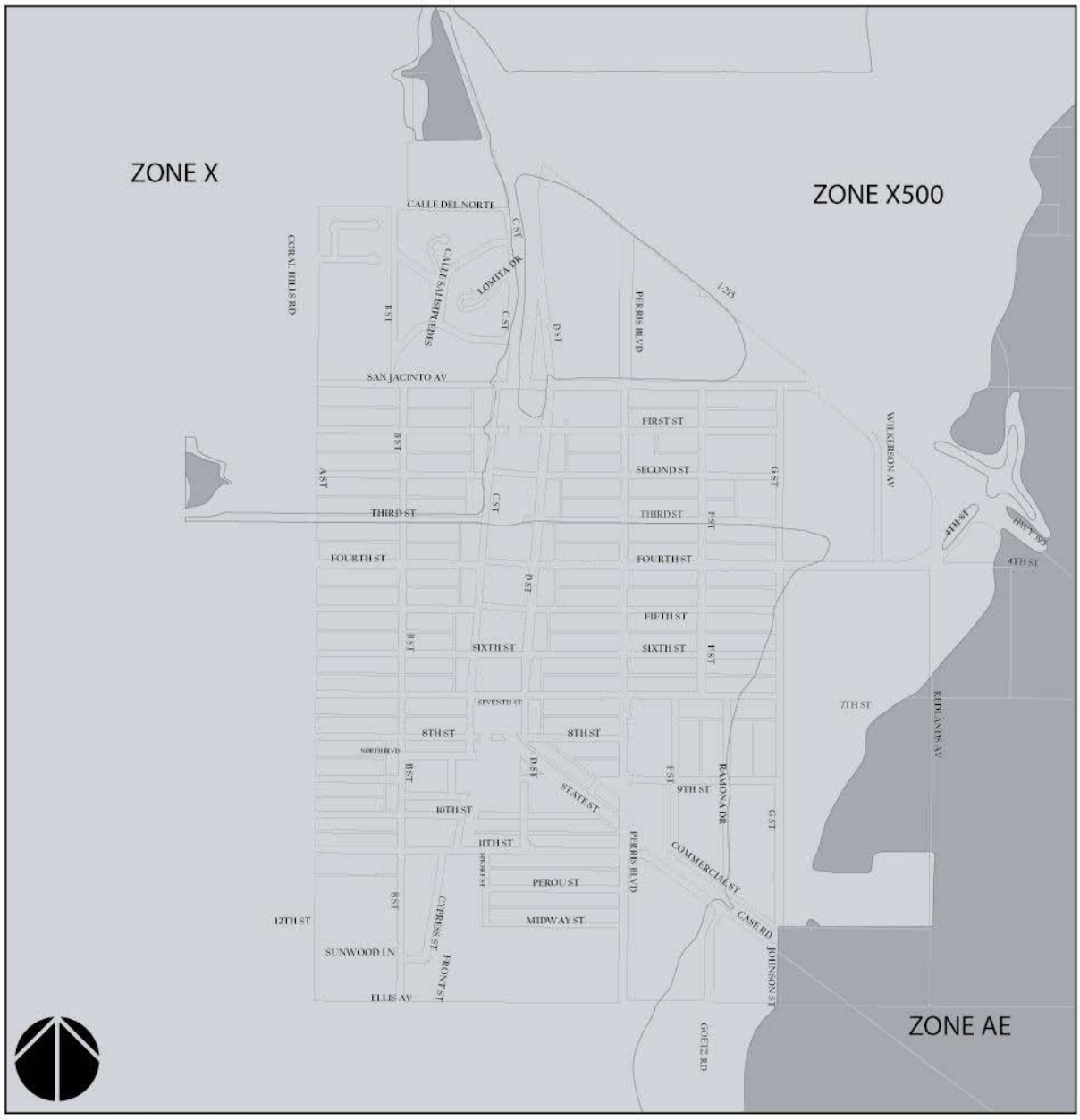
Legend

- Special Flood Hazard Areas Inudated by 100- Year Flood
- 500-Year flood area
- Other Areas
- City Boundary
- Planning Area

Zones

Zone A:	No base flood elevation determined.
Zone AE:	Base flood elevation determined
Zone X:	Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less that 1 square mile; and areas protected by levees from 100-year flood area.
Zone X500:	Areas Determined to be outside 500-year flood plan

Exhibit 4.5-7: Planning Area 6 Flood Zones



Source: FEMA Flood Insurance Rate Map, July 1992

Not to Scale

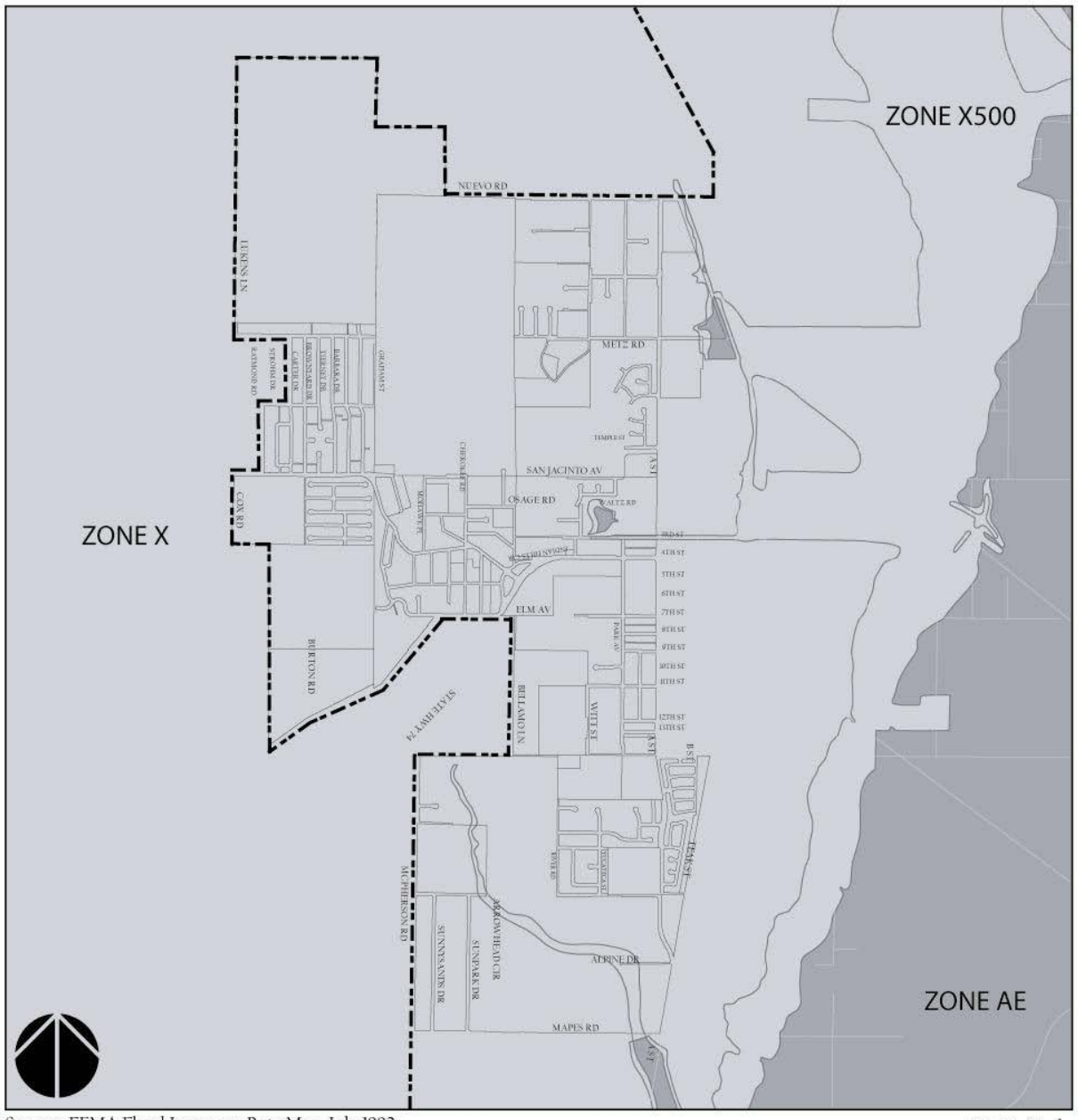
Legend

- Special Flood Hazard Areas Inudated by 100- Year Flood
- 500-Year flood area
- Other Areas
- City Boundary
- Planning Area

Zones

Zone A:	No base flood elevation determined.
Zone AE:	Base flood elevation determined
Zone X:	Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less that 1 square mile; and areas protected by levees from 100-year flood area.
Zone X500:	Areas Determined to be outside 500-year flood plan

Exhibit 4.5-8: Planning Area 7 Flood Zones



Source: FEMA Flood Insurance Rate Map, July 1992

Not to Scale

Legend

- Special Flood Hazard Areas Inudated by 100- Year Flood
- 500-Year flood area
- Other Areas
- City Boundary
- Planning Area

Zones

Zone A:	No base flood elevation determined.
Zone AE:	Base flood elevation determined
Zone X:	Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less that 1 square mile; and areas protected by levees from 100-year flood area.
Zone X500:	Areas Determined to be outside 500-year flood plan

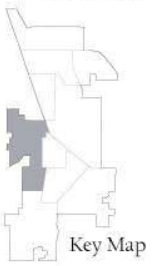
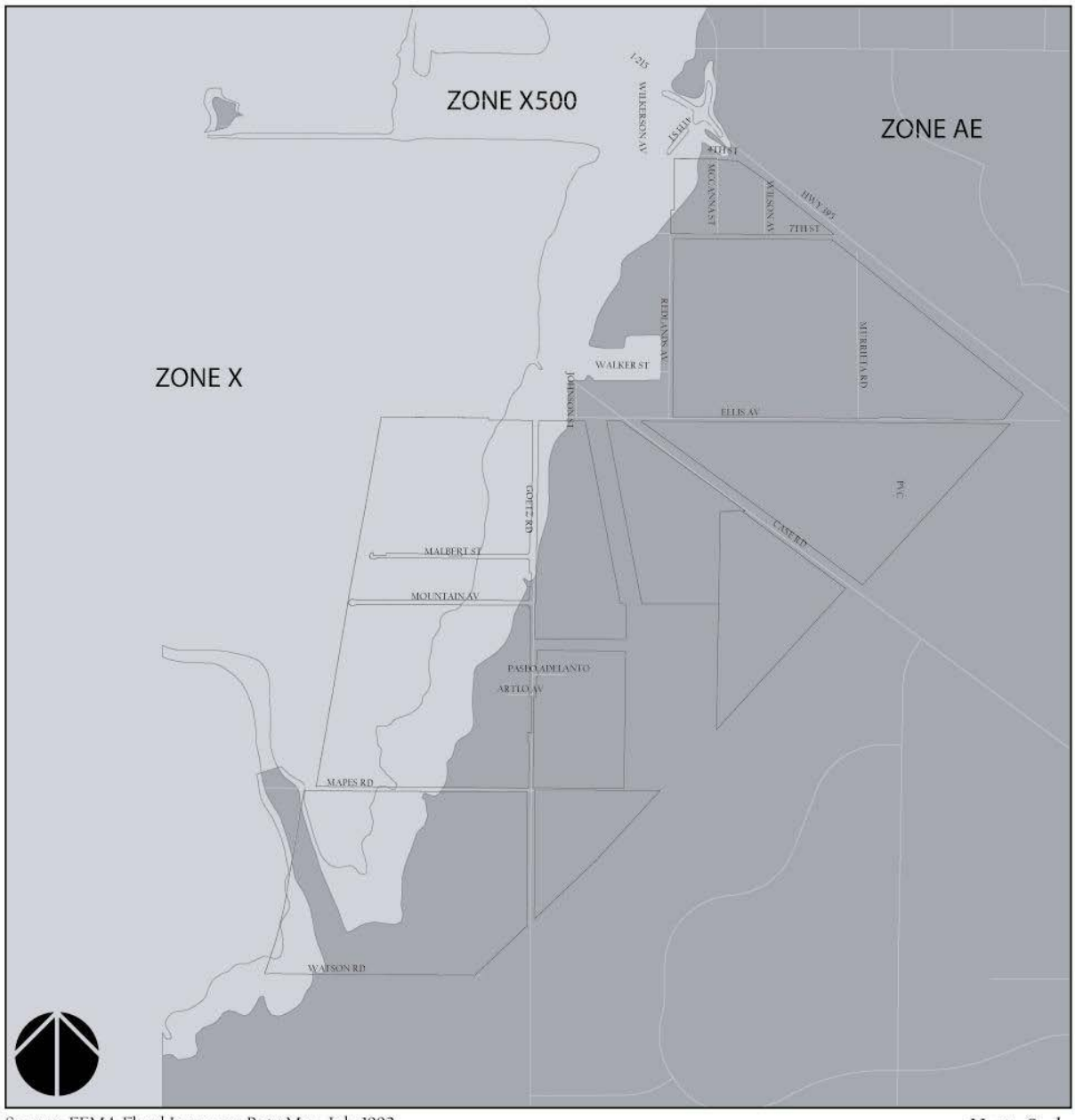


Exhibit 4.5-9: Planning Area 8 Flood Zones



Source: FEMA Flood Insurance Rate Map, July 1992

Not to Scale

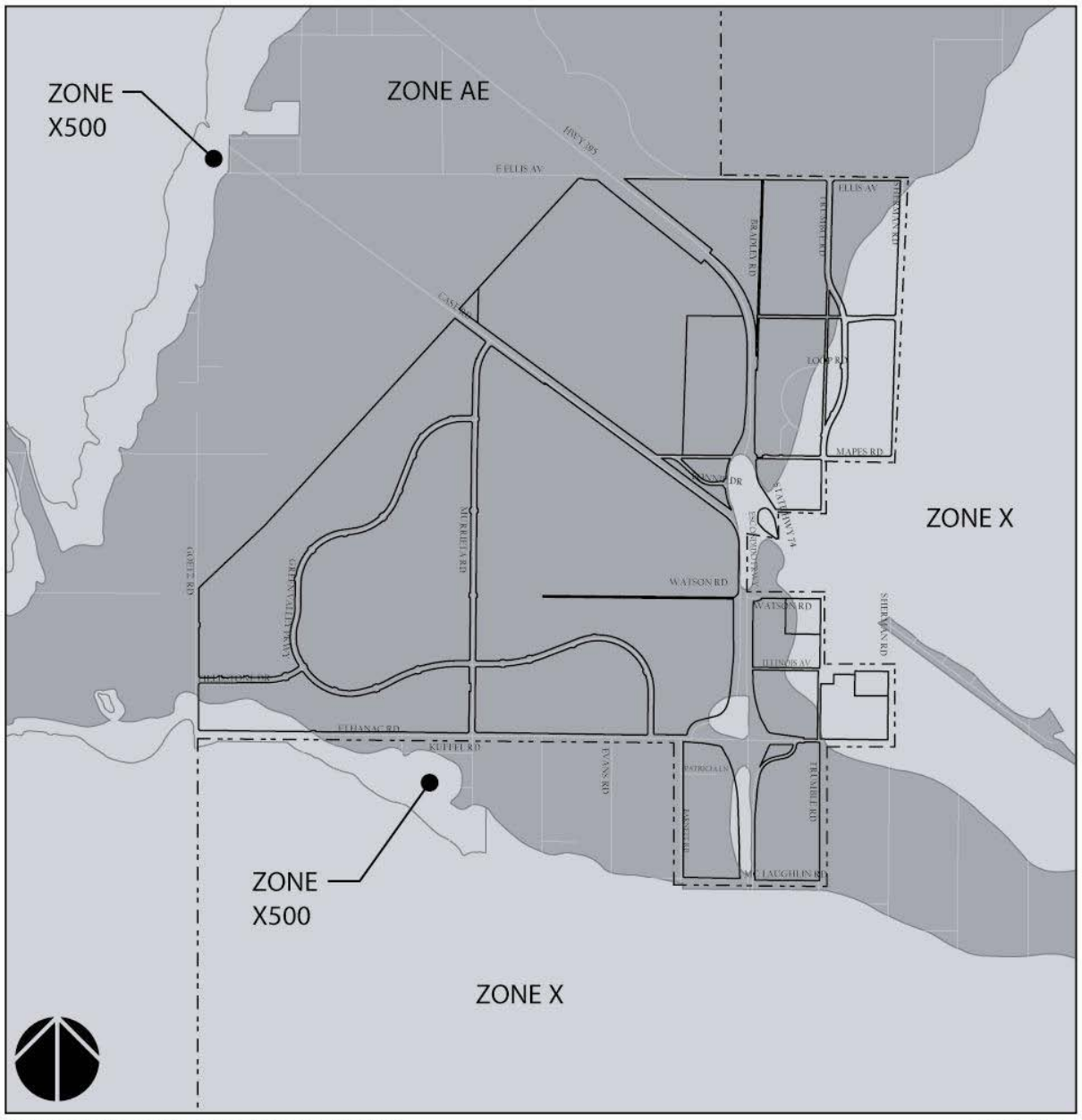
Legend

- Special Flood Hazard Areas Inudated by 100- Year Flood
- 500-Year flood area
- Other Areas
- City Boundary
- Planning Area

Zones

Zone A:	No base flood elevation determined.
Zone AE:	Base flood elevation determined
Zone X:	Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less that 1 square mile; and areas protected by levees from 100-year flood area.
Zone X500:	Areas Determined to be outside 500-year flood plan

Exhibit 4.5-10: Planning Area 9 Flood Zones



Source: FEMA Flood Insurance Rate Map, July 1992

Not to Scale

Legend

- Special Flood Hazard Areas Inudated by 100- Year Flood
- 500-Year flood area
- Other Areas
- City Boundary
- Planning Area

Zones

Zone A:	No base flood elevation determined.
Zone AE:	Base flood elevation determined
Zone X:	Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less that 1 square mile; and areas protected by levees from 100-year flood area.
Zone X500:	Areas Determined to be outside 500-year flood plan

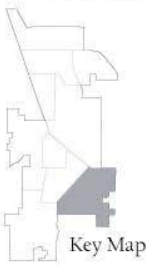
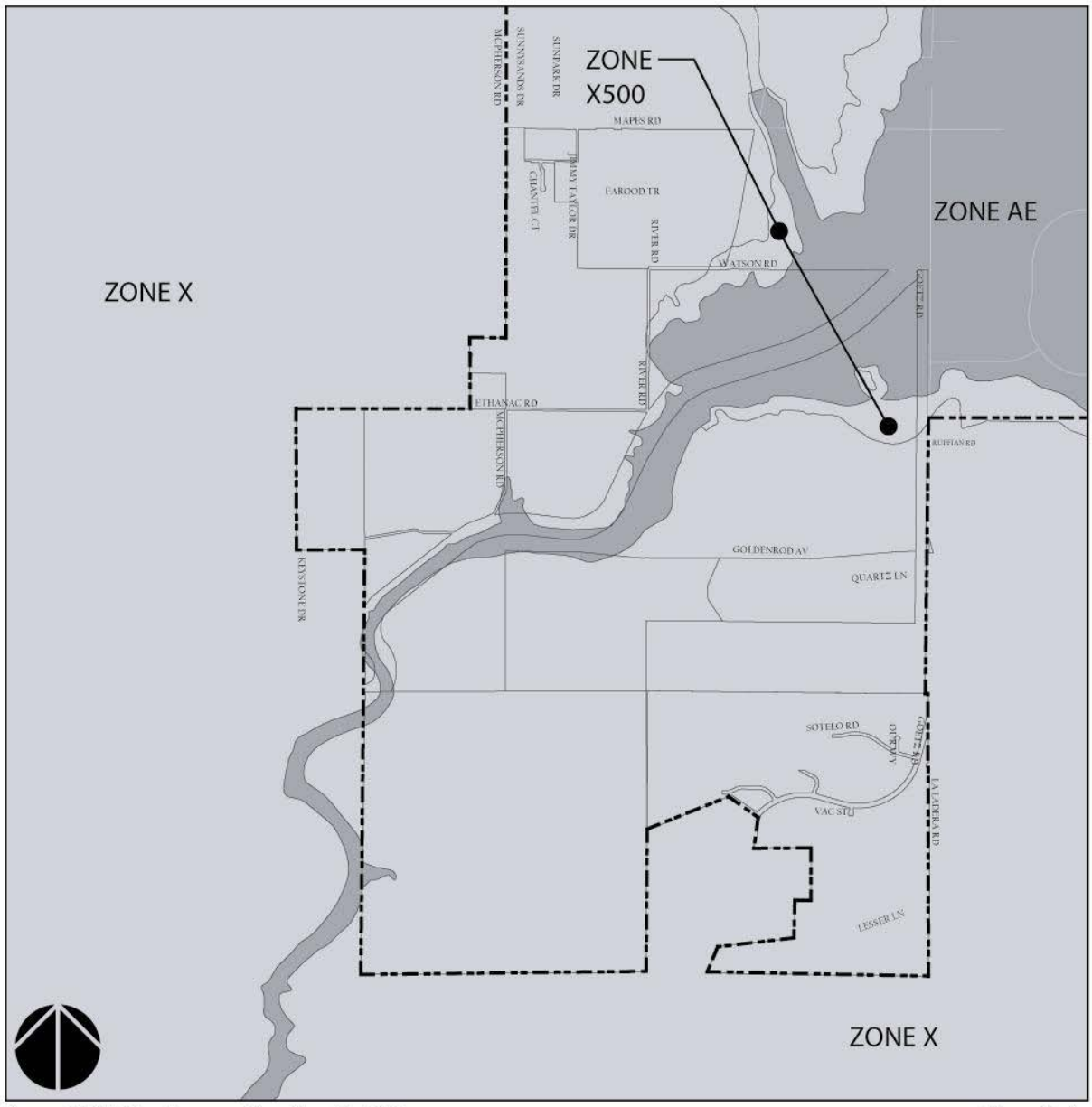


Exhibit 4.5-11: Planning Area 10 Flood Zones



Source: FEMA Flood Insurance Rate Map, July 1992

Not to Scale

Legend

- Special Flood Hazard Areas Inudated by 100- Year Flood
- 500-Year flood area
- Other Areas
- City Boundary
- Planning Area

Zones

Zone A:	No base flood elevation determined.
Zone AE:	Base flood elevation determined
Zone X:	Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less that 1 square mile; and areas protected by levees from 100-year flood area.
Zone X500:	Areas Determined to be outside 500-year flood plan

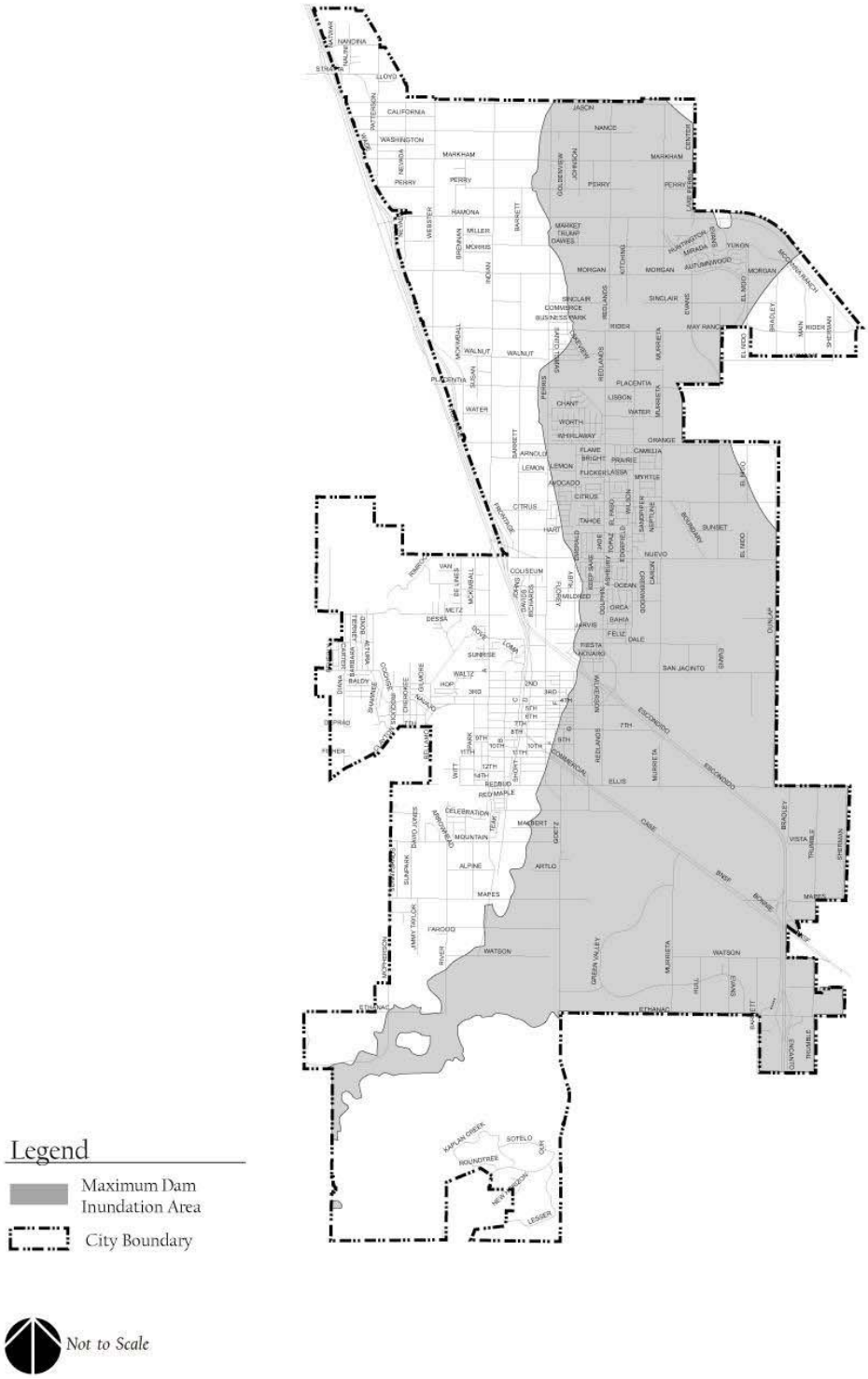
Dam Inundation

Perris is susceptible to flooding associated with dam failure, commonly referred to as dam inundation. Pursuant to Government Code Section 8589.4, which is commonly referred to as the Potential Flooding - Dam Inundation Act (the "PFDI Act"), inundation maps must be prepared, delivered and approved by the State Office of Emergency Service (OES). Dam inundation maps depict a best estimate of water flow in the event of dam failure. Projected water flow is based on a scenario in which a full reservoir completely empties and does not account for run-off from other sources.

Perris is within the potential dam inundation plain of three reservoirs: Pigeon Pass Reservoir to the north in the City of Moreno Valley, Lake Perris Reservoir to the immediate northeast, and Little Lake Reservoir to the east in Hemet. Failure of these dams would cause major flooding in those areas identified on Exhibit 4.5-12.

In 2000, the California Department of Water Resources prepared an analysis entitled "Dam Breach and Inundation Study for Perris Dam." The report used computer simulation to identify the volume, course of flow, floodwater depth, and time of arrival of floodwaters at various downstream locations. Because Perris Dam is expected to withstand the effects of the strongest earthquake likely to occur in the area, the simulations assume a "piping" failure. The piping failure begins as a relatively small leak near the base of the dam. The water flow continues to erode the earthen structure until a complete collapse of the dam occurs. A maximum flood flow of 365,000 cubic feet of water per second is projected to reach central Perris approximately 3.1 hours after the initial breach. A maximum floodwater depth of 28 feet could be expected. Virtually the entire land area of the City of Perris east of Perris Boulevard would be flooded.

Exhibit 4.5-12: Dam Inundation Map



Storm Drains

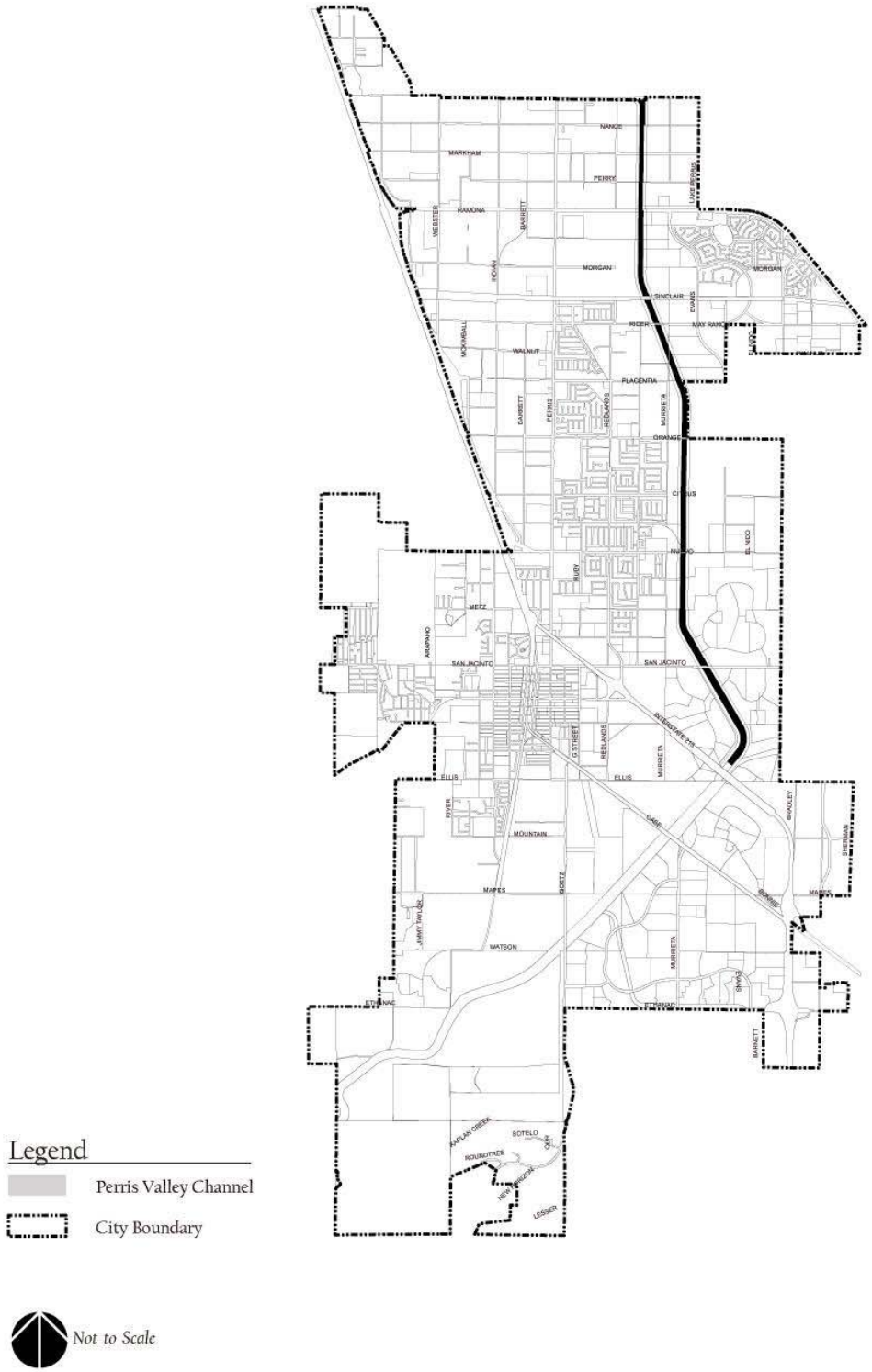
The backbone of the storm water drainage system is the Perris Valley Channel owned by the Riverside County Flood Control District. The Channel generally flows from the City of Moreno Valley through the east side of Perris before emptying into the San Jacinto River floodplain to the south. The Channel outfall into the San Jacinto River is located east of the I-215 Freeway north of Ellis Avenue in Perris. The Channel collects stormwater run-off from a series of east-west oriented, smaller drains and channels along its course through the City.

Smaller drains and channels flowing to the Perris Valley Channel are owned and maintained by the City of Perris or the Riverside County Flood Control District (Exhibit 4.15-13). The storm drainage system in Perris includes detention basins that collect concentrated runoff flow from wider geographic areas. Outflow pipes from the basins restrict the rates of discharge into the Perris Valley Channel so that flooding along the Channel is minimized during severe storms.

The Perris Valley Channel is a "soft-bottom" (permeable, not paved) channel with sidewalls that are either earthen embankments or lined with "rip-rap" (large stones). Because of the relatively shallow depths of the Channel and the San Jacinto River into which it empties, and the generally flat terrain of the City, proposed stormwater channels shown on the Master Drainage Plan will not have sufficient slope for water to flow to the Perris Valley Channel. Deepening the Perris Valley Channel and the San Jacinto River are required for future stormwater channels to have sufficient slope.

Deepening of the San Jacinto River to accommodate construction of new stormwater channels requires approval of the Army Corps of Engineers, as the agency responsible for waters of the United States, and the California Department of Fish and Game as the agency responsible for wildlife and wildlife habitat along the riverbed. A Multi Species Habitat Conservation Plan (MSHCP) prepared by the County of Riverside in conjunction with eight western Riverside County cities, including Perris, provides a means to resolve habitat issues and clear the way for deepening of the River channel. Funding for the multi-million dollar program to deepen the Perris Valley Channel and San Jacinto River has not been identified. The resultant lack of channel capacity is a significant limitation to future development. Alternative, interim methods for handling stormwater runoff are required in the near term to accompany development on expanses of land throughout the Perris Valley.

Exhibit 4.5-13: Perris Valley Channel



WATER QUALITY

Urban Runoff and Surface Water

Water quality in the San Jacinto River is affected by urban and agricultural runoff from areas upstream and outside of the City. Sources of urban runoff in the City include residential, commercial, office, industrial, agricultural, and other forms of urban development (public, parks, recreation, and open space). The ambient water quality of local runoff ranges from nearly drinking water quality to highly contaminated with petroleum products, surfactants, fertilizers, sediment, trash, heavy metals, nutrients, pathogens and pesticides.

The San Jacinto River Watershed falls under the jurisdiction of the Santa Ana Regional Water Quality Control Board (Regional Board). As a matter of course, the Regional Board sets water quality objectives and beneficial uses in the Santa Ana River Water Quality Control Plan (Basin Plan) for the San Jacinto River Watershed. These water quality objectives are intended for the reasonable protection of the present and probable beneficial uses of California inland water bodies including bays, estuaries, and groundwater.

The San Jacinto River is not listed on the 2002 list of Clean Water Act 303(d) impaired water bodies. However, Canyon Lake and Lake Elsinore, downstream of the City of Perris, are listed for excessive nutrients/pathogens and nutrients/sediment/unknown toxicity, respectively. As a result the Regional Board is expected to establish Total Maximum Daily Loads (TMDLs) for these two impaired water bodies by 2004. In the meantime, the Regional Board adopted a separate San Jacinto Watershed Construction Activities Permit to regulate pollutants in stormwater and nuisance discharges associated with new developments to surface waters from areas tributary to Lake Elsinore and Canyon Lake (San Jacinto Watershed). No surface water quality monitoring data was readily available for the City of Perris. Water quality sampling within the San Jacinto River conducted by the Riverside County Flood Control and Water Conservation District has not detected significant pollutant levels within the City of Perris.[9]

4.5.2 THRESHOLDS OF SIGNIFICANCE

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria or standards used to determine the significance of impacts may vary depending on the nature of project. Hydrology impacts resulting from the implementation of General Plan 2030 could be considered significant if they cause any of the following results:

[9] Personal communication, Steve Clarke, July 16, 2003.

- Violate any water quality standards or waste discharge requirements (*refer to Section 6.0, Impacts Found Not To Be Significant)*;

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (*refer to Section 6.0, Impacts Found Not To Be Significant)*;

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site (*refer to Section 6.0, Impacts Found Not To Be Significant)*;

- Require or result in the construction/expansion of new storm drain facilities that would cause significant environmental effects.

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

- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff (*refer to Section 6.0, Impacts Found Not To Be Significant)*;

- Otherwise substantially degrade water quality (refer to Section 6.0, Impacts Found Not To Be Significant);

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map (*refer to Section 6.0, Impacts Found Not To Be Significant)*;

- Place within a 100-year flood hazard area structures, which would impede or redirect flood flows (*refer to Section 6.0, Impacts Found Not To Be Significant)*;

- Expose people or structures to a significant risk of loss, injury or death involving flooding including flooding as a result of the failure of a levee or dam;

- Inundation by seiche, tsunami, or mudflow;

- Result in significant alteration of receiving water quality during or following construction (*refer to Section 6.0, Impacts Found Not To Be Significant)*;

- Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including

washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas (*refer to Section 6.0,Impacts Found Not To Be Significant)*;

- Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters (*refer to Section 6.0, Impacts Found Not To Be Significant)*;

- Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm (*refer to Section 6.0, Impacts Found Not To Be Significant)*; or

- Create significant increase in erosion of the project site or surrounding areas (*refer to Section 6.0, Impacts Found Not To Be Significant)*.

4.5.3 PROJECT IMPACTS

Threshold ***Require or result in the construction/expansion of new storm drain facilities that would cause significant environmental effects***

The existing drainage system in the City of Perris is owned and operated by both the City and Riverside County. Storm runoff within the City is generally intercepted by a network of City facilities. The local facilities then convey the flow to the major County facility, the Perris Valley Channel (PVC) which, in turn, conveys the flow into the San Jacinto River. According to the Master Drainage Plan, the drainage system throughout the City is adequate only for existing development. Construction of buildings, roadways, and parking lots consistent with the General Plan would increase impervious surfaces which could, in turn, increase stormwater runoff in the City. This increased runoff could exceed the capacity of existing infrastructure.

Comprehensive, area-wide flood control infrastructure improvements are required to accommodate continued development throughout the Perris Valley. The Perris Valley Channel will ultimately have to be deepened and widened to accommodate run off from both existing and future development. These improvements are feasible only in conjunction with future improvements to the San Jacinto River channel which receives the outflow from the PVC.

A master plan for the San Jacinto River Improvement Project (SRIP) prepared in the 1970's included a series of channelization improvements which were not constructed because of potential impacts on wildlife and wildlife habitat. The recent completion and adoption of the Multiple Species Habitat Conservation Plan (MSHCP) by Riverside County and area cities, including Perris, provides an alternative channelization concept for the San Jacinto River that balances flood control, private property rights, and protection of wildlife and wildlife habitat. This concept includes improvements to a Ramona Expressway bridge over the Perris Valley

Channel, Nuevo Road and San Jacinto Avenue bridges over the Perris Valley Channel, an I-215 bridge and levee, and bridges across the San Jacinto River at Case Road, the Burlington Northern Santa Fe Railroad track, Goetz Road, and Ethanac Road.

Until improvements to the Perris Valley Channel and the San Jacinto River channel are completed, development will be required to provide on-site retention/detention basins to limit the outflow of storm water run-off consistent with the capacity of existing storm drain infrastructure. On-site interim stormwater facilities are already required for new development in the City of Perris and will continue to be required pursuant to *Infrastructure Concept Plan* guidelines set forth in Land Use Element Implementation Measure II.A.1 and included below.

General Plan 2030 recognizes the need for Perris Valley Channel and San Jacinto River basin improvements over the long term and identifies the need for localized drainage facilities improvements in both the short-term and long-term to accommodate increased storm water run-off and provide the means to reducing pollutant levels in storm water discharged from new development as follows:

Land Use Element
Implementation Measures

II.A.1 Prepare and adopt a revised Area Drainage Plan including "regional" storm water detention basins capable of serving contributory areas of at least 100 acres.

II.A.2 Revise the Zoning Ordinance to require that development application submittals include master plans for backbone infrastructure substantially consistent with the provisions of "Infrastructure Concept Plans" in the Land Use Element.

II.A.3 Revise the capital facilities fee program so that all infrastructure construction and improvements identified as attributable to new development are fully funded.

Safety Element
Implementation Measures

I.B.1 Provide leadership in efforts to improve the Perris Valley Channel and San Jacinto River Channel.

I.B.2 Adopt Capital Facility Fees to fund drainage improvements.

I.B.3 Prepare and adopt a revised Area Drainage Plan including "regional" storm water detention basins capable of serving contributory areas of at least 100 acres.

I.B.4 Require that new development projects incorporate facilities for on-site control and treatment of storm water run-off.

Improvements to the Perris Valley Channel and San Jacinto River channel may occur over the longer term planning horizon associated with General Plan 2030. Although MSHCP criteria cover impacts to wildlife and wildlife habitats for a San Jacinto River flood control project, the Plan is based on a conceptual project; actual facilities have not been designed or funded. Analysis of potential impacts associated with the San Jacinto River flood control project will be undertaken pursuant to CEQA at such time as funding sources are identified and project design proceeds. At that time, mitigation measures needed to lessen or avoid impacts will be identified and adopted. More importantly, development of the San Jacinto River improvements is not a result of and is not contingent or dependent upon General Plan 2030 and will proceed independent of General Plan adoption. Accordingly, construction of the San Jacinto River project is not required or a result of adoption and implementation of General Plan 2030 and the impact is less than significant.

Consistent with General Plan 2030 Implementation Measures, new development will be accompanied by construction of both on-site storm detention basins and related structures in the near term, and construction of storm water master plan facilities in the City that will accompany longer term improvements to the Perris Valley Channel and the San Jacinto River channels as described above. The extent of interim facilities construction is not known and will depend upon the hydraulic measures employed and the elapsed time until improvements to the Perris Valley Channel and the San Jacinto River channel are completed.

Development of project-level storm water facilities consistent with General Plan 2030 could have an impact water quality as a result of soil erosion and sediment discharge to receiving water bodies. At the General Plan level, these impacts are evaluated over the planning horizon (Year 2030) and evaluated for their cumulative impact. The Conservation Element of General Plan 2030 includes the following Implementation Measures applicable to construction of storm water retention/detention facilities:

Conservation Element
Implementation Measures

VI.A.2 Evaluate the Planning Department's CEQA implementation procedures to ensure adequate consideration of water quality impacts and mitigation measures as part of Initial Studies/Mitigated Negative Declarations and Environmental Impact Reports.

VI.A.3 Prior to issuance of any grading permit involving a disturbance of one or more acres of land, require proof of a Regional Water Quality Control Board (RWQCB) San Jacinto Watershed Construction Activities Permit and a Storm Water Pollution Prevention Plan.

VI.A.4 Review water quality impacts during the project review and approval phases to ensure appropriate BMP's are incorporated into the project design and long-term operations.

VI.A.6 Continue to fulfill the City's obligation as Co-Permittee under the MSA NPDES permit for Riverside County.

As reflected in these Implementation Measures, each development project consistent with General Plan 2030 will be evaluated for compliance with CEQA that will include evaluation of project-level impacts associated with construction of any storm water retention/detention basin that may be included. More specifically, compliance with the RWQCB San Jacinto Watershed Construction Activities Permit requires that all available measures be implemented during construction on any project in this drainage basin to minimize, to the extent practicable, potential stormwater discharge of pollutants and sediment into the storm drain system.

As a Co-Permittee with the County of Riverside under the National Pollutant Discharge Elimination System (NPDES), the City of Perris is responsible for enforcing mitigation measures included in Stormwater Pollution Prevention Plans (SWPPP) for General Construction Permits on projects that disturb one acre or more of soil. Each SWPPP includes Best Management Practices (BMP's) using the best available technology to prevent contaminated storm water run-off during construction. As a component part of these projects, construction of storm water detention/pollution basins will be subject to these SWPPP BMP's. Subject to these existing legal requirements and as reiterated in General Plan 2030 Conservation Element Implementation Measures, the cumulative impact of construction of interim storm water facilities on water quality will be reduced to a less than significant level.

Operational phases of projects, including those with on-site detention/retention basins, are subject to pollutant discharge elimination measures of the respective Water Quality Management Plans (WQMP's) required for most new development pursuant to NPDES. WQMP measures applicable to the operational phase of these projects includes Best Management Practices (BMP's) that must be implemented after occupancy (operational phase) of each project. Operational BMP's are intended to substantially reduce or eliminate pollutants on-site before they are discharged with storm water into the receiving waters e.g. the San Jacinto River. The basins themselves often function as structural BMP's as well as storm water conveyance infrastructure. Operational compliance with WQMP BMP's will reduce the environmental effects associated with use of storm water detention/retention basins relative to water quality to a less than significant level.

Air quality impacts from construction of individual development projects and the attendant storm water facilities may not exceed the South Ccoast Air Quality Management District's (AQMD) recommended thresholds of significance. Other projects will be large enough to generate construction emissions that exceed these thresholds. The cumulative air quality impacts from these projects are included in Section 4.3, "Air Quality", in this EIR and are determined to be significant and unavoidable. Air quality impacts from storm water facilities construction are not otherwise disaggregated from this cumulative impact analysis, but the areas to be graded for individual storm water facilities are small relative to the overall development project sites. Accordingly, the cumulative contribution to air quality impacts

from grading and development of project-level storm water facilities is expected to be less than significant.

Impact: **Adoption and implementation of General Plan 2030 will not require or result in the construction/expansion of new storm drain facilities that would cause significant environmental effects and the impact, therefore, is less than significant.**

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

Development consistent with General Plan 2030 may occur within the identified floodplain of the Perris Valley Channel. Development in the floodplain could alter the existing drainage pattern. All future development in the floodplain, however, must be in compliance with Title 15, "Floodplain Regulations", of the City of Perris Municipal Code which regulates, restricts, or prohibits development in flood hazard areas as necessary to minimize increases in erosion, floodwater elevations, and floodwater velocities. To this end, Title 15 regulates filling, grading, dredging, and other alteration of floodplains, including the Perris Valley Channel floodplain, and conforms to requirements of the Federal Emergency Management Agency and National Flood Insurance Program. Subject to Title 15, development consistent with General Plan 2030 will not result in alteration of existing drainage patterns so as to substantially increase erosion or siltation along watercourses in the City or downstream, or as would result in flooding along watercourses in the City or those upstream or downstream. Accordingly, impacts resulting from adoption and implementation of General Plan 2030 are less than significant.

Development consistent with General Plan 2030 will significantly increase the amount of impervious surface area in the City. This impervious area includes paved parking areas, sidewalks, roadways, and building rooftops. Minimizing the increase in surface run-off to receiving waters requires that the quantity and rate of outflow from developed properties be limited at the source, or on-site. Detention/retention basins described in Land Use and Safety Element Implementation Measures, above, limit the rate and flow of storm water run-off from developed properties consistent with the storm water carrying capacities of drainage courses including streets and storm drains. Detention/retention basins are designed consistent with the City of Perris Grading Manual to provide adequate detention/retention capacity commensurate with the size, topography, extent of impervious surfaces, and run-off rate for each development project.

Detention/retention basins effectively limit the rate of run-off to public drainage courses to that of existing, pre-development conditions. Subject to these requirements, the resultant increase in run-off will be comprised of sheet flow on public streets connecting to lateral drainage channels and/or the Perris Valley Channel and on to the San Jacinto River. New roadway surfaces associated with future development will encompass up to twenty percent of the land area. Hydrology and hydraulic studies required for new project development consistent with the City of Perris Grading Manual will identify drainage facilities necessary to collect and disperse roadway sheet flow in a manner that will not cause on-site or off-site flooding. Subject to these design review requirements, the additional imperious surface area resulting from development consistent with General Plan 2030 will not result in flooding on-site or off-site. Accordingly, this impact is less than significant.

Impact: **Adoption and implementation of General Plan 2030 will not result in a substantial increase in the rate or amount of surface runoff in a manner which would result in flooding and the impact is less than significant.**

Threshold ***Expose people or structures to a significant risk of loss, injury or death involving flooding including flooding as a result of the failure of a levee or dam.***

The City of Perris is subject to inundation from dam failure at any of three reservoirs: Lake Perris Dam adjoining the northeasterly boundary of the City of Perris; Pigeon Pass Reservoir in Moreno Valley; and Little Lake Reservoir in Hemet.

Because of proximity to the City of Perris, inundation from breach of the Lake Perris dam is assumed to be the worst-case scenario in terms of volume and minimal elapsed time from breach to maximum flow within the City. The dam inundation study for Lake Perris Reservoir indicates that sudden failure of the dam as a result of a seismic event is so unlikely that the inundation simulation is based on a dam breach that follows an initial, small leak near the base of the dam. Based on this study, a maximum flood flow of 365,000 cubic feet of water per second would reach central Perris approximately 3.1 hours after the initial dam leak. A maximum flood depth of twenty-eight (28) feet could be reached in the lowest lying areas. Virtually all of Perris east of Perris Blvd., where the majority of existing development is located, would be flooded.

Adoption and implementation of General Plan 2030 will result in a significant increase in the number of people residing and working in the City of Perris. Much of this future development will occur in the area east of Perris Blvd. that is subject to inundation after breach of the Lake Perris dam. Although failure of the Lake Perris dam is an extremely unlikely event, the scenario outlined in the inundation study indicates that flooding would occur hours after the beginning of the dam breach. Accordingly, emergency evacuations could preclude injury and loss of life, but not property damage. The project General Plan Safety Element includes the following Implementation Measures that would provide for swift evacuation of people within the Lake Perris Dam inundation area:

I.A.1 Identify all known hazards within the City in the Multi-jurisdictional Hazard Plan.

I.A.2 Prepare evacuation routes and disaster response plans for all known hazards within the City.

I.A.3 Participate in on-going disaster preparedness training programs in conjunction with other jurisdictions.

III.B.1 Work with local telecommunication service providers to publish emergency evacuation routes in phone directories.

III.B.2 Work with local school districts to distribute emergency information at the schools.

III.B.3 Work with City service providers such as the waste hauler or water company to put informational inserts about emergency preparedness and evacuation procedures in billing statements or newsletters.

III.B.4 Work with the local Chamber of Commerce to distribute evacuation plans for all business owner/operators, employees and patrons.

III.B.5 Develop a map indicating locations of hazards that are likely to affect the City.

Subject to these Implementation Measures, evacuation of those living and working within the dam inundation area is feasible. The feasibility of evacuation measures combined with the extreme improbability of a dam breach allows the impacts associated with dam inundation to be deemed less than significant.

Development consistent with General Plan 2030 may occur within the identified floodplain of the Perris Valley Channel. Development in the floodplain would alter the existing drainage pattern. All future development in the floodplain must be in compliance with Title 15, "Floodplain Regulations", of the City of Perris Municipal Code which regulates development in flood hazard areas. Title 15 conforms to requirements of the Federal Emergency Management Agency and National Flood Insurance Program. In addition, General Plan 2030 includes the following Safety Element Implementation Measure:

I.B.5 Require flood mitigation plans for all proposal projects in the 100 year floodplain (Areas A and AE)

Subject to Title 15, and consistent with Safety Element Implementation Measure I.B.5, development consistent with General Plan 2030 will not result in exposure of people or property to significant risk of flooding. Accordingly, impacts resulting from adoption and implementation of General Plan 2030 are less than significant.

Impact: **Adoption and implementation of General Plan 2030 would result in additional development that could increase the numbers of people and structures at risk of loss from flooding but Implementation Measures included in General Plan 2030 will reduce impacts associated with flooding to a less than significant level.**

Threshold ***Inundation by seiche, tsunami, or mudflow***

A seiche is a standing wave in an enclosed or partly enclosed body of water. Seiches are normally caused by earthquake activity, and can affect harbors, bays, lakes, rivers, and canals. Lake Perris reservoir is a confined basin of water susceptible to a reverberating surface wave action induced by seismic action. Although a seiche in Lake Perris could conceivably cause the Lake Perris dam to fail, the dam inundation study by the California Water Resources Agency indicates the dam is not likely to be breached as a result of seismic activity. Consistent with this study, the impact associated with potential flooding resulting from a seiche is less than significant.

Tsunamis are usually caused by displacement of the ocean floor causing large waves. Tsunamis are typically generated by seismic activity. Tsunami hazard is not present in the City due to the elevation and distance from the ocean. Therefore, tsunamis and inundation associated with tsunamis are not a potential hazard and no significant impact is anticipated.

A mudflow or debris flow is a mixture of soil, rock and/or mantlerock, and water or air. The potential that a mudflow will occur depends on numerous factors, including soil depth and composition, the kind of vegetation, subtle variations in slope shape, existence of road cuts or drainage pipes, incongruities in underlying bedrock, and even the presence of animal burrows. Fine-grained sedimentary rocks are the most susceptible to debris flow. Typically, debris flows occur when a long saturation period is followed by intense bursts of rain, concentrated in just a few hours or days. Water, often traveling beneath the surface from miles away, fills the pores in the surface material but not in bedrock or clay, which are less permeable. This creates a saturated zone in the surface material. An increase in pore pressure in turn decreases the friction that holds material to a slope. At some point, gravity causes the mass to break loose and slide along the less permeable surface below. Damaging debris flows also can and often do occur on slopes that recently endured fire damage because there are few roots holding down the soil, and the surface is covered with ash and other debris.

Destructive debris flows typically occur within western Riverside County each decade, with the most recent debris flow events taking place in 1969 and 1978. There is debris flow potential within the Perris Valley, particularly within canyon bottoms, stream channels and areas near the outlets of canyons or channels.

Adoption and implementation of General Plan 2030 will result in a significant increase in the number of people residing and working in the City of Perris. Emergency evacuations will preclude injury and loss of life, but not property damage in the event of debris flow. The project General Plan Safety Element includes the following Implementation Measures that would provide for swift evacuation of people in areas subject to this event:

I.A.1 Identify all known hazards within the City in the Multi-jurisdictional Hazard Plan.

I.A.2 Prepare evacuation routes and disaster response plans for all known hazards within the City.

I.A.3 Participate in on-going disaster preparedness training programs in conjunction with other jurisdictions.

III.B.1 Work with local telecommunication service providers to publish emergency evacuation routes in phone directories.

III.B.2 Work with local school districts to distribute emergency information at the schools.

III.B.3 Work with City service providers such as the waste hauler or water company to put informational inserts about emergency preparedness and evacuation procedures in billing statements or newsletters.

III.B.4 Work with the local Chamber of Commerce to distribute evacuation plans for all business owner/operators, employees and patrons.

III.B.5 Develop a map indicating locations of hazards that are likely to affect the City.

Although adoption and implementation of General Plan 2030 will result in an increase in population and development in areas that may be subject to debris flows, these Implementation Measures will reduce the potential for injury from debris flows to a less than significant level.

Impact: **Adoption and implementation of General Plan 2030 would result in additional development that could increase the numbers of people and structures at risk of loss from seiche, tsunami, or mudflow but Implementation Measures included in General Plan 2030 will reduce impacts associated with these phenomona to a less than significant level.**

4.5.4 MITIGATION MEASURES

No mitigation measures are required.

4.5.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.6 PUBLIC SERVICES

This section evaluates the impacts of General Plan 2030 associated with providing public services within the City of Perris. Specifically, this section discusses future public services needs resulting from new development during the planning term of General Plan 2030, and potential impacts associated with development of new facilities to accommodate these public services including the following:

- Police Protection
- Fire Protection
- Health Services
- Schools
- Library Services
- Municipal Administration Buildings & Services

4.6.1 POLICE PROTECTION

EXISTING CONDITIONS

The Riverside County Sheriff's Department, under contract with the City of Perris and operating as the Perris Police Department provides law enforcement services to the City of Perris. The Perris Station of the Riverside County Sheriff's Department (Perris Police Station) is located at 403 East 4th Street in Perris. The Perris Station also serves a sizeable area of unincorporated Riverside County.

In 2002, a total of 177 Sheriff's Department personnel were assigned to the Perris Station. This includes 133 sworn peace officers. Forty (40) of the sworn officers are assigned to serve the City of Perris under terms of the contract between the City and the Riverside County Sheriff's Department.

The Perris Police Department serves both homes and businesses in its police service area, which is the City of Perris. Need for the public services and associated facilities are measured by service area population, or the number of residents and workers within the City's service area. Service population reasonably predicts the need for police facilities. The Riverside County Sheriff's Department and the Perris Police Department use a standard of one officer per 1,000 residents. As the population in Perris increases, additional police officers will be needed. Perris police department has no established threshold for the need for additional police facilities, such as a new station. Rather, the need for additional police stations and facilities is determined on an as needed basis.

Police response times vary by time of day and priority of the call. Average response time from dispatch to on-scene arrival for an emergency call as of May 2002 was 5.3 minutes. In the year 2001, 29,802 "911" calls were generated from within the City of Perris.

The City recently approved a new Sheriff's office to serve the City of Perris. The office will be attached to a new fire station in Paragon Park which fronts Placentia Avenue. Staff will consist of one full time Community Service Officer who will be answering public walk in questions, completing crime reports and making available crime information.

THRESHOLDS OF SIGNIFICANCE

Impacts associated with police protection may be considered potentially significant if the following condition would result from adoption and implementation of General Plan 2030:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services.

PROJECT IMPACTS

Threshold ***Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services.***

Increases in population and employment indirectly related to the adoption and implementation of General Plan 2030 will require expanded physical facilities for the police department. Maintaining acceptable emergency response times and the need for new facilities are recognized in General Plan 2030. Funding for new police facilities commensurate with the increased demand for services in the City of Perris will be provided from capital improvement fees levied on new development. General Plan 2030 includes the following Goals, Policies and Implementation Measures appropriate to sustaining this effort:

Land Use Element
Goal II
New development consistent with infrastructure capacity and municipal service capabilities**.**
Policy II.A
Require new development to pay its full, fair-share of infrastructure costs.
Implementation Measure
II.A.3 Revise the capital facilities fee program so that all infrastructure construction and improvements, including public safety facilities attributable to new development, are identified and fully funded.

In 2004, the City's Capital Fee Ordinance was being revised and updated based on projections of the number of future dwelling units and the floor areas of non-residential buildings and on population and employment projections associated with adoption and implementation of General Plan 2030. Analysis for updating the Capital Fee Ordinance will include approximation of spatial and funding requirements for expanded police facilities.

Expanded and/or renovated facilities for police services may be located on existing Civic Center properties and/or at the current location of the Perris Police Department at 403 East 4th Street. Attempts to evaluate potential project-specific physical impacts associated with police facilities construction would be speculative. Subsequent assessment of project-specific impacts from construction and operation of new facilities on these sites will be undertaken when facilities needs, sizes, configuration and funding are determined and funding is available at a future date.

General Plan 2030 also incorporates Goals, Policies and Implementation Measures to ensure that any new development resulting from adoption and implementation of General Plan 2030 participates in funding needed to provide police facilities so that police response times are maintained at acceptable levels:

> ***Safety Element***
> **Goal II**
> Improved response times for emergency service providers (police, fire, medical services).
> **Policy II.B**
> Provide adequate emergency facilities to serve existing and future residents.
> **Implementation Measures**
> **II.B.1** Adopt capital facilities fees to fund improvements in public safety facilities and equipment.
> **II.B.2** Adopt the capital facilities fee program so that all infrastructure improvements identified as attributable to new development are fully funded.
> **II.B.3** Identify sources of funding for additional facilities to serve existing development.

The Goals, Policies and Implementation Measures of General Plan 2030 would ensure that new or expanded police facilities needed to maintain acceptable levels of service are constructed. Potential construction impacts of any new facilities will be subject to development project-level environmental review.

Project-level construction impacts are likely to include impacts to air quality from motorized equipment and fugitive dust and will be subject to evaluation and mitigation consistent with the South Coast Air Quality Management District (SCAQMD) Handbook, with Rule 403 (fugitive dust) mitigation, and other applicable mitigation measures represented in the Air Resources Board's URBEMIS 2002, or successor, computer model. Construction noise will be subject to the City's Noise Ordinance which limits the hours of construction operations and will be short-term, typically suggesting a less than significant impact. Construction impacts to hydrology and water quality are possible but will be subject to restrictions of the Regional Water Quality Control Board San Jacinto Watershed Construction Activities Permit, and to

the Best Management Practices included in each project's Storm Water Pollution Prevention Plan required by the National Pollutant Discharge Elimination System. These will prevent stormwater run-off contamination during construction.

Project-level impacts on Transportation, Aesthetics, Biological Resources, and Cultural Resources are site-specific and, therefore, any attempt to identify such impacts at the General Plan level of analysis would be purely speculative until project sites are selected and project design is undertaken; however, future projects will be reviewed for consistency with General Plan Policies and Implementation Measures identified in the respective environmental category analyses in this EIR. Subject to such measures, impacts from construction of new or expanded police facilities, the need for which indirectly results from adoption and implementation of General Plan 2030, would be less than significant.

CUMULATIVE IMPACTS

General Plan 2030 is a long-term, regulatory document that will accommodate and help define the types, locations, sizes, and physical characteristics of innumerable development projects over the General Plan planning period. As such this EIR deals primarily with cumulative impact analyses. Cumulative impacts that would result from development and operation of new or expanded public safety facilities including those related to traffic, air quality, aesthetics, hydrology, and noise are implicit in the impact analysis for each of these categories in this Program EIR. Consistent with those analyses, cumulative impacts in all categories except air quality are less than significant.

Cumulative air quality impacts indirectly resulting from adoption and implementation of General Plan 2030, including those from operation of new or expanded public safety facilities, are identified in Section 4.3 of this EIR. Significant unavoidable cumulative air quality impacts would be expected to result even in the absence of the incremental addition of air pollutants from operation of public safety facilities. Accordingly, the cumulative impact to air quality from operation of new or expanded police facilities would be less than significant.

Impact: **Adoption and implementation of General Plan 2030 will indirectly result in the need for new or expanded police facilities in order to maintain acceptable service levels and response times, but the physical impacts associated with construction of new or expanded police facilities are determined to be less than significant.**

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.6.2 FIRE PROTECTION/EMERGENCY RESCUE

EXISTING CONDITIONS

The California Department of Forestry and Fire Protection, under contract with the County of Riverside and operating as the Riverside County Fire Department (RCFD), provides fire prevention, suppression, and paramedic services to the City of Perris. Station No. 1 serves the City of Perris and serves as the Riverside County Fire Department Headquarters. Station No. 1 is located at 210 W. San Jacinto Avenue.

Fire Station No. 1 has 7 full-time personnel on a daily basis. Between mid-April and the end of August, the staffing at Fire Station No. 1 increases during fire season, with an additional 8-9 full time personnel and the addition of (2) Type III Engine Truck Companies. A Type III Engine is a fire engine truck specifically designed for fighting brush fires. Both the additional staffing and the additional fire engines provided during fire season are funded by the California Department of Forestry. This fire station also has one fire engine and one rescue squad truck.

The City recently approved (September 2004) a proposal to construct a new fire station (#2) to serve the City of Perris. The site will be located within a leased area of Paragon Park which fronts Placentia Avenue. The fire station will have 3 employees on duty 24 hours a day, working 72 hour shifts. The number of employees will fluctuate depending community needs.

Station No. 59 serves the City's northern portion on an as-needed basis, and is located at 19450 Clark Street in Mead Valley. This fire station has 3-4 full-time personnel 24 hours a day, seven days a week. This fire station has one fire engine and one rescue squad truck.

Station No. 7 serves the City's southern portion on an as-needed basis and is located at 27860 Bradley Road in Sun City. Fire Station No. 7 has 3-4 full-time personnel 24 hours a day, seven days a week. This fire station has two fire engines and one rescue squad truck.

The California Department of Forestry and Fire Protection does not establish target response times for Perris. Since development within the City's boundaries is dispersed and the vacant areas in between existing developments do not have improved roads and infrastructure, the majority of the fire and rescue responses within the City of Perris arrive within 4-6 minutes, although calls for emergency services north of Orange Avenue average 8 minutes. All responses to calls for emergency services are made within 10 minutes. Station No. 1 responded to 4,200 calls for service in 2003.

The City of Perris, through an agreement with the County of Riverside and the City of Moreno Valley, provides 5 employees for the staffing for a fire engine truck based in the City of Moreno Valley. The added staffing provides emergency services in the northern areas of the City of Perris. Station No. 91 is located at 16110 Lassalle Street in Moreno Valley. This fire

station has 4 full-time personnel, 24 hours a day, seven days a week. This fire station has one Type-I truck company.

THRESHOLDS OF SIGNIFICANCE

Impacts associated with fire protection may be considered potentially significant if the following condition would result from adoption and implementation of General Plan 2030:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public service.

PROJECT IMPACTS

Threshold ***Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services.***

Adoption and implementation of General Plan 2030 will not have direct physical effects on the environment. Nevertheless, development under General Plan 2030 would increase the population and employment in the City of Perris and additional fire stations may be needed. General Plan 2030 incorporates Goals, Policies and Implementation Measures to ensure that new development resulting from adoption and implementation of General Plan 2030 is accompanied by construction of new fire facilities commensurate with the increase in service demands:

Land Use Element
Goal II
New development consistent with infrastructure capacity and municipal service capabilities.
Policy II.A
Require new development to pay its full, fair-share of infrastructure costs.
Implementation Measure
II.A.3 Revise the capital facilities fee program so that all infrastructure construction and improvements, including fire protection facilities attributable to new development, are identified and fully funded.

Safety Element
Goal II
Improved response times for emergency service providers (police, fire, medical services).
Policy II.A

The City shall require roadway improvements to expedite quick and safe travel by emergency responders.

Implementation Measure

II.A.1 Require that access roads be completed prior to development in outlying areas.

Safety Element

Goal II

Improved response times for emergency service providers (police, fire, medical services).

Policy II.B.

Provide adequate emergency facilities to serve existing and future residents.

Implementation Measures

II.B.1 Adopt capital facilities fees to fund improvements in public safety facilities and equipment.

II.B.2 Adopt the capital facilities fee program so that all infrastructure improvements identified as attributable to new development are fully funded.

II.B.3. Identify sources of funding for additional facilities to serve existing development.

The City's Capital Fee Ordinance is being revised and updated based on projections of the number of future dwelling units and the floor areas of non-residential buildings and on population and employment projections associated with adoption and implementation of General Plan 2030. Analysis for updating the Capital Fee Ordinance will include projections of spatial and funding requirements for expanded fire protection facilities.

In order to provide acceptable emergency response times for projected, new development additional fire stations will be needed. Currently, the City has plans for a new fire station (#2) which will be located near Placentia Avenue & Redlands Boulevard and provide service to the northern portion of the City. The project is expected to be completed in July 2005. Other locations and target dates for development of fire stations will not be identified until a sufficient amount of impact fees are collected and sufficient development has occurred within a fire facility service area to warrant property acquisition and facility design and development. In addition, identification of specific site(s) in General Plan 2030, possibly many years in advance of actual facility need, could necessitate immediate purchase of a site(s) by the City to avoid property owner claims of governmental taking of property without compensation.

The extent of undeveloped land area in the City precludes identification of the sequence and timing of future development. Similarly, the timing of infrastructure placement including improved roadways necessary for rapid emergency response will be known only as development consistent with the General Plan Land Use Plan proceeds. Accordingly, attempts to identify sites and evaluate potential project-specific physical impacts associated with fire station construction would be speculative. Potential construction and operation

impacts of any new facilities will be subject to development project- level environmental review. Mitigation measures to avoid or lessen impacts identified at that level of analysis will be identified and implemented.

Project-level impacts from future fire station development are likely to include impacts to air quality from motorized equipment and fugitive dust and will be subject to evaluation and mitigation consistent with the South Coast Air Quality Management District (SCAQMD) Handbook, with Rule 403 (fugitive dust) mitigation, and other applicable mitigation measures represented in the Air Resources Board's URBEMIS 2002, or successor, computer model. Construction noise will be subject to the City's Noise Ordinance which limits the hours of construction operations and will be short-term, typically suggesting a less than significant impact. Construction impacts to hydrology and water quality are possible but will be subject to restrictions of the Regional Water Quality Control Board San Jacinto Watershed Construction Activities Permit, and to the Best Management Practices included in each project's Storm Water Pollution Prevention Plan required by the National Pollutant Discharge Elimination System. These will prevent stormwater run-off contamination during construction.

Project-level impacts on Transportation, Aesthetics, Biological Resources, and Cultural Resources are site-specific and, therefore, any attempt to identify such impacts at the General Plan level of analysis would be purely speculative until project design is undertaken; however, future projects will be reviewed for consistency with General Plan Policies and Implementation Measures identified in the respective environmental category analyses in this EIR. Subject to such measures, impacts from construction of new fire stations, the need for which indirectly results from adoption and implementation of General Plan 2030, would be less than significant.

CUMULATIVE IMPACTS

General Plan 2030 is a long-term, regulatory document that will accommodate and help define the types, locations, sizes, and physical characteristics of innumerable development projects over the General Plan planning period. As such this EIR deals primarily with cumulative impact analyses. Cumulative impacts that would result from development and operation of new fire stations including those related to traffic, air quality, aesthetics, hydrology, and noise are implicit in the impact analysis for each of these categories in this Program EIR. Consistent with those analyses, cumulative impacts in all categories except air quality are less than significant.

Significant unavoidable cumulative air quality impacts indirectly resulting from adoption and implementation of General Plan 2030, including those from operation of new fire stations, are identified in Section 4.3 of this EIR. Significant unavoidable cumulative air quality impacts would be expected to result even in the absence of the incremental addition of air pollutants

from operation of public safety facilities. Accordingly, the cumulative impact to air quality from operation of new fire stations would be less than significant.

Impact: **Adoption and implementation of General Plan 2030 will indirectly result in the need for new fire stations in order to maintain acceptable service levels and response times, but the physical impacts associated with construction of new fire stations are determined to be less than significant.**

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.6.3 HEALTH SERVICES

EXISTING CONDITIONS

The nearest emergency medical, acute care, and trauma care services available to the City of Perris is provided by the Riverside County Regional Medical Center in Moreno Valley at 26520 Cactus Road. This medical center is a Level II Trauma Center. Level II Trauma Center meets the following criteria of the American College of Surgeons (ACS):

- A team of certified trauma care specialists must be available 24 hours a day including emergency room physicians, trauma surgeons, neurosurgeons and neurologists, orthopedic surgeons, plastic surgeons, cardiologists and heart surgeons, anesthesiologists, and radiologists.
- A certified surgeon specializing in trauma care directs trauma service.
- Trained staff must be available and a wide array of highly specialized diagnostic and treatment equipment are used throughout the continuum of trauma care including the Emergency Department, Operating Rooms and Critical Care Unit.
- Operating rooms are available 24 hours a day.
- A comprehensive clinical laboratory operates round-the-clock.
- Quality improvement programs exist, including a trauma registry for filing treatments of trauma injuries.
- Programs are offered for injury prevention, public and professional education and trauma research.
- Rehabilitation services are staffed and equipped for acute care of critically injured patients.

THRESHOLDS OF SIGNIFICANCE

Adoption and implementation of General Plan 2030 may result in a potentially significant impact if the proposed project would:

- Require new or expanded health and emergency service facilities, the construction of which would cause significant environmental effects.

PROJECT IMPACTS

Threshold ***Result or require construction or expansion of health and emergency service facilities that would cause significant environmental effects.***

Adoption and implementation of General Plan 2030 will not directly result in the need for new or expanded health and emergency service facilities that would cause significant environmental effects. Projected development and population growth consistent with General Plan 2030 will increase the demand for medical facilities and services in the City.

However, there are no statutory or regulatory standards in California for determining the threshold at which new acute care and emergency medical facilities, or the expansion of existing facilities, will be required. According to a representative from the Office of Statewide Health Planning and Development (OSHPD), new healthcare facilities are developed in response to perceived market demand by free enterprise. The State becomes involved only after medical facility developers submit notice of intent to build.[10] Accordingly, attempts to determine the size of future expanded or new medical facilities, and their locations, are speculative at this point. For purposes of this EIR, it is assumed that new and/or expanded healthcare and emergency medical facilities will be required in the Perris Valley to serve a growing market area. Growth and development consistent with General Plan 2030, together with cumulative growth in the surrounding area, will increase demand for health care and emergency medical services facilities in the City.

Construction of new facilities or expansion of existing facilities could result in significant impacts to the environment. At such time as the need for expanded or new facilities is determined, appropriate site(s) are identified, and project design is undertaken, project level review pursuant to CEQA will be required. Potential environmental impacts will be identified, alternative projects considered, and mitigation measures to avoid or lessen impacts identified. Project-level construction impacts are likely to include impacts to air quality from motorized equipment and fugitive dust and will be subject to evaluation and mitigation consistent with the South Coast Air Quality Management District (SCAQMD) Handbook, with Rule 403 (fugitive dust) mitigation. Construction noise will be subject to the City's Noise Ordinance which limits the hours of construction operations and will be short-term, typically suggesting a less than significant impact. Construction impacts to hydrology and water quality are possible but will be subject to restrictions of the Regional Water Quality Control Board San Jacinto Watershed Construction Activities Permit, and to the Best Management Practices included in each project's Storm Water Pollution Prevention Plan required by the National Pollutant Discharge Elimination System. These will prevent stormwater run-off contamination during construction.

Project-level impacts on Transportation, Aesthetics, Biological Resources, and Cultural Resources are site-specific and, therefore, any attempt to identify such impacts at the General Plan level of analysis would be purely speculative until project need is determined, appropriate site(s) selected, and project design is undertaken; however, future projects will be reviewed for consistency with General Plan Policies and Implementation Measures identified in the respective environmental category analyses in this EIR. Subject to such measures, impacts from construction of new or expanded health and emergency facilities, the need for which indirectly results from adoption and implementation of General Plan 2030, would be less than significant.

[10] Teshima, Ted. Verbal communication with Senior Architect from the Office of Statewide Planning and Development. October 20, 2004.

CUMULATIVE IMPACTS

General Plan 2030 is a long-term, regulatory document that will accommodate and help define the types, locations, sizes, and physical characteristics of innumerable development projects over the General Plan planning period. As such this EIR deals primarily with cumulative impact analyses. Cumulative impacts that would result from operation of new or expanded health care and emergency medical facilities including those related to traffic, air quality, aesthetics, hydrology, and noise are implicit in the impact analysis for each of these categories in this Program EIR. Consistent with those analyses, cumulative impacts in all categories except air quality are less than significant.

Cumulative air quality impacts indirectly resulting from adoption and implementation of General Plan 2030, including those from operation of new or expanded health care and emergency medical facilities, are identified in Section 4.3 of this EIR. Significant unavoidable cumulative air quality impacts would be expected to result even in the absence of the incremental addition of air pollutants from operation of new or expanded health care and emergency medical facilities. Accordingly, the cumulative impact to air quality from operation of new or expanded health care and emergency medical facilities would be less than significant.

Impact: **Adoption and implementation of General Plan 2030 will indirectly result in the need for new or expanded health care and emergency medical facilities, but the physical impacts associated with construction and operation of new or expanded health care and emergency medical facilities are determined to be less than significant.**

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.6.4 SCHOOLS

EXISTING CONDITIONS

The City of Perris is served by five (5) school districts: the Val Verde Unified School District (VVUSD), the Perris Union High School District (PUHSD), the Perris Elementary School District (PESD), the Romoland School District (RSD), and the Menifee Union School District (MUSD). Impacts to schools are analyzed based on information obtained from the school districts regarding existing school facilities.

Planning Area 4

Existing School(s):

Val Verde High School 9-12 (Continuation)
2935 Indian Avenue, Perris
Val Verde Unified School District
Current Capacity: 324
Current Enrollment: 481

Val Verde Elementary K-6
656 Indian Ave., Perris
Val Verde Unified School District
Current Capacity: 1026
Current Enrollment: 1084

Planning Area 5

Existing School(s):

Perris High School 9-12
175 E. Nuevo Road, Perris
Perris Union High School District
Current Capacity: 2,268
Current Enrollment: 5,163

Palms Elementary School K-5
255 East Jarvis Street, Perris
Perris Elementary School District
Current Capacity: 878
Current Enrollment: 878

Planning Area 6

Existing School(s):

Perris Lake High School, 9-12 (Continuation)
418 W. Ellis Avenue, Perris
Perris Union High School District
Current Capacity: 252
Current Enrollment: 408

Planning Area 7

Existing School(s):

Pinacate Middle School 7-8
1990 S. "A" Street, Perris
Perris Union High School District
Current Capacity: 513
Current Enrollment:1,405

"A" Street Elementary K-6
755 North A Street, Perris
Perris Elementary School District
Current Capacity: 922
Current Enrollment:922

Enchanted Hills School K-5
1357 Mt. Baldy Street, Perris
Perris Elementary School District
Current Capacity: 577
Current Enrollment:577

Nan Sanders Elementary School K-5
1461 North A Street, Perris
Perris Elementary School District
Current Capacity: 851
Current Enrollment:851

Park Avenue Elementary School K-5
445 South Park Avenue, Perris
Perris Elementary School District
Current Capacity: 611
Current Enrollment:611

Perris Elementary School K-5
5000 South A Street, Perris
Perris Elementary School District
Current Capacity: 757
Current Enrollment:757

THRESHOLDS OF SIGNIFICANCE

Impacts associated with school services may be considered potentially significant if any of the following conditions would result from adoption and implementation of General Plan 2030:

- Result in substantial need for new, altered or expanded school facilities; or

- Result in increased demand for schools beyond levels established by the five (5) school districts serving the City of Perris: the Val Verde Unified School District (VVUSD), the Perris Union High School District (PUHSD), the Perris Elementary School District (PEDS), the Romoland School District (RSD) and the Menifee Union School District (MUSD).

PROJECT IMPACTS

Threshold ***Results in substantial need for new, altered or expanded school facilities or result in increased demand for school beyond levels established by the five (5) school districts serving the City of Perris.***

Adoption and implementation of General Plan 2030 will accommodate construction of new dwelling units in the City of Perris which will increase the number of students in each school district serving the City of Perris.

Currently, Val Verde Unified School District (VVUSD) has one (1) elementary school and one (1) high school that provide services to Perris residents. Perris Elementary School District (PESD) has six (6) elementary schools that provide services to Perris residents, while Perris Union High School District (PUHSD) has one (1) middle school and two (2) high schools. VVUSD serves residents in Planning Areas 1, 2, 3, 4, and portions of 5 (north of Citrus).

As shown below in Table 4.6-1, the total capacity for VVUSD existing school facilities serving City of Perris residents is 1,350 students. Total student enrollment as of October 2003 for schools within the VVUSD serving Perris residents was 1,565 students. Student enrollment represented 116% of school capacity, 215 students more than buildings were designed to accommodate.

Table 4.6-1: Existing Enrollment, VVUSD Schools Serving the City of Perris

Schools	2003-04 District Maximum Capacity	Enrollment for 2003	Percent of Capacity
Elementary School			
Val Verde Elementary	1,026	1,084	94.65%
High School			
Val Verde High School (Continuation)	324	481	148.46%
District Total	***1,350***	***1,565***	***115.93%***

Source: Sandee Hackett, Val Verde Unified School District, personal communication via telephone dated June 30, 2004.

Perris Elementary School District serves residents in Planning Areas 6, 7, 8, 10, and portions of 5 (south of Citrus). As shown in Table 4.6-2, the total capacity for PESD existing school facilities serving City of Perris residents is 4,596 students. Total student enrollment for the school year of October 2003 for schools within the PESD serving Perris residents was 4,596 students. Therefore, the District's student enrollment was operating at approximately 100% percent capacity.

Table 4.6-2: Existing Enrollment, PESD Schools Serving the City of Perris

Schools	2003-04 District Maximum Capacity	Enrollment for 2003	Percent of Capacity
Elementary Schools			
Palms Elementary	878	878	100%
"A" Street Elementary	922	922	100%
Enchanted Hills Elementary	577	577	100%
Nan Sanders Elementary	851	851	100%
Park Avenue Elementary	611	611	100%
Perris Elementary	757	757	100%
District Total	***4,596***	***4,596***	***100%***

Source: William E. Gagner, Jr., Perris Elementary School District, personal communication via telephone dated July 9 2004.

Perris Union High School District (PUHSD) serves residents in Planning Areas 6, 7, 8, 10, and portions of 5 (south of Citrus). As shown in Table 4.6-3, the total capacity for PUHSD existing school facilities serving City of Perris residents is 3,033 students. Total student enrollment for the school year of October 2003 for schools within the PUHSD serving Perris residents was 6,976 students. Therefore, the District's student enrollment was over capacity for this school year by 3,943 students, and operating at approximately 230% percent capacity.

Table 4.6-3: Existing Enrollment, PUHSD Schools Serving the City of Perris

Schools	2003-04 District Maximum Capacity	Enrollment for 2003	Percent of Capacity
Middle Schools			
Pinacate Middle School	513	1,405	273.88%
High Schools			
Perris High School	2,268	5,163	227.65%
Perris Lake High School (Continuation)	252	408	161.90%
Subtotal	2,520	5,571	221.07%
District Total	***3,033***	***6,976***	***230.00%***

Source: Emmanuelle Reynolds, Perris Union High School District, written communication dated June 22, 2004.

A portion of Perris (Planning Area 9) is within the Romoland School District (RSD) boundary; however the District did not respond to written and verbal requests for information or to the Notice of Preparation of the EIR. Accordingly, information about RSD and potential impacts could not be determined and are presumed to be less than significant based on lack of response from the District.

PLANNED SCHOOL FACILITIES

Planning Area 2

Future Schools:

Avalon Elementary
Northeast corner of Rider Street and Bradley
Val Verde Unified School District

May Ranch Elementary
West/Southwest of May Ranch
Val Verde Unified School District

Planning Area 5

Future School(s):

Elementary School (2)
Southeast corner of Mildred and Murrieta
2-sites Parkwest Specific Plan
Perris Elementary School District

Elementary School
North of Orange between Redlands and Wilson
Val Verde Unified School District

High School
North of Citrus between Dunlap and Evans
Val Verde Unified School District

Planning Area 7

Future School(s):

Elementary School
Northwest corner Alpine and A streets
Perris Elementary School District

Planning Area 9

Future School(s):

3 Sites, Green Valley Specific Plan
Romoland School District

Planning Area 10
Future School(s): 1 site, Riverwoods Specific Plan

YEAR 2030 PROJECTED NEED FOR ADDITIONAL SCHOOLS

In order to determine the potential impacts on the school districts as a result of General Plan 2030, student generation rates were used to estimate the increase in students within the school districts. According to the schools facilities needs analysis, student generation rates in the VVUSD are 0.7086 per dwelling unit for K-12 grades. Student generation rates for the PESD are 0.4590 students per single-family dwelling unit and 0.3633 for multi-family dwelling units for grades K-6 and student generation rates for the PUHSD are 0.20 for students per dwelling unit.

Adoption and implementation of General Plan 2030 would result in the construction of approximately 11,319 additional dwelling units within the VVUSD and approximately 7,272 additional single-family dwellings units and 4,802 additional multi-family units in the PESD by the year 2030. Approximately 12,074 additional dwelling units would be constructed within the PUHSD during that time period. The increase in dwelling units would result in population and student enrollment increases. Table 4.6-6 illustrates the estimated enrollment increase based on generation rates utilized by the respective school districts. Implementation of General Plan 2030 would result in enrollment increases of 8,021 students for VVUSD, 5,082 students for PESD, and 3,389 students for PUHSD by the year 2030 in schools serving the City of Perris.

Table 4.6-4: Projected School District Enrollment Year 2030

School District	Student Generation Rates		Potential New Housing Units		Additional Students
	Single-Family Unit	Multi-Family Unit	Single-Family Dwellings	Multi-family Dwellings	
VVUSD	0.7086	*N/A*	11,319	NA	8,021
PESD	0.4590	0.3633	7,272	4,802	5,082
PUHSD					
Middle School	0.12	*N/A*	12,074		1,449
High School	0.16	*N/A*	12,074		1,932
Total					***16,484***

Source: Hogle-Ireland 2004

Districts have great leeway in deciding the physical size of their school sites as well as the density of pupils housed in the site. The standards are greatly influenced by availability of land, its cost, the size of existing schools, curriculum and program needs, along with other considerations. VVUSD's student loading standard (Table 4.6-7) is typical of school districts throughout California.[11] Based on the generation rates provided by VVUSD and school building capacities, 1 high school, and 1 middle school and 6 elementary schools will be needed to accommodate all of the projected students generated from residential development anticipated to occur by 2030. VVUSD has 1 high school (Planning Area 5) and 3 elementary schools (planning Areas 2 and 5) planned for future construction. Consequently, 1 middle school and 3 elementary schools are still needed to accommodate the increased student enrollment. Based on current CDE guidelines and District standards, the relevant acreage associated with the additional school facilities would be approximately 59.1 acres.

Table 4.6-5: VVUSD Student Loading Standards

Grade Level	Student Capacity	School Acreage Allowance
Elementary	650	12.2
Middle School	1,200	22.5
High School	3,000	52.9

Source: Val Verde Unified School District, 2004 School Facilities Needs Analysis, March 31, 2004.

[11] Val Verde Unified School District, 2004 School Facilities Needs Analysis, March 31, 2004.

To calculate the acreage required for additional school sites, PESD must determine the student capacity of future school facilities that will be needed to accommodate all of the projected students generated from residential development anticipated to occur by 2030. Based on educational programs of the PESD, future elementary schools will be designed to accommodate 650 students. The guidelines included in the "School Site Analysis and Development Handbook" published by the State Department of Education as that handbook read as of January 1, 1998 identify 9.0 acres as the site size for future elementary schools in PESD. The addition of approximately 5,082 students within the PESD would require an estimated 8 new elementary schools and the need for approximately 72 acres on which to build them. PESD currently has plans to construct 3 elementary schools (Planning Areas 5 and 7). Accordingly, 5 new elementary schools are still needed to accommodate the increased student enrollment. Based on current CDE guidelines and District standards, the land needed for additional school facilities will be approximately 45 acres.

PUHSD has an existing need for at least one additional high school, and 33 middle school classrooms (Note: Because the District does not plan to purchase additional land for the middle school, that need has been converted into classrooms that may be constructed on existing school campuses). [12] Using PUHSD ratio of approximately 2,000 students per high school, the addition of approximately 2,415 students by the year 2030 would result in the need for at least one additional high school. The acreage required for each school is based on both PUHSD's educational policy regarding the number of students to be served at an individual school and the site size guidelines developed by the California Department of Education (CDE). Based on current CDE guidelines and District standards, the relevant District site size requirement for a high school with 2,000 students is approximately 42 acres.[13]

General Plan 2030 includes Goals, Policies and Implementation Measures that address the increase in student enrollment as follow:

> ***Land Use Element***
> **Goal II**
> New development shall be consistent with infrastructure capacity and municipal service capabilities.
> **Policy II.B.**
> Require new development to include school facilities or pay school impact fees where appropriate.
> **Implementation Measure**
> **II.B.1** Circulate all development plans to local school districts to assess need to include future school sites.

[12] Perris Union High School District, Schools Facilities Need Analysis, October 2003.
[13] PUHSD; CDE "School Site Analysis and Development Handbook"; School Planning Services.

This Goal, Policy and Implementation Measure will assist local school districts in ensuring that educational services and facilities are available for all students in Perris consistent with General Plan 2030. Therefore, the Goals, Policies, and Implementation Measures of General Plan 2030 would reduce the impacts to school services to a less than significant level within the City of Perris.

Population growth resulting from adoption and implementation of General Plan 2030 will add school- age children to the VVUSD, PESD, and PUHSD. Each of these districts will require additional classroom facilities to accommodate increases in the student population.

School impact fees and/or dedication of land will be required for future development projects accommodated by General Plan 2030 pursuant to State law and the requirements of the respective school districts. Under State law, mitigation of school impacts resulting from development projects is limited to payment of these fees and/or contribution of land and facilities.

Future school sites already acquired by the respective school districts are indicated in the Land Use Plan of General Plan 2030 Land Use Element. Environmental review pursuant to CEQA for each of these sites was conducted as part of the property acquisition process. An additional high school, a middle school, and 14 elementary schools are likely to be required commensurate with development pursuant to General Plan 2030. Selection and acquisition of these school sites will occur subsequent to adoption of General Plan 2030. Accordingly, site-specific, development project-level analysis of potential impacts is not possible.

Construction of new school facilities or expansion of existing facilities could result in significant impacts to the environment. At such time as the location for each new or expanded facility is identified, and project design is undertaken, project level review pursuant to CEQA will be required. Potential environmental impacts will be identified, alternative project locations considered, and mitigation measures to avoid or lessen impacts identified. Project-level construction impacts are likely to include impacts to air quality from motorized equipment and fugitive dust and will be subject to evaluation and mitigation consistent with the South Coast Air Quality Management District (SCAQMD) Handbook, with Rule 403 (fugitive dust) mitigation. Construction noise will be subject to the City's Noise Ordinance which limits the hours of construction operations and will be short-term, typically suggesting a less than significant impact. Construction impacts to hydrology and water quality are possible but will be subject to restrictions of the Regional Water Quality Control Board San Jacinto Watershed Construction Activities Permit, and to the Best Management Practices included in each project's Storm Water Pollution Prevention Plan required by the National Pollutant Discharge Elimination System. These will prevent stormwater run-off contamination during construction.

Project-level impacts on Transportation, Aesthetics, Biological Resources, and Cultural Resources are site-specific and, therefore, any attempt to identify such impacts at the General

Plan level of analysis would be purely speculative until appropriate sites are identified and project design is undertaken; however, future projects will be reviewed for consistency with General Plan Policies and Implementation Measures identified in the respective environmental category analyses in this EIR. Subject to such measures, impacts from construction of new or expanded school facilities, the need for which indirectly results from adoption and implementation of General Plan 2030, would be less than significant.

CUMULATIVE IMPACTS

General Plan 2030 is a long-term, regulatory document that will accommodate and help define the types, locations, sizes, and physical characteristics of innumerable development projects over the General Plan planning period. As such this EIR deals primarily with cumulative impact analyses. Cumulative impacts that would result from operation of new or expanded school facilities including those related to traffic, air quality, aesthetics, hydrology, and noise are implicit in the impact analysis for each of these categories in this Program EIR. Consistent with those analyses, cumulative impacts in all categories except air quality are less than significant.

Cumulative air quality impacts indirectly resulting from adoption and implementation of General Plan 2030, including those from operation of new or expanded school facilities, are identified in Section 4.3 of this EIR. Significant unavoidable cumulative air quality impacts would be expected to result even in the absence of the incremental addition of air pollutants from operation of new or expanded schools. Accordingly, the cumulative impact to air quality would be less than significant.

Impact: **Adoption and implementation of General Plan 2030 will indirectly result in the need for new or expanded school facilities, but the physical impacts associated with construction and operation of new or expanded schools are determined to be less than significant.**

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.6.5 LIBRARIES

EXISTING CONDITIONS

Residents of the City of Perris are provided library services through the Riverside County Library System. Policies and approaches to ensure the adequate provision of library facilities are under jurisdiction of Riverside County. Impacts to the libraries are analyzed based upon information from the library facilities serving Perris. Facilities serving Perris are:

Perris Library
163 E. San Jacinto Avenue
Perris

Nuview Library
29990 Lakeview Avenue
Nuevo

Sun City Library
26982 Cherry Hills Boulevard
Sun City

Paloma Valley Library
31375 Bradley Road
Menifee

THRESHOLDS OF SIGNIFICANCE

Implementation of General Plan 2030 may result in a potentially significant impact if the proposed project would:

- Result or require the expansion and/or construction of library facilities that would cause significant environmental effects

PROJECT IMPACTS

Threshold ***Result or require the expansion and/or construction of library facilities that would cause significant environmental effects.***

Adoption and implementation of the project will indirectly increase the demand for library services and new or expanded facilities as a result of population increases associated with new development. New development will be subject to development impact fees that will be used to construct new library facilities or expand existing library facilities commensurate with

increased demand. The location and target dates for construction of these facilities will not be identified until a sufficient amount of impact fees are collected within the service area to warrant property acquisition and facility development.

Construction or expansion projects be subject to CEQA review at which time potential environmental impacts would be identified, alternative projects and locations considered, and implementation measures to avoid or reduce impacts identified. Although the Riverside County Library has no current plans for expansion and has no set threshold of demand that will trigger plans for expansion, for purposes of this EIR, it is assumed that additional building area will be required at the Caesar Chavez Branch Library in the City. Growth and development consistent with General Plan 2030, together with cumulative growth in the surrounding area, will increase demand for library services, and consequently, for expanded physical facilities.

Expansion of the Caesar Chavez Branch Library could result in significant impacts to the environment. At such time as the need for expansion is determined and project design is undertaken, project level review pursuant to CEQA will be required. Potential environmental impacts will be identified, alternative projects considered, and mitigation measures to avoid or lessen impacts identified.

Project-level construction impacts are likely to include impacts to air quality from motorized equipment and fugitive dust and will be subject to evaluation and mitigation consistent with the South Coast Air Quality Management District (SCAQMD) Handbook, with Rule 403 (fugitive dust) mitigation. Construction noise will be subject to the City's Noise Ordinance which limits the hours of construction operations and will be short-term, typically suggesting a less than significant impact. Construction impacts to hydrology and water quality are possible but will be subject to restrictions of the Regional Water Quality Control Board San Jacinto Watershed Construction Activities Permit, and to the Best Management Practices included in each project's Storm Water Pollution Prevention Plan required by the National Pollutant Discharge Elimination System. These will prevent stormwater run-off contamination during construction.

Project-level impacts on Transportation, Aesthetics, Biological Resources, and Cultural Resources are site-specific and, therefore, any attempt to identify such impacts at the General Plan level of analysis would be purely speculative until project design is undertaken; however, library expansion will be reviewed for consistency with General Plan Policies and Implementation Measures identified in the respective environmental category analyses in this EIR. Subject to such measures, impacts from construction of additional building area at the Caesar Chavez Branch Library, the need for which indirectly results from adoption and implementation of General Plan 2030, would be less than significant.

CUMULATIVE IMPACTS

General Plan 2030 is a long-term, regulatory document that will accommodate and help define the types, locations, sizes, and physical characteristics of innumerable development projects over the General Plan planning period. As such this EIR deals primarily with cumulative impact analyses. Cumulative impacts that would result from operation of an expanded Caesar Chavez Branch Library including those related to traffic, air quality, aesthetics, hydrology, and noise are implicit in the impact analysis for each of these categories in this Program EIR. Consistent with those analyses, cumulative impacts in all categories except air quality are deemed to be less than significant.

Cumulative air quality impacts indirectly resulting from adoption and implementation of General Plan 2030, including those from operation of an expanded branch library, are identified in Section 4.3 of this EIR. Significant unavoidable cumulative air quality impacts would be expected to result even in the absence of the incremental addition of air pollutants from operation of this larger facility. Accordingly, the cumulative impact to air quality would be less than significant.

Impact: **Adoption and implementation of General Plan 2030 will indirectly result in the need for expansion of the Caesar Chavez Branch Library, but the physical impacts associated with construction and operation of an expanded library are determined to be less than significant.**

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.6.6 MUNICIPAL ADMINISTRATION BUILDINGS

EXISTING CONDITIONS

The City of Perris City Hall is located 101 North "D" Street. Police Services are located in a City-owned building at 403 E. 4th Street. The Public Works Yard is located at 1015 South "G" Street.

THRESHOLDS OF SIGNIFICANCE

Implementation of General Plan 2030 would result in a potentially significant impact if General Plan 2030 would:

- Result or require construction and/or expansion of municipal administration facilities, the construction of which could cause significant environmental effects.

PROJECT IMPACTS

Threshold ***Result or require the expansion and/or construction of municipal administration facilities that would cause significant environmental effects.***

In 2004, the City's Capital Fee Ordinance was being revised and updated based on projections of the number of future dwelling units and the floor areas of non-residential buildings and on population and employment projections associated with adoption and implementation of the proposed project General Plan. Analysis for updating the Capital Fee Ordinance will include approximation of spatial and funding requirements for expanded municipal facilities.

Municipal administrative facilities may be expanded on land currently designated and used for public purposes at the City of Perris Civic Center. The target dates for development of these facilities will not be identified until a sufficient amount of impact fees are collected and sufficient development has occurred within the City to warrant facility development.

A requirement that new development proposals be accompanied by Infrastructure Concept Plans as defined in the Land Use Element of General Plan 2030 will ensure that necessary infrastructure improvements and the funding for these improvements including new municipal facilities are provided. New municipal facilities would be subject to project level environmental review pursuant to CEQA. . Potential environmental impacts will be identified, alternative projects considered, and mitigation measures to avoid or lessen impacts identified.

Project-level construction impacts associated with new or expanded municipal administrative facilities are likely to include impacts to air quality from motorized equipment and fugitive dust and will be subject to evaluation and mitigation consistent with the South Coast Air

Quality Management District (SCAQMD) Handbook, with Rule 403 (fugitive dust) mitigation. Construction noise will be subject to the City's Noise Ordinance which limits the hours of construction operations and will be short-term, typically suggesting a less than significant impact. Construction impacts to hydrology and water quality are possible but will be subject to restrictions of the Regional Water Quality Control Board San Jacinto Watershed Construction Activities Permit, and to the Best Management Practices included in each project's Storm Water Pollution Prevention Plan required by the National Pollutant Discharge Elimination System. These will prevent stormwater run-off contamination during construction.

Project-level impacts on Transportation, Aesthetics, Biological Resources, and Cultural Resources are site-specific and, therefore, any attempt to identify such impacts at the General Plan level of analysis would be purely speculative until project design is undertaken; however, expansion or construction of new municipal administration facilities will be reviewed for consistency with General Plan Policies and Implementation Measures identified in the respective environmental category analyses in this EIR. Subject to such measures, impacts from construction of new or expanded municipal administration facilities, the need for which indirectly results from adoption and implementation of General Plan 2030, would be less than significant.

CUMULATIVE IMPACTS

General Plan 2030 is a long-term, regulatory document that will accommodate and help define the types, locations, sizes, and physical characteristics of innumerable development projects over the General Plan planning period. As such this EIR deals primarily with cumulative impact analyses. Cumulative impacts that would result from operation of new or expanded municipal administration facilities including those related to traffic, air quality, aesthetics, hydrology, and noise are implicit in the impact analysis for each of these categories in this Program EIR. Consistent with those analyses, cumulative impacts in all categories except air quality are deemed to be less than significant.

Cumulative air quality impacts indirectly resulting from adoption and implementation of General Plan 2030, including those from operation of new or expanded municipal administration facilities, are identified in Section 4.3 of this EIR. Significant unavoidable cumulative air quality impacts would be expected to result even in the absence of the incremental addition of air pollutants from operation of new or expanded municipal administration facilities. Accordingly, the cumulative impact to air quality would be less than significant.

Impact: **Adoption and implementation of General Plan 2030 will indirectly result in the need for new or expanded municipal administration facilities, but the physical impacts associated with construction and operation are determined to be less than significant.**

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.7 NOISE

This section addresses noise impacts in the City of Perris that may indirectly result from adoption and implementation of the General Plan 2030. Existing sources of noise and noise levels within the City are measured and described and future noise levels are projected based on computer modeling reflecting the acoustic environment in 2030 likely to result through implementation of the project General Plan. Applicable noise reduction standards and regulations are discussed. Mitigation measures appropriate to avoiding or lessening noise impacts on sensitive receptors such residences and schools are identified. Resultant noise impacts are quantified.

4.7.1 NOISE EVALUATION AND MEASUREMENT METHODLOGY

ACOUSTIC FUNDAMENTALS

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in Hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the loudness of sound is the decibel (dB). Typical human hearing can detect changes in sound levels of approximately 3 dB under normal conditions.

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all and are "felt" more as a vibration. Similarly, while people with extremely sensitive hearing can hear sounds at frequencies as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz. Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate human sensitivity to sound. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

NOISE

Noise is defined as unwanted sound, and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, the State of California and local governments have established criteria to protect public health and safety and to prevent disruption of certain human activities.

In general, noise can affect the average person in the following ways:

- Sound levels that exceed 40 to 45 dBA are generally considered to be excessive for sleeping areas within a residence;
- Speech intelligibility is impaired when sound levels exceed 60 dBA. The amount of interference increases when distance between speaker and listener increases;

- Sound levels exceeding 85 dBA experienced for long durations of time on a daily basis may result in severe temporary or permanent hearing loss. State and federal safety and health regulations currently protect workers from levels of exposure that exceed 90 dBA over the duration of an 8-hour workday; and
- Human response to frequent noise levels loud enough to startle or alarm has been linked to such chronic stress symptoms such as high blood pressure, exhaustion, and ulcers.

Exposure to high noise levels affects our entire system; prolonged noise exposure in excess of 75 dBA can increase body tensions, and thereby affect blood pressure, functions of the heart, and the nervous system. Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Extended periods of noise exposure above 90 dBA can result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is referred to as the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain; this is known as the threshold of pain. A sound level of 190 dBA will rupture the eardrum and permanently damage the inner ear.

Noise may be generated from a point source, such as a piece of construction equipment, or from a line source, such as a roadway containing moving vehicles. Because noise spreads in a widening pattern, the given amount of noise striking an object, such as an eardrum, is reduced with distance from the source. This phenomenon is known as "spreading loss."

The rate of reduction in noise due to spreading loss is also dependent on the characteristics of the terrain over which the noise passes. Hard sites, such as developed areas with pavement, reduce noise at a rate of 3 dBA per doubling of the distance while soft sites, such as undeveloped areas, open space, and vegetated areas reduce noise at a rate of 4.5 dBA per doubling of the distance. These represent the extremes and most environments will actually include a combination of hard and soft surfaces with spreading loss noise reduction placed somewhere in between 3dBA and 4.5 dBA. The only way to determine the absolute amount of spreading loss that an area provides is through field measurement under operating conditions with subsequent noise levels measurements conducted at varying distances from a constant noise source.

Most environmental noise sources produce varying amounts of noise over time, so the measured sound levels may also vary. For example, noise from traffic varies with the number and type of vehicles, speed and proximity to the onlooker. Perception of individual noise events varies with the number of occurrences and the time of day or night they occur. Public reaction to noise can be expressed as the percentage of the population which is "highly annoyed" by exposure to increasing Ldn values (see below). The number of persons "highly annoyed" represents the upper 25-30 percent of all persons who are annoyed to some degree.

Widespread complaints may be expected when noise levels exceed 65 dBA Ldn and widespread threats of legal action may be expected when noise levels exceeds 70 dB Ldn.

NOISE MEASUREMENT STANDARDS

Because the noise environment is a result of a combination of noise sources producing noise event levels that vary over time, noise levels are quantified for noise exposure over a longer temporal interval than a single event. The following standards are used to define levels of noise:

- Day/Night Noise Level (Ldn) – The Ldn is a 24-hour, time-weighted average noise level, measured in decibels, with an added penalty of 10 dBA for people's increased sensitivity of noise at night from 10 PM to 7 AM. The Environmental Protection Agency (EPA) idenitifies 45 Ldn indoors and 55 Ldn outdoors as the desirable maximum level of noise;
- Equivalent Noise Level (Leq) – The Leq is a measurement of sound energy over a specified time (usually 1 hour). Leq represents the amount of variable sound energy received by a receptor over a timed interval in a singe numerical value. For example, a 1-hour Leq noise level measurement represents the average amount of acoustical energy produced in one hour; and
- Community Noise Equivalent Level (CNEL) – The CNEL noise metric is based on 24 hours of measurement and similar to Ldn except that a penalty of 5 dBA is added to noise events occurring between the hours of 7:00 PM and 10:00 PM. The CNEL and Ldn metrics yield approximately the same 24-hour value (within 1 dBA) with CNEL being the more restrictive i.e. higher number of the two.

4.7.2 REGULATORY STANDARDS

To limit population exposure to physically and/or psychologically damaging noise levels, the federal government, the State, various County governments, and most municipalities in California have established standards and ordinances to control noise. Pertinent regulatory standards are summarized below.

FEDERAL REGULATIONS

Occupational Health and Safety Administration

The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the United States Environmental Protection Agency (EPA). Noise regulations apply to the operation of construction equipment and may apply to industrial land uses. Noise exposure of this type is dependent on work conditions and is addressed through a facility's Health and Safety Plan, as required under OSHA, and will not be addressed further in this analysis.

U.S. Department of Housing and Urban Development

The U.S. Department of Housing and Urban Development (HUD) has set a goal of 65 dBA Ldn as a desirable maximum exterior standard for residential units developed under HUD funding. (This level is also generally accepted within the State of California.) While HUD does not specify acceptable interior noise levels, standard construction of residential dwellings constructed under State of California Code of Regulations Title 24 standards typically provide a minimum of 20 dBA sound attenuation with the windows closed. Based on this premise, the interior Ldn should not exceed 45 dBA.

Environmental Protection Agency

The federal government regulates railroad operations in the United States. Local regulation of train noise is preempted by the federal Noise Control Act (Public Law 90-411, as amended). The EPA is charged with regulating railroad noise under the Noise Control Act. These regulations appear in the Code of Federal Regulations, Title 40, Chapter 1, Part 201. While these regulations remain in force, the EPA Office of Noise Abatement and Control was closed in 1982, leaving enforcement of the EPA regulations to the Federal Railroad Administration (FRA). Representatives of the EPA, however, have indicated that states and localities may, at their option, enforce the federal regulation. Table 4.7-1 summarizes the EPA operating noise standards for older and newer railroad equipment. (Note that these values are in terms of the Lmax, which is the loudest noise level emitted by the source. The Lmax can be considerably greater than the Leq)

The Federal Rail Administration adopted the EPA railroad noise standards as noise regulations (CFR 49, Chapter 11, part 210) for the purpose of enforcement. The standards provide specific noise limits for stationary and moving locomotives, moving railroad cars, and associated railroad operations in terms of A-weighted sound level at a specified measurement location. These regulations are pre-emptive, and states and local governments cannot set more stringent limits for railroad equipment than required by these federal regulations.

The FRA recently issued an Interim Final Rule that requires the sounding of a locomotive horn while a train is approaching and entering a public highway rail crossing, to warn approaching motorists. This rule includes an exception for circumstances in which there is not a significant risk of life or serious personal injury, use of the locomotive horn is impractical, or safety measures fully compensate for the absence of the warning provided by the horn.

Under the new rule, communities can ban train whistles if there is a low risk of collision or if they implement safety measures, such as installing crossing gates that block traffic in both directions, or install cameras that photograph people pulling around gates so that they may be issued traffic violations. The rule also allows the use of an automated horn system installed at the crossing as a substitute for the train horn. The rule also requires that the horns

be sounded 15 to 20 seconds before arrival at the crossing, rather than from a quarter-mile away, and establishes a maximum 110 decibels, down from the commonly found 114 decibels.

Table 4.7-1: Summary of EPA/FRA Railroad Noise Standards

Noise Sources	Operating Conditions	Measured Distance (Feet)	Standard (dBA)
Non-Switcher Locomotives built on or before 12/31/79	Stationary	100	73
	Idle Stationary	100	93
	Non-Idle Moving	100	95
Switcher Locomotives plus Non-Switcher Locomotives built after 12/31/79	Stationary	100	70
	Idle Stationary	100	87
	Non-Idle Moving	100	90
Rail Cars	Speed < 45 mph	100	88
	Speed > 45 mph	100	93
	Coupling	50	92

Non-Switcher Locomotives – A "road engine that is used in long-haul railcar movement.
Switcher Locomotives –A smaller engine that is used in shuttling railcars.
Railcar – The car(s) pulled by a train engine.

Idle Stationary – Sitting at idle
Stationary – Sitting at idle and measured 100 ft from the center line of the track where the train is idling
Non-Idle Moving – Moving along the rails

STATE OF CALIFORNIA REGULATIONS

California Code of Regulations, Part 2, Title 24, Appendix Chapter 35, Section 3501 establishes the State Noise Insulation Standards, which limit the interior noise level exposure within new hotels, motels, dormitories, long-term care facilities, apartment houses and dwellings. This State standard indicates that interior noise levels attributable to exterior noise sources shall not exceed 45 dB (CNEL or Ldn) in any habitable room.

Exhibit 4.7-1 presents a land use compatibility chart for community noise prepared by the State of California, Department of Health. It identifies normally acceptable, conditionally acceptable and clearly unacceptable noise levels for siting various new land uses. A conditionally acceptable designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land

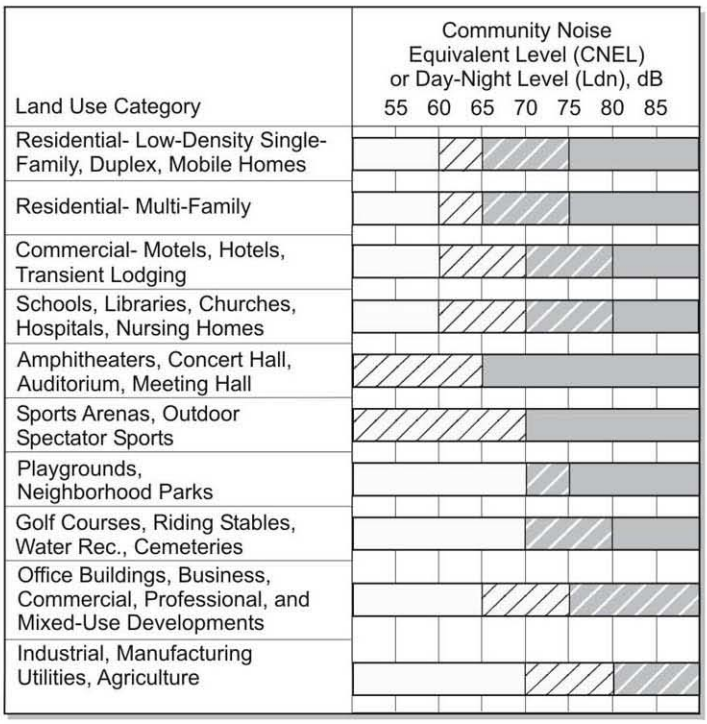
use is made and the needed noise insulation features are incorporated in the design. By comparison, a normally acceptable designation indicates that standard construction can occur with no special noise reduction requirements.

MUNICIPAL CODE

Chapter 16.22 of the Perris Municipal Code regulates new development including "sensitive receptors" located near arterials, railroads and the airport. "Sensitive receptors" refers to types of land uses that are adversely affected by various noise sources. Such land uses are defined in Section 16.22.020 of the Municipal Code to include: residences, schools, libraries, hospitals, churches, offices, hotels, motels, and outdoor recreational areas. Factors used to define sensitive receptors include the potential for interference with speech communication, the need for freedom from noise intrusion, the potential for sleep interference, and subjective judgment.

"Noise impacted projects" are defined as residential projects, or portions thereof, which are exposed to an exterior noise level of 60 dBA CNEL or greater. Such projects must include noise insulation design and construction assemblies that achieve an exterior-to-interior noise reduction sufficient to keep interior noise levels to a maximum of 45 dBA CNEL. This standard applies to any habitable room furnished for normal use with doors and windows closed. Specific construction techniques and materials that will achieve various levels of noise reduction are defined. Specifications for preparation of an acceptable acoustical report are also defined.

Exhibit 4.7-1: Land Use/Noise Compatibility Guidelines



Nature of the noise environment where the CNEL or Ldn level is:

Below 55 dB
Relatively quiet suburban or urban areas, no arterial streets within 1 block, no freeways within 1/4 mile.

55-65 dB
Most somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic.

65-75 dB
Very noisy urban areas near arterials, freeways or airports.

75+ dB
Extremely noisy urban areas adjacent to freeways or under airport traffic patterns. Hearing damage with constant exposure outdoors.

Normally Acceptable
Specific land use is satisfactory, based on the assumption that any building is of normal conventional construction, without any special noise insulation requirements

Conditionally Acceptable
New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Normally Unacceptable
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.

Clearly Unacceptable
New construction or development should generally not be undertaken.

The Community Noise Equivalent Level (CNEL) and Day-Night Noise Level (Ldn) are measures of the 24-hour noise environment. They represent the constant A-weighted noise level that would be measured if all the sound energy received over the day were averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a 5-decibel penalty on noise between 7:00 p.m. and 10:00 p.m. and a 10-decibel penalty on noise between 10:00 p.m. and 7:00 a.m. of the next day. The Ldn includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.

Source: State of California, Department of Health, City of Monterey Park.

4.7.3 EXISTING CONDITIONS

NOISE SOURCES

A variety of noise sources exist in the City of Perris. Mobile noise sources produce a major effect on the ambient noise environment. These sources include automobile traffic, aircraft overflights, and train movements. The primary noise source is automotive traffic along the streets and highway network. Traffic noise is generated by the friction of tires on pavement, together with the sounds of engines and exhausts. Generally, higher traffic volumes and speeds equal higher noise levels along the roadway. Accordingly, the highest traffic noise levels are typically found along freeway and highway corridors.

The mix of vehicles also directly affects noise levels e.g. noise along a truck route would typically be higher than noise levels along a comparable route that did not allow trucks. Street grades can also make a difference since vehicles, and trucks in particular, make more noise when climbing grades, compared to travel along a relatively flat road surface, as the engines work harder (and louder) to propel the vehicle uphill.

A number of stationary sources also generate noise on a regular basis. Much of this noise occurs at industrial sites that are generally located away from sensitive land uses. Other notable stationary sources include auto racing events at the Perris Auto Speedway located adjacent to the City at the Lake Perris State Recreational Area, and motorcycle racing events at the Starwest Motocross Park, just south of the Speedway.

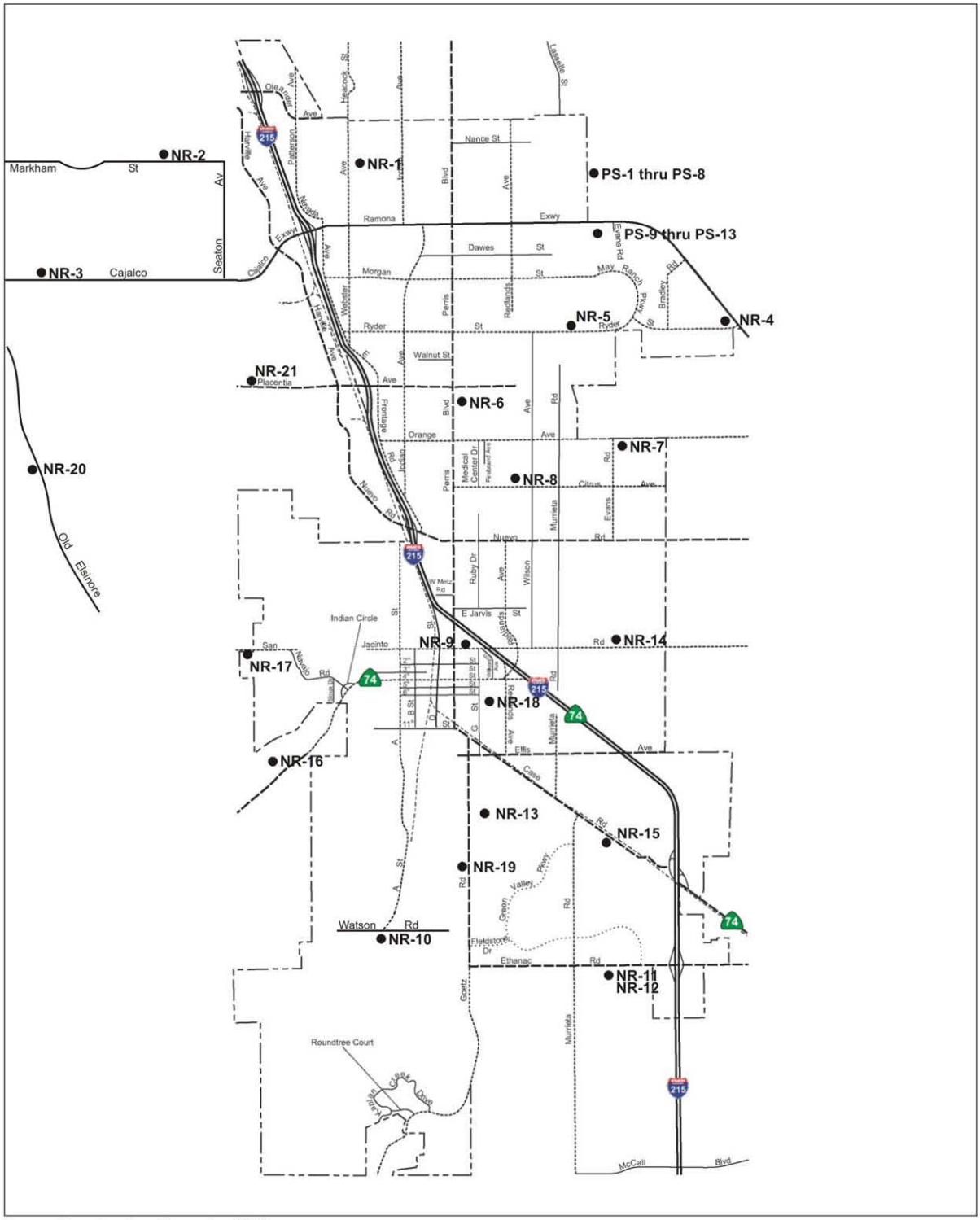
NOISE SURVEYS/MODELING

Noise Survey measurements were taken throughout the City. These surveys were then used to assess existing noise impacts on sensitive land uses and receptors. A separate survey was conducted around the Perris Auto Speedway due to its close proximity to the May Ranch residential development.

CITYWIDE AMBIENT NOISE SURVEY

Field monitoring was conducted on Monday, Tuesday, and Wednesday, December 8, 9, and 10, 2003. Noise levels were recorded at 21 separate locations, as shown on Exhibit 4.7-2. The locations were selected to include existing or planned sensitive land uses, and to capture the various vehicle mixes on City streets for subsequent use in the Caltrans Sound32 Noise Prediction Model. Monitoring results are listed in Table 4.7-2. A description of the acoustical environment at each location/time period is located in Appendix C.

Exhibit 4.7-2: Noise Monitoring Locations



Source: Synectecology, December 2003.

Table 4.7-2: Citywide Noise Level Measurements

Monitoring Location	Leq (dBA)	L02 (dBA)	L08 (dBA)	L25 (dBA)	L50 (dBA)	Lmin (dBA)	Lmax (dBA)
Monday, December 8, 2003							
NR-1	53.5	63.3	56.2	49.9	47.5	41.4	72.7
NR-2	62.0	70.7	66.4	61.1	54.6	46.5	78.4
NR-3	70.3	77.5	74.5	71.2	67.8	49.4	84.4
NR-4	71.9	79.1	76.5	73.7	69.0	47.6	83.0
NR-5	62.0	68.4	65.5	62.6	59.3	48.4	79.5
NR-6	68.4	74.1	72.1	69.9	67.2	52.9	82.8
NR-7	60.9	67.2	65.2	62.6	58.4	40.1	72.5
NR-8	60.3	68.1	63.4	59.7	56.0	46.2	80.6
Tuesday, December 9, 2003							
NR-9	59.5	68.0	63.0	57.5	53.5	48.1	76.3
NR-10	51.1	61.9	56.4	46.1	43.4	39.8	63.8
NR-11	62.3	71.5	67.3	61.6	51.4	33.2	77.4
NR-12	69.5	77.2	76.2	70.2	63.4	45.4	77.7
NR-13	69.1	72.1	70.9	69.8	68.7	64.1	75.2
NR-14	64.3	74.0	70.1	62.1	48.9	31.6	80.1
NR-15	61.7	70.0	66.8	61.9	51.6	36.1	76.5
NR-16	62.3	70.8	67.8	62.3	54.1	40.9	77.9
NR-17	63.5	70.1	67.8	65.1	60.4	45.9	75.0
Wednesday, December 10, 2003							
NR-18	55.0	64.1	60.6	52.6	48.9	44.8	67.6
NR-19	62.5	71.9	67.8	62.2	53.1	35.5	76.3
NR-20	64.1	72.3	70.1	64.4	55.3	39.4	76.9
NR-21	58.8	69.3	59.2	49.3	43.4	40.1	77.4

The Leq represents the equivalent sound level and is the numeric value of a constant level that over the given period of time transmits the same amount of acoustic energy as the actual time-varying sound level. The L02, L08, L25, and L50 are the levels that are exceeded 2, 8, 25, and 50 percent of the time, respectively. Alternatively, these values represent the noise level that would be exceeded for 1, 5, 15, and 30 minutes during a 1-hour period. The Lmin and Lmax represent the minimum and maximum root-mean-square noise levels obtained over a period of 1 second.

Perris Auto Speedway Noise Modeling

Perris Auto Speedway is a privately operated auto and truck racing venue located inside the Lake Perris State Recreation Area. It is the only ½ mile clay track in the western United States and it operates from February through November, with racing competition on Saturday nights and open practice on Wednesdays. A variety of racing events are held, including stock cars, super stocks, dwarf cars, sprint cars, light trucks, cruisers, hornets, and midgets. Races last from about 2 and ½ minutes (8 laps) to over 8 and ½ minutes (30 laps), between 6:30 and 10 PM.

The survey at the Perris Auto Speedway includes 13 separate readings obtained on the evening of November 22, 2003. Monitoring locations are shown in Exhibit 4.7-2 (noted as PS-1 thru PS-13) and meter readings are listed in Table 4.7-3. Locations were selected to capture the noise generated by racing activities at the speedway boundary and in the nearest part of the May Ranch residential community to the south. Because of the proximity of Lake Perris Drive, it was difficult to obtain racing noise level measurements without also including road traffic noise. The fact that racing was conducted in "heats" that only last approximately 2 to 8 minutes increased the difficulty in obtaining representative measurements.

The first eight readings were obtained directly in front of the Speedway entrance at the Lake Perris Drive right-of-way. This placed the meter approximately 575 feet from the actual track. The other five readings were obtained in front of the residential units in the closest proximity to the speedway, located to the south at a distance of about 1,900 feet from the track. Characteristics of the noise environment at each monitoring site are described in Appendix D.

Table 4.7-3: Perris Auto Speedway Noise Level Measurements

Monitoring Location	Leq (dBA)	L02 (dBA)	L08 (dBA)	L25 (dBA)	L50 (dBA)	Lmin (dBA)	Lmax (dBA)
Outside main entrance, approximately 575 feet from speedway track							
PS-1	77.5	80.5	80.1	78.6	77.8	70.9	80.9
PS-2	73.6	76.4	75.8	74.6	73.7	63.4	77.0
PS-3	82.2	84.9	84.3	83.5	82.0	77.7	85.1
PS-4	79.8	83.9	82.4	81.1	79.6	65.5	87.5
PS-5	77.3	83.2	81.2	79.2	74.5	65.6	83.6
PS-6	83.0	88.1	86.1	84.5	82.5	74.2	90.4
PS-7	82.8	87.9	86.0	84.0	82.7	74.2	88.3
PS-8	82.8	87.8	86.1	84.4	81.8	73.6	88.3
In nearest residential area, approximately 1,900 feet from speedway track							
PS-9	67.0	75.0	69.6	68.3	65.3	56.5	76.4
PS-10	64.5	72.9	68.9	66.5	60.3	51.6	73.6
PS-11	62.4	72.2	66.4	61.0	57.1	50.5	72.4
PS-12	70.3	78.0	72.9	70.9	68.7	60.9	79.4
PS-13	47.4	52.3	49.5	47.7	46.6	43.9	55.7

The Leq represents the equivalent sound level and is the numeric value of a constant level that over the given period of time transmits the same amount of acoustic energy as the actual time-varying sound level. The L02, L08, L25, and L50 are the levels that are exceeded 2, 8, 25, and 50 percent of the time, respectively. Alternatively, these values represent the noise level that would be exceeded for 1, 5, 15, and 30 minutes during a 1-hour period. The Lmin and Lmax represent the minimum and maximum root-mean-square noise levels obtained over a period of 1 second.

TRAFFIC NOISE MODELING

Listed in Table 4.7-4 located below are the results of modeling of the existing noise levels generated along City routes using the "hard site" analysis, which assumes the area between the roadway and the noted CNEL location is comprised of reflective surfaces. Table 4.7-5 presents the modeling results for the same routes, assuming the "soft site" (sound absorptive) conditions.

Table 4.7-4: Existing Traffic Noise Levels (Hard Site Modeling)

Existing Traffic Noise Levels (Hard Site Modeling)						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
11th Street	A Street - B Street	4,631	62.4	9	27	86
11th Street	D Street - Perris Boulevard	6,041	63.5	11	35	112
2nd Street	B Street - C Street	1,800	56.9	2	8	24
2nd Street	D Street - Perris Boulevard	900	53.8	1	4	12
5th Street	B Street - C Street	1,100	54.7	1	5	15
5th Street	D Street - Perris Boulevard	2,200	57.7	3	9	30
6th Street	B Street - C Street	800	53.3	1	3	11
6th Street	D Street - Perris Boulevard	600	52.1	1	3	8
A Street	5th Street - 6th Street	5,625	61.8	8	24	76
A Street	South of Nuevo Road	5,348	65.1	16	51	161
C Street	2nd Street - San Jacinto Road	5,000	61.3	7	21	67
C Street	3rd Street - 2nd Street	8,700	63.7	12	37	117
C Street	5th Street - 4th Street	100	44.3	0	0	1
Cajalco Expressway	Harville Avenue - I-215	14,500	73.0	100	316	1,001
Case Road	G Street - Ellis Avenue	1,975	61.9	8	24	77
Case Road	West of I-215	2,958	65.7	19	59	186
D Street	11th Street - 6th Street	5,400	63.8	12	38	121
D Street	2nd Street - San Jacinto Road	12,500	67.5	28	88	279
D Street	3rd Street - 2nd Street	2,800	61.0	6	20	63
D Street	5th Street - 4th Street	7,389	65.2	17	52	165
D Street	5th Street - 6th Street	7,389	65.2	17	52	165
D Street	San Jacinto Road - I-215	14,710	68.2	33	104	329
Ethanac Road	Goetz Road - Murrieta Road	2,200	64.0	13	40	126
Ethanac Road	I-215 - SR-74	4,400	67.0	25	80	253
Ethanac Road	Murrieta Road - I-215	4,133	66.8	24	75	237

Existing Traffic Noise Levels (Hard Site Modeling)						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Goetz Road	Kaplan Creek Drive - Ethanac Road	1,900	65.0	16	50	158
Goetz Road	North of Fieldstone Drive	2,127	65.5	18	56	176
Goetz Road	Roundtree Court - Kaplan Creek Drive	3,001	65.4	17	54	172
I-215	Case Road - Redlands Avenue	63,000	82.1	810	2,560	8,097
I-215	Ethanac Road - Case Road	51,000	80.5	558	1,764	5,579
I-215	North of Oleander Avenue	84,000	83.6	1,157	3,658	11,568
I-215	Nuevo Road - Placentia Avenue	70,000	82.9	964	3,048	9,640
I-215	Perris Boulevard - Nuevo Road	67,000	82.7	923	2,918	9,227
I-215	Ramona Expressway - Oleander Avenue	81,000	83.5	1,115	3,527	11,155
I-215	Redlands Avenue - Perris Boulevard	57,000	82.0	785	2,482	7,850
Indian Avenue	Dawes Street - Ramona Expressway	1,800	61.5	7	22	70
Lasselle Street	At City Boundary, North of Murrietta Road	8,393	65.7	19	59	187
May Ranch Parkway	Morgan Street - Ryder Street	1,500	58.3	3	11	34
Murrieta Road	Ethanac Road - Case Road	1,300	60.0	5	16	50
Murrieta Road	McCall Boulevard - Ethanac Road	3,600	64.5	14	44	140
Navajo Road	Sioux Drive - 4th Street	9,811	66.4	22	69	219
Navajo Road	Sioux Drive - Indian Circle	9,811	66.4	22	69	219
Nuevo Road	I-215 - Perris Boulevard	23,486	71.5	71	224	708
Nuevo Road	Wilson Avenue - Murrietta Road	6,950	66.2	21	66	209

Existing Traffic Noise Levels (Hard Site Modeling)						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Orange Avenue	Firebrand Avenue - Wilson Avenue	6,584	66.0	20	63	198
Orange Avenue	Frontage Road - Indian Avenue	3,956	62.5	9	28	88
Orange Avenue	Perris Boulevard - Wilson Avenue	6,584	66.0	20	63	198
Perris Boulevard	2nd Street - 4th Street	12,544	69.7	46	147	465
Perris Boulevard	4th Street - 5th Street	7,229	67.2	34	107	337
Perris Boulevard	6th Street - 11th Street	6,707	68.0	31	99	313
Perris Boulevard	Citrus Avenue - Nuevo Road	22,754	75.0	157	497	1,570
Perris Boulevard	Dawes Street - Morgan Street	16,765	72.8	96	304	962
Perris Boulevard	E Jarvis Street - W Metz Road	18,581	71.4	69	218	689
Perris Boulevard	Morgan Street - Dawes Street	16,765	72.8	96	304	962
Perris Boulevard	North of Nance Street	17,464	74.6	145	458	1,449
Perris Boulevard	Placentia Avenue - Walnut Street	17,974	73.1	103	326	1,032
Placentia Avenue	East of Perris Boulevard	2,700	62.1	8	26	81
Placentia Avenue	Indian Avenue - Perris Boulevard	1,076	58.1	3	10	32
Ramona Expressway	Bradley Road - Ryder Street	10,500	72.4	87	276	871
Ramona Expressway	Evans Road - Bradley Road	11,700	72.9	97	307	971

Existing Traffic Noise Levels (Hard Site Modeling)						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Ramona Expressway	I-215 - Nevada Avenue	29,400	76.1	203	642	2,029
Ramona Expressway	Indian Avenue - Perris Boulevard	19,600	75.1	163	514	1,626
Ramona Expressway	Nevada Avenue - Webster Avenue	24,000	76.0	199	630	1,992
Ramona Expressway	Perris Boulevard - Redlands Avenue	23,577	75.9	196	619	1,956
Ramona Expressway	Redlands Avenue - Evans Road	13,500	73.5	112	354	1,120
Ramona Expressway	Webster Avenue - Indian Avenue	19,000	75.0	158	499	1,577
Redlands Avenue	San Jacinto Road - I-215	13,418	70.2	52	165	521
Rider Street	Bradley Road - Ramona Expressway	1,700	60.1	5	16	51
Rider Street	Indian Avenue - Perris Boulevard	2,100	61.0	6	20	63
Rider Street	Wilson Avenue - May Ranch Parkway	3,700	63.5	11	35	111
San Jacinto Road	Wilson Avenue - Murrieta Road	3,750	64.6	15	46	146
SR-74	B Street - C Street	24,300	72.6	90	285	901
SR-74	C Street - D Street	23,600	72.4	87	277	875
SR-74	D Street - Perris Boulevard	19,100	70.0	50	158	501
SR-74	East of I-215	22,756	72.3	84	267	843
SR-74	Indian Circle - Navajo Road	17,200	74.8	149	473	1,495
SR-74	Wilkerson Avenue - Redlands Avenue	19,800	71.7	73	232	734
Webster Avenue	Ramona Expressway - Oleander Avenue	14,400	68.1	32	102	322

Table 4.7-5: Existing Traffic Noise Levels (Soft Site Modeling)

Existing Traffic Noise Levels (Soft Site Modeling)						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
11th Street	A Street - B Street	4,631	61.4	13	29	62
11th Street	D Street - Perris Boulevard	6,041	62.5	16	34	74
2nd Street	B Street - C Street	1,800	55.9	6	12	26
2nd Street	D Street - Perris Boulevard	900	52.8	4	8	17
5th Street	B Street - C Street	1,100	53.7	4	9	19
5th Street	D Street - Perris Boulevard	2,200	56.7	7	14	30
6th Street	B Street - C Street	800	52.3	3	7	15
6th Street	D Street - Perris Boulevard	600	51.1	3	6	13
A Street	5th Street - 6th Street	5,625	60.8	12	26	57
A Street	South of Nuevo Road	5,348	64.0	20	43	92
C Street	2nd Street - San Jacinto Road	5,000	60.3	11	24	52
C Street	3rd Street - 2nd Street	8,700	62.7	16	35	76
C Street	5th Street - 4th Street	100	43.3	1	2	4
Cajalco Expressway	Harville Avenue - I-215	14,500	72.0	68	147	316
Case Road	G Street - Ellis Avenue	1,975	60.9	12	26	57
Case Road	West of I-215	2,958	64.6	22	47	101
D Street	11th Street - 6th Street	5,400	62.8	17	36	77
D Street	2nd Street - San Jacinto Road	12,500	66.5	29	63	135
D Street	3rd Street - 2nd Street	2,800	60.0	11	23	50
D Street	5th Street - 4th Street	7,389	64.2	20	44	95
D Street	5th Street - 6th Street	7,389	64.2	20	44	95
D Street	San Jacinto Road - I-215	14,710	67.2	32	70	150
Ethanac Road	Goetz Road - Murrieta Road	2,200	62.9	17	36	78

Existing Traffic Noise Levels (Soft Site Modeling)						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Ethanac Road	I-215 - SR-74	4,400	65.9	27	58	124
Ethanac Road	Murrieta Road - I-215	4,133	65.7	26	55	119
Goetz Road	Kaplan Creek Drive - Ethanac Road	1,900	64.0	20	43	92
Goetz Road	North of Fieldstone Drive	2,127	64.5	21	46	99
Goetz Road	Roundtree Court - Kaplan Creek Drive	3,001	64.3	21	45	96
I-215	Case Road - Redlands Avenue	63,000	81.1	274	591	1,274
I-215	Ethanac Road - Case Road	51,000	79.4	211	454	979
I-215	North of Oleander Avenue	84,000	82.5	343	739	1,592
I-215	Nuevo Road - Placentia Avenue	70,000	81.8	304	654	1,409
I-215	Perris Boulevard - Nuevo Road	67,000	81.6	295	635	1,369
I-215	Ramona Expressway - Oleander Avenue	81,000	82.4	335	721	1,553
I-215	Redlands Avenue - Perris Boulevard	57,000	80.9	265	570	1,229
Indian Avenue	Dawes Street - Ramona Expressway	1,800	60.5	12	25	54
Lasselle Street	At City Boundary, North of Murrietta Road	8,393	64.7	22	48	103
May Ranch Parkway	Morgan Street - Ryder Street	1,500	57.3	7	15	33
Murrieta Road	Ethanac Road - Case Road	1,300	59.0	9	20	43
Murrieta Road	McCall Boulevard - Ethanac Road	3,600	63.5	18	39	85
Navajo Road	Sioux Drive - 4th Street	9,811	65.4	25	53	115

Existing Traffic Noise Levels (Soft Site Modeling)						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Navajo Road	Sioux Drive - Indian Circle	9,811	65.4	25	53	115
Nuevo Road	I-215 - Perris Boulevard	23,486	70.4	53	115	247
Nuevo Road	Wilson Avenue - Murrietta Road	6,950	65.1	24	51	110
Orange Avenue	Firebrand Avenue - Wilson Avenue	6,584	64.9	23	49	106
Orange Avenue	Frontage Road - Indian Avenue	3,956	61.5	14	29	63
Orange Avenue	Perris Boulevard - Wilson Avenue	6,584	64.9	23	49	106
Perris Boulevard	2nd Street - 4th Street	12,544	68.6	40	87	187
Perris Boulevard	4th Street - 5th Street	7,229	66.1	27	59	127
Perris Boulevard	6th Street - 11th Street	6,707	65.8	26	56	121
Perris Boulevard	Citrus Avenue - Nuevo Road	22,754	74.0	92	198	427
Perris Boulevard	Dawes Street - Morgan Street	16,765	71.7	65	141	303
Perris Boulevard	E Jarvis Street - W Metz Road	18,581	70.3	52	113	243
Perris Boulevard	Morgan Street - Dawes Street	16,765	71.7	65	141	303
Perris Boulevard	North of Nance Street	17,464	73.6	87	188	405
Perris Boulevard	Placentia Avenue - Walnut Street	17,974	72.0	68	147	318
Placentia Avenue	East of Perris Boulevard	2,700	61.0	13	27	58
Placentia Avenue	Indian Avenue - Perris Boulevard	1,076	57.0	7	15	32

Existing Traffic Noise Levels (Soft Site Modeling)						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Ramona Expressway	Bradley Road - Ryder Street	10,500	71.4	62	134	288
Ramona Expressway	Evans Road - Bradley Road	11,700	71.9	67	144	310
Ramona Expressway	I-215 - Nevada Avenue	29,400	75.1	109	235	506
Ramona Expressway	Indian Avenue - Perris Boulevard	19,600	74.1	94	203	437
Ramona Expressway	Nevada Avenue - Webster Avenue	24,000	75.0	108	232	500
Ramona Expressway	Perris Boulevard - Redlands Avenue	23,577	74.9	106	229	494
Ramona Expressway	Redlands Avenue - Evans Road	13,500	72.5	73	158	341
Ramona Expressway	Webster Avenue - Indian Avenue	19,000	74.0	92	199	428
Redlands Avenue	San Jacinto Road - I-215	13,418	69.2	44	95	205
Rider Street	Bradley Road - Ramona Expressway	1,700	59.0	9	20	43
Rider Street	Indian Avenue - Perris Boulevard	2,100	59.9	11	23	49
Rider Street	Wilson Avenue - May Ranch Parkway	3,700	62.4	16	33	72
San Jacinto Road	Wilson Avenue - Murrieta Road	3,750	63.6	19	41	87
SR-74	B Street - C Street	24,300	71.6	63	137	295
SR-74	C Street - D Street	23,600	71.4	62	134	289
SR-74	D Street - Perris Boulevard	19,100	69.0	43	93	199
SR-74	East of I-215	22,756	71.3	61	131	282
SR-74	Indian Circle - Navajo Road	17,200	73.7	88	189	407

Existing Traffic Noise Levels (Soft Site Modeling)						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
SR-74	Wilkerson Avenue - Redlands Avenue	19,800	70.7	55	119	257
Webster Avenue	Ramona Expressway - Oleander Avenue	14,400	67.1	32	69	148

As expected, the highest noise levels occur along the I-215 freeway and the main streets of the arterial system, including Perris Boulevard, SR 74, Ramona Expressway, and Cajalco Expressway. Calculated noise levels above 60 dBA CNEL are projected for considerable distances along many of these segments. In fact, many of the modeled roadways could produce noise levels in excess of 60 dBA CNEL at distances well in excess of 100 feet.

Existing residential development is found along the City's major and secondary streets and highways, and in a number of areas homes are exposed to calculated exterior noise levels above 60 dBA CNEL. Examples of such noise impacted residential areas include:

- Laurel Palms Apartments, located immediately east of the D Street on -ramp to the northbound I-215 Freeway. Habitable yards and bedroom windows face the freeway, with no intervening sound barriers;
- Single family homes, churches and schools along Perris Boulevard, between Nuevo Road and the I-215 Freeway. Relatively deep front yards, side yards and windowed rooms face the street, with no intervening sound barriers;
- Single-family residential neighborhood along the east side of Perris Boulevard, between Nuevo Road and Placentia Avenue. Homes back up to Perris Boulevard, with roughly a 10-foot setback from the street to a solid wall barrier along the rear property line;
- Manufactured home subdivision along east side of Perris Boulevard, just south of Rider Street. Single-story homes back up to Perris Boulevard, with small, roughly 10-foot setbacks from the street to a solid wall barrier along the rear property line; and

- Older mobile home parks along north side of Nuevo Road, between Perris Boulevard and Plum Tree. Front and side yards, and habitable interior spaces face the street, with no intervening barriers.

RAILROAD NOISE REVIEW

Railroad noise is dependent on the number of engines and railcars, the average speed, the percentage of operations that take place at night, the type of rails, and the presence of "at-grade" crossings that require the engineer to sound a warning horn/whistle. An at-grade crossing raises the noise produced by approximately 10 dBA. A similar increase would require that ten times as many operations occur if a horn were not sounded. Because horn noise contains much higher sound energy than the energy generated by a moving train, it has a profound impact on calculated CNEL levels, causing the average of all sound levels throughout the day to increase, despite the momentary nature of the horn blow event itself.

The San Jacinto Branch Line railroad tracks traverse a portion of the planning area, extending south from Riverside along the west side of the I-215 Freeway, continuing along "D" Street in central Perris, then transitioning to the east along Case Road. The tracks are owned by the Riverside County Transportation Commission. Freight service rights were retained by Burlington Northern Santa Fe Railroad (BNSF), which operates two freight trains a day (one in the daylight hours, the other at various times of the night) within the planning area. An average freight train is reported to included three engines and up to 25 railcars.

The Orange Empire Railway Museum operates a weekend tourist train service that shuttles passengers between the downtown area and the Orange Empire Railway Museum along a spur that begins at an intersection with the main tracks just north of 7th Street and runs southward to the museum south of Mountain Avenue. Service is offered every half-hour between 9 AM and 6 PM on Saturdays and Sundays. A typical train includes a locomotive with 2 to 4 railcars. Individual trolley cars are also part of this tourist service line.

At-grade crossings for the main line operated by BNSF freight service are located at: San Jacinto Avenue, 2nd Street, 4th Street, D Street, Perris Boulevard, and Case/Mapes Road. At-grade rail crossings for the tourist train service occur at 7th Street, 11th Street, and Ellis Avenue.

MARCH INLAND PORT NOISE REVIEW

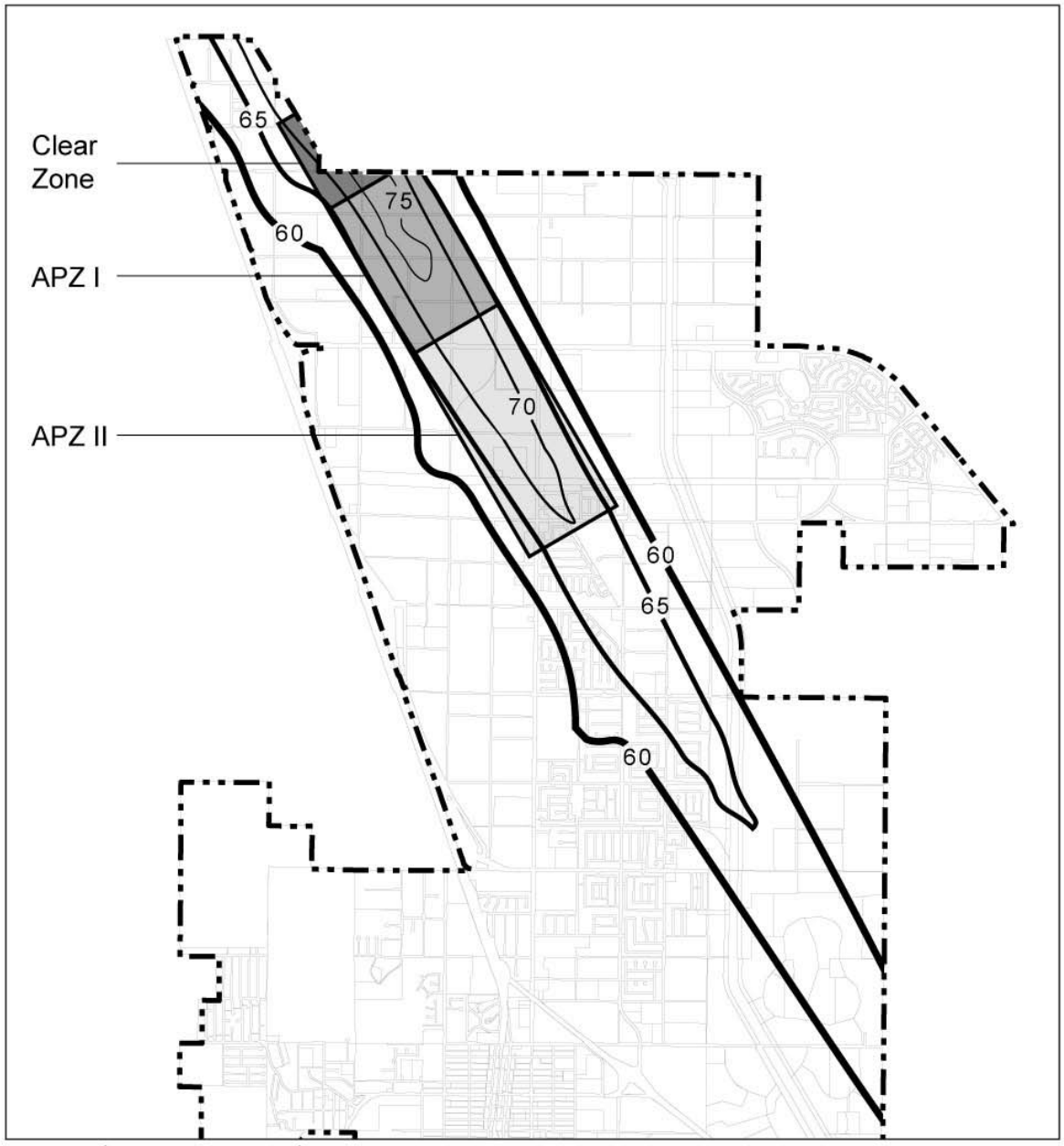
Located immediately north of the planning area, the March Inland Port is a joint military/civilian use air transport facility, that includes air cargo freight traffic. This facility is expected to play an increasingly important role in transportation of goods and cargo for the southern California region. Existing flight patterns affect a large portion of Perris, along a path that bisects the planning area in a northwest/southeast alignment. Noise contours above 65 dBA CNEL fall within several existing residential neighborhoods located east of Perris Boulevard, between Rider Street and Nuevo Road. Noise contours and accident potential zones associated with air traffic projected onto the Perris planning area are shown in Exhibit 4.7-3.

PERRIS VALLEY AIRPORT NOISE REVIEW

The privately-operated Perris Valley Airport is a center for skydiving enthusiasts from throughout the western United States and has operated its present location for many years. Aircraft typically consist of Twin Otter Turbo Prop, 20-passenger plane equipped with jet engines and propellers. On a peak weekend skydiving day, with optimal weather conditions and a day-long stream of sky diving customers, approximately 60 separate flights may occur. There are occasional night flights, according to the facility operator. Use of a DC-9 jet is planned for higher altitude skydiving excursions.

Modeling of 24-hour average noise contours associated with air traffic originating at this facility was not performed as part of this analysis; however, the noise levels measured at monitoring locations NR-11 and NR-12 are indicative of a range of noise levels that occur within the flight paths, for various numbers of minutes, at various times of the day.

Exhibit 4.7-3: Noise Contours and Accident Potential Zones for March Inland Port

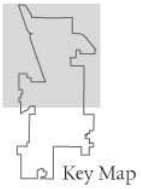


Source: United States Air Force AICUZ Study, 1998.

Legend

—#— Contour Lines

City Boundary



Not to Scale

4.7.4 THRESHOLDS OF SIGNIFICANCE

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria or standards, used to determine the significance of impacts may vary depending on the nature of project. Noise impacts resulting from implementation of General Plan 2030 could be deemed significant if they cause the following results:

- Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels *(refer to Section 6.0, Impacts Found Not To Be Significant)*;
- 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 (refer to *Section 6.0, Impacts Found Not To Be Significant)*;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project exposes people residing or working in the project areas to excessive noise levels; or
- For a project within the vicinity of a private airstrip, the project exposes people residing or working in the project area to excessive noise levels.

4.7.5 PROJECT IMPACTS

Under the California Environmental Quality Act, noise impacts may be considered significant if General Plan 2030 results in:

Impact: **Implementation of General Plan 2030 may generate or expose persons to noise levels in excess of City standards.**

Impact: **Implementation of General Plan 2030 may result in substantial permanent increases in ambient noise levels.**

ROADWAY IMPACTS ON EXISTING LAND USES

Future noise levels have been calculated for individual roadway segments within the City of Perris. Table 4.7-6 presents projected changes in noise levels along existing roadways, based on General Plan 2030's Circulation Element network and the year 2030 traffic volume projections developed for this network. As a reasonable worst case scenario, the noise levels shown are based on "hard site" (reflective surface) modeling. The assessment reflects the change in vehicle mix when re-designating auto routes as truck routes. As expected, the greatest noise increases are projected in those areas where most new development will occur.

Much of future development will occur in outlying areas. Much of the area to be developed is currently serviced by unpaved roads and is sparsely developed. Once these roads are improved, traffic levels are expected to increase. As a result noise levels are also expected to increase in excess of 10 dBA CNEL in the long term.

The number of sensitive receptors exposed to unacceptable levels of traffic noise will increase inasmuch as many receptors are located along roadway segments projected to experience substantial increases in traffic. Those areas are listed below in Table 4.7-7. Also noted in Table 4.7-7 are the roadway segments proposed for widening in the Circulation Element. Such widening may bring the roadway noise source closer to sensitive receptors.

Table 4.7-6: Long-Term Changes in Existing Roadway Noise Levels

Long-Term Changes in Existing Roadway Noise Levels						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet)**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet)**	**Difference (dBA CNEL)[1]**
11th Street	A Street - B Street	4,631	62.4	3,100	60.6	**-1.8**
11th Street	D Street - Perris Boulevard	6,041	63.5	9,600	65.5	**2.0**
A Street	5th Street - 6th Street	5,625	61.8	7,900	63.3	**1.5**
A Street	South of Nuevo Road	5,348	65.1	7,500	66.6	**1.5**
Cajalco Expressway	Harville Avenue - I-215	14,500	73.0	32,400	76.5	**3.5**
Case Road	G Street - Ellis Avenue	1,975	61.9	10,500	70.8	**8.9**
Case Road	West of I-215	2,958	65.7	8,900	71.7	**6.0**
D Street	11th Street - 6th Street	5,400	63.8	8,900	66.0	**2.2**
D Street	2nd Street - San Jacinto Road	12,500	67.5	23,400	70.2	**2.7**
D Street	3rd Street - 2nd Street	2,800	61.0	23,400	70.2	**9.2**
D Street	5th Street - 4th Street	7,389	65.2	23,400	70.2	**5.0**
D Street	5th Street - 6th Street	7,389	65.2	8,900	66.0	**0.8**
D Street	San Jacinto Road - I-215	14,710	68.2	23,400	70.2	**2.0**
Ethanac Road	Goetz Road - Murrieta Road	2,200	64.0	17,600	73.1	**9.1**
Ethanac Road	I-215 - SR-74	4,400	67.0	18,700	73.3	**6.3**
Ethanac Road	Murrieta Road - I-215	4,133	66.8	17,600	73.1	**6.3**
Goetz Road	Kaplan Creek Drive - Ethanac Road	1,900	65.0	12,900	71.7	**6.7**
Goetz Road	North of Fieldstone Drive	2,127	65.5	13,300	72.6	**7.1**
Goetz Road	Roundtree Court - Kaplan Creek Drive	3,001	65.4	2,500	64.6	**-0.8**
I-215	Case Road - Redlands	63,000	82.1	138,500	85.5	**3.4**

Long-Term Changes in Existing Roadway Noise Levels						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet)**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet)**	**Difference (dBA CNEL)[1]**
	Avenue					
I-215	Ethanac Road - Case Road	51,000	80.5	124,900	84.4	**3.9**
I-215	North of Oleander Avenue	84,000	83.6	180,200	87.0	**3.4**
I-215	Nuevo Road - Placentia Avenue	70,000	82.9	160,500	86.5	**3.6**
I-215	Perris Boulevard - Nuevo Road	67,000	82.7	160,500	86.5	**3.8**
I-215	Ramona Expressway - Oleander Avenue	81,000	83.5	176,500	86.9	**3.4**
I-215	Redlands Avenue - Perris Boulevard	57,000	82.0	137,000	85.5	**3.5**
Indian Avenue	Dawes Street - Ramona Expressway	1,800	61.5	1,900	63.4	**1.9**
May Ranch Parkway	Morgan Street - Ryder Street	1,500	58.3	22,500	70.0	**11.7**
Murrieta Road	Ethanac Road - Case Road	1,300	60.0	9,700	68.8	**8.8**
Murrieta Road	McCall Boulevard - Ethanac Road	3,600	64.5	7,600	65.3	**0.8**
Navajo Road	Sioux Drive - 4th Street	9,811	66.4	7,600	65.3	**-1.1**
Navajo Road	Sioux Drive - Indian Circle	9,811	66.4	7,600	65.3	**-1.1**
Nuevo Road	I-215 - Perris Boulevard	23,486	71.5	18,200	72.3	**0.8**
Nuevo Road	Wilson Avenue - Murrietta Road	6,950	66.2	15,400	69.7	**3.5**
Orange Avenue	Firebrand Avenue - Wilson Avenue	6,584	66.0	9,100	67.4	**1.4**
Orange Avenue	Frontage Road - Indian Avenue	3,956	62.5	1,400	58.0	**-4.5**

Long-Term Changes in Existing Roadway Noise Levels						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet)**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet)**	**Difference (dBA CNEL)[1]**
Orange Avenue	Perris Boulevard - Wilson Avenue	6,584	66.0	6,700	66.1	**0.1**
Perris Boulevard	2nd Street - 4th Street	12,544	69.7	24,000	72.5	**2.8**
Perris Boulevard	4th Street - 5th Street	7,229	67.2	7,000	67.1	**-1.1**
Perris Boulevard	6th Street - 11th Street	6,707	66.9	7,000	67.1	**0.2**
Perris Boulevard	Citrus Avenue - Nuevo Road	22,754	75.0	17,600	73.9	**-1.1**
Perris Boulevard	Dawes Street - Morgan Street	16,765	72.8	24,900	74.6	**1.8**
Perris Boulevard	E Jarvis Street - W Metz Road	18,581	71.4	25,700	72.8	**1.4**
Perris Boulevard	Morgan Street - Dawes Street	16,765	72.8	24,900	74.6	**1.8**
Perris Boulevard	North of Nance Street	17,464	74.6	27,000	76.5	**0.9**
Perris Boulevard	Placentia Avenue - Walnut Street	17,974	73.1	25,500	74.7	**1.6**
Placentia Avenue	East of Perris Boulevard	2,700	62.1	6,100	65.7	**3.6**
Placentia Avenue	Indian Avenue - Perris Boulevard	1,076	58.1	29,600	74.4	**16.3**
Ramona Expressway	Bradley Road - Ryder Street	10,500	72.4	39,300	78.1	**5.7**
Ramona Expressway	Evans Road - Bradley Road	11,700	72.9	39,500	78.2	**5.3**
Ramona Expressway	I-215 - Nevada Avenue	29,400	76.1	55,800	78.9	**2.8**
Ramona Expressway	Indian Avenue - Perris Boulevard	19,600	75.1	37,800	78.0	**2.9**
Ramona	Nevada Avenue -	24,000	76.0	43,900	78.6	**2.6**

Long-Term Changes in Existing Roadway Noise Levels						
Street Name	**Segment**	**Existing ADT Volumes**	**Existing CNEL (dBA @ 50 Feet)**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet)**	**Difference (dBA CNEL)[1]**
Expressway	Webster Avenue					
Ramona Expressway	Perris Boulevard - Redlands Avenue	23,577	75.9	41,600	78.4	**2.5**
Ramona Expressway	Redlands Avenue - Evans Road	13,500	73.5	45,700	78.8	**5.3**
Ramona Expressway	Webster Avenue - Indian Avenue	19,000	75.0	43,900	78.6	**3.6**
Redlands Avenue	San Jacinto Road - I-215	13,418	70.2	24,700	72.8	**2.6**
Rider Street	Bradley Road - Ramona Expressway	1,700	60.1	4,700	64.5	**4.4**
Rider Street	Indian Avenue - Perris Boulevard	2,100	61.0	4,600	66.3	**5.3**
Rider Street	Wilson Avenue - May Ranch Parkway	3,700	63.5	10,700	68.1	**4.6**
San Jacinto Road	Wilson Avenue - Murrieta Road	3,750	64.6	6,300	66.9	**2.3**
SR-74	B Street - C Street	24,300	72.6	34,500	74.1	**1.5**
SR-74	C Street - D Street	23,600	72.4	34,500	74.1	**1.7**
SR-74	D Street - Perris Boulevard	19,100	70.0	22,100	70.6	**0.6**
SR-74	East of I-215	22,756	72.3	7,500	67.5	**-4.8**
SR-74	Indian Circle - Navajo Road	17,200	74.8	29,000	77.0	**2.2**
SR-74	Wilkerson Avenue - Redlands Avenue	19,800	71.7	14,600	70.3	**-1.4**
Webster Avenue	Ramona Expressway - Oleander Avenue	14,400	68.1	5,200	65.9	**-2.2**
Bold values denote an audible and potentially significant increase.						

Table 4.7-7: Existing Sensitive Receptor Areas Impacted by Long-Term Increases in Roadway Traffic Noise

Roadway Segment	Affected Sensitive Receptor(s)	Projected Change in Noise Levels	Roadway Widening Also Planned?
D Street, between San Jacinto Road and I-215	Residential	68.2 to 70.2 (+2 dBA)	Yes-from 2 to 4 lanes
Goetz Road, from Kaplan Creek Drive to Ethanac Road	Residential	65 to 71.7 (+6.7 dBA)	Yes-from 2 to 4 lanes
Goetz Road, north of Fieldstone Drive	Residential	65.5 to 72.6 (+7.1 dBA)	Yes-2 to 6 lanes
I-215, between Perris Boulevard and Nuevo Road	Residential	82.7 to 86.5 (+3.8 dBA)	Yes-from 6 to 8 lanes by 2038
I-215, between Redlands Avenue and Perris Boulevard	Residential	82 to 85.5 (+3.5 dBA)	Yes-from 6 to 8 lanes by 2038
Nuevo Road, between Wilson Avenue. and Murrieta Road	Residential	66.2 to 69.7 (+3.5dBA)	Yes-2 to 6 lanes
Placentia Avenue, east of Perris Boulevard	Residential and Park	62.1 to 65.7 (+3.6 dBA)	Yes-2 to 6 lanes
Ramona Expressway, between Bradley Road. and Rider Street	Residential	72.4 to 78.1 (+5.7 dBA)	Yes-4 to 6 lanes
Rider Street, between Indian Avenue and Perris Boulevard	Residential	61 to 66.3 (+5.3 dBA)	Yes-2 to 4 lanes

ROADWAY NOISE IMPACTS ON FUTURE LAND USES

Future development along roadways projected to generate noise levels above 60 dBA CNEL could expose residences, schools, churches, libraries, hospitals, and other sensitive receptors to significant noise impacts. Table 4.7-8 and 4.7-9 present the projected year 2030 roadway noise contours based on "hard site" (reflective surfaces) and "soft site" (absorptive surfaces) modeling, respectively.

The projected daily traffic volumes are from the Circulation Element. Actual noise levels will depend on the terrain at the time of build out and in all probability lie somewhere between those predicted in Tables 4.7-8 and 4.7-9. The distances do not account for the presence of barriers that may provide acoustic shielding to more distant receptors. Based on the

standards set forth in Chapter 16.22 of the Municipal Code and on the Noise/Land Use Compatibility Guidelines illustrated in Exhibit 4.7-1, placement of noise sensitive lands uses within areas exposed to 60 dBA or higher roadway noise levels could result in significant noise exposure impacts.

Note that there are several areas where the projected 60 dBA CNEL overlaps areas of sensitive land uses. These sensitive land uses, which include schools and churches, will be exposed to long-term noise levels that exceed 60 dBA CNEL. Sensitive land uses near the I-215 Freeway, SR-74, and Ramona Expressway are particularly vulnerable and problematic.

The projected traffic noise levels on a number of other roads are also estimated to exceed 60 dBA CNEL. These include designated truck routes that pass by existing residential development, major arterial roads, and many of the secondary arterial roads.

Table 4.7-8: Long-Term Roadway Noise Levels (Hard Site Analysis)

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
7th Street	Redlands - SR 74	4,600	62.1	15	32	69
11th Street	West of "A"	3,200	59.8	10	22	48
11th Street	A Street - D Street	3,100	59.6	10	22	47
11th Street	D Street - G Street	9,600	64.5	22	46	100
A Street	North of San Jacinto	7,500	65.5	25	54	115
A Street	San Jacinto - 4th (SR 74)	13,300	67.9	36	79	169
A Street	4th Street - 11th Street	7,900	62.3	15	33	71
A Street	11th Street - Ellis Avenue	7,900	62.3	15	33	71
A Street	Ellis Avenue - Mountain	10,000	65.5	25	54	116
A Street	Mountain - Mapes	10,000	65.5	25	54	116
A Street	Mapes - Watson	8,500	66.0	27	58	125
Bradley	Ramona Expressway - Rider Street	1,700	57.8	8	17	36
Cajalco Expressway	West of Haines	22,700	73.1	80	172	371

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Cajalco Expressway	Haines - Old Elsinore	21,800	72.9	78	168	361
Cajalco Expressway	Old Elsinore - Day	24,900	73.5	85	183	395
Cajalco Expressway	Day - Seaton	24,000	74.2	95	205	442
Cajalco Expressway	Seaton - Harville	25,400	74.4	99	213	459
Cajalco Expressway	Harville Avenue - I-215	32,400	75.5	116	251	540
Case Road	Perris - Goetz	10,300	70.5	54	117	252
Case Road	Goetz - Ellis	10,500	69.7	48	103	222
Case Road	Ellis - Murietta	17,700	73.7	88	190	408
Case Road	Murietta - I-215	8,900	70.7	56	120	258
Citrus	Perris - Redlands	600	52.5	3	7	16
Citrus	Redlands - Wilson	5,800	63.1	17	38	81
Citrus	Wilson - Murrieta	1,900	58.3	8	18	38
Citrus	West of Evans	800	54.5	5	10	22
D Street	I-215 - 4th Street	23,400	69.2	44	95	205
D Street	4th Street - 11th	8,900	65.0	23	50	108
Dunlap	Orange - Citrus	15,500	68.6	40	87	187
Dunlap	Citrus - Nuevo	9,200	66.3	28	61	132
Dunlap	Nuevo - San Jacinto Road	12,200	67.6	34	74	160
Dunlap	San Jacinto - Ellis	ND[1]	—	—	—	—
East Frontage Road	Rider - Placentia	3,700	63.6	19	40	87
East Frontage Road	Placentia - Orange	2,200	61.3	13	28	61

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
East Frontage Road	Orange - Indian	2,200	61.3	13	28	61
East Frontage Road	Indian - Nuevo Road	2,100	61.1	13	28	59
Ellis Avenue	West of SR 74	12,800	69.0	43	92	198
Ellis Avenue	SR 74 - A Street	14,900	70.3	53	113	244
Ellis Avenue	A Street - Goetz Road	17,400	71.0	58	126	271
Ellis Avenue	Goetz Road - Case Road	17,800	71.1	59	128	275
Ellis Avenue	Case Road - Redlands	19,400	71.5	63	135	291
Ellis Avenue	Redlands - Murietta	11,200	69.1	43	94	202
Ellis Avenue	Murietta - Evans	11,700	69.3	45	96	208
Ethanac Road	West of Sophie	11,100	70.0	50	107	230
Ethanac Road	Sophie - River Road	11,100	70.0	50	107	230
Ethanac Road	River Road - Goetz Road	14,100	71.0	58	125	270
Ethanac Road	Goetz Road - Murrieta Road	17,600	72.0	68	145	313
Ethanac Road	Murrieta Road - Green Valley Pkwy	16,100	71.6	64	137	295
Ethanac Road	Green Valley Pkwy - I-215	17,600	72.0	68	145	313
Ethanac Road	I-215 - SR-74	18,700	72.2	70	151	326
Ethanac Road	East of SR 74	24,100	73.3	83	179	386
Evans Road	Oleander - Ramona Parkway	20,400	72.6	74	160	346
Evans Road	Ramona Parkway - Morgan	22,500	73.0	80	171	369
Evans Road	Morgan - Rider	14,800	71.2	60	130	279

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Evans Road	Rider Street - Placentia	13,500	70.8	57	122	263
Evans Road	Placentia - Orange	12,800	70.6	55	118	253
Evans Road	Orange - Citrus	12,400	70.4	53	115	248
Evans Road	Citrus - Nuevo	12,100	70.3	53	113	244
Evans Road	Nuevo Road - Murietta	10,800	69.8	49	105	226
Evans Road	Murietta - San Jacinto	9,500	69.3	45	96	208
Evans Road	San Jacinto Road - I-215	14,500	71.1	59	128	275
Evans Road	I-215 - Ellis Avenue	12,600	70.5	54	116	251
Fieldstone	Goetz - Green River Parkway	700	56.4	6	13	29
"G" Street	San Jacinto - 4th (SR 74)	23,100	66.9	31	67	145
"G" Street	4th - Case	14,900	65.0	23	50	108
Goetz Road	Case - Ellis	9,000	69.9	50	107	230
Goetz Road	Ellis - Mountain	7,500	69.2	44	95	204
Goetz Road	Mountain - Mapes	12,900	71.5	63	136	292
Goetz Road	Mapes - Fieldstone Dr.	13,300	71.6	64	139	298
Goetz Road	Fieldstone Dr. - Ethanac	12,500	72.2	70	150	324
Goetz Road	Ethanac - Valley Road	12,900	70.6	55	118	255
Goetz Road	South of Valley Road	2,500	63.5	18	40	85
Green River Parkway	Murietta - Ethanac	100	44.7	1	2	5
Green River Parkway	Murietta - Fieldstone	100	44.7	1	2	5
Green River Parkway	Fieldstone Dr. - Murietta	200	47.7	2	4	8
Harville	Oleander - Markham	11,100	69.5	46	99	213
Harville	Markham - Ramona Expressway	11,300	69.5	47	100	216

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Harville	Ramona Expressway - Placentia	5,200	67.6	34	74	160
I-215	North of Oleander	180,200	85.9	570	1,229	2,647
I-215	Oleander - Ramona Expressway	176,500	85.8	563	1,212	2,611
I-215	Ramona Expressway - Placentia	160,500	85.4	528	1,138	2,451
I-215	Placentia Avenue - Nuevo	160,500	85.4	528	1,138	2,451
I-215	Nuevo Road - SR 74 (4th Street)	159,500	85.3	526	1,133	2,440
I-215	SR 74 - Evans	137,000	84.5	461	993	2,139
I-215	Evans - Case	138,500	84.5	464	1,000	2,154
I-215	Case - Ethanac	124,900	83.3	383	825	1,778
I-215	South of Ethanac	124,500	83.3	382	824	1,775
Indian Avenue	North of Oleander Avenue	4,100	66.5	29	63	136
Indian Avenue	Oleander - Markham	4,300	65.8	26	57	122
Indian Avenue	Markham - Ramona	3,000	64.3	21	45	96
Indian Avenue	Ramona Expressway - Rider Street	1,900	62.3	15	33	71
Indian Avenue	Rider - Placentia	5,400	64.9	23	49	106
Indian Avenue	Placentia - Orange	5,500	65.0	23	50	108
Indian Avenue	Orange - E. Frontage Road	6,300	65.6	25	55	118
Jarvis	Perris - Redlands	5,000	62.5	16	34	73
Mapes	Goetz - "A"	6,100	63.4	18	39	84

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Mapes	"A" - McPherson	1,300	56.6	6	14	30
Mapes	McPherson - Sophie	1,300	56.6	6	14	30
Mapes	Sophie - Mountain	1,300	56.6	6	14	30
Mapes	Mountain - Marie	4,300	61.8	14	31	66
Markham	West of Harville	13,700	69.3	45	96	207
Markham	I-215 - Harville	100	45.5	1	3	5
Markham	Wade - Patterson	100	45.5	1	3	5
Markham	Patterson - Webster	2,100	58.7	9	19	41
Markham	Webster - Indian	2,900	60.1	11	24	51
Markham	Indian - Perris	2,900	60.1	11	24	51
Markham	Perris - Redlands	1,400	57.0	7	15	31
May Ranch Parkway	Evans - Rider Street	22,500	69.0	43	93	200
McPherson	North of Mountain	1,700	57.0	7	15	32
McPherson	Mapes - Watson	ND	—	—	—	—
McPherson	Watson - Ethanac	ND	—	—	—	—
Morgan	Nevada - Webster	2,300	60.3	11	24	52
Morgan	Webster - Indian	2,100	61.8	14	31	66
Morgan	Indian - Perris	4,600	65.2	24	52	112
Morgan	Perris - Redlands	6,700	65.0	23	50	107
Morgan	East of Evans - Evans	800	55.7	6	12	26
Mountain	West of SR 74	5,900	63.2	18	38	82
Mountain	SR 74 - Sophie	4,800	63.5	18	40	86
Mountain	Sophie - McPherson	4,400	63.1	17	38	81
Mountain	McPherson - "A" Street	2,800	57.8	8	16	36
Murrieta Road	Placentia - Orange	4,600	62.1	15	32	69

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Murrieta Road	Nuevo Road - Evans	7,200	61.9	14	31	67
Murrieta Road	Case Road - Green Valley Pkwy	9,300	67.6	35	74	160
Murrieta Road	Green Valley Pkwy -Green Valley Pkwy So.	9,700	67.8	35	76	165
Murrieta Road	Green Valley Pkwy So. - Ethanac	8,900	67.4	34	72	156
Murrieta Road	Ethanac - McCall	3,400	64.3	21	45	97
Navajo Road	NW of 4th	7,600	64.3	21	45	97
Nevada Frontage Rd	Markham - Ramona Pkwy	2,600	62.0	15	32	68
Nevada Frontage Rd	Ramona Pkwy - Morgan	4,500	64.4	21	46	99
Nevada Frontage Rd	Morgan - Rider	4,200	64.1	20	44	94
Nuevo Road	Webster - I-215	4,300	66.7	30	65	141
Nuevo Road	I-215 to East Frontage Road	17,900	71.1	59	128	276
Nuevo Road	East Frontage Road - Perris Boulevard	18,200	71.2	60	130	279
Nuevo Road	Perris Boulevard - Redlands Avenue	17,700	69.2	44	95	205
Nuevo Road	Redlands Avenue - Wilson	18,000	69.3	45	96	207
Nuevo Road	Wilson Avenue - Murrietta Road	15,400	68.6	40	87	186
Nuevo Road	Murrietta Road - Evans	20,500	73.0	79	171	369
Nuevo Road	Evans - Dunlap	17,500	72.3	72	154	332
Nuevo Road	East of Dunlap	17,500	72.3	72	154	332

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Old Elsinore Road	Oleander - Ramona	8,300	67.1	32	69	148
Old Elsinore Road	Ramona - Rider	13,800	69.3	45	97	208
Old Elsinore Road	Rider - Mack	11,500	68.5	40	86	185
Old Elsinore Road	Mack - Nuevo	12,600	70.0	50	108	232
Old Elsinore Road	Nuevo - San Jacinto	11,100	69.5	46	99	213
Oleander Avenue	West of Harville	16,200	70.0	50	108	232
Oleander Avenue	Harville - I-215	25,300	71.9	67	145	312
Oleander Avenue	I-215 - Patterson	16,200	71.6	64	138	296
Oleander Avenue	Patterson - Heacock	13,400	70.8	56	121	261
Oleander Avenue	Heacock - Indian	7,600	68.3	39	83	179
Oleander Avenue	Indian Avenue - Perris Boulevard	7,300	68.1	38	81	174
Oleander Avenue	Perris Boulevard - Laselle	5,500	65.3	24	52	113
Orange Avenue	West of I-215	3,500	60.9	12	27	58
Orange Avenue	E. Frontage Road - Indian Avenue	1,400	57.0	7	15	31
Orange Avenue	Indian Road - Perris	4,600	62.1	15	32	69
Orange Avenue	Perris Boulevard - Redlands	6,700	65.0	23	50	107

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Orange Avenue	Redlands - Wilson	9,100	66.3	28	61	131
Orange Avenue	Wilson - Evans	9,300	66.4	29	62	133
Orange Avenue	Evans - Dunlap	4,900	63.6	19	40	87
Patterson	Oleander - Markham	8,900	64.2	21	44	95
Perris Boulevard	North of Oleander	34,600	75.8	122	262	565
Perris Boulevard	Oleander - Markham	27,000	75.5	117	251	541
Perris Boulevard	Markham - Ramona	26,000	75.3	114	245	528
Perris Boulevard	Ramona Expressway - Morgan	24,900	73.5	85	183	395
Perris Boulevard	Morgan - Rider	25,600	73.6	87	187	402
Perris Boulevard	Rider Street - Placentia Avenue	25,500	73.6	86	186	401
Perris Boulevard	Placentia Avenue - Orange	24,600	73.4	84	182	392
Perris Boulevard	Orange - Citrus	17,200	72.8	76	164	354
Perris Boulevard	Citrus - Nuevo	17,600	72.9	78	167	360
Perris Boulevard	Nuevo - E. Jarvis Avenue	25,700	71.7	65	140	301
Perris Boulevard	E. Jarvis - San Jacinto	27,900	72.1	69	148	318
Perris Boulevard	San Jacinto - 4th	24,000	71.4	62	134	288

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Perris Boulevard	4th Street - 11th	7,000	66.0	27	58	125
Perris Boulevard	11th - Ellis	7,000	63.2	17	38	81
Placentia Avenue	West of Harville	14,200	69.4	46	99	212
Placentia Avenue	Harville - I-215	14,600	71.1	60	128	277
Placentia Avenue	I-215 - East Frontage Road	ND	—	—	—	—
Placentia Avenue	East Frontage Road - Indian Avenue	30,200	73.4	84	182	391
Placentia Avenue	Indian Avenue - Perris Boulevard	29,600	73.3	83	179	386
Placentia Avenue	Perris Boulevard - Redlands Avenue	6,100	64.6	22	47	101
Placentia Avenue	Redlands Avenue - Wilson	6,100	64.6	22	47	101
Placentia Avenue	Wilson - Murietta	6,300	65.9	27	57	124
Placentia Avenue	Murietta - Evans	5,600	65.4	25	53	114
Phillips Street	Mountain - Mapes	ND	—	—	—	—
Phillips Street	Mapes - Ethanac	ND	—	—	—	—
Ramona Expressway	I-215 - Nevada Avenue	55,800	77.9	167	360	776
Ramona Expressway	Nevada Avenue - Webster Avenue	43,900	77.6	161	347	748
Ramona Expressway	Webster Avenue - Indian Avenue	41,400	77.4	155	334	719

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Ramona Expressway	Indian Avenue - Perris Boulevard	37,800	77.0	146	314	677
Ramona Expressway	Perris Boulevard - Redlands Avenue	41,600	77.4	155	335	722
Ramona Expressway	Redlands Avenue - Evans Road	45,700	77.8	166	357	768
Ramona Expressway	Evans Road - Bradley Road	39,500	77.2	150	324	697
Ramona Expressway	Bradley Road - Rider Street	39,300	77.1	150	323	695
Ramona Expressway	East of Rider Street	38,700	77.1	148	319	688
Redlands Avenue	Oleander - Markham	ND	—	—	—	—
Redlands Avenue	Markham - Ramona	13,600	69.2	44	96	206
Redlands Avenue	Ramona - Morgan	14,700	69.6	47	101	217
Redlands Avenue	Morgan - Rider	16,500	70.1	51	109	235
Redlands Avenue	Rider Street - Placentia Avenue	21,400	71.2	60	130	279
Redlands Avenue	Placentia Avenue - Orange	21,200	68.8	41	89	192
Redlands Avenue	Orange - Citrus	15,700	69.9	49	105	227
Redlands Avenue	Citrus - Nuevo	18,400	65.9	27	58	125
Redlands Avenue	Nuevo - E. Jarvis Avenue	24,700	71.8	66	143	307
Redlands Avenue	E. Jarvis - San Jacinto	24,400	71.8	66	141	305

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Redlands Avenue	San Jacinto Road - I-215	24,700	71.8	66	143	307
Redlands Avenue	I-215 - 4th (SR 74)	26,400	69.7	48	103	222
Redlands Avenue	4th - Ellis	18,600	67.4	34	72	156
Rider Street	West of Alexander	4,300	61.8	14	31	66
Rider Street	Alexander - Old Elsinore	8,300	64.7	22	48	103
Rider Street	Old Elsinore - Marie	4,600	63.3	18	39	83
Rider Street	Marie - Harville	11,600	67.3	33	72	154
Rider Street	Nevada - Webster	3,900	62.6	16	35	75
Rider Street	Webster - Indian	3,600	64.2	20	44	95
Rider Street	Indian Avenue - Perris Boulevard	4,600	65.2	24	52	112
Rider Street	Perris - Wilson	4,000	62.7	16	35	76
Rider Street	Wilson - Redlands	3,700	62.4	16	33	72
Rider Street	Redlands - Evans	10,700	67.0	32	68	146
Rider Street	Evans - May Ranch Pkwy	4,900	63.6	19	40	87
Rider Street	May Ranch Pkwy - Bradley	6,100	64.6	22	47	101
Rider Street	Bradley - Ramona	4,700	63.4	18	39	85
River Road	Watson - Ethanac	6,700	63.0	17	37	79
San Jacinto Road	East of "A" Street	6,000	63.3	18	38	83
San Jacinto Road	"A" - "D"	6,400	63.6	19	40	86
San Jacinto Road	"D" - Perris	6,800	63.8	19	42	90
San Jacinto Road	Perris - "G"	15,500	67.4	34	72	156

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
San Jacinto Road	"G" - Redlands	10,500	65.7	26	56	120
San Jacinto Road	Redlands - Wilson	3,300	63.1	17	37	80
San Jacinto Road	Wilson - Evans	6,300	65.9	27	57	124
San Jacinto Road	Evans - Dunlap	5,000	64.9	23	49	106
Sophie	Mountain - Mapes	9,000	65.0	23	50	108
SR-74	South of Mountain	32,600	76.4	134	289	623
SR-74	Marie - Mountain	29,600	76.0	126	271	584
SR-74	Mountain - Ellis	33,400	76.5	136	294	633
SR-74	Ellis - Navajo	29,000	75.9	124	267	576
SR-74	Navajo - "A"	34,300	76.7	139	299	644
SR-74	A Street - D Street	34,500	73.1	80	173	372
SR-74	D Street - Perris Boulevard	22,100	69.6	47	102	220
SR-74	Perris Boulevard - "G"	14,400	69.3	45	97	208
SR-74	"G" - Redlands	14,600	69.3	45	97	210
SR-74	East of Redlands	7,500	66.5	29	62	135
Valley Road	South of Goetz	12,300	68.8	42	90	193
Wade	Oleander - Markham	3,300	59.9	11	23	49
Watson	"A" Street - River Road	5,400	62.0	15	32	68
Watson	River Road - McPherson	6,800	63.0	17	37	80
Webster Avenue	Oleander - Markham	5,200	64.8	22	48	104
Webster Avenue	Markham - Ramona	2,000	60.6	12	25	55
Webster Avenue	Ramona Expressway - Morgan	2,000	60.6	12	25	55

Long-Term Roadway Noise Levels (Hard Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Webster Avenue	Morgan - Rider	1200	58.4	8	18	39
Wilson	Rider - Placentia	5,400	62.8	17	36	77
Wilson	Placentia - Orange	4,300	61.8	14	31	66
Wilson	Orange - Citrus	200	46.3	1	3	6
Wilson	Citrus - Nuevo	400	49.3	2	5	10
Wilson	Nuevo - San Jacinto Road	500	50.3	2	5	11
[1] ND - No Data.						

Table 4.7-9: Long-Term Roadway Noise Levels (Soft Site Analysis)

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
7th Street	Redlands - SR 74	4,600	63.1	10	32	103
11th Street	West of "A"	3,200	60.8	6	19	59
11th Street	A Street - D Street	3,100	60.6	6	18	58
11th Street	D Street - G Street	9,600	65.5	18	56	178
A Street	North of San Jacinto	7,500	66.6	23	71	226
A Street	San Jacinto - 4th (SR 74)	13,300	69.0	40	127	401
A Street	4th Street - 11th Street	7,900	63.3	11	34	106
A Street	11th Street - Ellis Avenue	7,900	63.3	11	34	106
A Street	Ellis Avenue - Mountain	10,000	66.5	22	71	223
A Street	Mountain - Mapes	10,000	66.5	22	71	223
A Street	Mapes - Watson	8,500	67.1	26	81	256
Bradley	Ramona Expressway - Rider Street	1,700	58.8	4	12	38
Cajalco Expressway	West of Haines	22,700	74.2	130	412	1,303
Cajalco Expressway	Haines - Old Elsinore	21,800	74.0	125	396	1,251
Cajalco Expressway	Old Elsinore - Day	24,900	74.6	143	452	1,429
Cajalco Expressway	Day - Seaton	24,000	75.2	166	524	1,656
Cajalco Expressway	Seaton - Harville	25,400	75.4	175	554	1,753
Cajalco Expressway	Harville Avenue - I-215	32,400	76.5	224	707	2,236
Case Road	Perris - Goetz	10,300	71.5	71	225	711
Case Road	Goetz - Ellis	10,500	70.8	60	191	603

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Case Road	Ellis - Murietta	17,700	74.7	147	464	1,469
Case Road	Murietta - I-215	8,900	71.7	74	234	739
Citrus	Perris - Redlands	600	53.5	1	4	11
Citrus	Redlands - Wilson	5,800	64.1	13	41	130
Citrus	Wilson - Murrieta	1,900	59.3	4	13	42
Citrus	West of Evans	800	55.5	2	6	18
D Street	I-215 - 4th Street	23,400	70.2	52	165	523
D Street	4th Street - 11th	8,900	66.0	20	63	199
Dunlap	Orange - Citrus	15,500	69.7	47	148	467
Dunlap	Citrus - Nuevo	9,200	67.4	28	88	277
Dunlap	Nuevo - San Jacinto Road	12,200	68.7	37	116	368
Dunlap	San Jacinto - Ellis	ND[1]	—	—	—	—
East Frontage Road	Rider - Placentia	3,700	64.6	14	45	144
East Frontage Road	Placentia - Orange	2,200	62.3	9	27	85
East Frontage Road	Orange - Indian	2,200	62.3	9	27	85
East Frontage Road	Indian - Nuevo Road	2,100	62.1	8	26	82
Ellis Avenue	West of SR 74	12,800	70.0	50	157	497
Ellis Avenue	SR 74 - A Street	14,900	71.4	70	220	695
Ellis Avenue	A Street - Goetz Road	17,400	72.1	81	257	812
Ellis Avenue	Goetz Road - Case Road	17,800	72.2	83	263	831
Ellis Avenue	Case Road - Redlands	19,400	72.6	91	286	905
Ellis Avenue	Redlands - Murietta	11,200	70.2	52	165	523
Ellis Avenue	Murietta - Evans	11,700	70.4	55	173	546

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Ethanac Road	West of Sophie	11,100	71.1	64	202	637
Ethanac Road	Sophie - River Road	11,100	71.1	64	202	637
Ethanac Road	River Road - Goetz Road	14,100	72.1	81	256	809
Ethanac Road	Goetz Road - Murrieta Road	17,600	73.1	101	320	1,010
Ethanac Road	Murrieta Road - Green Valley Pkwy	16,100	72.7	92	292	924
Ethanac Road	Green Valley Pkwy - I-215	17,600	73.1	101	320	1,010
Ethanac Road	I-215 - SR-74	18,700	73.3	107	339	1,074
Ethanac Road	East of SR 74	24,100	74.4	138	438	1,384
Evans Road	Oleander - Ramona Parkway	20,400	73.7	117	370	1,171
Evans Road	Ramona Parkway - Morgan	22,500	74.1	129	408	1,292
Evans Road	Morgan - Rider	14,800	72.3	85	269	850
Evans Road	Rider Street - Placentia	13,500	71.9	78	245	775
Evans Road	Placentia - Orange	12,800	71.7	73	232	735
Evans Road	Orange - Citrus	12,400	71.5	71	225	712
Evans Road	Citrus - Nuevo	12,100	71.4	69	220	695
Evans Road	Nuevo Road - Murietta	10,800	70.9	62	196	620
Evans Road	Murietta - San Jacinto	9,500	70.4	55	172	545
Evans Road	San Jacinto Road - I-215	14,500	72.2	83	263	832
Evans Road	I-215 - Ellis Avenue	12,600	71.6	72	229	723
Fieldstone	Goetz - Green River Parkway	700	57.4	3	9	27
"G" Street	San Jacinto - 4th (SR 74)	23,100	67.9	31	98	311

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
"G" Street	4th - Case	14,900	66.0	20	63	201
Goetz Road	Case - Ellis	9,000	70.9	62	196	621
Goetz Road	Ellis - Mountain	7,500	70.2	52	164	518
Goetz Road	Mountain - Mapes	12,900	72.5	89	282	890
Goetz Road	Mapes - Fieldstone Dr.	13,300	72.6	92	290	918
Goetz Road	Fieldstone Dr. - Ethanac	12,500	73.2	104	328	1,037
Goetz Road	Ethanac - Valley Road	12,900	71.7	74	234	741
Goetz Road	South of Valley Road	2,500	64.6	14	45	144
Green River Parkway	Murietta - Ethanac	100	45.7	0	1	2
Green River Parkway	Murietta - Fieldstone	100	45.7	0	1	2
Green River Parkway	Fieldstone Dr. - Murietta	200	48.7	0	1	4
Harville	Oleander - Markham	11,100	70.5	56	176	555
Harville	Markham - Ramona Expressway	11,300	70.5	57	179	565
Harville	Ramona Expressway - Placentia	5,200	68.6	36	113	359
I-215	North of Oleander	180,200	87.0	2,482	7,847	24,816
I-215	Oleander - Ramona Expressway	176,500	86.9	2,431	7,686	24,306
I-215	Ramona Expressway - Placentia	160,500	86.5	2,210	6,989	22,103
I-215	Placentia Avenue - Nuevo	160,500	86.5	2,210	6,989	22,103
I-215	Nuevo Road - SR 74 (4th Street)	159,500	86.4	2,196	6,946	21,965
I-215	SR 74 - Evans	137,000	85.5	1,761	5,568	17,607
I-215	Evans - Case	138,500	85.5	1,780	5,629	17,800

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
I-215	Case - Ethanac	124,900	84.4	1,366	4,320	13,663
I-215	South of Ethanac	124,500	84.4	1,362	4,307	13,619
Indian Avenue	North of Oleander Avenue	4,100	67.5	28	89	283
Indian Avenue	Oleander - Markham	4,300	66.9	25	78	247
Indian Avenue	Markham - Ramona	3,000	65.4	17	54	172
Indian Avenue	Ramona Expressway - Rider Street	1,900	63.4	11	34	109
Indian Avenue	Rider - Placentia	5,400	66.0	20	63	200
Indian Avenue	Placentia - Orange	5,500	66.1	20	64	204
Indian Avenue	Orange - E. Frontage Road	6,300	66.7	23	74	234
Jarvis	Perris - Redlands	5,000	63.5	11	35	112
Mapes	Goetz - "A"	6,100	64.4	14	43	136
Mapes	"A" - McPherson	1,300	57.6	3	9	29
Mapes	McPherson - Sophie	1,300	57.6	3	9	29
Mapes	Sophie - Mountain	1,300	57.6	3	9	29
Mapes	Mountain - Marie	4,300	62.8	10	30	96
Markham	West of Harville	13,700	70.3	53	168	532
Markham	I-215 - Harville	100	46.5	0	1	2
Markham	Wade - Patterson	100	46.5	0	1	2
Markham	Patterson - Webster	2,100	59.7	5	15	47
Markham	Webster - Indian	2,900	61.1	6	20	65
Markham	Indian - Perris	2,900	61.1	6	20	65
Markham	Perris - Redlands	1,400	58.0	3	10	31

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
May Ranch Parkway	Evans - Rider Street	22,500	70.0	50	159	503
McPherson	North of Mountain	1,700	58.0	3	10	32
McPherson	Mapes - Watson	ND	—	—	—	—
McPherson	Watson - Ethanac	ND	—	—	—	—
Morgan	Nevada - Webster	2,300	61.4	7	22	69
Morgan	Webster - Indian	2,100	62.9	10	31	98
Morgan	Indian - Perris	4,600	66.3	21	68	215
Morgan	Perris - Redlands	6,700	66.1	20	64	202
Morgan	East of Evans - Evans	800	56.8	2	8	24
Mountain	West of SR 74	5,900	64.2	13	42	132
Mountain	SR 74 - Sophie	4,800	64.6	14	46	145
Mountain	Sophie - McPherson	4,400	64.2	13	42	133
Mountain	McPherson - "A" Street	2,800	58.8	4	12	38
Murrieta Road	Placentia - Orange	4,600	63.1	10	32	103
Murrieta Road	Nuevo Road - Evans	7,200	62.9	10	31	97
Murrieta Road	Case Road - Green Valley Pkwy	9,300	68.6	36	114	361
Murrieta Road	Green Valley Pkwy -Green Valley Pkwy So.	9,700	68.8	38	119	376
Murrieta Road	Green Valley Pkwy So. - Ethanac	8,900	68.4	35	109	345
Murrieta Road	Ethanac - McCall	3,400	65.3	17	54	170
Navajo Road	NW of 4th	7,600	65.3	17	54	170
Nevada Frontage Rd	Markham - Ramona Pkwy	2,600	63.0	10	32	101

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Nevada Frontage Rd	Ramona Pkwy - Morgan	4,500	65.4	17	55	175
Nevada Frontage Rd	Morgan - Rider	4,200	65.1	16	52	163
Nuevo Road	Webster - I-215	4,300	67.7	30	94	297
Nuevo Road	I-215 to East Frontage Road	17,900	72.2	84	264	835
Nuevo Road	East Frontage Road - Perris Boulevard	18,200	72.3	85	269	849
Nuevo Road	Perris Boulevard - Redlands Avenue	17,700	70.3	53	169	533
Nuevo Road	Redlands Avenue - Wilson	18,000	70.4	54	171	542
Nuevo Road	Wilson Avenue - Murrietta Road	15,400	69.7	46	147	464
Nuevo Road	Murrietta Road - Evans	20,500	74.1	129	408	1,290
Nuevo Road	Evans - Dunlap	17,500	73.4	110	348	1,102
Nuevo Road	East of Dunlap	17,500	73.4	110	348	1,102
Old Elsinore Road	Oleander - Ramona	8,300	68.1	32	102	322
Old Elsinore Road	Ramona - Rider	13,800	70.3	54	169	536
Old Elsinore Road	Rider - Mack	11,500	69.5	45	141	446
Old Elsinore Road	Mack - Nuevo	12,600	71.0	63	199	630
Old Elsinore Road	Nuevo - San Jacinto	11,100	70.5	56	176	555
Oleander Avenue	West of Harville	16,200	71.0	63	199	629
Oleander Avenue	Harville - I-215	25,300	72.9	98	311	982

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Oleander Avenue	I-215 - Patterson	16,200	72.7	93	294	930
Oleander Avenue	Patterson - Heacock	13,400	71.9	77	243	769
Oleander Avenue	Heacock - Indian	7,600	69.4	44	138	436
Oleander Avenue	Indian Avenue - Perris Boulevard	7,300	69.2	42	133	419
Oleander Avenue	Perris Boulevard - Laselle	5,500	66.3	21	68	213
Orange Avenue	West of I-215	3,500	61.9	8	25	78
Orange Avenue	E. Frontage Road - Indian Avenue	1,400	58.0	3	10	31
Orange Avenue	Indian Road - Perris	4,600	63.1	10	32	103
Orange Avenue	Perris Boulevard - Redlands	6,700	66.1	20	64	202
Orange Avenue	Redlands - Wilson	9,100	67.4	27	87	274
Orange Avenue	Wilson - Evans	9,300	67.5	28	89	280
Orange Avenue	Evans - Dunlap	4,900	64.7	15	47	148
Patterson	Oleander - Markham	8,900	65.2	17	52	165
Perris Boulevard	North of Oleander	34,600	76.8	239	755	2,388
Perris Boulevard	Oleander - Markham	27,000	76.5	224	708	2,240
Perris Boulevard	Markham - Ramona	26,000	76.3	216	682	2,157

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Perris Boulevard	Ramona Expressway - Morgan	24,900	74.6	143	452	1,429
Perris Boulevard	Morgan - Rider	25,600	74.7	147	465	1,470
Perris Boulevard	Rider Street - Placentia Avenue	25,500	74.7	146	463	1,464
Perris Boulevard	Placentia Avenue - Orange	24,600	74.5	141	447	1,412
Perris Boulevard	Orange - Citrus	17,200	73.8	119	375	1,187
Perris Boulevard	Citrus - Nuevo	17,600	73.9	121	384	1,215
Perris Boulevard	Nuevo - E. Jarvis Avenue	25,700	72.8	95	301	953
Perris Boulevard	E. Jarvis - San Jacinto	27,900	73.2	103	327	1,034
Perris Boulevard	San Jacinto - 4th	24,000	72.5	89	281	890
Perris Boulevard	4th Street - 11th	7,000	67.1	25	80	254
Perris Boulevard	11th - Ellis	7,000	64.2	13	41	130
Placentia Avenue	West of Harville	14,200	70.4	55	174	551
Placentia Avenue	Harville - I-215	14,600	72.2	84	265	838
Placentia Avenue	I-215 - East Frontage Road	ND	—	—	—	—
Placentia Avenue	East Frontage Road - Indian Avenue	30,200	74.5	141	446	1,409
Placentia Avenue	Indian Avenue - Perris Boulevard	29,600	74.4	138	437	1,381

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Placentia Avenue	Perris Boulevard - Redlands Avenue	6,100	65.7	18	58	184
Placentia Avenue	Redlands Avenue - Wilson	6,100	65.7	18	58	184
Placentia Avenue	Wilson - Murietta	6,300	66.9	24	77	245
Placentia Avenue	Murietta - Evans	5,600	66.4	22	69	217
Phillips Street	Mountain - Mapes	ND	—	—	—	—
Phillips Street	Mapes - Ethanac	ND	—	—	—	—
Ramona Expressway	I-215 - Nevada Avenue	55,800	78.9	385	1,218	3,851
Ramona Expressway	Nevada Avenue - Webster Avenue	43,900	78.6	364	1,152	3,643
Ramona Expressway	Webster Avenue - Indian Avenue	41,400	78.4	344	1,086	3,435
Ramona Expressway	Indian Avenue - Perris Boulevard	37,800	78.0	314	992	3,137
Ramona Expressway	Perris Boulevard - Redlands Avenue	41,600	78.4	345	1,092	3,452
Ramona Expressway	Redlands Avenue - Evans Road	45,700	78.8	379	1,199	3,792
Ramona Expressway	Evans Road - Bradley Road	39,500	78.2	328	1,036	3,278
Ramona Expressway	Bradley Road - Rider Street	39,300	78.1	326	1,031	3,261
Ramona Expressway	East of Rider Street	38,700	78.1	321	1,016	3,211
Redlands Avenue	Oleander - Markham	ND	—	—	—	—

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Redlands Avenue	Markham - Ramona	13,600	70.2	53	167	528
Redlands Avenue	Ramona - Morgan	14,700	70.6	57	180	571
Redlands Avenue	Morgan - Rider	16,500	71.1	64	203	640
Redlands Avenue	Rider Street - Placentia Avenue	21,400	72.2	83	263	831
Redlands Avenue	Placentia Avenue - Orange	21,200	69.8	47	150	473
Redlands Avenue	Orange - Citrus	15,700	70.9	61	193	609
Redlands Avenue	Citrus - Nuevo	18,400	66.9	25	78	248
Redlands Avenue	Nuevo - E. Jarvis Avenue	24,700	72.8	96	303	959
Redlands Avenue	E. Jarvis - San Jacinto	24,400	72.8	95	299	947
Redlands Avenue	San Jacinto Road - I-215	24,700	72.8	96	303	959
Redlands Avenue	I-215 - 4th (SR 74)	26,400	70.7	59	186	590
Redlands Avenue	4th - Ellis	18,600	68.4	35	109	346
Rider Street	West of Alexander	4,300	62.8	10	30	96
Rider Street	Alexander - Old Elsinore	8,300	65.7	19	59	185
Rider Street	Old Elsinore - Marie	4,600	64.4	14	44	139
Rider Street	Marie - Harville	11,600	68.4	35	111	349
Rider Street	Nevada - Webster	3,900	63.7	12	37	117
Rider Street	Webster - Indian	3,600	65.3	17	53	168

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
Rider Street	Indian Avenue - Perris Boulevard	4,600	66.3	21	68	215
Rider Street	Perris - Wilson	4,000	63.8	12	38	121
Rider Street	Wilson - Redlands	3,700	63.5	11	35	111
Rider Street	Redlands - Evans	10,700	68.1	32	102	322
Rider Street	Evans - May Ranch Pkwy	4,900	64.7	15	47	148
Rider Street	May Ranch Pkwy - Bradley	6,100	65.7	18	58	184
Rider Street	Bradley - Ramona	4,700	64.5	14	45	142
River Road	Watson - Ethanac	6,700	64.0	12	39	124
San Jacinto Road	East of "A" Street	6,000	64.3	13	42	134
San Jacinto Road	"A" - "D"	6,400	64.6	14	45	143
San Jacinto Road	"D" - Perris	6,800	64.8	15	48	152
San Jacinto Road	Perris - "G"	15,500	68.4	35	109	346
San Jacinto Road	"G" - Redlands	10,500	66.7	23	74	235
San Jacinto Road	Redlands - Wilson	3,300	64.1	13	41	128
San Jacinto Road	Wilson - Evans	6,300	66.9	24	77	245
San Jacinto Road	Evans - Dunlap	5,000	65.9	19	61	194
Sophie	Mountain - Mapes	9,000	66.0	20	64	201
SR-74	South of Mountain	32,600	77.5	283	896	2,833
SR-74	Marie - Mountain	29,600	77.1	257	813	2,572
SR-74	Mountain - Ellis	33,400	77.6	290	918	2,902

Long-Term Roadway Noise Levels (Soft Site Analysis)						
Street Name	**Segment**	**Future ADT Volumes**	**Future CNEL (dBA @ 50 Feet from centerline)**	**Distance to 70 CNEL**	**Distance to 65 CNEL**	**Distance to 60 CNEL**
SR-74	Ellis - Navajo	29,000	77.0	252	797	2,520
SR-74	Navajo - "A"	34,300	77.8	298	942	2,980
SR-74	A Street - D Street	34,500	74.1	128	404	1,279
SR-74	D Street - Perris Boulevard	22,100	70.6	58	183	580
SR-74	Perris Boulevard - "G"	14,400	70.3	53	169	534
SR-74	"G" - Redlands	14,600	70.3	54	171	541
SR-74	East of Redlands	7,500	67.5	28	88	278
Valley Road	South of Goetz	12,300	69.8	48	151	477
Wade	Oleander - Markham	3,300	60.9	6	19	61
Watson	"A" Street - River Road	5,400	63.0	10	32	100
Watson	River Road - McPherson	6,800	64.0	13	40	126
Webster Avenue	Oleander - Markham	5,200	65.9	19	61	193
Webster Avenue	Markham - Ramona	2,000	61.7	7	23	74
Webster Avenue	Ramona Expressway - Morgan	2,000	61.7	7	23	74
Webster Avenue	Morgan - Rider	1200	59.5	4	14	44
Wilson	Rider - Placentia	5,400	63.8	12	38	121
Wilson	Placentia - Orange	4,300	62.8	10	30	96
Wilson	Orange - Citrus	200	47.3	0	1	3
Wilson	Citrus - Nuevo	400	50.3	1	2	5
Wilson	Nuevo - San Jacinto Road	500	51.3	1	2	7
[1] ND - No Data.						

Implementation of policies under General Plan 2030 would minimize noise effects though methods such as incorporating increased setbacks and providing for sufficient noise barriers

(buffering) around sensitive noise receptors. Proposed General Plan Goals, Policies and Implementation Measures contained in the Noise Element that are relevant are listed below:

Noise Element

Goal I – Future Land Use Siting

Future land uses compatible with projected noise environments.

Policy I.A

The State of California Noise/Land Use Compatibility Criteria shall be used in determining land use compatibility for new development.

Implementation Measures

I.A.1 All new development proposals will be evaluated with respect to the State Noise/Lane Use Compatibility Criteria. Placement of noise sensitive uses will be discouraged within any area exposed to exterior noise levels that fall into the "Normally Unacceptable" range and prohibited within areas exposed to "Clearly Unacceptable" noise ranges.

I.A.2 Site plans for new residential development near roadway and train noise sources shall incorporate increased building setbacks and/or provide for sufficient noise barriers for usable exterior yard areas so that the noise exposure in those areas does not exceed the levels considered "Normally Acceptable" in The State of California Noise/Land Use Compatibility Criteria.

I.A.3 Acoustical studies shall be prepared for all new development proposals involving noise sensitive land uses, as defined in Section 16.22.020J of the Perris Municipal Code, where such projects are adjacent to roadways and within existing or projected roadway CNEL levels of 60 dBA or greater.

I.A.4 As part of any approvals of noise sensitive projects where reduction of exterior noise to 65 dBA is not reasonably feasible, the City will require the developer to issue disclosure statements to be identified on all real estate transfers associated with the affected property that identifies regular exposure to roadway noise.

I.A.5 No new residential dwellings shall be placed in areas with mitigated or unmitigated exterior noise levels that exceed 70 dBA CNEL.

Goal II – Existing Sensitive Receptors

Roadway improvements compatible with existing noise-sensitive land uses.

Policy II.A

Appropriate measures shall be taken in the design phase of future roadway widening projects to minimize impacts on existing sensitive noise receptors.

Implementation Measures

II.A.1 In the design of future roadway widening projects adjacent to existing sensitive land uses, first priority will be given to widening on the opposite side of the street where no sensitive land uses occur.

II.A.2 Use of quieter roadway surface materials, incorporation of solid noise barriers between the sensitive land use and the roadway will be implemented where feasible, to reduce exterior noise levels within adjacent sensitive land uses to a maximum of 60 dBA CNEL.

II.A.3 Where construction of a solid barrier is economically or practically infeasible e.g. along front yards where driveways would prohibit continuation of the wall, retrofitting of homes with noise attenuation features will be implemented to reduce interior noise to 45 dBA CNEL.

II.A.4 Reduction of posted speed limits will be implemented, wherever it can be accomplished without increasing traffic congestion.

II.A.5 Work proactively with Caltrans to facilitate construction of sound barriers and/or retrofit existing noise impacted structures with noise attenuation features, along those segments of I-215 that abut existing noise impacted land uses.

Implementation of General Plan 2030 Goals, Policies, Implementation Measures identified above reduces the potential impacts associated with noise standards to a less than significant level.

RAILROAD NOISE IMPACTS ON EXISTING LAND USES

Like auto traffic, railroad traffic is also expected to increase during the build out period. The Riverside County Transportation Commission (RCTC) reports that Metrolink commuter service is estimated to begin service in the area by 2008-2009, with 8 trains per day. These operations are projected to increase to 16 trains per day by the year 2030. By this time the rails are to be upgraded to continuous welded rail to accommodate the Metrolink service. Metrolink trains are expected to be composed of one engine and three railcars. Metrolink speed through the project area is estimated at 30 mph and no night operations are expected.

Freight train operations are expected to double to four trains per day by the year 2030. This analysis assumes no change to the current average three engines and 25 railcars through the project area. Train speed is assumed to be 10 mph and half of the operations are assumed to occur between 10:00 PM and 7:00 AM.

Future train noise was modeled using the "Wyle" method. Modeling results indicate that the noise associated with future Metrolink operations and two additional freight trains per day would increase noise levels along the tracks by approximately 3.5 to 4 dBA CNEL. Noise levels along the rail segments between the at grade rail crossings are projected to increase from 62.5 to 66 dBA within 200 feet of the centerline of the tracks, while noise levels at grade rail crossings are projected to increase from 72.5 to 76.5 dBA, within 200 feet of the centerline of the tracks. Any existing sensitive receptors within 200 Feet of any rail segment would thus be exposed to a significant, long-term increase in train noise.

To facilitate future Metrolink commuter service, the City has adopted a specific plan for the downtown area that calls for the removal of the crossings at 2nd Street, 5th Street and 6th Street, thereby removing the warning requirement and whistle noise in those locations.

RAILROAD NOISE IMPACTS ON FUTURE LAND USES

Railroad noise modeling predicts that the future 60 dBA CNEL noise level falls at a distance of approximately 502 feet from the centerline of the tracks. This distance is extended to approximately 2,518 feet at grade crossings where a warning horn is sounded. Any noise-sensitive land uses proposed within these distances would require some form of noise attenuation to reduce exterior and interior noise exposure to the levels required by the Perris Municipal Code, Chapter 16.22.

Areas designated in the proposed Land Use Plan for noise-sensitive development along the rail line include land along the west side of Case Road and undeveloped parcels within the downtown area between Nuevo Road and 11th Street. Sensitive land uses may be located within a 502-foot distance to the 60 dBA noise level area, along segments of rail where no at grade crossings occur e.g. west of Case Road. At grade rail crossings, sensitive land uses must be located at a minimum of 2,518 feet from the crossing.

Implementation of policies under General Plan 2030 would minimize train noise effects through methods such as incorporating building design/noise insulation measures to reduce exterior and interior noise levels to no more than 65 dBA and 45 dBA respectively. Proposed General Plan Goals, Policies and Implementation Measures contained in the Noise Element that are relevant are listed below:

> ***Noise Element***
> **Goal III – Train Noise**
> Future land uses compatible with noise from rail traffic.
> **Policy III.A**
> Mitigate existing and future noise impacts resulting from train movement.
> **Implementation Measures**
> **III.A.1** The City will work proactively with BNSF and Riverside County Transportation Commission to replace aging rail with new continuous welded rail, and to install sound-deadening matting leading to, from, and between the rails where public roads cross tracks in residential areas.
> **III.A.2** Acoustical and vibration studies will be prepared for all new development proposals involving noise sensitive land uses within 500 feet of the BNST railroad tracks. Wherever these studies determine that exterior living areas in the proposed development plan would be exposed to noise levels of 60 dBA or greater, the plans shall incorporate setbacks and/or building design/noise insulation measures to reduce exterior noise levels to no more than 65 dBA and ensure that interior noise levels do not exceed 45 dBA CNEL.

III.A.3 As part of any approvals of noise sensitive projects where reduction of exterior noise to 65 dBA is not reasonably feasible, the City will require the developer to issue disclosure statements that identify regular exposure to train noise. This disclosure shall be issued at the time of initial and all subsequent sales of the affected properties.

III.A.4 No new residential dwellings shall be placed in areas with mitigated or unmitigated exterior exposure to train noise levels in excess of 70 dBA CNEL.

Implementation of General Plan 2030 Goals, Policies, Implementation Measures identified above reduces the potential impacts associated with train noise to a less than significant level.

PERRIS AUTO SPEEDWAY IMPACTS ON EXISTING LAND USES

The speedway is located within State-owned park-land and is not subject to the land use policy restrictions set forth in the Perris General Plan. The General Plan will have no effect on operations at the Speedway and as a result will not have any effect on noise levels generated at the Speedway. These noise levels could negatively impact existing sensitive land uses located to the south, at the nearest edge of May Ranch.

PERRIS AUTO SPEEDWAY IMPACTS ON FUTURE LAND USES

The 65 and 60 dBA CNEL noise levels measured from the Speedway fall at distances of 2,040 and 3,628, respectively. New residential development is designated in the Land Use Plan south of Ramona Expressway, within 3,628 feet from the speedway located in the 60 dBA CNEL.

To avoid exposing future homes to significant speedway noise impacts, acoustical studies will be required in conjunction with new development proposals in the 60 dBA CNEL area designated above. The acoustical studies will help identify measures to mitigate exterior and interior noise exposure in accordance with Chapter 16.22 of the Municipal Code and the Noise Land Use Compatibility Guidelines illustrated in Exhibit 4.10-1. Continued enforcement of the Perris Municipal Code and the Noise Land Use Compatibility Guidelines reduces potential impacts associated with Noise from the Perris Auto Speedway to a less than significant level.

Impact: **Implementation of General Plan 2030 may expose people residing or working in close proximity to excessive noise levels from a public use airstrip.**

The Land Use Plan designates considerable land area for residential development within the March Inland Port flight patterns, including land within the 65 dBA and higher CNEL

contours, as illustrated in Exhibit 4.7-3. Acoustical studies will be required to identify appropriate site design and building design measures to reduce exterior and interior noise exposure associated with air traffic originating at March Inland Port, to those levels specified in Chapter 16.22 of the Municipal Code and the /Land Use Compatibility Guidelines illustrated in Exhibit 4.7-1.

Implementation of policies under General Plan 2030 would minimize air traffic noise effects. Those policies contained in the Noise Element that are relevant are:

Noise Element
Goal IV – Air Traffic Noise
Future land uses compatible with noise from air traffic.
Policy IV.A
Reduce or avoid the existing and potential future impacts from air traffic on new sensitive noise land uses in areas where air traffic noise is 60 dBA CNEL or higher.
Implementation Measures
IV.A.1 As part of any approvals for new sensitive land uses within the 60 dBA CNEL or higher noise contours associated with March Inland Port, and for such new uses within the flight paths associated with the Perris Valley Skydiving Center, the City will require the developer to issue disclosure statements identifying exposure to regular aircraft noise. This disclosure shall be issued at the time of initial and all subsequent sales of the affected properties.
IV.A.2 All new development proposals in the noise contour areas of 60 dBA and above will be evaluated with respect to the State Noise/Land Use Compatibility Criteria.

Continued enforcement of the Perris Municipal Code and the Noise Land Use Compatibility Guidelines, along with implementation of General Plan 2030 Goals, Policies, Implementation Measures identified above reduces potential impacts associated with noise from air craft operations into and out of March Inland Port to a less than significant level.

Impact: **Implementation of General Plan 2030 may expose people residing or working in close proximity to excessive noise levels from a private use airstrip.**

Adoption and implementation of General Plan 2030 will have no impact on the number of flights or the types of aircraft operating from the Perris Valley airport, or upon any specific activities associated with the airport. Accordingly, the project would not cause people living and working in existing structures under the flight paths to be exposed to excessive noise levels.

New residential development is planned within the flight pattern located south of The Perris Valley Airport, between Goetz Road and Murrieta Avenue, in the southern edge of the planning area. Additional residential development is planned in the downtown area, within the northern flight path for aircraft departing from the Perris Valley Airport. Future homes in both areas would be exposed to overflight noise impacts that could occur up to 60 times a day on peak days.

Implementation of General Plan 2030 Goals, Policies and Implementation Measures listed above in Project Impact 4.7-3 would minimize noise effects to a less than significant level.

CUMULATIVE IMPACTS

The analysis of future noise levels associated with highway and traffic volumes presented previously in this EIR section include traffic volumes associated with cumulative development in the region. Implementation of the policies within the Noise Element of General Plan 2030 would reduce impacts associated with noise to a less than significant level.

4.7.6 MITIGATION MEASURES

No mitigation measures are required.

4.7.7 LEVEL OF SIHNIFICANCE AFTER MITIGATION

Less than significant.

4.8 PARKS AND RECREATION

This section of the EIR analyzes the potential physical environmental effects related to parks and recreation facilities within the City of Perris from implementation of General Plan 2030.

4.8.1 EXISTING CONDITIONS

Within General Plan 2030's Open Space Element, open space for recreational uses is categorized as either for "active" or "passive" recreation. Active recreation includes sports activities such as baseball, soccer, and tennis, and active play on swings, slides and similar play equipment. Active recreational venues typically require site improvements such as paved court areas, lighting, and playground equipment. Passive recreation included activities such as walking, hiking, and picnicking requiring minimal site improvements or amenities.

ACTIVE RECREATION USES

As of October 2004, the City of Perris has 11 parks totaling 69.46 acres. These parks have amenities ranging from benches and trails to ball fields and restrooms. Several of the City's parks cannot support active play due to their small size or lack of amenities for active recreational use. For purposes of analysis and designation in General Plans or in Parks and Recreation Master Plans, parks are typically categorized by size and use. Two categories, neighborhood parks and community parks, are of specific interest because they are used to establish park dedication standards according to the Quimby Act. (The Quimby Act is a state policy that enables local governments to require the dedication of land or impose a requirement of fees for park and recreational purposes as a condition of approval of tentative maps or parcel maps).

A neighborhood park is a general use facility, developed to serve the active recreational needs of a particular neighborhood within a community. Neighborhood parks range in size from 2 to 20 acres and are intended to serve the residents within a radius of approximately 1/2 mile, typically within walking or cycling distance. Neighborhood parks generally feature active-play amenities such as play equipment, game courts, children's play areas, lighting for night use, and on-site parking facilities. Neighborhood parks are sometimes located adjoining an elementary school and near the center of a neighborhood. A neighborhood park should not be separated from its user population by major highways, railroads, or other obstacles that cannot easily be traversed.

Community parks should be between 20 and 50 acres in size and are generally designed to meet the active recreational needs of several neighborhoods. These parks are intended to serve people living within a radius of up to three miles, and include facilities that require more space than neighborhood parks such as multiple sport fields and courts, swimming pools, and community centers with adequate on-site parking. Community parks may also

include passive uses such as nature areas and picnic facilities and should be linked, via pedestrian, bicycle or equestrian trails, to other open space uses.

PASSIVE RECREATIONAL USES

The hills, valleys, and slopes in Perris provide open space, habitat, and recreation spaces alike. The open spaces encompass a variety of natural habitats including riparian corridors, oak woodlands and chaparral. Examples include features such as the San Jacinto River and the Motte-Rimrock Reserve. In particular, the San Jacinto River is a major riparian corridor through the southern portion of Perris.

Lands identified for passive uses include those for ecologic and other scientific studies, rivers and stream corridors including undeveloped floodways, water retention and recharge basins, lands set aside for mitigation and habitat protection, and unpaved trails, and include facilities such as the Perris Valley Channel. Public parks, such as Kabian County Park, which are planned to remain in their natural state, are also included in the category of passive open space.

The San Jacinto River corridor in Perris is 5 1/2 miles in length, providing a number of opportunities and constraints that influence open space uses and future development along the flood plain. The Perris Valley storm drain and the river corridors include 130 feet of open space along both sides of their channels for a combined 332 acres of open space. A regional trail running the length of the storm drain and river corridor is shown on the County of Riverside Integrated Project as a primary riding and hiking trail, but has yet to be developed. The river corridor is also an integral part of the County's Multi-Species Habitat Conservation Plan, which will limit development on much of the land, restricting other land-use activities, and likely increase the total amount of open space along the river corridor.

Perris has two large nature preserves within its boundaries. These nature preserves provide natural, undeveloped land for passive recreational use such as hiking, bird watching, and enjoyment of the scenery and wildlife.

4.8.2 EXISTING POLICIES AND REGULATIONS

The following policies/regulations are intended to ensure the dedication and preservation of parks and recreational facilities in Perris

CITY OF PERRIS SUBDIVISION ORDINANCE

The City of Perris Subdivision Ordinance incorporates park dedication procedures consistent with California Government Code Section 66477 (Quimby Act) thereby establishing a requirement for dedication of 3 acres of parkland per 1,000 population, or payment of a fee in lieu of such dedication. The fee and/or land dedications or improvements, can only be used to provide neighborhood and community parks that serve the proposed development.

MITIGATION FEE ACT (GOVERNMENT CODE 66000)

The City of Perris has adopted a Mitigation Fee Ordinance reflecting State enabling legislation allowing cities to develop fee structures to pay for infrastructure improvements or new infrastructure that is needed due to the new development.

4.8.3 THRESHOLDS OF SIGNIFICANCE

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid significant impacts that are identified. The criteria, or standards, used to determine the significance of these impacts may vary depending on the nature of the project. Parks and recreational impacts resulting from General Plan 2030 could be deemed significant if they cause the following results:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated (*refer to Section 6.0, Impacts Found Not To Be Significant)*; or

- Include recreational facilities or require the construction of or expansion of recreational facilities, which might have an adverse impact on the environment.

4.8.4 PROJECT IMPACTS

Under the California Environmental Quality Act, recreation impacts may be considered significant if General Plan 2030:

Threshold ***Include recreational facilities or require the construction of or expansion of recreational facilities, which might have an adverse impact on the environment.***

General Plan 2030 identifies and guides future growth, development, and environmental management throughout the City of Perris over the next 30 years. This anticipated growth and development would increase the demand for park and recreational facilities, and would require the construction of new parks and facilities. With General Plan 2030, it is anticipated that there would be at year 2030 a population of 83,570 who would require approximately 250 acres of neighborhood and/or community parkland, according to the park acreage per resident ratio (3 acres per 1,000 residents). As of 2003, the City has approximately 69.46 acres of parkland within the City limits. The Open Space Element of General Plan 2030 quantifies additional acreage to be acquired and developed to satisfy the need for additional park venues resulting from development of new dwelling units. Generalized locations for these community parks are identified in the Open Space Element.

Specific locations for community parks will be determined, consistent with the process set forth in the "New Community Parks" section of the Open Space Element, at the time residential development is proposed within an area designated as a "Generalized Park Location." This process assures that adequate parkland will be reserved and developed commensurate with demand attendant to new residential development.

The process for acquiring and improving community parks (parks of at least 20 acres) will include identification of park sites and agreement on the means for reserving those sites for park development. Based on the park needs analysis included in the Open Space Element, the general areas within which community parks are to be developed concurrent with new residential development are shown in Exhibits 4.8-1 through 4.8-4, "Generalized Locations of Future Parks." The projected parkland dedication attributable to future residential development, by planning area, is shown in Table 4.8-1.

The generalized locations of future parks encompass vast land tracts that will include future residential development. Each generalized park location was selected with a projected service area of approximately three miles. The precise location of a community park, the means to acquiring and developing each park, and the allocation of costs among benefiting subdivisions will be identified at the time residential development is proposed within an area designated in Exhibits 4.8-1 through 4.8-4 as a *Generalized Location*.

Because development of detailed, site-specific information for the community parks is not feasible prior to adoption of General Plan 2030, potential direct physical impacts of each community park will be analyzed together with those of proposed residential development that triggers the General Plan Open Space Element process for identifying a specific community park site. The physical effects on the environment from the construction of the new parks and recreation facilities are mitigated through the implementation of policies and mitigation provided in land use, air quality, noise, traffic, and public service section of the EIR. No further mitigation is required.

Impacts associated with parks and recreation within the City would be less than significant with implementation of General Plan 2030 Goals, Policies and Implementation Measures. No residual impacts remain. In addition, cumulative impacts associated with parks and recreation would also be less than significant, and no residual impacts would remain.

Impact: **Adoption and implementation of General Plan 2030 will indirectly result in the need for new or expanded park and recreational facilities, but the physical impacts associated with construction of new or expanded park and recreational facilities are determined to be less than significant.**

.

Table 4.8-1: Projected Parkland Dedication

Planning Area	Estimated Park Acreage
Planning Area 2	9
Planning Area 5	96
Planning Area 7	54
Planning Area 9	51*
Planning Area 10	26

*Parks are proposed in Green Valley Specific Plan

Exhibit 4.8-1: Generalized Locations of Future Parks, Planning Area 2

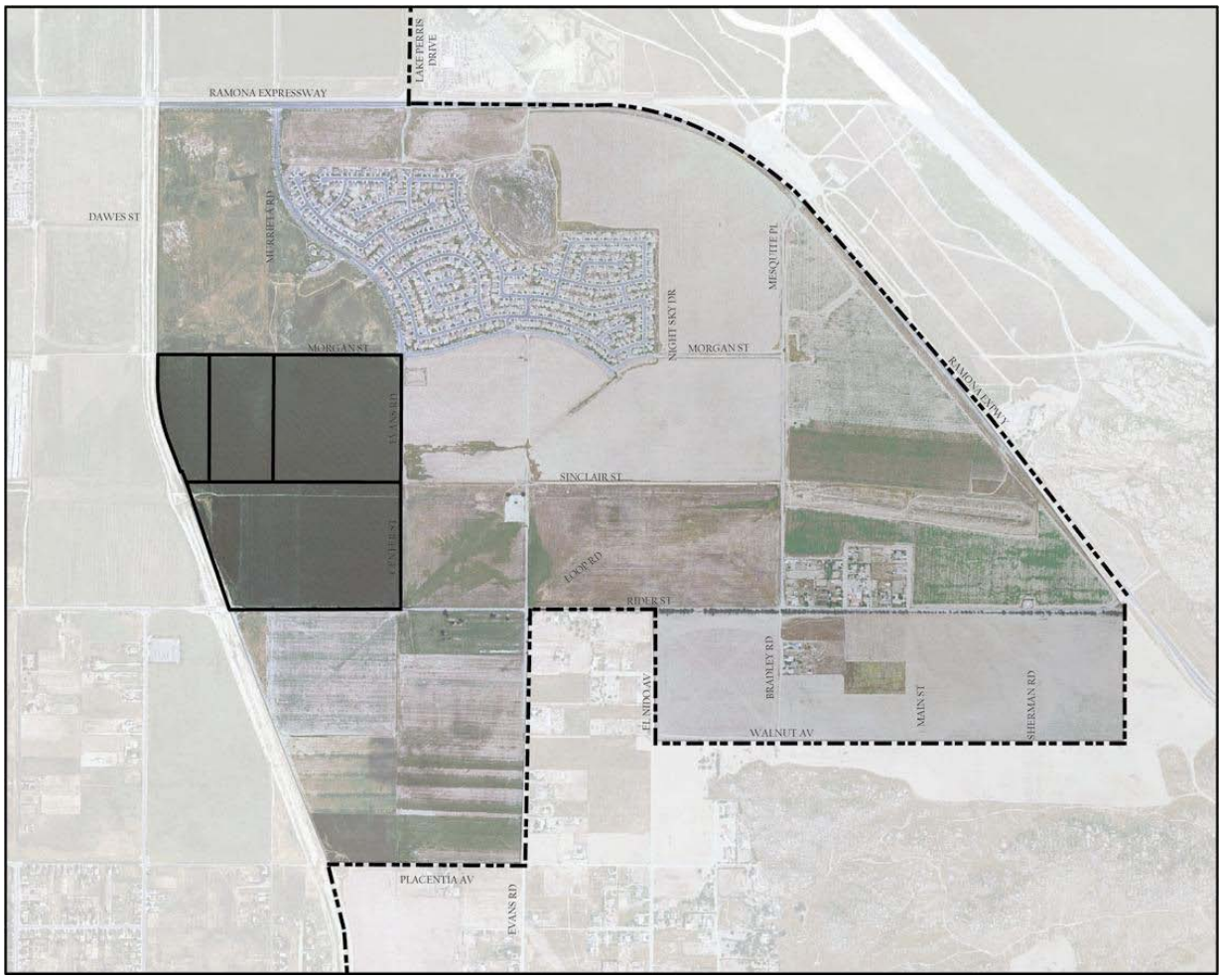


Exhibit 4.8-2: Generalized Locations of Future Parks, Planning Area 5

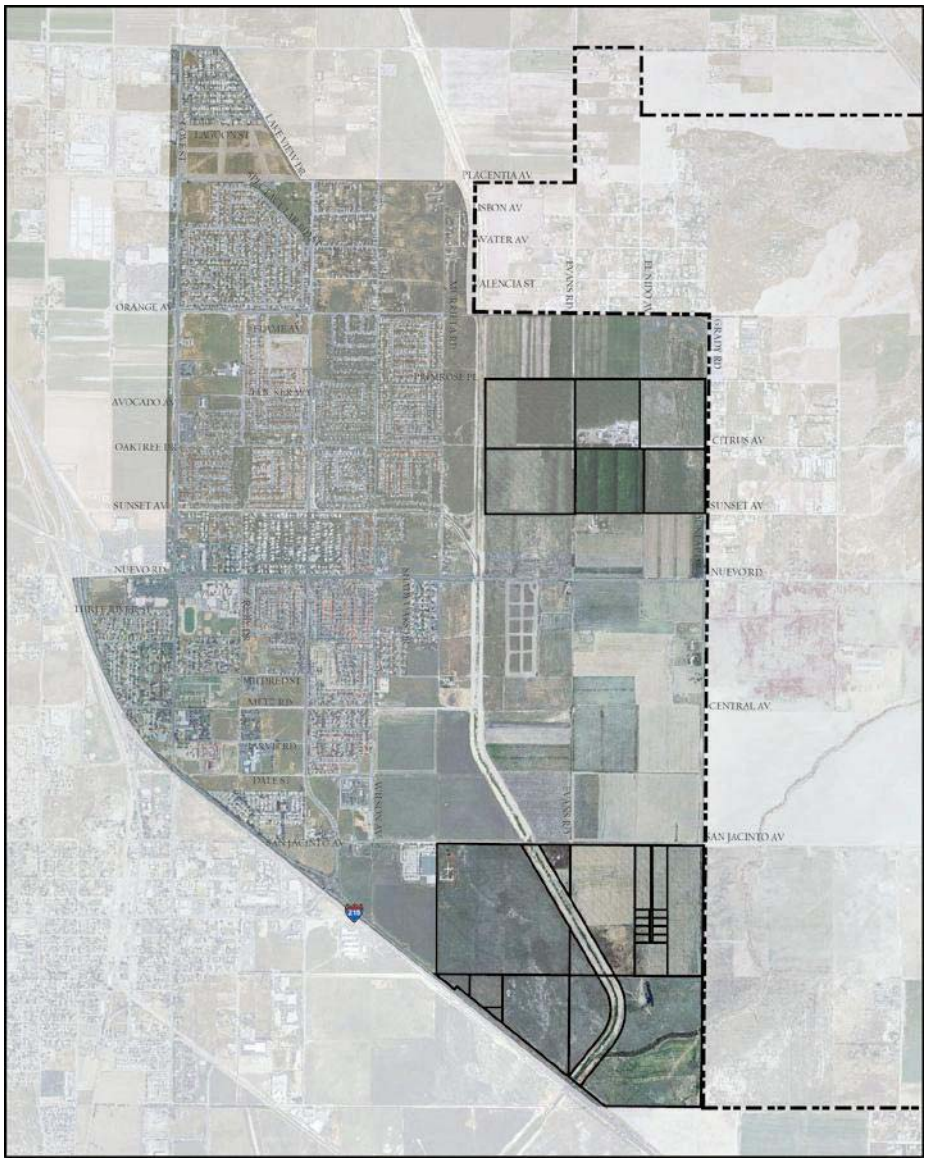
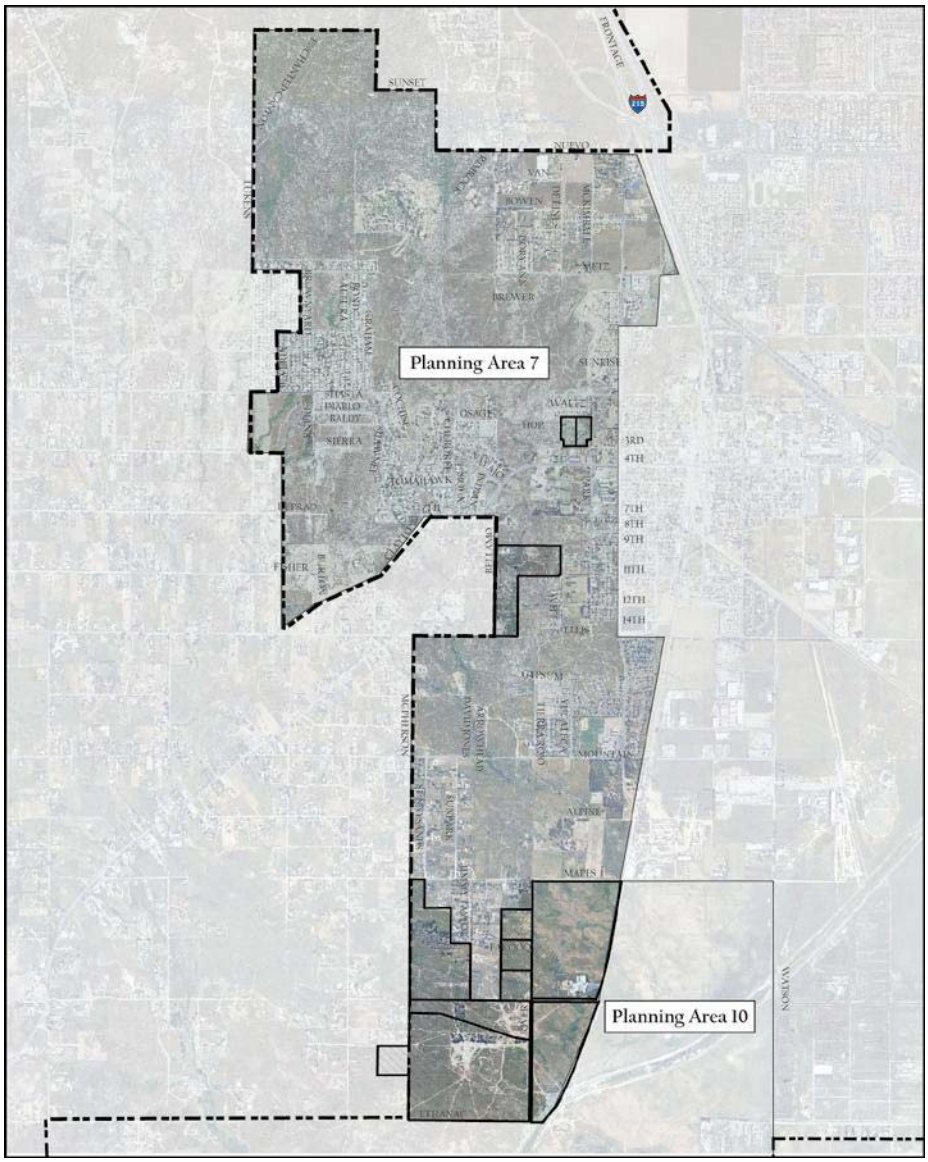


Exhibit 4.8-3: Generalized Locations of Future Parks, Planning Area 9

Exhibit 4.8-4: Generalized Locations of Future Parks, Planning Areas 7 and 10



4.8.5 MITIGATION MEASURES

No mitigation measures are required.

4.8.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.9 TRANSPORTATION/CIRCULATION

The following discussion is based on a traffic and transportation report prepared by VRPA Technologies in July 2003. The traffic analysis includes an evaluation of cumulative conditions as required by CEQA.

4.9.1 EXISTING CONDITIONS

ROADWAY SYSTEM

The City of Perris is located within Riverside County, California (Exhibit 4.9-1). Two State highways traverse the City: Interstate 215 and Highway 74. Both highways are owned and maintained by the California Department of Transportation (Caltrans) and are

Interstate 215 runs north to south through the City of Perris and is designated as a freeway. The freeway is 4 lanes south of Redlands Avenue and 6 lanes north of Redlands Avenue.

State Route 74 generally runs east-west through the City, connecting Southeastern Perris with the downtown area and the I-215. Between Case Road and 4th Street, State Route 74 and I-215 are the same roadway. SR 74 is 4 lanes from I-215 west through downtown Perris and is 2 lanes west of Navajo Road and east of I-215.

Ramona Expressway is a four-lane expressway providing major east-west travel in northern Perris. The Expressway is owned and maintained by the City of Perris.

A network of City-owned and maintained streets provides for traffic circulation within Perris and interconnects with State and County roadways for access to the surrounding region. This network is comprised of roadways classified as primary arterials, secondary arterials, collectors, and local streets.

The existing roadway network and classification system for the City of Perris is shown in Exhibit 4.9-2.

Existing Levels of Service

Levels of Service (LOS) standards are used to assess the performance of a street or highway system and the capacity of a roadway. Roadway segment LOS is important in order to understand whether the capacity of the entire roadway can accommodate future traffic volumes. The performance criteria used for evaluating volumes and capacities on the City street system were estimated using the Modified Highway Capacity Manual (HCM)-Based LOS Tables (Tables 4.9-1, 4.9-2 and Appendix E).

Exhibit 4.9-1: City of Perris and Surrounding Communities

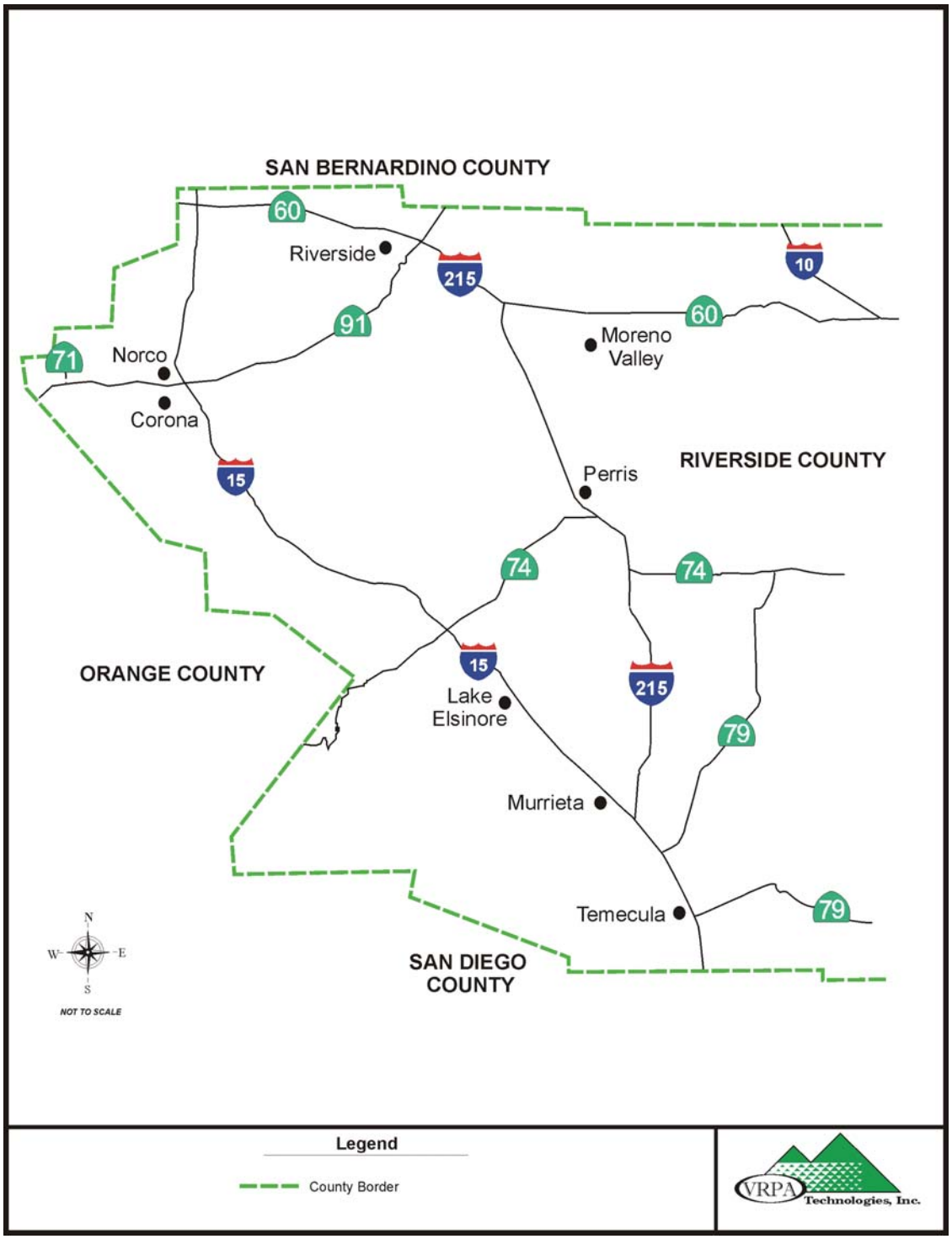


Exhibit 4.9-2: City of Perris Existing Roadway Network

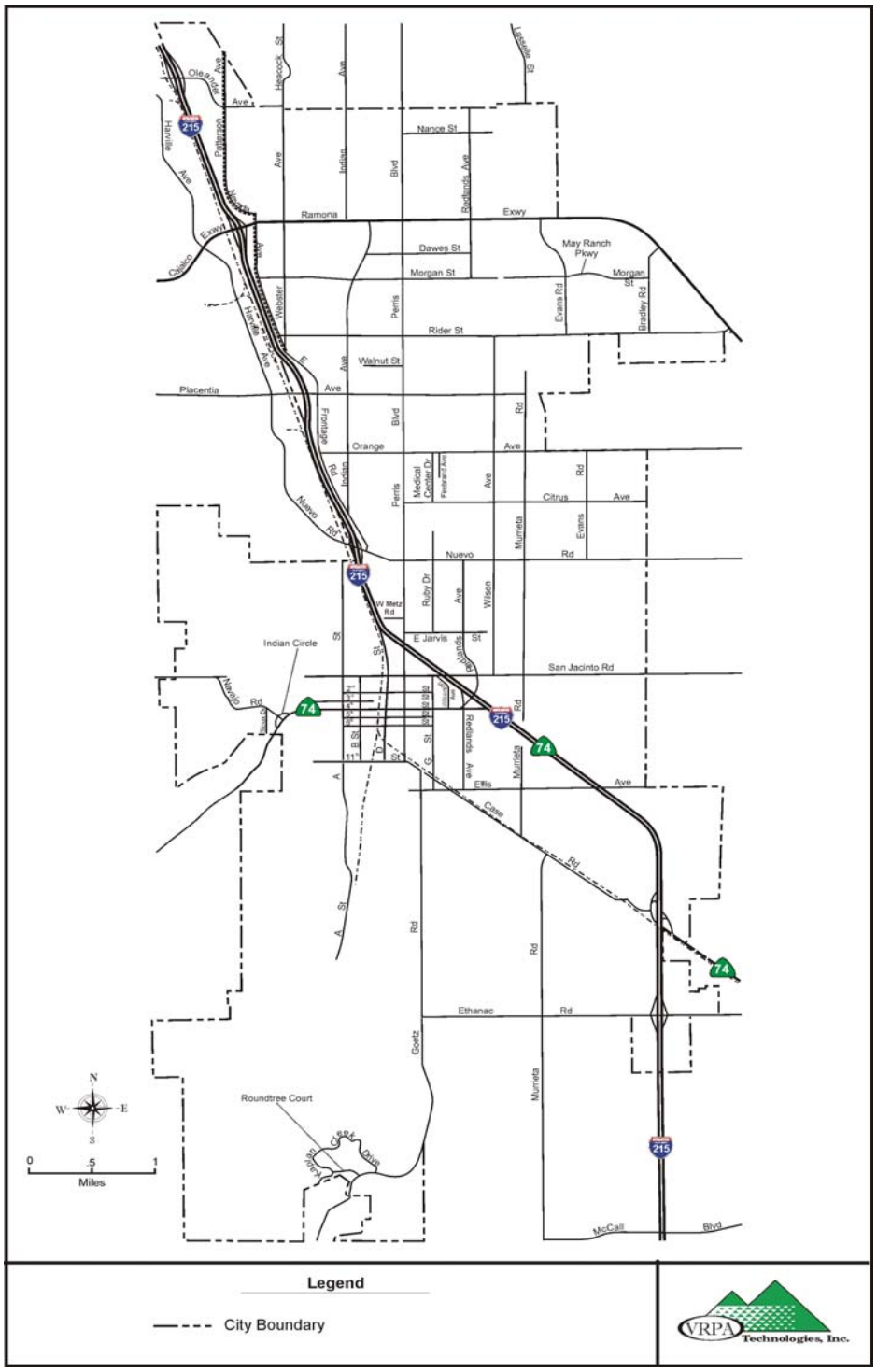


Table 4.9-1: Segment Level of Service Definitions (2000 Highway Capacity Manual)

Level of Service	Definition
A	Represents free flow. Individual vehicles are virtually unaffected by the presence of others in the traffic stream.
B	Is in the range of stable flow, but the presence of other vehicles in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.
C	Is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual vehicles becomes significantly affected by interactions with other vehicles in the traffic stream.
D	Is a crowded segment of roadway with a large number of vehicles restricting mobility and a stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.
E	Represents operating conditions at or near the level capacity. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.
F	Is used to define forced or breakdown flow (stop-and-go gridlock). This condition exists when the amount of traffic approaches a point that exceeds the amount that can travel to a destination. Operations within the queues are characterized by stop and go waves, and they are extremely unstable.

Table 4.9-2: Perris Roadway Capacity / Level of Service (1)

Roadway Classification	*Number of Lanes*	*Maximum Two-Way Average Daily Traffic (ADT)* [2]				
		LOS A	*LOS B*	*LOS C*	*LOS D*	*LOS E*
Collector	2	7,800	9,100	10,400	11,700	13,000
Collector	4	15,540	18,130	20,700	23,300	25,900
Arterial	2	10,800	12,600	14,400	16,200	18,000
Arterial	4	21,540	25,130	28,700	32,300	35,900
Arterial	6	32,340	37,730	43,100	48,500	53,900
Expressway	4	24,540	28,630	32,700	36,800	40,900
Expressway	6	36,780	42,910	49,000	55,200	61,300
Expressway	8	49,020	57,190	65,400	73,500	81,700
Freeway	4	45,900	53,550	61,200	68,900	76,500
Freeway	6	70,500	82,250	94,000	105,800	117,500
Freeway	8	96,300	112,350	128,400	144,500	160,500
Freeway	10	120,360	140,420	160,500	180,500	200,600

(1) All Capacity Exhibits are based on optimum conditions and are intended as guidelines for planning purposes only.
(2) Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables

Traffic volumes used to develop these LOS calculations were obtained through a count program and from various relevant studies conducted by the City of Perris within the past year. Table 4.9-3 and Exhibit 4.9-3 document the existing Average Daily Traffic (ADT) for segments within the City and the corresponding LOS.

Levels of Service in Perris range from LOS "A" through "C". On I-215 the range is LOS "A" through "D". Since the current city adopted minimum LOS is "E" there are no deficiencies at this time on any City streets and the number of through lanes is currently adequate for capacity.

The roadway system in the City of Perris includes signalized and unsignalized intersections on arterial and collector facilities. Intersections selected by the City Engineer were evaluated to determine current LOS. The level of service standards applied to calculate intersection LOS are in accordance with the current edition of the Highway Capacity Manual (HCM) which includes the input of truck percentages at each intersection. Intersection turning movements were counted, roadway geometrics identified and various studies conducted by the City of Perris were reviewed in calculating LOS. Table 4.9-4 and Exhibit 4.9-4 show the existing LOS at major intersections in the City of Perris. Appendix F contains the actual counts and calculations used in determining these current Levels of Service.

Intersection LOS in the City ranges from "C" through "F". Based on the current City adopted minimum LOS of "E" the following intersections are deficient within the City:

- I-215 SB and Cajalco Expressway – PM
- I-215 NB and Ramona Expressway – PM
- Nuevo Road and Ruby Drive – AM and PM (unsignalized)
- I-215 NB and Redlands Avenue – PM

Table 4.9-3: Existing Segment Average Daily Traffic (ADT) & Level of Service (LOS)

Count Taken 9/02	Street	Segment	Classification	Number of Lanes	ADT	LOS
23	11th Street	A Street - B Street	Collector	2	4,631	A
24	11th Street	D Street - Perris Boulevard	Collector	2	6,041	A
	2nd Street	B Street - C Street	Collector	2	1,800	A
	2nd Street	D Street - Perris Boulevard	Collector	2	900	A
	5th Street	B Street - C Street	Collector	2	1,100	A
	5th Street	D Street - Perris Boulevard	Collector	2	2,200	A
	6th Street	B Street - C Street	Collector	2	800	A
	6th Street	D Street - Perris Boulevard	Collector	2	600	A
20	A Street	5th Street - 6th Street	Secondary Arterial	2	5,625	A
14	A Street	South of Nuevo Road	Secondary Arterial	2	5,348	A
	C Street	2nd Street - San Jacinto Road	Collector	2	5,000	A
	C Street	3rd Street - 2nd Street	Collector	2	8,700	B
	C Street	5th Street - 4th Street	Collector	2	100	A
	Cajalco Expressway	Harville Avenue - I-215	Freeway	4	14,500	A
25	Case Road	G Street - Ellis Avenue	Primary Arterial	2	1,975	A
28	Case Road	West of I-215	Primary Arterial	2	2,958	A
	D Street	11th Street - 6th Street	Collector	2	5,400	A
	D Street	2nd Street - San Jacinto Road	Collector	4	12,500	A
	D Street	3rd Street - 2nd Street	Collector	4	2,800	A
	D Street	5th Street - 4th Street	Collector	2	7,389	A
21	D Street	5th Street - 6th Street	Collector	2	7,389	A
4	D Street	San Jacinto Road - I-215	Collector	4	14,710	A
	Ethanac Road	Goetz Road - Murrieta Road	Primary Arterial	2	2,200	A
	Ethanac Road	I-215 - SR-74	Primary Arterial	2	4,400	A
29	Ethanac Road	Murrieta Road - I-215	Primary Arterial	2	4,133	A
	Goetz Road	Kaplan Creek Drive - Ethanac Road	Secondary Arterial	2	1,900	A
27	Goetz Road	North of Fieldstone Drive	Primary Arterial	2	2,127	A
30	Goetz Road	Roundtree Court - Kaplan Creek Drive	Secondary Arterial	2	3,001	A
	I-215	Case Road - Redlands Avenue	Freeway	4	63,000	D
	I-215	Ethanac Road - Case Road	Freeway	4	51,000	B
	I-215	North of Oleander Avenue	Freeway	6	84,000	C
	I-215	Nuevo Road - Placentia Avenue	Freeway	6	70,000	A
	I-215	Perris Boulevard - Nuevo Road	Freeway	6	67,000	A
	I-215	Ramona Expressway - Oleander Avenue	Freeway	6	81,000	B
	I-215	Redlands Avenue - Perris Boulevard	Freeway	4	57,000	C
	Indian Avenue	Dawes Street - Ramona Expressway	Secondary Arterial	2	1,800	A
2	Lasselle Street	At City Boundary, North of Murrietta Road	Collector	2	8,393	B
	May Ranch Parkway	Morgan Street - Ryder Street	Secondary Arterial	2	1,500	A
	Murrieta Road	Ethanac Road - Case Road	Secondary Arterial	2	1,300	A
	Murrieta Road	McCall Boulevard - Ethanac Road	Secondary Arterial	2	3,600	A
18	Navajo Road	Sioux Drive - 4th Street	Collector	2	9,811	C
	Navajo Road	Sioux Drive - Indian Circle	Collector	2	9,811	C
10	Nuevo Road	I-215 - Perris Boulevard	Primary Arterial	4	23,486	B
12	Nuevo Road	Wilson Avenue - Murrietta Road	Primary Arterial	4	6,950	A
9	Orange Avenue	Firebrand Avenue - Wilson Avenue	Secondary Arterial	4	6,584	A

Count Taken 9/02	Street	Segment	Classification	Number of Lanes	ADT	LOS
8	Orange Avenue	Frontage Road - Indian Avenue	Secondary Arterial	4	3,956	A
	Orange Avenue	Perris Boulevard - Wilson Avenue	Secondary Arterial	4	6,584	A
17	Perris Boulevard	2nd Street - 4th Street	Primary Arterial	4	12,544	A
	Perris Boulevard	3rd Street - 2nd Street	Primary Arterial	4	12,544	A
19	Perris Boulevard	4th Street - 5th Street	Primary Arterial	2	7,229	A
22	Perris Boulevard	6th Street - 11th Street	Primary Arterial	2	6,707	A
11	Perris Boulevard	Citrus Avenue - Nuevo Road	Primary Arterial	6	22,754	A
5	Perris Boulevard	Dawes Street - Morgan Street	Primary Arterial	4	16,765	A
	Perris Boulevard	E Jarvis Street - W Metz Road	Primary Arterial	4	18,581	A
	Perris Boulevard	Morgan Street - Dawes Street	Primary Arterial	4	16,765	A
1	Perris Boulevard	North of Nance Street	Primary Arterial	4	17,464	A
	Perris Boulevard	North of Nance Street	Primary Arterial	4	17,464	A
	Perris Boulevard	Placentia Avenue - Walnut Street	Primary Arterial	4	17,974	A
13	Perris Boulevard	W. Metz Road - E. Jarvis Street	Primary Arterial	4	18,581	A
6	Perris Boulevard	Walnut Street - Placentia Avenue	Primary Arterial	4	17,974	A
	Placentia Avenue	East of Perris Boulevard	Primary Arterial	2	2,700	A
7	Placentia Avenue	Indian Avenue - Perris Boulevard	Primary Arterial	2	1,076	A
	Placentia Avenue	Indian Avenue - Perris Boulevard	Primary Arterial	2	1,076	A
	Ramona Expressway	Bradley Road - Ryder Street	Expressway	4	10,500	A
	Ramona Expressway	Evans Road - Bradley Road	Expressway	4	11,700	A
	Ramona Expressway	I-215 - Nevada Avenue	Expressway	4	29,400	C
	Ramona Expressway	Indian Avenue - Perris Boulevard	Expressway	4	19,600	A
	Ramona Expressway	Nevada Avenue - Webster Avenue	Expressway	4	24,000	A
3	Ramona Expressway	Perris Boulevard - Redlands Avenue	Expressway	4	23,577	A
	Ramona Expressway	Redlands Avenue - Evans Road	Expressway	4	13,500	A
	Ramona Expressway	Webster Avenue - Indian Avenue	Expressway	4	19,000	A
	Redlands Avenue	I-215 - San Jacinto Road	Secondary Arterial	2	13,418	C
16	Redlands Avenue	San Jacinto Road - I-215	Secondary Arterial	2	13,418	C
	Ryder Street	Bradley Road - Ramona Expressway	Secondary Arterial	2	1,700	A
	Ryder Street	Indian Avenue - Perris Boulevard	Secondary Arterial	2	2,100	A
	Ryder Street	Wilson Avenue - May Ranch Parkway	Secondary Arterial	2	3,700	A
15	San Jacinto Road	Wilson Avenue - Murrieta Road	Secondary Arterial	4	3,750	A
	San Jacinto Road	Wilson Avenue - Murrieta Road	Secondary Arterial	4	3,750	A
	SR-74	B Street - C Street	Secondary Arterial	2	24,300	F
	SR-74	C Street - D Street	Secondary Arterial	2	23,600	F
	SR-74	D Street - Perris Boulevard	Secondary Arterial	2	19,100	F
26	SR-74	East of I-215	Primary Arterial	2	Future Count	
	SR-74	Indian Circle - Navajo Road	Secondary Arterial	2	17,200	E
	SR-74	Wilkerson Avenue - Redlands Avenue	Secondary Arterial	2	19,800	F
	Webster Avenue	Ramona Expressway - Oleander Avenue	Secondary Arterial	2	14,400	C

Exhibit 4.9-3: Existing Segment Average Daily Traffic (ADT) Counts and Level of Service (LOS)

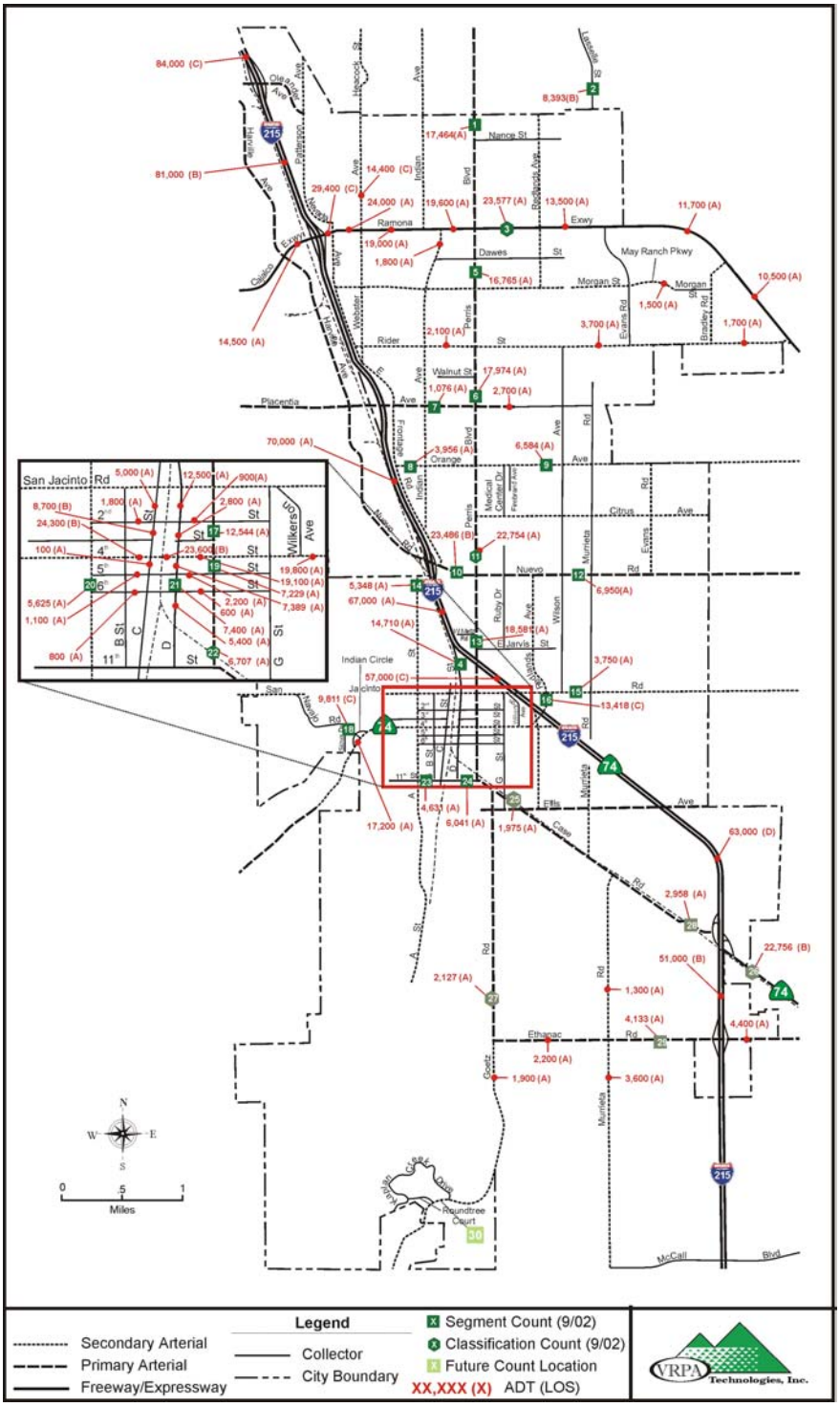


Exhibit 4.9-4: Existing Intersection Counts and Level of Service (LOS)

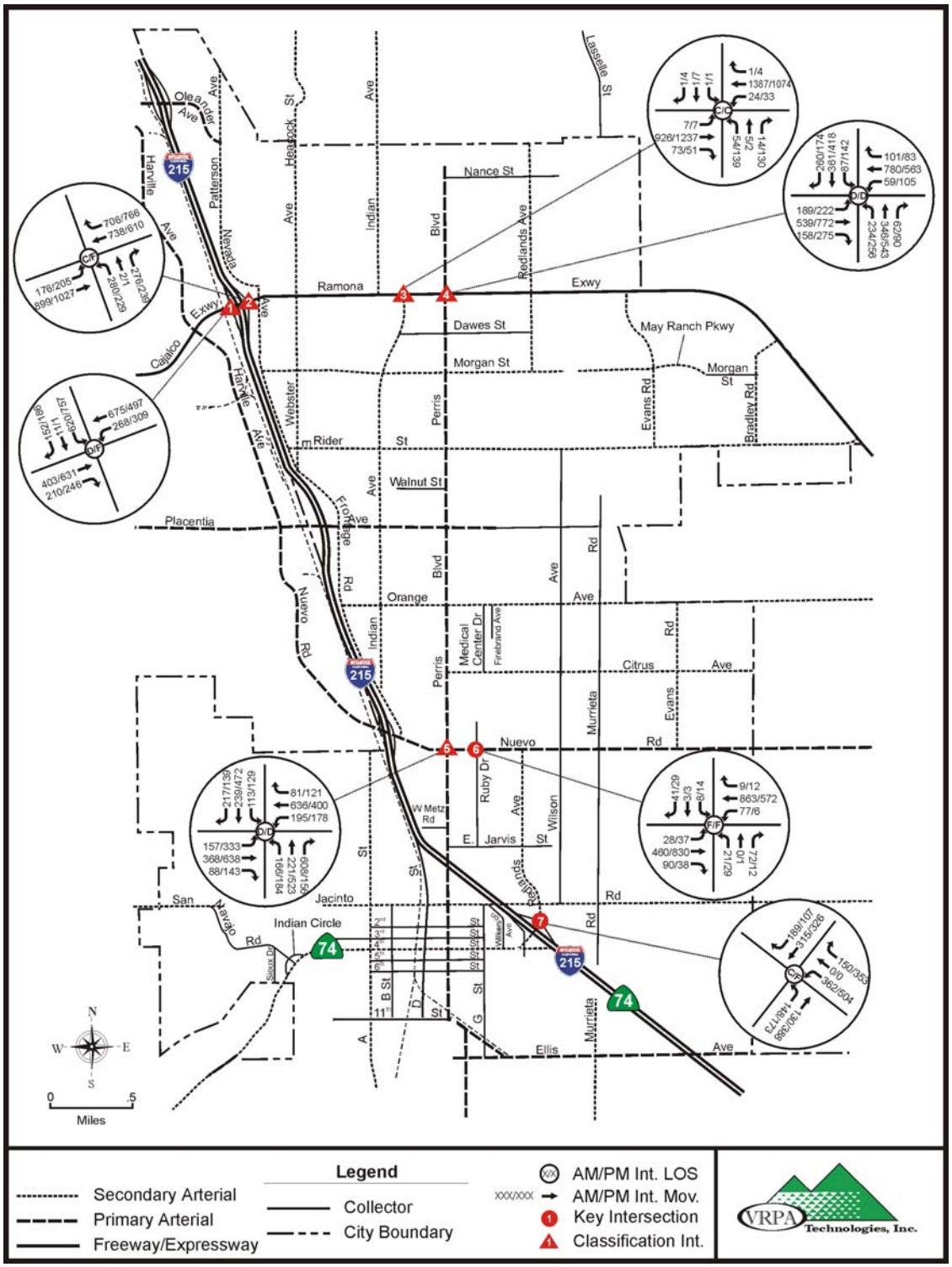


Table 4.9-4: Existing Intersection Delay and Level of Service (LOS)

Intersection Number	Intersection	AM Average Delay	AM LOS	PM Average Delay	PM LOS
1	*I-215 SB and Cajalco Expressway*	*46.2*	*D*	*>80.0*	*F*
2	*I-215 NB and Ramona Expressway*	*32.0*	*C*	*>80.0*	*F*
3	*Ramona Expressway and Indian Avenue*	*21.9*	*C*	*34.9*	*C*
4	*Ramona Expressway and Perris Boulevard*	*43.8*	*D*	*47.1*	*D*
5	*Nuevo Road and Perris Boulevard*	*38.8*	*D*	*43.0*	*D*
6	*Nuevo Road and Ruby Drive(1)*	*>50*	*F*	*>50*	*F*
7	*I-215 NB and Redlands Avenue(1)*	*15.9*	*C*	*>50*	*F*

FIXED ROUTE TRANSIT

The Riverside Transit Agency (RTA) operates 29 fixed bus routes providing public transit service throughout a 2,500 square mile area of Western Riverside County. RTA's fixed routes have been designed to establish transportation connections between all the cities, including the City of Perris, and unincorporated communities in western Riverside County. A Riverside Transit Agency System Map brochure has been included in Appendix G, which shows all the fixed routes, route connection and transfer locations, and demand response system service areas.

RTA is currently operating 76 full size buses, 67 mini-buses and vans, and two trolleys. The system carries approximately 6.4 million passengers annually, which are about 18,000 passengers per day. All of the RTA s vehicles are wheelchair accessible and all full size buses include bike racks

Within the City of Perris, RTA operates five (5) fixed route services that link the City with various Riverside County destinations such as Riverside, Woodcrest, Mead Valley, Moreno Valley, Hemet and Sun City. In addition, RTA maintains one fixed-route service within the City of Perris linking the retail/commercial center located at Orange Avenue and Perris Boulevard with Goetz and Ellis Roads in the south and Weston and Lamore Roads in the west. The route encompasses the downtown area via A Street, 11th Street, and D Street and makes a stop near the Civic Center and library.All routes operate on regular schedules and the overall network serviced in Perris is depicted in Exhibit 4.9-5.

PARATRANSIT SERVICE

Dial-A-Ride is a general public, advance reservation service provided by RTA and designed to provide curb to curb transportation. Anyone may use the Perris Dial-A-Ride if the beginning and ending points of their trip fall within the Dial-A-Ride service area. Dial-A-Ride service hours are: Mon-Fri, 6:00 AM – 9:00 PM; Sat, 7:00 AM – 8:00 PM; and Sun, 7:00

AM – 9:00 PM. Dial-A-Ride fares range from: General $2.00; Senior/Disabled $1.00; and Child Free (first two 5 and under – additional child 50¢).

COMMON CARRIERS

Greyhound Bus Lines provides private transportation services that link the principal population centers of the County with other regions. This includes east-west service connecting Blythe, Indio, Palm Springs, Banning/Beaumont, and Riverside (via San Bernardino). The service continues westward to downtown Los Angeles and intermediate stops. North-south service connects Riverside with Temecula, continuing southward to San Diego. The number of bus trips in each direction ranges from five to eight per day.

PASSENGER RAIL SERVICE

AMTRAK does not currently directly service the City of Perris although a rail line does exist. The passenger rail station located along the rail line in Perris at D Street between San Jacinto Avenue and 4th Street in downtown is currently inactive. The only AMTRAK station located in Riverside County is in the City of Palm Springs. This station provides connecting AMTRAK service to points west including Los Angeles and to points east including Tucson, Arizona and El Paso, Texas. AMTRAK does provide bus connections to and from other Riverside County areas to the San Bernardino AMTRAK station on a daily basis. RTA Bus service is provided from downtown Riverside to downtown San Bernardino; however, a transfer will be needed to get to the AMTRAK station. There is also an Amtrak stop in Palm Springs at Indian Canyon Drive (extension of Indian Avenue South) at Amado Road.

COMMUTER RAIL SERVICE

Metrolink offers commuter rail service in six major corridors. Long-term plans call for extension of the Riverside Transit Corridor along the San Jacinto branch line to the City of Hemet. The 2001 Southern California Association of Governments' Regional Transportation Plan indicates that the commuter rail segment of this corridor between 12th and Vine in the City of Riverside to 4th and D Street in Perris will be completed by 2010.

FREIGHT RAIL SERVICE

The Union Pacific (UP) and the Burlington Northern Santa Fe (BNSF) Railroads provide freight service in Riverside County, connecting the County with major markets within California and other destinations north and east. The Burlington Northern Santa Fe (BNSF) line from Riverside traverses the City of Perris along I-215 in the north and transitions southeast along Case Road. Currently the rail line provides significant goods movement through Riverside to distribution centers north of Perris.

AVIATION

Five major commercial airports offer passenger service in southern California: Palm Springs International Airport, Ontario International Airport (San Bernardino County), Orange County - John Wayne Airport, Los Angeles International Airport, and Lindbergh Field (San Diego County). Of these, only Palm Springs International Airport is located in Riverside County.

Nine public-use general aviation airports are also located in the County of Riverside: Flabob Airport, French Valley Airport, Hemet-Ryan Airport, Bermuda Dunes Airport, Desert Resorts Regional Airport, Chiriaco Summit Airport, Desert Center Airport, Riverside Municipal Airport, and Blythe Airport.

Perris Valley Airport is a privately-owned, public-use airport located near the corner of Ethanac Road and Goetz Road in Perris. The facility provides a 5100-foot runway and handles approximately 68 aircraft operations per day. The airport serves as home to ultralight plane rides and the Perris Valley Skydiving Company, the largest Skydiving Center in North America.

Los Angeles (LAX) and Ontario International Airports are the major air cargo-handling airports in Southern California. March Inland Port/Air Reserve Base, located along Interstate 215 on the northern border of Perris, provides regional air cargo service and functions as the Air Reserve Base in Riverside County

4.9.2 REGULATORY AND PLANNING FRAMEWORK

REGIONAL TRANSPORTATION PLANNING

SCAG Regional Transportation Plan

The Regional Transportation Plan (RTP) is a multi-modal, long-range planning document prepared by the Southern California Association of Governments (SCAG), in coordination with federal, state, and other regional, sub regional, and local agencies in southern California. The RTP includes programs and policies for congestion management, transit, bicycles and pedestrians, roadways, freight, and finances for the Southern California region (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties). The RTP is prepared every three years and reflects the current future horizon based on a 25-year projection of needs.

The RTP's primary use is as a regional long-range plan for federally funded transportation projects. It also serves as a comprehensive, coordinated transportation plan for all governmental jurisdictions within the region. Each agency responsible for transportation, such as local cities, the County, and Caltrans, has different transportation implementation responsibilities under the RTP. The RTP relies on the plans and policies governing circulation and transportation in each County to identify the region's future multi-modal transportation system. The RTP contains a listing of projects that are believed to be financially feasible within the 25-year time frame. Federally funded projects must be consistent with the RTP.

"Potential Solutions" in the RTP include strategies for public transit and non-motorized alternatives to the automobile summarized as follows:

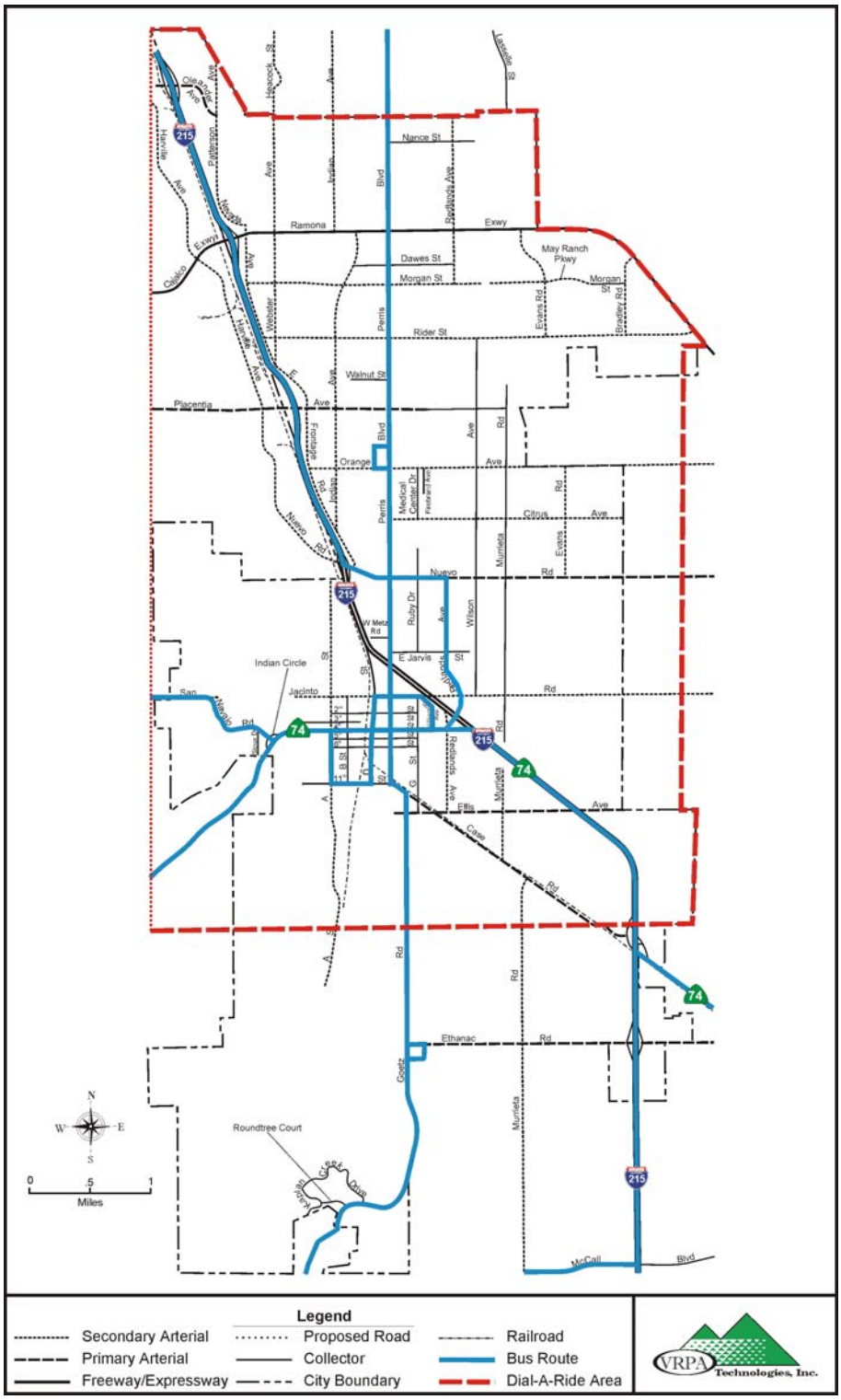
- Increase in service availability through expansion of bus rapid transit
- Additional bus lines to feed into commuter rail systems
- Doubling of Metrolink passenger carrying capacity
- Transit-oriented development with compact land patterns that promote walking and reduced automobile use especially around bus and rail stations

Inland Empire Intelligent Transportation System Strategic Plan

The Inland Empire Intelligent Transportation System (ITS) Strategic Plan was approved by the Riverside County Transportation Commission in 1997. The Strategic Plan contains a list of goals and policies to be followed by responsible agencies within the County to achieve a viable Intelligent Transportation System infrastructure that improves mobility and enhances safety within the region. Nine core ITS components have been identified by the Riverside County Transportation Commission that are needed to deploy a comprehensive set of Intelligent Transportation System services throughout the metropolitan areas. These components are:

- Freeway Management;
- Transit Management;
- Incident Management;
- Electronic Fare Payment;
- Electronic Toll Collection;
- Railroad Grade Crossings;
- Emergency Management Services; and
- Regional Multimodal Traveler Information.

Exhibit 4.9-5: Existing Public Transit Service Center Network



The Plan includes a process to evaluate the most effective Intelligent Transportation System projects and the benefits of those projects on the transportation system. The Plan can also be used to assist the City with applications for federal or State funding for specific types of Intelligent Transportation System projects. The Riverside County Transportation Commission and the Western Riverside Council of Governments are currently in the process of preparing the Inland Empire Intelligent Transportation System Architecture Plan which identifies how its components should be implemented to attain maximum capability.

Measure "A" ½ Cent Sales Tax for Transportation

Measure "A" is the half-percent sales tax measure for transportation improvements originally passed by the voters of Riverside County in 1988 for a twenty-year period and managed by the Riverside County Transportation Commission (RCTC). The Measure provides funding for transportation projects (highway, transit, and ridesharing). Voters in Riverside County extended Measure "A" on November 5, 2002 for an additional thirty years.

Funding derived from Measure "A" may be used in combination with other sources of funding. Currently, all the Measure "A" funds available over the 30-year duration are committed to projects. Measure "A" funds are used by Perris on an equal basis with the City's Redevelopment Agency funds.

WRCOG "TUMF" Program

The Western Riverside Council of Governments (WRCOG) has developed a "Transportation Unified Mitigation Fee" (TUMF) Program for Western Riverside County to provide funding for transportation infrastructure and improvements that will be necessary to address congestion and traveler safety. Given the significant funding shortfall anticipated from federal, State, regional, and local funding sources for transportation improvements over the next several years, the TUMF Program is intended to "make whole" the funding gap so that improvements can be accommodated.

A Regional System of Highways and Arterials was identified for TUMF funding based on several transportation network and performance guidelines, including: arterial highway facilities proposed to have a minimum of four lanes at ultimate build-out (not including freeways), facilities that serve multiple jurisdictions and/or provide connectivity between communities both within and adjoining Western Riverside County, facilities with forecast traffic volumes in excess of 20,000 vehicles per day by 2025, facilities with forecast volume to capacity ratio of 0.82 (LOS E) or greater in 2025, facilities that accommodate regional fixed route transit services, and facilities that provide direct access to major commercial, industrial, institutional, recreational or tourist activity centers, and multi-modal transportation facilities (such as airports, railway terminals and transit centers).

Based on the criteria described above the following roadways in the City of Perris have been identified on the regional system of highways and arterials: Oleander, Ramona, Placentia, Evans, Nuevo, Ellis, SR 74, Ethanac and Goetz.

Congestion Management Program

Each urbanized county in California is required to have a Congestion Management Program (CMP). The Riverside County Transportation Commission (RCTC) prepares and implements the CMP for Riverside County. The CMP was originally prepared and approved by RCTC in 1991 and is updated biennially in accordance with Proposition 111 and other recent legislation.

The CMP was established in the State of California to more directly link land use, transportation, and air quality and to prompt reasonable growth management programs that would more effectively utilize new and existing transportation funds, alleviate traffic congestion and related impacts, and improve air quality. In addition, the CMP defines a roadway network and level of service to be maintained on that network. The target level of service for CMP roadways in Riverside County is E, except that the target is LOS F for roadways that were already at F at the inception of the program (1991). The CMP in Riverside County focuses mainly on the monitoring of traffic and level of service.

The Circulation Element describes how the future transportation system will function. This is important for congestion management, since deficiencies along the CMP system must be mitigated when they occur. The ability to anticipate such deficiencies is critical. Understanding the reason for these deficiencies and identifying ways to reduce the impact of future growth and development along a critical CMP corridor will conserve scarce funding resources and help target those resources appropriately.

CMP facilities within the City of Perris include I-215 and SR 74. There are currently no local roadways identified as CMP facilities within the City of Perris.

Riverside County Integrated Project/CETAP

Riverside County has recognized the potential impacts of population growth and the need to secure necessary infrastructure improvements through extensive land-use planning and the mitigation of potential habitat impacts. One of the most extensive planning initiatives in the country, the Riverside County Integrated Plan (RCIP) seeks to accommodate Riverside County's growing population in a comprehensive plan that addresses conservation, transportation and land use needs for the next several decades. Due to the importance of the circulation and mobility systems in the County, the Community Environmental Transportation Acceptability Process (CETAP) was created as one of three planning efforts of the RCIP in addition to the Multi Species Habitat Conservation Plan, the Coachella Valley Multi Species Habitat Conservation Plan and the General Plan.

The CETAP committee served as an advisory body to the County staff during the development of the Integrated Plan, and made recommendations relating to transportation issues for the County to consider during the General Plan development and review process. The CETAP incorporated three levels of effort:

- Identification of transportation corridors;
- Development of the General Plan Circulation Element; and
- Exploration of options for transit system development in the County.

The transportation corridors that were identified will serve as multi-modal facilities and be an integral part of the long-term strategy to keep Riverside County moving. Thirteen corridors were initially identified and were reduced to four, including: Winchester to Temecula, Hemet to the Corona/Lake Elsinore area, Moreno Valley to San Bernardino County, and Riverside County to Orange County. Within each corridor several alignment alternatives were identified, evaluation criteria developed, and draft EIS/EIRs for each corridor were prepared. Within the City of Perris, the Ramona/Cajalco Expressway is the designated alignment for the Hemet to Corona/Lake Elsinore corridor.

Riverside Transit Agency

The Riverside Transit Agency (RTA) will focus on expanded commuter services in the near term including rapid bus service between Riverside County and San Diego and increased services to Metrolink stations. Additional vehicles to provide expanded services for those with disabilities have been purchased and an Express Route on I-215 now links Perris with Sun City, Moreno Valley, and Riverside.

RTA's "Ten Year Strategic Plan" includes a new transit center for Perris/Moreno Valley and improved bus stop amenities if funding becomes available. The Plan identifies 15 arterials within Riverside County for potential Primary Transit Network (PTN) service providing bus service at 15-minute intervals. The PTN includes a route connecting Perris and Moreno Valley via Perris Boulevard.

RTA will consider use of new technologies and infrastructure to improve commuter service including:

- Signal preemption, an electronic device, that allows a traffic control signal to respond and provide a green light to a particular type of vehicle.
- Queue bypasses that provide an additional lane to speed preferred traffic through congested areas.
- Bus-only lanes to give priority right-of-way to busses.

Planned Metrolink Improvements

Metrolink commuter rail service is expected to expand over the long term and will include extension of the Riverside Transit Corridor from Riverside to Hemet. The segment of this rail line between 4th and "D" Streets in Perris will be completed by the year 2010. Improvements will include an upgrade of the existing rail station and parking for Metrolink commuters.

4.9.2 THRESHOLDS OF SIGNIFICANCE

Pursuant to Appendix G of the State CEQA Guidelines, the project would have a significant impact on the environment if it would:

- Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system i.e. result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections;

- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

- Substantially increase hazards due to a design feature e.g., sharp curves or dangerous intersections or incompatible uses e.g., farm equipment *(refer to Section 6.0, Impacts Found Not To Be Significant*);

- Result in inadequate emergency access;

- Result in inadequate parking capacity *(refer to Section 6.0, Impacts Found Not To Be Significant)*; or

- Conflict with adopted policies, plans, or programs supporting alternative transportation e.g., bus turnouts, bicycle racks *(refer to Section 6.0, Impacts Found Not To Be Significant*).

4.9.3 PROJECT IMPACTS

Threshold ***Impacts Related to Substantial Increases in Traffic and Reductions in Levels of Service.***

GENERAL PLAN 2030 CIRCULATION ELEMENT

The Circulation Element of General Plan 2030 defines the planned roadway system within the City of Perris in the horizon year 2030. Planned roadway classifications are provided in Table 4.9-5. Exhibit 4.9-6 depicts the future roadway network in the City of Perris. Roadway improvements identified in the Southern California Association of Governments 2001 Transportation Plan (RTP) were included in the Year 2030-circulation system network. In addition, projects to be included in the most recent State Transportation Improvement Program (STIP) were considered. Table 4.9-6 and Exhibit 4.9-6 identify those significant projects that are expected to be completed by 2030.

The Circulation Element includes accommodations for transportation alternatives to the automobile. Existing and planned long-distance rail transportation and commuter rails service are described. Local and regional bus service is incorporated together with infrastructure improvements necessary to facilitate and promote public transit upgrades. Facilities for non-motorized transportation such as pedestrian and bike trails are included.

Table 4.9-5: City of Perris Future Street Classification

Classification	Right-of-Way	Lanes	Median
Local	60 feet	2	None
Collector	66 feet	2	None
Major Collector	78 feet	2	Painted
Secondary Arterial	94 feet	4	Raised or Painted
Arterial	128 feet	6	Raised
Expressway	184 feet	6 – 8	Raised
Freeway	Varies	Varies	Varies

Roadway Segment Levels of Service

The Southern California Association of Governments (SCAG) traffic model was used to estimate average daily vehicle trips in the year 2030. Vehicle trips were estimated considering: (1) projected land use as shown in the Land Use Plan of the Land Use Element of the project General Plan; (2) the planned transportation network; and, (3) household behavior.

Levels of Service (LOS) for roadway segments in the year 2030 were projected using the Modified Highway Capacity Manual-Based Level of Service Tables (Table 4.9-7 and Appendix

E). Table 4.9-6 and Exhibit 4.9-7 identify the resulting Year 2030 average daily traffic volumes and LOS for critical street and highway segments.

Results of the segment analysis for the Year 2030 indicate that a majority of the future year street and highway segments will be operating at LOS A through D (Table 4.9-6). Fourteen (14) segments referenced in Table CE-10 are projected to be operating at LOS E or F by the Year 2030. As a result, these street and highway segments will fall short of the Minimum LOS Standard of "D" or better established in the project General Plan Circulation Element. This represents a significant impact.

Exhibit 4.9-6: City of Perris Future Roadway Network

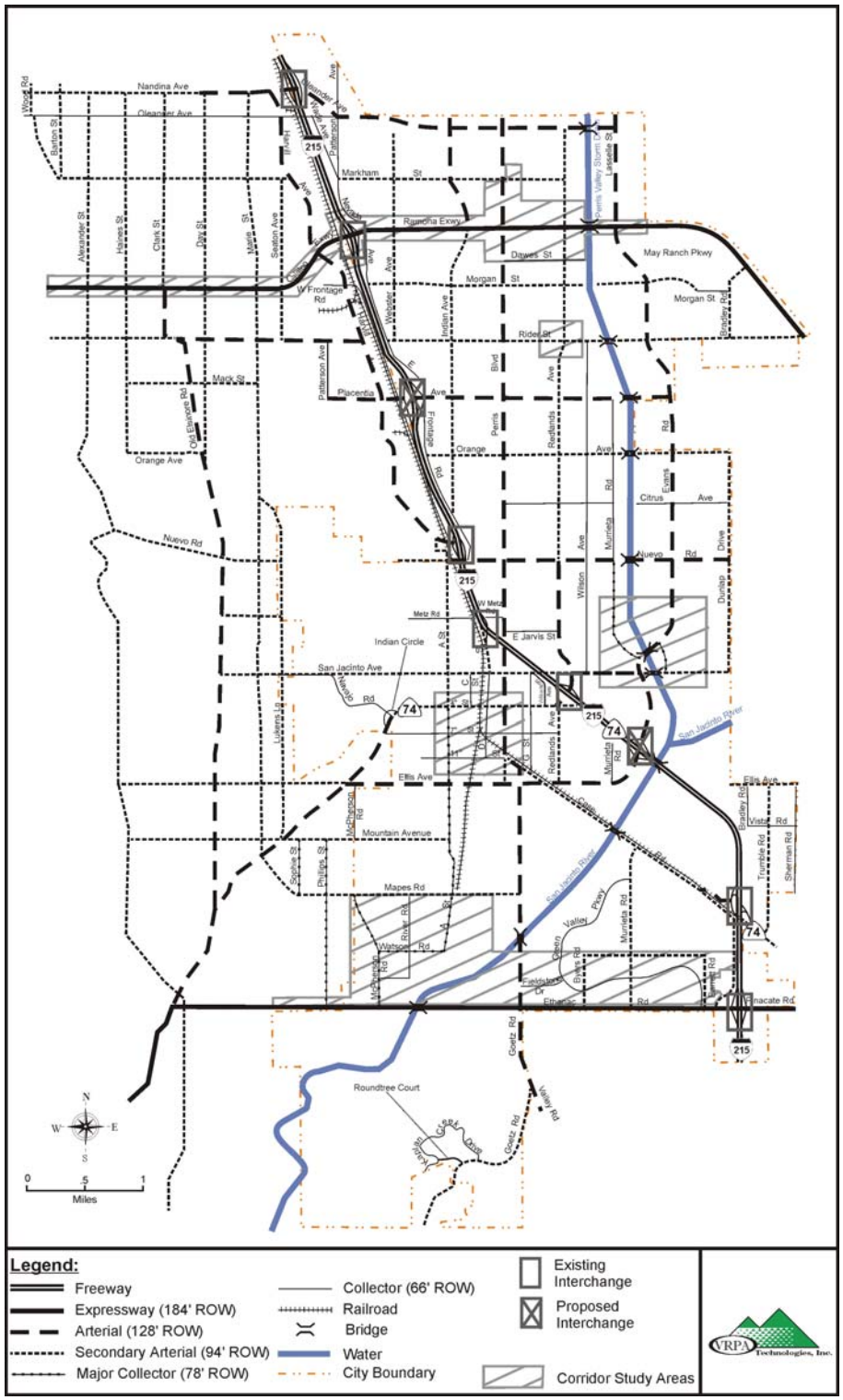


Table 4.9-6: Future Segment Average Daily Traffic (ADT) and Level of Service (LOS)

Future Segment Average Daily Traffic (ADT) and Level of Service (LOS)					
Street	Segment	2030			
		Future Classification	Future Number of Lanes	Future ADT	Future LOS
7th Street	Redlands - SR 74	Collector	2	4,800	A
11th Street	West of "A"	Collector	2	3,400	A
11th Street	A Street - D Street	Collector	2	3,300	A
11th Street	D Street - G Street	Collector	2	10,400	C
A Street	North of San Jacinto	Secondary Arterial	4	7,900	A
A Street	San Jacinto - 4th (SR 74)	Secondary Arterial	4	14,400	A
A Street	4th Street - 11th Street	Major Collector	2	8.400	A
A Street	11th Street - Ellis Avenue	Major Collector	2	8,400	A
A Street	Ellis Avenue - Mountain	Major Collector	2	10,900	B
A Street	Mountain - Mapes	Major Collector	2	10,900	B
A Street	Mapes - Watson	Major Collector	2	9,200	A
Bradley	Ramona Expressway - Rider Street	Secondary Arterial	4	1,900	A
Cajalco Expressway	West of Haines	Expressway	6	24,900	A
Cajalco Expressway	Haines - Old Elsinore	Expressway	6	23,400	A
Cajalco Expressway	Old Elsinore - Day	Expressway	6	27,300	A
Cajalco Expressway	Day - Seaton	Expressway	6	26,200	A
Cajalco Expressway	Seaton - Harvill	Expressway	6	29,200	A
Cajalco Expressway	Harvill Avenue - I-215	Expressway	6	36,200	B
Case Road	Perris - Goetz	Secondary Arterial	4	10,900	A
Case Road	Goetz - Ellis	Secondary Arterial	4	10,800	A
Case Road	Ellis - Murietta	Secondary Arterial	4	18,500	A
Case Road	Murietta - I-215	Secondary Arterial	4	9,300	A
Citrus	Perris - Redlands	Collector	2	700	A
Citrus	Redlands - Wilson	Collector	2	6,200	A
Citrus	Wilson - Murrieta	Collector	2	2,100	A
Citrus	West of Evans	Collector	2	900	A
D Street	I-215 - 4th Street	Secondary Arterial	4	25,200	C
D Street	4th Street - 11th	Collector	2	9,300	C
Dunlap	Orange - Citrus	Secondary Arterial	4	17,100	A
Dunlap	Citrus - Nuevo	Secondary Arterial	4	10,100	A
Dunlap	Nuevo - San Jacinto Road	Secondary Arterial	4	13,300	A
Dunlap	San Jacinto - Ellis	Secondary Arterial	4	12,400	A
East Frontage Rd	Rider - Placentia	Collector	2	3,800	A
East Frontage Rd	Placentia - Orange	Collector	2	2,300	A
East Frontage Rd	Orange - Indian	Collector	2	2,400	A

Future Segment Average Daily Traffic (ADT) and Level of Service (LOS)					
Street	Segment	2030			
		Future Classification	Future Number of Lanes	Future ADT	Future LOS
East Frontage Rd	Indian - Nuevo Rd.	Collector	2	2,200	A
Ellis Avenue	West of SR 74	Secondary Arterial	4	13,700	A
Ellis Avenue	SR 74 - A Street	Arterial	6	16,100	A
Ellis Avenue	A Street - Goetz Road	Arterial	6	18,600	A
Ellis Avenue	Goetz Road - Case Road	Arterial	6	19,200	A
Ellis Avenue	Case Road - Redlands	Arterial	6	20,900	A
Ellis Avenue	Redlands - Murietta	Arterial	6	12,100	A
Ellis Avenue	Murietta - Evans	Arterial	6	12,400	A
Ethanac Road	West of Sophie	Expressway	6	12,700	A
Ethanac Road	Sophie - River Rd.	Expressway	6	12,600	A
Ethanac Road	River Rd. - Goetz Road	Expressway	6	15,900	A
Ethanac Road	Goetz Road - Murrieta Road	Expressway	6	18,900	A
Ethanac Road	Murrieta Road - Green Valley Pkwy	Expressway	6	17,300	A
Ethanac Road	Green Valley Pkwy - I-215	Expressway	6	18,900	A
Ethanac Road	I-215 - SR-74	Expressway	6	20,400	A
Ethanac Road	East of SR 74	Expressway	6	26,200	A
Evans Road	Oleander - Ramona Parkway	Arterial	6	22,500	A
Evans Road	Ramona Parkway - Morgan	Arterial	6	24,600	A
Evans Road	Morgan - Rider	Arterial	6	16,100	A
Evans Road	Rider Street - Placentia	Arterial	6	15,500	A
Evans Road	Placentia - Orange	Arterial	6	14,100	A
Evans Road	Orange - Citrus	Arterial	6	14,900	A
Evans Road	Citrus - Nuevo	Arterial	6	13,500	A
Evans Road	Nuevo Road - Murietta	Arterial	6	10,800	A
Evans Road	Murietta - San Jacinto	Arterial	6	9,500	A
Evans Road	San Jacinto Road - I-215	Arterial	6	14,500	A
Evans Road	I-215 - Ellis Avenue	Arterial	6	12,600	A
Fieldstone	Goetz - Green River Parkway	Collector	2	700	A
"G" Street	San Jacinto - 4th (SR 74)	Collector	2	24,300	F
"G" Street	4th - Case	Collector	2	15,300	F
Goetz Road	Case - Ellis	Arterial	6	9,600	A
Goetz Road	Ellis - Mountain	Arterial	6	8,300	A
Goetz Road	Mountain - Mapes	Arterial	6	13,700	A
Goetz Road	Mapes - Fieldstone Dr.	Arterial	6	14,100	A
Goetz Road	Fieldstone Dr. - Ethanac	Arterial	6	13,100	A
Goetz Road	Ethanac - Valley Road	Arterial	6	13,300	A
Goetz Road	South of Valley Road	Secondary Arterial	4	2,600	A
Green River Parkway	Murietta - Ethanac	Collector	2	100	A
Green River Parkway	Murietta - Fieldstone	Collector	2	100	A
Green River Parkway	Fieldstone Dr. - Murietta	Collector	2	200	A

Future Segment Average Daily Traffic (ADT) and Level of Service (LOS)					
Street	Segment	2030			
		Future Classification	Future Number of Lanes	Future ADT	Future LOS
Harvill	Oleander - Markham	Arterial	6	11,700	A
Harvill	Markham - Ramona Expressway	Arterial	6	11,700	A
Harvill	Ramona Expressway - Placentia	Arterial	6	5,400	A
I-215	North of Oleander	Freeway	6	189,200	F
I-215	Oleander - Ramona Expressway	Freeway	6	185,500	F
I-215	Ramona Expressway - Placentia	Freeway	6	169,500	F
I-215	Placentia Avenue - Nuevo	Freeway	6	165,500	F
I-215	Nuevo Road - SR 74 (4th St.)	Freeway	6	164,500	F
I-215	SR 74 - Evans	Freeway	6	142,000	F
I-215	Evans - Case	Freeway	6	143,500	F
I-215	Case - Ethanac	Freeway	6	129,900	F
I-215	South of Ethanac	Freeway	6	129,500	F
Indian Avenue	North of Oleander Avenue	Secondary Arterial	4	4,300	A
Indian Avenue	Oleander - Markham	Secondary Arterial	4	4,500	A
Indian Avenue	Markham - Ramona	Secondary Arterial	4	3,200	A
Indian Avenue	Ramona Expressway - Rider Street	Secondary Arterial	4	2,100	A
Indian Avenue	Rider - Placentia	Secondary Arterial	4	5,600	A
Indian Avenue	Placentia - Orange	Secondary Arterial	4	5,700	A
Indian Avenue	Orange - E. Frontage Rd.	Secondary Arterial	4	6,700	A
Jarvis	Perris - Redlands	Collector	2	5,100	A
Mapes	Goetz - "A"	Secondary Arterial	4	6,400	A
Mapes	"A" - McPherson	Secondary Arterial	4	1,400	A
Mapes	McPherson - Sophie	Secondary Arterial	4	1,400	A
Mapes	Sophie - Mountain	Secondary Arterial	4	1,400	A
Mapes	Mountain - Marie	Secondary Arterial	4	4,500	A
Markham	West of Harvill	Secondary Arterial	4	15,900	A
Markham	I-215 - Harvill	Secondary Arterial	4	100	A
Markham	Wade - Patterson	Secondary Arterial	4	100	A
Markham	Patterson - Webster	Secondary Arterial	4	2,200	A
Markham	Webster - Indian	Secondary Arterial	4	3,100	A
Markham	Indian - Perris	Secondary Arterial	4	3,100	A
Markham	Perris - Redlands	Secondary Arterial	4	1,500	A
May Ranch Parkway	Evans - Rider Street	Secondary Arterial	4	24,500	B
McPherson	North of Mountain	Collector	2	1,800	A
McPherson	Mapes - Watson	Major Collector	2	1,700	A
McPherson	Watson - Ethanac	Major Collector	2	1,800	A
Morgan	Nevada - Webster	Secondary Arterial	4	2,400	A
Morgan	Webster - Indian	Secondary Arterial	4	2,200	A
Morgan	Indian - Perris	Secondary Arterial	4	4,800	A
Morgan	Perris - Redlands	Secondary Arterial	4	7,100	A

Future Segment Average Daily Traffic (ADT) and Level of Service (LOS)					
Street	Segment	2030			
		Future Classification	Future Number of Lanes	Future ADT	Future LOS
Morgan	East of Evans - Evans	Secondary Arterial	4	800	A
Mountain	West of SR 74	Secondary Arterial	4	6,200	A
Mountain	SR 74 - Sophie	Secondary Arterial	4	5,200	A
Mountain	Sophie - McPherson	Secondary Arterial	4	4,600	A
Mountain	McPherson - "A" Street	Secondary Arterial	4	2,900	A
Murrieta Road	Placentia - Orange	Collector	2	4,800	A
Murrieta Road	Nuevo Road - Evans	Major Collector	2	7,500	A
Murrieta Road	Case Road - Green Valley Pkwy	Secondary Arterial	4	9,700	A
Murrieta Road	Green Valley Pkwy -Green Valley Pkwy So.	Secondary Arterial	4	10,300	A
Murrieta Road	Green Valley Pkwy So. - Ethanac	Secondary Arterial	4	9,400	A
Murrieta Road	Ethanac - McCall	Secondary Arterial	4	3,600	A
Navajo Road	NW of 4th	Collector	2	7,800	A
Nevada Frontage Rd	Markham - Ramona Pkwy	Collector	2	2,700	A
Nevada Frontage Rd	Ramona Pkwy - Morgan	Collector	2	4,600	A
Nevada Frontage Rd	Morgan - Rider	Collector	2	4,400	A
Nuevo Road	Webster - I-215	Secondary Arterial	4	4,500	A
Nuevo Road	I-215 to East Frontage Road	Arterial	6	18,400	A
Nuevo Road	East Frontage Road - Perris Boulevard	Arterial	6	18,900	A
Nuevo Road	Perris Boulevard - Redlands Avenue	Arterial	6	18,500	A
Nuevo Road	Redlands Avenue - Wilson	Arterial	6	18,700	A
Nuevo Road	Wilson Avenue - Murrietta Road	Arterial	6	16,000	A
Nuevo Road	Murrietta Road - Evans	Arterial	6	21,500	A
Nuevo Road	Evans - Dunlap	Arterial	6	18,200	A
Nuevo Road	East of Dunlap	Arterial	6	18,200	A
Old Elsinore Road	Oleander - Ramona	Secondary Arterial	4	8,500	A
Old Elsinore Road	Ramona - Rider	Arterial	6	14,400	A
Old Elsinore Road	Rider - Mack	Arterial	6	12,000	A
Old Elsinore Road	Mack - Nuevo	Arterial	6	13,100	A
Old Elsinore Road	Nuevo - San Jacinto	Arterial	6	11,600	A
Oleander Avenue	West of Harvill	Arterial	6	16,800	A
Oleander Avenue	Harvill - I-215	Arterial	6	26,100	A
Oleander Avenue	I-215 - Patterson	Arterial	6	16,700	A
Oleander Avenue	Patterson - Heacock	Arterial	6	13,800	A
Oleander Avenue	Heacock - Indian	Arterial	6	8,000	A
Oleander Avenue	Indian Avenue - Perris Boulevard	Arterial	6	7,700	A
Oleander Avenue	Perris Boulevard - Laselle	Arterial	6	5,700	A
Orange Avenue	West of I-215	Secondary Arterial	4	3,700	A
Orange Avenue	E. Frontage Rd. - Indian Avenue	Secondary Arterial	4	1,500	A
Orange Avenue	Indian Road - Perris	Secondary Arterial	4	4,800	A

Future Segment Average Daily Traffic (ADT) and Level of Service (LOS)					
Street	Segment	2030			
		Future Classification	Future Number of Lanes	Future ADT	Future LOS
Orange Avenue	Perris Boulevard - Redlands	Secondary Arterial	4	6,900	A
Orange Avenue	Redlands - Wilson	Secondary Arterial	4	9,600	A
Orange Avenue	Wilson - Evans	Secondary Arterial	4	9,800	A
Orange Avenue	Evans - Dunlap	Secondary Arterial	4	5,200	A
Patterson	Oleander - Markham	Collector	2	9,400	C
Perris Boulevard	North of Oleander	Arterial	6	36,900	B
Perris Boulevard	Oleander - Markham	Arterial	6	29,600	A
Perris Boulevard	Markham - Ramona	Arterial	6	27,600	A
Perris Boulevard	Ramona Expressway - Morgan	Arterial	6	26,200	A
Perris Boulevard	Morgan - Rider	Arterial	6	27,300	A
Perris Boulevard	Rider Street - Placentia Avenue	Arterial	6	27,200	A
Perris Boulevard	Placentia Avenue - Orange	Arterial	6	26,600	A
Perris Boulevard	Orange - Citrus	Arterial	6	19,400	A
Perris Boulevard	Citrus - Nuevo	Arterial	6	19,500	A
Perris Boulevard	Nuevo - E. Jarvis Avenue	Arterial	6	28,200	A
Perris Boulevard	E. Jarvis - San Jacinto	Arterial	6	30,100	A
Perris Boulevard	San Jacinto - 4th	Arterial	6	27,200	A
Perris Boulevard	4th Street - 11th	Arterial	6	7,600	A
Perris Boulevard	11th - Ellis	Arterial	6	7,800	A
Placentia Avenue	West of Harvill	Arterial	6	16,300	A
Placentia Avenue	Harvill - I-215	Arterial	6	15,700	A
Placentia Avenue	I-215 - East Frontage Rd.	Arterial	6	15,100	A
Placentia Avenue	East Frontage Rd. - Indian Avenue	Arterial	6	32,300	A
Placentia Avenue	Indian Avenue - Perris Boulevard	Arterial	6	31,500	A
Placentia Avenue	Perris Boulevard - Redlands Avenue	Arterial	6	6,600	A
Placentia Avenue	Redlands Avenue - Wilson	Arterial	6	6,700	A
Placentia Avenue	Wilson - Murietta	Arterial	6	6,700	A
Placentia Avenue	Murietta - Evans	Arterial	6	5,900	A
Phillips Street	Mountain - Mapes	Major Collector	2	2,800	A
Phillips Street	Mapes - Ethanac	Major Collector	2	1,700	A
Ramona Expressway	I-215 - Nevada Avenue	Expressway	6	61,400	E
Ramona Expressway	Nevada Avenue - Webster Avenue	Expressway	6	48,700	C
Ramona Expressway	Webster Avenue - Indian Avenue	Expressway	6	45,600	C
Ramona Expressway	Indian Avenue - Perris Boulevard	Expressway	6	41,500	B
Ramona Expressway	Perris Boulevard - Redlands Avenue	Expressway	6	44,900	C
Ramona Expressway	Redlands Avenue - Evans Road	Expressway	6	52,300	D
Ramona Expressway	Evans Road - Bradley Road	Expressway	6	43,100	C
Ramona Expressway	Bradley Road - Rider Street	Expressway	6	42,900	C
Ramona Expressway	East of Rider Street	Expressway	6	42,400	C
Redlands Avenue	Oleander - Markham	Secondary Arterial	4	12,500	A

Future Segment Average Daily Traffic (ADT) and Level of Service (LOS)					
Street	Segment	2030			
		Future Classification	Future Number of Lanes	Future ADT	Future LOS
Redlands Avenue	Markham - Ramona	Secondary Arterial	4	14,100	A
Redlands Avenue	Ramona - Morgan	Secondary Arterial	4	15,300	A
Redlands Avenue	Morgan - Rider	Secondary Arterial	4	17,200	A
Redlands Avenue	Rider Street - Placentia Avenue	Secondary Arterial	4	22,900	B
Redlands Avenue	Placentia Avenue - Orange	Secondary Arterial	4	22,800	B
Redlands Avenue	Orange - Citrus	Secondary Arterial	4	16,400	A
Redlands Avenue	Citrus - Nuevo	Secondary Arterial	4	19,300	A
Redlands Avenue	Nuevo - E. Jarvis Avenue	Arterial	6	25,600	A
Redlands Avenue	E. Jarvis - San Jacinto	Arterial	6	25,500	A
Redlands Avenue	San Jacinto Road - I-215	Arterial	6	25,900	A
Redlands Avenue	I-215 - 4th (SR 74)	Arterial	6	27,100	A
Redlands Avenue	4th - Ellis	Secondary Arterial	4	19,500	A
Rider Street	West of Alexander	Secondary Arterial	4	4,500	A
Rider Street	Alexander - Old Elsinore	Secondary Arterial	4	8,900	A
Rider Street	Old Elsinore - Marie	Secondary Arterial	4	4,800	A
Rider Street	Marie - Harvill	Secondary Arterial	4	12,300	A
Rider Street	Nevada - Webster	Secondary Arterial	4	4,200	A
Rider Street	Webster - Indian	Secondary Arterial	4	3,900	A
Rider Street	Indian Avenue - Perris Boulevard	Secondary Arterial	4	4,800	A
Rider Street	Perris - Wilson	Secondary Arterial	4	4,200	A
Rider Street	Wilson - Redlands	Secondary Arterial	4	4,000	A
Rider Street	Redlands - Evans	Secondary Arterial	4	11,500	A
Rider Street	Evans - May Ranch Pkwy	Secondary Arterial	4	5,300	A
Rider Street	May Ranch Pkwy - Bradley	Secondary Arterial	4	6,600	A
Rider Street	Bradley - Ramona	Secondary Arterial	4	4,900	A
River Rd.	Watson - Ethanac	Collector	2	6,900	A
San Jacinto Road	East of "A" Street	Secondary Arterial	4	6,200	A
San Jacinto Road	"A" - "D"	Secondary Arterial	4	6,600	A
San Jacinto Road	"D" - Perris	Secondary Arterial	4	7,100	A
San Jacinto Road	Perris - "G"	Secondary Arterial	4	15,800	A
San Jacinto Road	"G" - Redlands	Secondary Arterial	4	11,000	A
San Jacinto Road	Redlands - Wilson	Arterial	6	3,500	A
San Jacinto Road	Wilson - Evans	Arterial	6	6,600	A
San Jacinto Road	Evans - Dunlap	Secondary Arterial	4	5,300	A
Sophie	Mountain - Mapes	Major Collector	2	9,300	A
SR-74	South of Mountain	Arterial	6	34,200	B
SR-74	Marie - Mountain	Arterial	6	31,400	A
SR-74	Mountain - Ellis	Arterial	6	35,100	B
SR-74	Ellis - Navajo	Arterial	6	31,300	A
SR-74	Navajo - "A"	Secondary Arterial	4	35,500	E

Future Segment Average Daily Traffic (ADT) and Level of Service (LOS)					
Street	Segment	2030			
		Future Classification	Future Number of Lanes	Future ADT	Future LOS
SR-74	A Street - D Street	Secondary Arterial	4	36,100	E
SR-74	D Street - Perris Boulevard	Secondary Arterial	4	23120	B
SR-74	Perris Boulevard - "G"	Secondary Arterial	4	15,100	A
SR-74	"G" - Redlands	Secondary Arterial	4	15,300	A
SR-74	East of Redlands	Secondary Arterial	4	8,100	A
Valley Road	South of Goetz	Arterial	6	12,700	A
Wade	Oleander - Markham	Collector	2	3,500	A
Watson	"A" Street - River Road	Major Collector	2	5,800	A
Watson	River Road - McPherson	Major Collector	2	6,900	A
Webster Avenue	Oleander - Markham	Arterial	6	5,600	A
Webster Avenue	Markham - Ramona	Arterial	6	2,100	A
Webster Avenue	Ramona Expressway - Morgan	Secondary Arterial	4	2,100	A
Webster Avenue	Morgan - Rider	Secondary Arterial	4	1,300	A
Wilson	Rider - Placentia	Collector	2	5,500	A
Wilson	Placentia - Orange	Collector	2	4,400	A
Wilson	Orange - Citrus	Collector	2	200	A
Wilson	Citrus - Nuevo	Collector	2	400	A
Wilson	Nuevo - San Jacinto Road	Collector	2	500	A

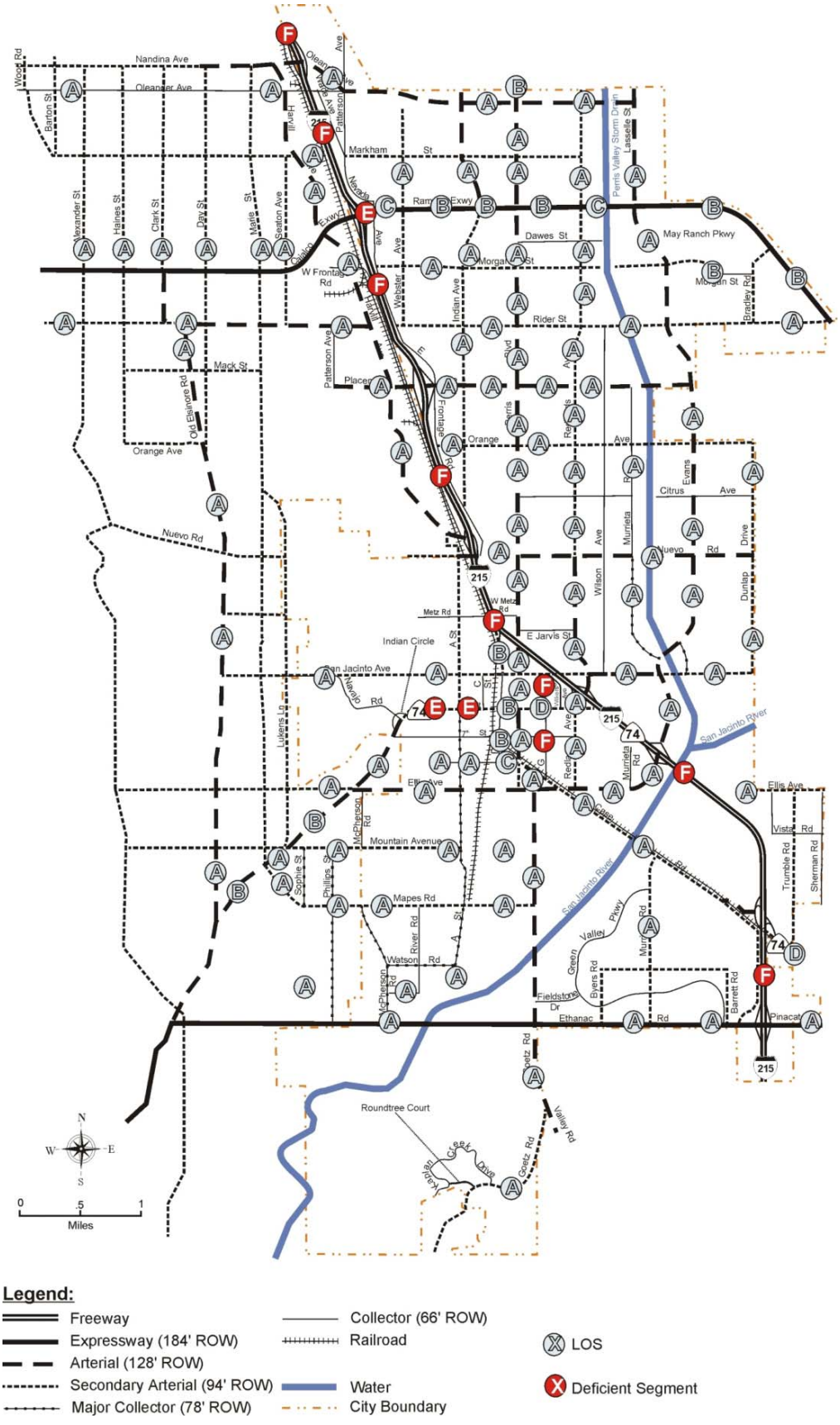
Table 4.9-7: Perris Roadway Future Capacity / Level of Service [1]

		Maximum Two-Way Average Daily Traffic (ADT) [2]				
Roadway Classification	*Number of Lanes*	*LOS A*	*LOS B*	*LOS C*	*LOS D*	*LOS E*
Collector/Local	2	7,800	9,100	10,400	11,700	13,000
Major Collector	2	10,800	12,600	14,400	16,200	18,000
Secondary Arterial	4	21,540	25,130	28,700	32,300	35,900
Arterial	6	32,340	37,730	43,100	48,500	53,900
Expressway	6	36,780	42,910	49,000	55,200	61,300
Expressway	8	49,020	57,190	65,400	73,500	81,700
Freeway	4	45,900	53,550	61,200	68,900	76,500
Freeway	6	70,500	82,250	94,000	105,800	117,500
Freeway	8	96,300	112,350	128,400	144,500	160,500
Freeway	10	120,360	140,420	160,500	180,500	200,600

(1) All Capacity Exhibits are based on optimum conditions and are intended as guidelines for planning purposes only.

(2) Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables.

Exhibit 4.9-7: City of Perris Future Segment LOS



Legend:

- Freeway
- Expressway (184' ROW)
- Arterial (128' ROW)
- Secondary Arterial (94' ROW)
- Major Collector (78' ROW)
- Collector (66' ROW)
- Railroad
- Water
- City Boundary
- LOS
- Deficient Segment

Intersection Levels of Service

Seven intersections selected by the City Engineer were analyzed for year 2030 conditions. Intersection turning movements for year 2030 were forecast based on model roadway segment output and the results were analyzed using the Highway Capacity Manual (HCM) methodology to determine the intersection configurations needed to maintain a LOS "D" or "E" (Appendix H).

Four of the seven intersections analyzed were on the Ramona/Cajalco Expressway. HCM analysis indicated that Levels of Service at the on and off-ramps of I-215 at Ramona/Cajalco Expressway, and at the intersections of Perris Boulevard/Ramona Expressway and Indian Avenue/Ramona Expressway would deteriorate to LOS E or worse by the horizon year of 2030. An unsignalized intersection at Nuevo Road and Ruby Drive currently operating at LOS F would continue to operate at LOS F in 2030. Two of the seven intersections analyzed, Perris/Nuevo and Redlands/I-215, are projected to operate at LOS "D" in 2030. Intersections operating at Levels of Service less than "D" represent a significant traffic impact.

Roadway Improvements

Based on the assessment of current and year 2030 levels of service included in General Plan 2030 Circulation Element, roadway improvements have been incorporated into the Circulation Element roadway network to accommodate growth and development anticipated in the project General Plan. These projects are summarized in Table 4.9-8 and will result in LOS "D" or better on roadway segments and at intersections owned and maintained by the City as the projects are implemented between Year 2003 and 2030. As a result of planned improvements indicated in General Plan 2030 Circulation Element, the impact on levels of service on roadway segments and at intersections owned and maintained by the City is less than significant.

Widening of State Route 74 consistent with the Circulation Element will result in improvement to LOS "B" or better in the year 2030 on all but two segments where more extensive improvements are precluded by right-of-way constraints. These two segments are projected to result in LOS "E." Because of these constraints, and consistent with the 2003 Riverside County Congestion Management Program, a standard of LOS "E" for SR 74 is established in General Plan 2030 Circulation Element. With planned improvements included in the Circulation Element of General Plan 2030, impacts to levels of service on segments of SR 74 will be less than significant.

Interstate 215 is expected to be upgraded to 8 lanes with Measure A funding before expiration of this 30-year tax measure. The City has requested that Caltrans conduct a Project Study Report (PSR) at the I-215/Ramona Interchange which would include adjoining segments of the expressway and deficient intersections at the off-ramps as identified in Existing Conditions Table 4.9-3. Table 4.9-3 also identifies the Redlands Avenue and I-215 interchange as operating at LOS F. Construction of a roundabout at this interchange has been approved and funded by Caltrans. Even with contemplated improvements, however, all segments of

Interstate 215 through the City of Perris will operate at LOS "F" by the year 2030. This level of service represents a significant impact.

The Riverside Transportation Commission has issued a "Request for Proposal to Prepare a Project Report and Environmental Document" for the Proposed Cajalco-Ramona Corridor Project. This project includes construction of a Ramona Freeway either north or south of the current Ramona Expressway alignment through the City of Perris. Construction of the Ramona Freeway is anticipated to improve Levels of Service at intersections on the existing Ramona Expressway to "D" or better.

The projected increase in traffic volume on Interstate 215 by the year 2030 as a cumulative effect of project traffic and of traffic generated by projects contributory to vehicle trips on Interstate 215 is substantial in relation to the existing traffic load and capacity of Interstate 215 through the project area. The resultant Level of Service "F" through the project area represents a significant impact.

Impact: **Implementation of the project General Plan would result in substantial increases in traffic and reductions in Levels of Service**

Table 4.9-8: Future Improvements

Future Improvements									
Street	**Segment**	**Future Street Class.**	**Future # of Lanes**	**Future ADT**	**Future LOS**	**Req'd # of Lanes/Class.**	**Result LOS**	**Segment Length (Miles)**	**Planning Level Cost (Includes Signals)**
I-215	*North of Oleander*	*Freeway*	*6*	*189200*	*F*	*N/A*			
I-215	*Oleander - Ramona Expressway*	*Freeway*	*6*	*185500*	*F*	*N/A*			
I-215	*Ramona Expressway - Placentia*	*Freeway*	*6*	*169500*	*F*	*N/A*			
I-215	*Placentia Avenue - Nuevo*	*Freeway*	*6*	*165500*	*F*	*N/A*			
I-215	*Nuevo Road - SR 74 (4th St.)*	*Freeway*	*6*	*164500*	*F*	*N/A*			
I-215	*SR 74 - Evans*	*Freeway*	*6*	*142000*	*F*	*N/A*			
I-215	*Evans - Case*	*Freeway*	*6*	*143500*	*F*	*N/A*			
I-215	*Case - Ethanac*	*Freeway*	*6*	*129900*	*F*	*N/A*			
I-215	*South of Ethanac*	*Freeway*	*6*	*129500*	*F*	*N/A*			
I-215 Northbound off-ramp and Ramona Expressway Intersection (as identified in Table 3.6)						*N/A*			

Future Improvements									
Street	**Segment**	**Future Street Class.**	**Future # of Lanes**	**Future ADT**	**Future LOS**	**Req'd # of Lanes/Class.**	**Result LOS**	**Segment Length (Miles)**	**Planning Level Cost (Includes Signals)**
I-215 Southbound off-ramp and Cajalco Expressway Intersection (as identified in Table 3.6)						*N/A*			
G Street	*San Jacinto - 4th (SR74)*	*Collector*	*2*	*24900*	*F*	*4 Lane Secondary Arterial*	*B*	*0.25*	*$375,000*
G Street	*4th - Case*	*Collector*	*2*	*15300*	*F*	*4 Lane Secondary Arterial*	*A*	*0.5*	*$750,000*
*Ramona Express.**	*I-215 - Nevada Avenue*	*Expressway*	*6*	*61400*	*E*	*8 Lanes*	*C*	*0.2*	*$1,500,000*
SR 74	*Navajo - "A" Street*	*Secondary Arterial*	*4*	*35500*	*E*	*N/A*			
SR 74	*"A" Street - "D" Street*	*Secondary Arterial*	*4*	*36100*	*E*	*N/A*			
I-215 off-ramp and Redlands Intersection (as identified in Table 3.6)						*N/A*			
Nuevo Road/Ruby Drive Intersection (as identified in Table 3.6)									*$200,000*
TOTAL COST:									*$2,825,000*

Threshold ***Impacts Related to Increased Hazards Due to a Design Feature or Incompatible Uses***

Refer to Section 6.0, "Impacts Found Not to Be Significant".

Threshold ***Impacts Related to Inadequate Emergency Access***

General Plan 2030 will accommodate additional residential development in the area that lies between the Perris Valley Storm Drain channel and the San Jacinto River floodplains. This area comprises more than 3,000 acres in the City of Perris and a larger area in unincorporated Riverside County. A 100-year storm event would cause flooding of all roadways crossing the Perris Valley Storm Drain channel and the San Jacinto River, as well as Evans Road north of the Ramona Expressway. Vehicular access to dwellings and two schools in this area would be blocked, preventing residents from entering or leaving the area and cutting off emergency services access. This represents a significant impact to public health and safety related to inadequate emergency access.

Impact: **Implementation of General Plan 2030 will not adversely impact emergency access**

Threshold ***Impacts Related to Inadequate Parking Capacity***

Refer to Section 6.0, "Impacts Found Not to Be Significant".

Threshold ***Conflict with adopted policies, plans, or programs supporting alternative transportation e.g., bus turnouts, bicycle racks.***

General Plan 2030 Circulation Element – Implementation Measures

General Plan 2030 Circulation Element sets a "Strategy for Action" comprised of policies, plans, and programs necessary to support alternative transportation within the City of Perris. The Strategy for Action was prepared within the regional framework provided by the Southern California Association of Government's Regional Transportation Plan. The "Strategy for Action" in the Circulation Element of project General Plan 2030 includes the following Implementation Measures:

I.A.1 Revise the downtown Specific Plan to address the planned Metrolink station and other modes of transportation.

I.A.4 Plan off-street parking facilities in downtown Perris to support and enhance the concept of walkable and transit-oriented communities.

I.A.5 Consider ancillary parking facilities with transit connections to activity centers such as downtown.

I.B.1 Require on-site improvements that accommodate public transit vehicles (i.e. bus pullouts and transit stops and cueing lanes, bus turnarounds, and other improvements) at major trip attractions (i.e. community centers, tourist and employment centers, etc.).

II.B.1 Develop standard specifications for the City of Perris that include facilities that accommodate bus operations, including bus turns.

IV.A.1 Develop a multi-purpose recreational bikeway plan for the City of Perris based on standards in the Caltrans Highway Design Manual and in the riverside County Integrated Project as identified in Chapter 4.

IV.A.2 Consider the use of future abandoned rail lines as multipurpose "rail-trails".

IV.A.3 Comply with Americans with Disabilities Act requirements for pedestrian movement along sidewalks, paths, trails and pedestrian crossings within City rights-of-way.

IV.A.4 Maximize access for pedestrians and encourage the removal of barriers in public rights-of-way (walls, easements, and fences) for safe and convenient movement of pedestrians.

IV.A.5 Incorporate pedestrian paths or sidewalks in road design standards and provide tree easements between curbs and paths or sidewalks except within the Downtown Specific Plan Area.

IV.A.6 Regularly review traffic signal timing plans to allow for safe pedestrian street crossing.

VIII.D.1 Implement the City's Transportation Demand Ordinance to comply with federal, State, regional, and local requirements.

VIII.D.2 Coordinate with Caltrans, the Riverside County Transportation Commission, transit agencies and other responsible agencies to identify the need for additional park-n-ride facilities along major commuter travel corridors and at major activity centers.

Inclusion of these Implementation Measures in the Circulation Element of General Plan 2030 will accommodate expansion of bus service, facilitate development of a Metrolink station in the City, and will provide for transit-oriented development in the downtown area surrounding the planned Metrolink station consistent with the Southern California Association of Governments Regional Transportation Plan. Pursuant to these Implementation Measures, new development will incorporate infrastructure consistent with the Riverside Transit Agency's Ten Year Strategic Plan for expanding bus service in and through the City. Inclusion of a Recreation Trail System in the Circulation Element, connecting with the regional trail system, will provide opportunities for non-motorized transportation in Perris. General Plan 2030 establishes plans, policies, and programs for alternative forms of transportation consistent with regional plans for same. Accordingly, adoption of the project General Plan will have no impact.

The projected increase in traffic volume on Interstate 215 by the year 2030 as a cumulative effect of project traffic and of traffic generated by projects contributory to vehicle trips on Interstate 215 is substantial in relation to the existing traffic load and capacity of Interstate 215 through the project area. The resultant Level of Service "F" through the project area represents a significant cumulative impact.

Impacts related to inadequate emergency access are a function of geographic and topographic characteristics confined to a small portion of the project planning area and are not exacerbated by or additive to impacts of other projects in the planning area or within the larger region. Accordingly, no cumulative impacts will result.

As a local policy document with which future development projects in the planning area must comply, no cumulative impacts relative to conflicts with plans, policies, and programs relating to transportation alternatives to the automobile will result.

Impact: Implementation of the project General Plan will not conflict with adopted policies, plans, or programs supporting alternative transportation.

4.9.5 MITIGATION MEASURES

Impact: Implementation of the project General Plan would result in substantial increases in traffic and reductions in Levels of Service.

All feasible roadway infrastructure improvements appropriate to accommodating project and cumulative traffic resulting from population growth and new development throughout the region are included in the roadway network planned for the year 2030 and set forth in the project General Plan Circulation Element. Improvements planned for Interstate 215 through the year 2030 are incorporated. No mitigation measures are indicated or proposed.

Impact: Implementation of the project General Plan will not adversely impact emergency access.

A new Perris Valley Storm Drain channel overcrossing will be constructed at Nuevo Road as a condition of approval and prior to occupancy of any dwellings constructed pursuant to Tentative Tract Maps 31659, 31660, and 32041, approved by the City of Perris Planning Commission on July 21, 2004. This facility will provide required access to the southern portion of the affected area in the event of a 100-year storm event.

The project General Plan includes the following Implementation Measure:

Circulation Element
Implementation Measure

VII.A.3 Identify adequate flood control measures along roadways located within identified flood areas.

Consistent with Circulation Element Implementation Measure VII.A.3, conditions of approval for future development will include construction of Perris Valley Storm Drain channel overcrossings at locations and elevations appropriate for access to the northeasterly portions of the subject area in the event of a 100-year storm event.

Construction of the Nuevo Road overcrossing of the Perris Valley Storm Drain channel and compliance with General Plan Circulation Element Implementation Measure VII.A.3 will reduce impacts related to inadequate emergency access to a less than significant level. No mitigation measures are required or proposed.

4.9.5 LEVEL OF SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Impact: Implementation of the project General Plan would result in substantial increases in traffic and reductions in Levels of Service.

The projected increase in traffic volume on Interstate 215 by the year 2030 as a cumulative effect of project traffic and of traffic generated by projects contributory to vehicle trips on Interstate 215 is substantial in relation to the existing traffic load and capacity of Interstate 215 through the project area. The resultant Level of Service "F" on all segments of Interstate 215 through the project area represents a significant, unavoidable impact.

Impact: Implementation of the project General Plan will not adversely impact emergency access.

Less than significant impact.

Impact: Implementation of the project General Plan will not conflict with adopted policies, plans, or programs supporting alternative transportation.

No impact.

4.10 UTILITIES AND SERVICE SYSTEMS

This section evaluates the impacts of General Plan 2030 associated with utilities and service systems within the City of Perris. Specifically, this section discusses the following utilities and service systems:

- Water System
- Wastewater
- Solid Waste
- Energy
- Communication Services

4.10.1 WATER SYSTEM

EXISTING CONDITIONS

The Eastern Municipal Water District (EMWD) provides and distributes potable water throughout all but a small portion of the City of Perris and its Sphere of Influence. The City of Perris Water District owns and maintains water lines in and around Downtown Perris in an area generally extending north to Nuevo Road, west to Arapahoe, south to Mountain Avenue, and east to Redlands Boulevard (Exhibit 4.10.1-1). The Perris City Water District buys all of its water from the EMWD that, in turn, delivers the water through five metered connections to the Perris Water system.

Imported water purchased from the Metropolitan Water District of Southern California (MWD) is and will continue to make up over 75% of the EMWD's water supply. Of water imported by the District, 75% is from Northern California from the State Water Project, and 25% from the Colorado River via the Colorado River Aqueduct and Lake Perris. MWD potable water from the State Water Project water is piped into the EMWD system serving the northern section of Perris from the Mills Filtration plant north of the City. The Skinner Filtration Plant south of the City supplies water to the southern portion of Perris from both the California Water Project and the Colorado River Aqueduct. Both facilities are operated by MWD.

Twenty-five percent (25%) of EMWD water is supplied by groundwater wells, most of which comes from EMWD wells in the Hemet and San Jacinto areas. Other EMWD wells are located in Moreno Valley, the Perris Valley, and Murrieta areas.

Eight (8) EMWD storage tanks contribute to the water supply for the City of Perris:

- Oleander Tanks I and II in northeastern Perris with capacities of 4 million gallons each;
- Citrus Tanks I and II at the east end of Citrus Avenue with capacities of 4 million and 7.2 million gallons respectively;

- Cajalco Tank on Cajalco Road west of Decker Road with capacity of 1.25 million gallons;
- Decker Tank west of Decker Road and Redwood Drive with a capacity of 8.4 million gallons;
- Ellis Tank at Ellis Avenue and Post Road with a capacity of 0.25 million gallons;
- Motte Tank on Metz Road east of Graham Street with a capacity of 0.5 million gallons.

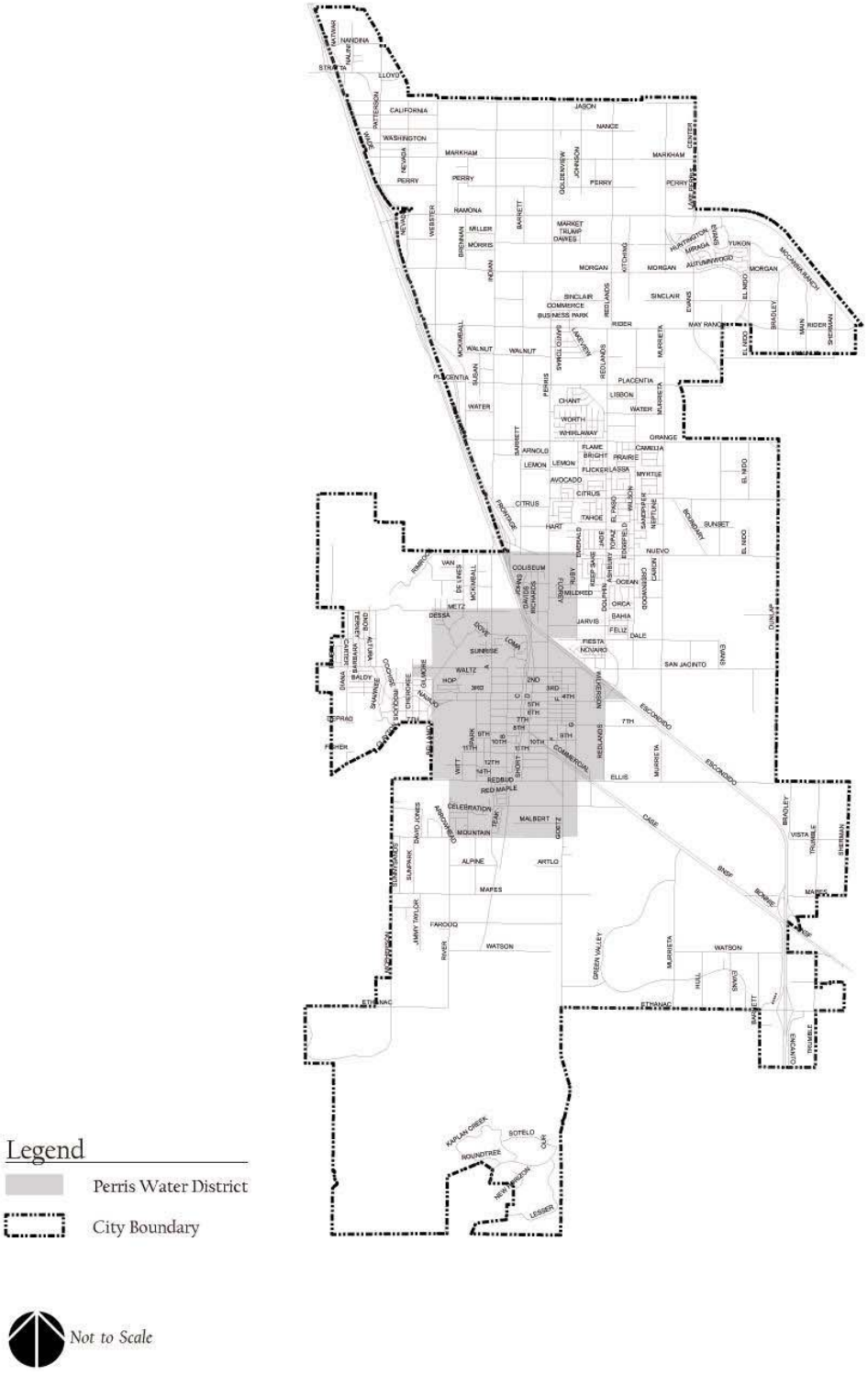
Five (5) EMWD booster stations pump water throughout Perris:

- Harvill Booster at Harvill Avenue and "A" Street;
- Cajalco Road Booster at Morgan Street and the I-215 Freeway;
- Good Hope II Booster at Ellis Avenue and Thelma Street;
- Nuevo & Webster Booster at Nuevo Road and Webster Avenue;
- Murrieta Road Booster @ Murrieta Road and Ethanac Road.

EMWD constructed the Menifee Desalter to recover high total dissolved solids (TDS) groundwater for potable use. In addition to being a source of water, the desalter plays a part in managing the groundwater subbasins by addressing the migration of brackish groundwater into areas of good quality groundwater. Construction of a second desalter has begun next to the Menifee Desalter at the Sun City Regional Water Reclamation Facility. This desalter will expand the production of desalinated water from 3 to 7 million gallons per day. A third desalter is also in the design stage. Test wells are being drilled to help determine options and requirements for final design and construction of production facilities.

EMWD also has a microfiltration plant south of the Ramona Expressway. This plant treats water supplied from the Colorado River and provides potable water to its customers including those in Perris. Future plans call for the expansion of the existing plant and the addition of several other plans throughout EMWD's service area.

Exhibit 4.10.1-1: City of Perris Water District



THRESHOLD OF SIGNIFICANCE

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria or standards, used to determine the significance of impacts may vary depending on the nature of project. Impacts to the water system may be considered significant if one or more of the following conditions would result from implementation of General Plan 2030:

- Requires new or expanded water entitlements due to insufficient water supplies (*refer to Section 6.0, Impacts Found Not To Be Significant)*; or

- Require or result in the construction and/or expansion of water supply facilities that would cause significant environmental effects;

PROJECT IMPACTS

Threshold ***Require or result in the construction and/or expansion of water supply facilities that would cause significant environmental effects.***

Population increases and new development associated with General Plan 2030 would result in an increase in demand for water supply within Eastern Municipal Water District's (EMWD) service area. Based on the proposed land use designations under the General Plan, Table 4.10-1 illustrates the projected water use within the City at General Plan build-out. By incorporating water use factors from EMWD's Water System Planning & Design[14] standards, the City is anticipated to have a water demand of 88,938,050 gallons per day at buildout of the General Plan. According to EMWD's Urban Water Management Plan, the approximate total water demand under General Plan 2030 buildout would be within the projected water supply capacity.

Table 4.10.1-1: Projected Water Use Under General Plan 2030

Type of Land Use	Proposed Land Use Designation Acreage	Water Use Factor (GPD/Gross Acre)	Additional Projected Water Use
Low Density Residential (0-3)	777	2,100	1,631,700
Medium Density Res. (4-8)	11,345	2,430	27,568,350
High Density Res. (9-20)	11,755	3,600	42,318,000
Commercial[1]	1,867	2,000	3,734,000
Industrial[2]	4,725	2,000	9,450,000
Institutional/Public Facilities	1,412	3,000	4,236,000

[14] Eastern Municipal Water District. Water Planning & Design: Principle Policy Criteria Recommendations. February 18, 1998.

Total		**88,938,050**

[1] Includes Community Commercial, Neighborhood Commercial and Professional Office land use designations
[2] Includes Light Industrial, Industrial and Business Park land use designations

Furthermore, since the Urban Water Management Plan was approved in 2000, there have been several developments assuring the Metropolitan Water District's (MWD) water supply is reliable beyond 2010. In March of 2003, MWD prepared a "Report on Metropolitan's Water Supplies." This report details the reliability of MWD's current and future water supply. The records find that with all of its existing and planned supplies, MWD can meet 100 percent of member agencies', which includes EMWD and City of Perris Water District, projected supplemental demand through 2030 even through a repeat of the worse drought.[15] After the MWD's report was published, the Quantification Settlement Agreement (QSA) was signed supporting MWD's development plans for Colorado River supply projects that are identified in the report. The QSA resolves disputes over the priority and use of Colorado River supply.

In addition to the report in MWD's water supply, MWD approved its Integrated Resources Plan (IRP) in May of 2004. This plan establishes regional targets for developing water supply. Portions of the Plan address conservation, local supplies, State Water Project supplies, Colorado River Aqueduct supplies, water drawn from regional storage and Central Valley water transfers. The updated IRP will insure that MWD will have a reliable supply of water through 2025. The Implementation of the IRP will not only depend on MWD but on its member agencies developing local resources. EMWD is actively participating in the IRP through several existing and proposed projects.[16]

The City also implements several water conservation and recycling efforts and proposes to continue to participate with EMWD to develop and implement water conservation programs and to encourage use of water conserving technologies. In addition, implementation of the Goal, Policy and Implementation Measures proposed in the General Plan, along with recycling programs already in effect, would reduce the need for increased water supply and, in turn, ease the need for new or expanded water entitlements or facilities.

Polices in General Plan 2030 include:

> ***Conservation Element***
> **Goal V – Water Supply**
> An adequate water supply to support existing and future land uses, anticipated in the Land Use Element..
> **Policy V.A**
> Coordinate land-planning efforts with local water purveyors.
> **Implementation Measures**

[15] Lovsted, Elizabeth. Written communication with Facilities Planner/Engineer at EMWD. August 27, 2004.
[16] Lovsted, Elizabeth. Written communication with Facilities Planner/Engineer at EMWD. August 27, 2004.

V.A.1 Work with Eastern Municipal Water District to ensure that development does not outpace projections consistent with the Water Districts Urban Water Management Plan.

V.A.2 Require use of new technologies and water conserving plant materials for landscaping.

VI.A.3 Participate with the Eastern Municipal Water District to develop and implement water conservation programs and to encourage use of water conserving technologies.

Furthermore, EMWD will take changes to General Plan 2030 into account when considering updates to their water master plans. The master plan provides a guide to future improvements. Using this guide, in addition to the current conditions and concerns, an annual capital improvement plan is developed laying out funding and prioritizing capital improvements for the next five years. In addition to the capital improvement plan, each new development within the District is reviewed on a case-by-case basis for needed improvements to the water system.[17]

Eastern Municipal Water District (EMWD) will construct new or expand existing water supply, water treatment and wastewater treatment facilities. Required capacities, locations, and projected dates for bringing new or expanded facilities on-line will be identified in the District's annual capital facilities program update as existing excess capacity is used commensurate with increased demand from new development. Development consistent with General Plan 2030 will contribute to the cumulative demand that will result in the need for new or expanded EMWD facilities.

The cumulative demand for natural gas and electricity associated with development consistent with General Plan 2030 together with development within the region will result in the need for new natural gas and electricity production/transmission facilities. New or expanded production/transmission facilities may also be required outside the southern California region

Construction of new facilities or expansion of existing facilities for potable water supplies, wastewater treatment, and for natural gas and electricity production and distribution could result in significant impacts to the environment. Project-level construction impacts are likely to include impacts to air quality from motorized equipment and fugitive dust and will be subject to evaluation and mitigation consistent with the South Coast Air Quality Management District (SCAQMD) Handbook, with Rule 403 (fugitive dust) mitigation. Construction impacts to hydrology and water quality are possible but will be subject to restrictions of the respective Regional Water Quality Control Board and the Best Management Practices included in each project's Storm Water Pollution Prevention Plan required by the National Pollutant Discharge Elimination System. These will prevent stormwater run-off contamination during construction.

[17] Lovsted, Elizabeth. Written communication with Facilities Planner/Engineer at EMWD. August 27, 2004.

Project-level impacts on Transportation, Aesthetics, Biological Resources, and Cultural Resources are site-specific and, therefore, any attempt to identify such impacts at the General Plan level of analysis would be purely speculative until project need is determined, appropriate site(s) selected, and project design is undertaken.

At such time as the need for expanded or new facilities is determined, appropriate site(s) are identified, and project design is undertaken, project level review pursuant to CEQA will be required. Potential environmental impacts will be identified, alternative projects considered, and mitigation measures to avoid or lessen impacts identified. Impacts related to facilities construction are deemed to be less than significant. Subject to CEQA and applicable regulatory programs, impacts from construction of new or expanded utilities and service systems resulting from increases in demand resulting from development consistent with General Plan 2030 are expected to be less than significant

Impact: **Population increases and new development associated with General Plan 2030 would indirectly result in the need for new or expanded water supply facilities within the Eastern Municipal Water District (EMWD) service area, but the physical impacts associated with construction and operation of new or expanded water supply facilities are determined to be less than significant.**

MITIGATION MEASURES

No mitigation measures are required.

SIGNIFICANCE AFTER MITIGATIONS

Less than significant.

4.10.2 WASTEWATER

EXISTING CONDITIONS

The Eastern Municipal Water District (EMWD) owns and maintains the sanitary sewer system serving most of the City of Perris and its Sphere of Influence. The City of Perris Sewer District owns and maintains sanitary sewers in and around Downtown Perris in an area generally extending north to Nuevo Road, west to Arapahoe, south to Mountain Avenue, and east to Redlands Boulevard (See Exhibit 4.10.2-1) The City of Perris Sewer District sewers discharge into EMWD trunk lines. EMWD trunk line sewers convey sewage from both EMWD and Perris Sewer District systems to the 300-acre Perris Valley Regional Water Reclamation Facility (PVRWRF) south of Case Road and west of the I-215 Freeway. Sewage is processed at the PVRWRF into biosolids that may be used for soil enrichment, and into recycled water. In 2001, all of more than 25,000 acre feet of recycled water produced at the facility was consumed by CALPINE energy company, the San Jacinto Wildlife Area, agricultural irrigators, and "municipal irrigators" for use in irrigation of golf courses, school athletic fields, and municipal parks.

THRESHOLDS OF SIGNIFICANCE

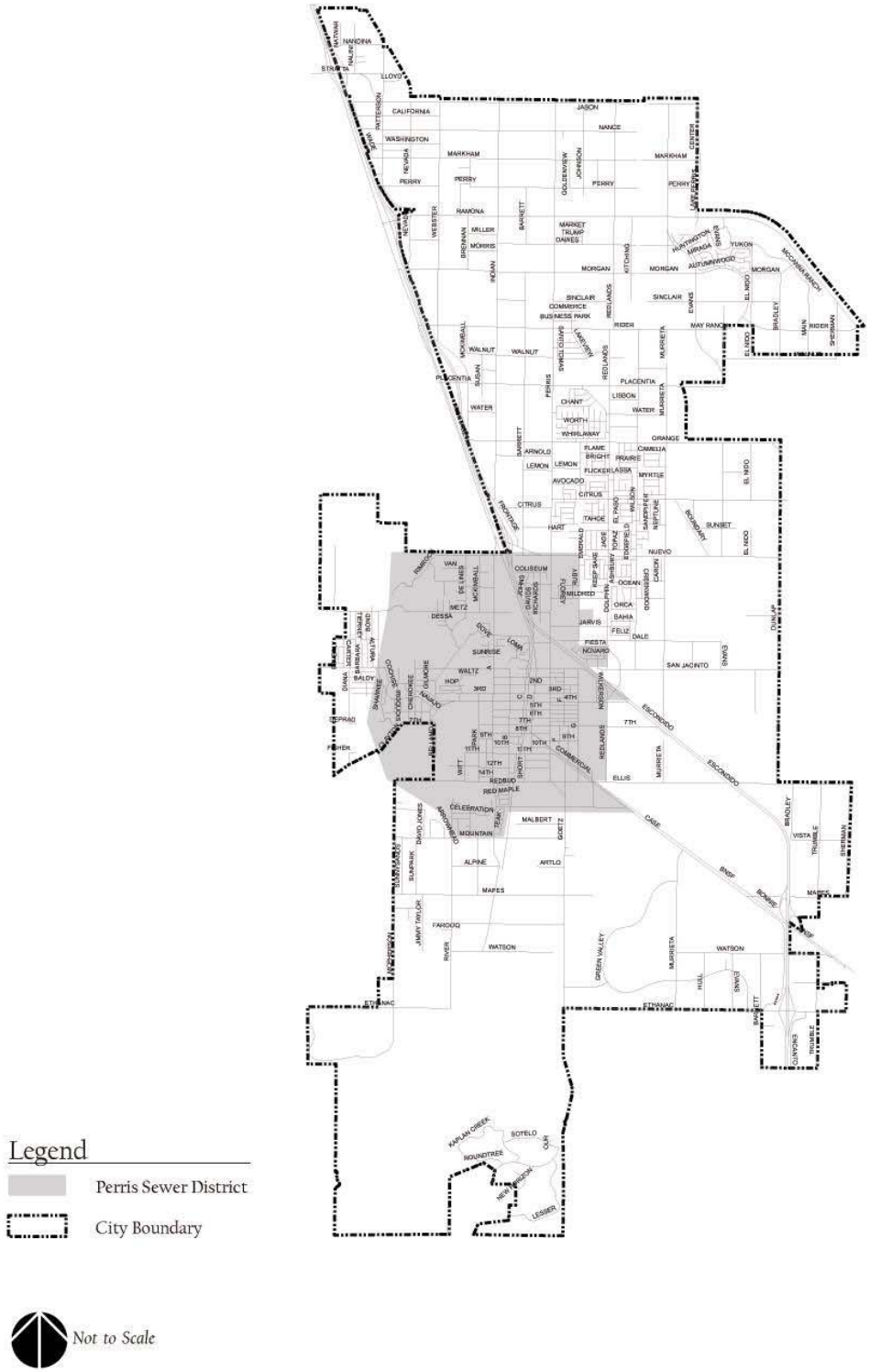
In accordance with CEQA, the effects of a project are evaluated to determine if they will result in significant adverse impacts on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria or standards, used to determine the significance of impacts may vary depending on the nature of project. General Plan 2030 is considered to have adverse impact on wastewater service if any of the following occur:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; or

- Result in determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; or

- Include a new or retrofitted stormwater treatment control Best Management Practices (BMP), the operation of which could result in significant environmental effects.

Exhibit 4.10.2-1: City of Perris Sewer District



PROJECT IMPACTS

Threshold ***Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.***

Existing regulations within the City of Perris Municipal Code require an industrial wastewater permit for industrial facilities and certain commercial facilities that plan to discharge industrial wastewater to the City's sewage collection and treatment system. The purpose of the industrial wastewater permit program is to ensure the City's compliance with the National Pollution Discharge Elimination System (NPDES) program, as administered by the Regional Water Quality Control Board (RWQCB), for all facilities discharging to navigable surface waters of the state, including sewage treatment plants.

New development consistent with adoption and implementation of General Plan 2030 would continue to comply with all provisions of industrial wastewater permits, which regulate discharges in the City. Through compliance with the City's industrial wastewater permit program, which is administered subject to the requirements and limitations of the NPDES program, as enforced by the RWQCB, General Plan 2030 would not result in an exceedance of wastewater treatment requirements. Further, the NPDES permit system also regulates both point source discharges (a municipal or industrial discharge at a specific location or pipe), and non-point source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the State (e.g., stormwater systems). The NPDES Phase I and Phase II requirements would regulate discharge from construction sites. Al future projects under General Plan 2030 would be required to comply with all applicable wastewater discharge requirements issued by the State Water Resources Control Board (SWRCB) and RWQCB. Therefore, implementation of General Plan 2030 would not exceed applicable wastewater treatment requirements of the RWQCB with respect to discharges to the sewer system or stormwater system within the City.

Under the Santa Ana Regional Water Quality Board (SARWQCB) NPDES permit system, all existing and future municipal and industrial discharges to surface waters within the City would be subject to regulations. NPDES permits are required for operators of municipal separate storm sewer systems (MS4s), construction projects, and industrial facilities. These permits contain limits on the amount of pollutants that can be contained in each facility's discharge. Specifically, all development within the City would be subject to the provisions of the Santa Ana MPDES Storm Water Permit. The Santa Ana NPDES storm water permit was issued by SARWQCB to the municipalities in the Santa Ana drainage area of Riverside County. The Santa Ana River Basin Regional Drainage Area Master Plan (SAR-DAMP) was subsequently prepared to meet the requirements of the storm water permit by describing the overall storm water management strategies planned by Riverside County to protect the beneficial uses of the receiving waters in the Santa Ana drainage area. Thus, developments would also be subject to the provisions of the SAR-DAMP.

Policy VI.A in the Conservation Element of General Plan 2030 requires compliance with NPDES and Implementation Measure VI.A.1 will aid in obtaining the SAR-DAMP ordinance. A less than significant impact would occur within the City and no further mitigation would be required.

General Plan 2030 Goals, Policies and Implementation Measures pertaining to water quality are as follows:

Conservation Element

Goal VI – Water Quality

Achieve regional water quality objectives and protect the beneficial use of the region's surface and groundwater.

Policy VI.A

Comply with requirements of the National Pollutant Discharge Elimination System (NPDES).

Implementation Measures

VI.A.1 Adopt a Stormwater Ordinance per Santa Ana Regional Area Management Plan (SAR-DAMP) requirements for stormwater management and discharge control.

VI.A.3 Prior to issuance of any grading permit involving a disturbance of one or more acres of land, require proof of a RWQCB San Jacinto Watershed Construction Activities Permit and a Storm Water Pollution Prevention Plan.

VI.A.4 Review water quality impacts during the project review and approval phases to ensure appropriate BMPs are incorporated into the project design and long-term operations.

VI.A.5 In accordance with the Riverside County NPDES, enact a Water Quality Management Plan to review and regulate new development approvals.

VI.A.6 Continue to fulfill the City's obligation as Co-Permittee under the MS4 NPDES permit for Riverside County.

Impact **Implementation of General Plan 2030 would not exceed wastewater treatment requirements of the Regional Water Quality Board.**

Threshold ***Result in determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.***

Implementation of General Plan 2030 would generate additional demand on the existing sewer system from increased sewage flows. New residential, commercial, and industrial growth would generate wastewater that would require treatment.

Under development of General Plan 2030, the number of housing units would increase by approximately 34,330 dwellings. Increased commercial and industrial uses would also be expected by 2030. Based on sewage flow generation factors provided by EMWD, and as shown in Table 4.10.2-1, this increased development under General Plan 2030 is anticipated to

generate an estimated additional average wastewater flow of 30,517,668 gallons per day (gpd) within the City.[18]

[18] Eastern Municipal Water District, Brochure on Perris Valley Regional Water Reclamation Facility at www.emwd.org/news/Insights/insights_perris-valley.pdf

Table 4.10.2-1: Projected Wastewater under General Plan 2030

Type of Land Use	Estimated Potential New Development	Sewer Generation Factor	Additional Projected Wastewater (gpd)
Residential	34,330 units	270 gpd/du	9,269,100
Commercial	9,420,849 sf	300 gpd/1,000 sf	2,826,255
Industrial	36,755,826 sf	500 gpd/1,000 sf	18,377,913
Parks	296 acres	150 gpd/ac	44,400
Total			**30,517,668 gpd**

Source: Sewer generation factors based upon data provided by EMWD 2003.

Additional wastewater would require treatment by the existing wastewater treatment plants and expansion of these plants may be necessary as a result of cumulative growth from General Plan 2030 and throughout the region. EMWD will take changes to General Plan 2030 into account when considering updates to their sewer master plans. The master plan provides a guide to future improvements. Using this guide, in addition to the current conditions and concerns, an annual capital improvement plan is developed laying out funding and prioritizing capital improvements for the next five years to ensure that development does not increase demand beyond the capacity of wastewater treatment facilities. In addition to the capital improvement plan, each new development within the District is reviewed on a case-by-case basis for needed improvements to the sewer system.[19]

Impact: **Development associated with General Plan 2030 would not increase sewer demand beyond the capacity of existing wastewater treatment facilities.**

MITIGATION MEASURES

No mitigation measures are required.

SIGNIFICANCE AFTER MITIGATION

Less than significant.

[19] Lovsted, Elizabeth. Written communication with Facilities Planner/Engineer at EMWD. August 27, 2004.

4.10.3 SOLID WASTE

EXISTING CONDITIONS

Solid waste collection service in the City of Perris is provided by CR&R Disposal. Waste is transported to Perris Materials Recovery Facility at 1706 Goetz Road where recyclable materials are separated from solid wastes. Recyclable materials are sold in bulk and transported for processing and transformation for other uses. Solid wastes are transported to either the El Sobrante Landfill on Dawson Canyon Road in Corona or to the Badlands Landfill on Ironwood Avenue in Moreno Valley.

In the most recent year reported by the State of California (2000), solid waste generated in the City and disposed in landfills totaled 47,896 tons.[20] Of this, 19,637 tons were generated from residential uses and 9,100 tons were generated from commercial and the remaining 19,158 tons were generated by industrial uses.[21] It is estimated that residents in Perris produce an average of 2.2 pounds of waste day. Non-residential land uses are estimated to generate an average 19 pounds of waste per employee per day.

THRESHOLD OF SIGNIFICANCE

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria or standards, used to determine the significance of impacts may vary depending on the nature of project. Implementation of General Plan 2030 may result in a potentially significant impact if the proposed project would cause either of the following results:

- Generate solid waste that exceeds landfill capacity or substantially shorten the life of the landfill; or
- Not comply with applicable sold waste plans, policies, and regulations (*refer to Section 6.0, Impacts Found Not To Be Significant).*

PROJECT IMPACTS

Threshold ***Generate solid waste that exceeds landfill capacity or substantially shorten the life of the landfill.***

CR&R is contracted by the City of Perris as the sole hauler of solid waste and operator of recycling services for the City. CR&R offers refuse collection to residential, commercial and

[20] Integrated Waste Management Board, at www.ciwmb.gov
[21] Spoonhour, Barbara. Correspondence with solid waste program manager at Western Riverside Council of Governments, August 19, 2004.

industrial customers. CR&R transports solid waste from the City to either the El Sobrante Landfill or Badlands Landfill. In August 2001, the El Sobrante Landfill received a major expansion and now has 495 acres of permitted disposal activities with more than 165 million cubic yards of remaining capacity. The El Sobrante Landfill can accept up to 10,000 tons per day of waste from the California Counties of Riverside, San Bernardino, Los Angeles, Orange and San Diego, but currently accepts an average 8,000 tons/day.[22] The El Sobrante Landfill has a lifespan of approximately 36 years.

The Badlands Landfill is owned and operated by Riverside County Waste Management Department (RCWMD) with 10,515,251 tons of remaining capacity. The Badlands Landfill can accept up to 4,000 tons per day of waste or 1,248,000 tons per year. It has a lifespan of approximately 15 more years (until 2018).[23]

Future development within the City is estimated to add approximately 120,018 persons in the City of General Plan build-out, with an associated 34,330 dwelling units, as well as increased commercial and industrial uses. This increase in development as a result of General Plan 2030 would result in an increase of solid waste stream to the landfill, and increased demand for solid waste services throughout the City. This analysis is based on solid waste generation rates utilized within the 2002 Riverside County Integrated Project, as illustrated in Table 4.10.3-1. Development under General Plan 2030 would result in an additional 433,648 tons/year of solid waste to be disposed of at either the El Sobrante Landfill or the Badlands Landfill.

Table 4.10.3-1: Generation of Solid Waste Under General Plan 2030

Land Use	Potential New Development	Solid Waste Generation Rate	Solid Waste Generation
Residential	34,330 units	0.41 tons/unit/year	14,075 tons/year
Commercial	9,420,849 sf	0.0024 tons/sf/year	22,610 tons/year
Industrial	36,755,826 sf	0.0108 tons/sf/year	396,963 tons/year
Total			**433,64 tons/year**
Generation rates utilized within the Riverside County Integrated Project, October 2003. Section 4.15, Solid Waste impacts and Mitigation.			

Source: Integrated Waste Management Board, at www.ciwmb.ca.gov

With the remaining capacity at both the Badlands Landfill and the El Sobrante Landfill, the increase in solid waste generated by new development under General Plan 2030 would not exceed capacity at the landfills. In addition, AB 939 mandates the reduction of solid waste disposal in landfills. The Bill mandated a minimum 50 percent diversion goal by the year

[22] Taken from the City of Corona General Plan EIR, March 2004. Defrantes, Damon. Personal communication via telephone with District Manager at Waste Management , Inc. August 13, 2003.
[23] Riverside County Integrated Plan, General Plan Final program EIR, October 2003.

2000, and also requires cities and counties to prepare Source Reduction Recycling Elements (SRRE) in their General Plans. The Riverside Countywide Integrated Waste Management Plan (CIWMP), adopted by the Riverside County Board of Supervisors on January 14, 1997, and approved by the California Integrated Waste Management Board (CIWMB) on September 23, 1998, outlines the goals, policies, and programs the County and its cities, including the City of Perris, will implement to create an integrated and cost effective waste management system that complies with the provisions of AB 939 and its diversion mandates. The CIWMP is composed of the Riverside Countywide Summary Plan, the Source Reduction and Recycling Element (SRRE) for the County and each of its cities, the Nondisposal Facility Element (NDFE) for the County and each of its cities, the Household Hazardous Waste Element (HHWE) for the County and each of its cities, and the Riverside Countywide Siting Element.

Therefore, as the Badlands Landfill and El Sobrante Landfill would have sufficient capacity to serve increased development within the City under General Plan 2030, impacts would be less than significant.

The Badlands landfill can accept up to 4,000 ton per day of waste and the El Sobrante Land fill can except up to 10,000 tons per day of waste from the Counties of Riverside, San Bernardino, Los Angeles, Orange and San Diego. As discussed earlier, the El Sobrante Landfill and the Badlands Landfill would have sufficient capacity to accommodate the increased demand associated with implementation of General Plan 2030, in combination with all future projects within their service boundaries. Furthermore, the implementation of source reduction measures, such as a recycling plan, that would be implemented on a project-specific basis would partially address landfill capacity issues by diverting additional solid waste at the source of generation. Therefore, cumulative impacts associated with solid waste, and the City's contribution to this cumulative impact, would be less than significant.

Impact: **Implementation of General Plan 2030 will not result in insufficient landfill capacity to accommodate the increased demand for solid waste service provided to the City.**

MITIGATION MEASURES

No mitigation measures are required.

SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.10.4 ENERGY

Impacts to natural gas and electricity are analyzed upon information from the Southern California Gas Company (SCG) and Southern California Edison Company (SCE).

EXISTING CONDITIONS

Natural Gas

The Southern California Gas Company provides natural gas service to Perris via existing 6" gas mains in Perris Blvd., Morgan, Nuevo, Goetz Road (south of Watson), Ethanac, and Murrietta (north of Ethanac).

Estimated consumption rates for natural gas are based on average figures provided by the South Coast Air Quality Management District[24] (SCAQMD). Residential consumption is broken down into single and multi-family units. Single-family units consume, on average, 6,665 cubic feet of natural gas per unit per month while multi-family units consume 4,011.5 cubic feet per unit per month.

Commercial/office consumption rates average 24 cubic feet per square foot per year and retail consumption rates average 34.8 cubic feet per square foot per year.

Electricity

Southern California Edison (SCE) provides electricity within the City of Perris. Based on data provided by SCE for the twelve months ending July 31, 2002, electricity consumption in kilowatt hours per year (kWh) within the City of Perris was as follows:

Residential
56,248,575 kWh/year

Commercial/Industrial
99,473,418 kWh/year

Agriculture/pumping
4,828,427 kWh/year

Street lighting
86,266 kWh/year

Traffic control

[24] Table A9-12-A, Appendix 9, SCAQMD CEQA Air Quality Handbook, adopted April 1993. Consumption averages are based on The Gas Company's average usage rates.

233,340 kWh/year

Total
160,870,026 kWh/year

For planning purposes, projected electricity consumption rates are those set forth by the Air Quality Management District as follow:

Residential
5,626.50 kWh/dwelling unit/year

Food Store
53.30 kWh/square feet/year

Restaurant
47.45 kWh/square feet/year

Hospital
21.70 kWh/square feet/year

Retail
13.55 kWh/square feet/year

High School
10.50 kWh/square feet/year

Elementary School
5.90 kWh/square feet/year

Office
12.90 kWh/square feet/year

Hotel/Motel
9.95 kWh/square feet/year

Warehouse
4.35 kWh/square feet/year

Miscellaneous
10.50 kWh/square feet/year

THRESHOLD OF SIGNIFICANCE

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria or standards, used to determine the significance of impacts may vary depending on the nature of project. Impacts associated with natural gas and electricity may be considered potentially significant if General Plan 2030 would cause any of the following results:

- Encourage activities that result in the use of large amount of energy or use of energy in a wasteful manner; or
- Substantially increase demands for energy or natural gas beyond available supply; or
- Require expansion or construction of new energy or natural gas infrastructure that would cause adverse environmental effects.

PROJECT IMPACTS

Threshold ***Encourage activities that result in the use of large amount of energy or use of energy in a wasteful manner or require expansion or construction of new energy infrastructure that would cause adverse environmental effects.***

As shown in Table 4.10.4-1, the monthly electricity demand at General Plan build-out would be 58,620,761 kilo-watt hours (kWh). Implementation of General Plan 2030 would increase the intensity of development within the City; thus, increasing the demand for electricity. The proposed residential, commercial and industrial uses would increase the demand for electricity to light, heat, and air condition new development. This increased development would, in turn, increase demand for electricity over existing conditions. However, Southern California Edison has indicated they are a "reactive" utility, and will provide electricity as customers request their services.[25]

Table 4.10.4-1: Increased Demand of Electricity under General Plan 2030

Land Use	Increased Development under Proposed General Plan	Electricity Demand Rate	Monthly Electricity Demand at Build-out

[25] Taken from the City of Corona General Plan EIR, March 2004. Lacy, Scott. Personal communication via telephone with Distribution Engineer at SCE. August 20, 2003.

Residential	34,330 units	468.875 kWh/unit/month	16,096,479 kWh
Commercial	9,420,849 square feet	1.100 kWh/sf/month	10,362,934 kWh
Industrial	36,755,826 square feet	0.875 kWh/sf/month	32,161,348 kWh
Total			**58,620,761 kWh**

Source: SCAQMD CEQA Air Quality Handbook, 1993.

Further, the additional growth and development anticipated under General Plan 2030 would require that electricity providers expand existing facilities to serve new development within the City. The construction of new electricity facilities or expansion of existing facilities may cause environmental effects. Since it is not possible to accurately determine or quantify such environmental effects without site locations and specific project details, potential impacts of construction of future electricity infrastructure will be evaluated on a project-by-project basis.

Information is provided by Southern California Edison[26] as each new development is proposed. Implementation of General Plan 2030 would not substantially increase electricity demands beyond available supply, and environmental effects associated with new or expanded electricity facilities would be analyzed under further environmental reviews, impacts to electricity service within the City are considered less than significant.

As shown in Table 4.10.4-2, the monthly natural gas demand at General Plan build-out would be 377,424,138 cubic feet (cf). Development under General Plan 2030 would result in 120,018 new residents in the City, as well as increased commercial and industrial uses. This new development would increase demand for natural gas over existing conditions. However, the Southern California Gas Company has indicated that they are a "reactive" utility, and will provide natural gas as customers request their services.[27]

Table 4.10.4-2: Increased Demand of Natural Gas Under General Plan 2030

Land Use	Increased Development under Proposed General Plan	Natural Gas Demand Rate	Monthly natural Gas Demand at Build-out
Residential	34,330 units	6,665 cf/unit/month	228,809,450 cf
Commercial	9,420,849 square feet	2.9 cf/sf/month	27,320,462 cf
Industrial	36,755,826 square feet	3.3 cf/sf/month	121,294,226 cf
Total			**377,424,138 cf**

Source: SCAQMD CEQA Air Quality Handbook, 1993.

[26] Correspondence from Bon Lopez, Regional Manager, Southern California Edison. July 2003.
[27] Taken from the City of Corona General Plan EIR, March 2004. Kalinowski, Frank. Personal communication via telephone with Field Environmental Specialist at SCG. August 19, 2003.

Further, the additional growth and development anticipated under General Plan 2030 would require that natural gas purveyors expand existing facilities to serve new development within the City. The construction of natural gas facilities or expansion of existing facilities may cause environmental effects. Since it is not possible to accurately determine or quantify such environmental effects without site locations and specific project details, construction of future natural gas infrastructure and expansion of existing infrastructure will be evaluated as each new development is proposed. Through the City's environmental review process, potential environmental impacts associated with future development projects will be evaluated. Since implementation of General Plan 2030 would not substantially increase demands beyond available supply, and environmental effects associated with the new or expanded gas facilities would be analyzed under further environmental reviews, impacts to natural gas service within the City is considered less than significant.

Development under General Plan 2030, in combination with all other development within the Southern California Gas (SCG) and Southern California Edison (SCE) service areas, would result in the permanent and continued use of natural gas and electricity resources. However, both SCG and SCE indicated that, as reactive providers, which supply natural gas and electricity services to customers at their request they would be able to service future developments under General Plan 2030 build-out within the City, in combination with all projected future developments within their service boundaries.[28] Therefore, the project's contribution to these impacts would not be cumulatively considerable, and cumulatively considerable, and cumulative impacts to energy demand with SCG and SCE service boundaries would be less than significant.

The cumulative demand for natural gas and electricity associated with development consistent with General Plan 2030 together with development within the region will result in the need for new natural gas and electricity production/transmission facilities. New or expanded production/transmission facilities may also be required outside the southern California region

Construction of new facilities or expansion of existing facilities for potable water supplies, wastewater treatment, and for natural gas and electricity production and distribution could result in significant impacts to the environment. Project-level construction impacts are likely to include impacts to air quality from motorized equipment and fugitive dust and will be subject to evaluation and mitigation consistent with the South Coast Air Quality Management District (SCAQMD) Handbook, with Rule 403 (fugitive dust) mitigation. Construction impacts to hydrology and water quality are possible but will be subject to restrictions of the respective Regional Water Quality Control Board and the Best Management Practices included in each project's Storm Water Pollution Prevention Plan required by the National

[28] Taken from the City of Corona General Plan EIR, March 2004. Kalinowski, Frank. Personal communication via telephone with Field Environmental Specialist at SCG. August 19, 2003.

Pollutant Discharge Elimination System. These will prevent stormwater run-off contamination during construction.

Project-level impacts on Transportation, Aesthetics, Biological Resources, and Cultural Resources are site-specific and, therefore, any attempt to identify such impacts at the General Plan level of analysis would be purely speculative until project need is determined, appropriate site(s) selected, and project design is undertaken.

At such time as the need for expanded or new facilities is determined, appropriate site(s) are identified, and project design is undertaken, project level review pursuant to CEQA will be required. Potential environmental impacts will be identified, alternative projects considered, and mitigation measures to avoid or lessen impacts identified. Impacts related to facilities construction are deemed to be less than significant. Subject to CEQA and applicable regulatory programs, impacts from construction of new or expanded utilities and service systems resulting from increases in demand resulting from development consistent with General Plan 2030 are expected to be less than significant

Impact: **Implementation of General Plan 2030 would result in an increased demand for energy which may result in a need for new or expanded facilities which may have significant effects on the environment. Subject to CEQA and regulatory requirements, the effects of such construction resulting from adoption and implementation of General Plan 2030 are deemed to be less than significant.**

MITIGATION MEASURES

No mitigation measures are required.

SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.10.5 COMMUNICATION SERVICES

EXISTING CONDITIONS

Adelphia offers television cable subscription services to residential customers in the City of Perris. As of November 2002, of the 11,317 homes for which service is available, residents of 6,530 of those dwellings subscribed to Adelphia cable services. Services offered include radio from the DMX digital music network and television programming for basic, expanded, and premium channels line-ups in traditional and digital formats.

THRESHOLD OF SIGNIFICANCE

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria or standards, used to determine the significance of impacts may vary depending on the nature of project. Impacts associated with telecommunication services may be considered potentially significant if implementation of General Plan 2030 would result in the following:

- Require expansion or construction of new telecommunication infrastructure that would cause adverse environmental effects.

PROJECT IMPACTS

Threshold ***Require expansion or construction of new telecommunications infrastructure that would cause adverse environmental effects.***

Cable television service for the City of Perris is primarily provided by Adelphia. Currently technology allows residents and businesses to utilize a variety of options for their telecommunications needs. Each service provider offers a selection of services that consumers can choose from to fit their individual needs. It is anticipated that all service providers including Adelphia would have the ability to supply the future demand for telecommunications services anticipated from implementation of General Plan 2030. If expansion of existing facilities or construction of new telecommunication facilities is required, the associated environmental effects will be analyzed when site location and specific project details are known. As such, since potential environmental impacts would be analyzed through the City's environmental review process, the increased demand for telecommunication services for the City would be less than significant.

Telecommunication services are provided to customers when requested, and as stated above, each service provider offers a selection of services that consumers can choose from to fit individual needs. Since there are no particular capacity issues for these services, the projects

contribution to cumulative impacts would not be considerable and would be less than significant.

Impact: **Implementation of General Plan 2030 will result in increased demand for telecommunication services that could result in the need for expansion or construction of new facilities which could cause significant environmental impacts. Impacts of facilities construction resulting from adoption and implementation of General Plan 2030 is determined to be less than significant.**

MITIGATION MEASURES

No mitigation measures are required.

SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.11 LAND USE AND PLANNING

CEQA guidelines require that land use and planning provisions of General Plan 2030 be evaluated for consistency with land use plans and policies of other agencies that may have authority over land use in the General Plan 2030 planning area. The Riverside County Airport Land Use Plan (ALUP) includes substantial portions of the City of Perris within Influence Areas for March Air Reserve Base and for Perris Valley Airport. This section assesses the consistency of General Plan 2030 with the ALUP.

4.11.1 EXISTING CONDITIONS

The Riverside County Airport Land Use Commission (ALUC) has the responsibility for promoting land use compatibility around airports including March Air Reserve Base and Perris Valley Airport pursuant to Public Utility Code Sections 21670 et seq. The Airport Land Use Plan (ALUP) adopted by the ALUC in 1986 establishes the policies and procedures for promoting land use compatibility within Influence Areas that include substantial portions of the City of Perris. The ALUP defines three "Influence Areas" wherein land use restrictions are to be applied to minimize interference of new development with airport and flight operations. These are defined below.

Influence Area 1 extends southeasterly from the end of the runway into the City of Perris. Influence Area 1 is co-extensive with Accident Potential Zones I and II delineated in the Air Installation Compatible Use Zone (AICUZ) study completed by the Department of the Air Force for March Field in 1998. Influence Area 1 reflects the air corridor with the highest volume of air traffic; all aircraft pass through this corridor on approach or departure from March Air Reserve Base.

Aircraft are more likely to have problems within Influence Area 1 due to changes in aircraft power settings associated with take-offs or landings. The convergence of all aircraft take-offs and landings within Influence Area 1 result in the highest noise levels in this Area.[29] For these reasons, high risk and sensitive uses including residential uses are prohibited in this area consistent with both the ALUP and the AICUZ. Development standards for the City of Perris reflect restrictions on use and density and intensity standards within this Influence Area and are consistent with the ALUP and AICUZ for Influence Area 1.

Influence Areas 2 and 3 encompass much of the City of Perris east of Interstate I-215. Hazards in Influence Area 2 are similar to those in Influence Area 1, but the influence of take-off and noise are not as severe and the aircraft are higher in altitude. Therefore, the limitations are

[29] Riverside County Airport Land Use Plan. Riverside County Airport Land Use Commission, April, 26, 1984.

not as severe as in Influence Area 1. Restrictions in the ALUP for Influence Area 2 include a minimum residential lot of 2 ½ acres, but permit agricultural, industrial, and commercial uses.

Aircraft flights into and out of March Air Reserve Base have less impact on uses in ALUP Influence Area 3 than in Influence Areas 1 and 2 Within Influence Area 3, Avigation Easements are to be granted by land purchasers to airport operators to preclude legal actions by property owners to abate nuisances, including noise and vibration. In exchange for Avigation Easements, development of subject properties are to be permitted.

Perris Valley Airport is a small, private airport with uses that include skydiving and hot air ballooning. In October 1975, the Riverside County Airport Land Use Commission revised the ALUP to include Interim Influence Area 1 adjacent to Perris Valley Airport As described above, aircraft are more likely to have problems within this Influence Area due to changes in aircraft power settings associated with take-offs or landings. The convergence of all aircraft take-offs and landings result in the highest noise levels in this area. For these reasons, high risk and sensitive uses including residential uses are prohibited in the ALUP. Development standards for the City of Perris do not reflect these restrictions on use and density and intensity standards and are not consistent with the ALUP restrictions for Interim Influence Area 1.

4.11.2 THRESHOLDS OF SIGNIFICANCE

Thresholds indicating an impact to Land Use and Planning resulting from adoption and implementation of General Plan 2030 are as follow:

- Physically divide an established community *(refer to Section 6.0, Impacts Found Not To Be Significant)*; or

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or

- Conflict with any applicable habitat conservation plan or natural communities conservation plan *(refer to Section 6.0, Impacts Found Not To Be Significant).*

4.11.3 PROJECT IMPACTS

Threshold ***Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general***

> ***plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.***

A conflict between General Plan 2030 Policies and Implementation Measures and the ALUP would represent a significant impact. The Land Use Plan and corresponding development standards in the Land Use Element of General Plan 2030 do not reflect the land use restrictions set forth in the ALUP for Influence Areas 2 and 3.

ALUP Influence Areas 2 and 3 extend far beyond the Crash Potential Zones established for March Field and do not accurately reflect areas subject to hazards and/or nuisances associated with flights into and out of this facility. The boundaries of Influence Areas 2 and 3 within the City of Perris were adopted as part of Riverside County ALUP in 1986. Up until that time, much of the airport planning area within the City of Perris was agricultural and large-lot, rural residential development and the need for more precisely defined Influence Area boundaries was not recognized. With the explosive growth in southern California since that time, however, the demand for housing necessitated development at much higher densities than previously existed. Conformity with the 1986 ALUP would have precluded much of the development in the City that began during the late 1980's and continues to the present.

According to a representative of the Riverside County Land Use Commission, the factors used to establish Interim Influence Area 1 associated with Perris Valley Airport are technically outdated and largely unknown. There is no documentation of the basis for delineating this Influence Area.

General Plan 2030 includes the following policies to ensure that the ALUP and AICUZ are considered as part of new development review:

> ***Safety Element***
> **Goal I**
> Reduce risk of damage to property or loss of life due to natural or man-made disasters.
> **Policy I.D: Aircraft**
> Consult the AICUZ Land Use Compatibility Guidelines and ALUP Airport Influence Area development restrictions when considering development project applications.
> **Implementation Measures**
> **I.D.1** Participate in March Operations Assurance Task Force to resolve inconsistencies between local land use regulations and AICUZ and ALUP policies.
> **I.D.2** Continue to notify March Air Reserve Base of new development project applications and consider their input prior to making land use decisions.

The City of Perris is currently participating as a member of a multi-jurisdictional committee working with the "March Operations Assurance Task Force" to resolve inconsistencies between ALUP policies and restrictions and the land development policies and standards of

affected local jurisdictions. The Riverside County ALUC as of this writing is in the process of preparing the Riverside County Airport Land Use Compatibility Plan Policy Document that will supercede the existing ALUP. The March Air Reserve Base component has not been completed as of this writing and a determination cannot be made as to conformity of General Plan 2030 with the Riverside County Airport Land Use Compatibility Plan Policy Document.

Subject to General Plan 2030 Safety Element Implementation Measure I.D.3, development consistent with General Plan 2030 may be consistent with the intent and purposes of the ALUP, but will not be consistent with the ALUP adopted in 1986.

Impact: General Plan 2030 is not consistent with the Riverside County Airport Land Use Plan. This is a significant impact.

4.11.4 MITIGATION MEASURES

Mitigation of the impact associated with inconsistency of General Plan 2030 and the 1986 ALUP requires adoption by the Riverside County Airport Land Use Commission of a revised ALUP reflecting current technology and land use patterns. Such action is not within the purview of the City of Perris as lead agency for General Plan 2030.

4.11.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and unavoidable.

V. SECTION 5.0: OTHER CEQA CONSIDERATIONS

Table of Contents

5.1 GROWTH INDUCING IMPACTS

This section evaluates the potential for the proposed project to effect "economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment" (CEQA Guidelines Section 15126.2(D)). A positive finding relative to any one of the criteria that follow is an indication that General Plan 2030 will have a growth-inducing impact. Each criterion is accompanied by a statement as to why a positive or negative finding for the respective criterion is appropriate.

Threshold ***The project removes an impediment to growth (e.g., the establishment of an essential public service, or the provision of new access to an area).***

The land area subject to General Plan 2030 is accessible within the greater western Riverside County region by Interstate 215, the Cajalco/Ramona Expressway, and State Route 74. The Regional Transportation Plan includes upgrades to all three roadways to improve access to the Perris area, independent of adoption and implementation of General Plan 2030. Lack of a potable water supply would typically represent an impediment to growth in the southern California region; however, the Eastern Municipal Water District provides potable water to the City and has the rights to adequate supplies to accommodate growth in Perris consistent with General Plan 2030. No other public service impediments exist or would be removed through adoption and implementation of the General Plan 2030.

General Plan 2030 does not result in removal of an impediment to growth.

Threshold ***The project results in an urbanization of land in a remote location e.g. leapfrog development.***

The continued eastward movement of growth into western Riverside County has extended the contiguous urbanized area south from Moreno Valley along Interstate 215 to encompass the City of Perris. Continued development consistent with General Plan 2030 reflects the logical, geographic expansion of the urban area southward to existing development in the unincorporated community of Sun City.

General Plan 2030 does not result in urbanization in a remote location.

Threshold ***Economic expansion or growth occurs in area in response to the project (e.g. changes in revenue base, employment expansion, etc).***

General Plan 2030 has been drafted to manage growth consistent with the continued urbanization of western Riverside County as the geographical extension of the metropolitan region that encompasses Los Angeles and Orange Counties. Expansion of the metropolitan area continues as a result of rapid population growth in southern California. General Plan

2030 retains sufficient land for non-residential uses necessary to accommodate future employment centers that will improve the jobs/housing balance in the City of Perris, but does not cause such economic expansion or growth.

Economic expansion or growth will not occur as a result of adoption and implementation of General Plan 2030.

Threshold ***The project establishes a precedent-setting action (e.g., a change in zoning or General Plan amendment approval).***

General Plan 2030 accommodates land uses and development intensities and densities substantially similar to those in the existing General Plan adopted in 1991 and no precedent allowing development of land not previously designated for development will result.

Adoption and implementation of General Plan 2030 will not establish a precedent for developing land previously not subject to development

Threshold ***The project necessitates the extension of major infrastructure such as sewer and water facilities or roadways.***

New development consistent with General Plan 2030 will require extension and upgrading of roadways and water, storm drain, sanitary sewer, and electric lines.

Adoption and implementation of General Plan 2030 will indirectly necessitate extension of major infrastructure which represents a significant impact.

Threshold ***The project encourages premature or unplanned growth.***

By definition, a General Plan is a guide for timely, planned growth.

Adoption and implementation of General Plan 2030 will not encourage premature or unplanned growth.

Impact: General Plan 2030 will indirectly result in extension of major infrastructure including roadways, water lines, storm drains, sanitary sewers, and gas and electric lines and will, therefore, have a growth-inducing impact.

5.2 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF GENERAL PLAN 2030 IS IMPLEMENTED

Section 15126(b) of the CEQA Guidelines requires an EIR to "describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect should be described."

Section 4.0 of this EIR provides a description of the potential environmental impacts of General Plan 2030 and identifies policies and/or mitigation measures that will reduce impacts to a less than significant level wherever possible. After implementation of the recommended

policies and mitigation measures, the impacts listed below could not be feasibly mitigated to a less than significant level and will result in significant, unavoidable impacts with adoption and implementation of General Plan 2030.

AIR QUALITY

Impact: Adoption and implementation of General Plan 2030 will contribute to an existing and projected air quality violation (Significant and unavoidable).

Daily construction-related emissions throughout the General Plan area during any given day would exceed the applicable SCAQMD thresholds for NOx, ROG, and PM-10 even with implementation of regulatory measures appropriate to reducing construction project pollutants.

Impact: Adoption and implementation of General Plan 2030 will result in a cumulatively considerable net increase of criteria pollutants for which the region is in non-attainment under an applicable national or State air quality standard (Significant and unavoidable).

Cumulative emissions resulting from development associated with General Plan 2030 will contribute to a cumulatively considerable net increase in criteria pollutants ROG, Sox, and PM10 in the South Coast Air Basin, which is currently a non-attainment area for these pollutants, and in violation of air quality standards.

TRANSPORTATION/CIRCULATION

Impact: Implementation of the project General Plan would result in substantial increases in traffic and reductions in Levels of Service (Significant and unavoidable).

The projected increase in traffic volume on Interstate 215 by the year 2030 as a cumulative effect of project traffic and of traffic generated by projects contributory to vehicle trips on Interstate 215 is substantial in relation to the existing traffic load and capacity of Interstate 215 through the project area. The resultant Level of Service "F" through the project area represents a significant impact.

LAND USE AND PLANNING

Impact: General Plan 2030 is not consistent with the Riverside County Airport Land Use Plan. (Significant and unavoidable)

Development consistent with General Plan 2030 will not be consistent with the ALUP adopted in 1986. Mitigation of the impact associated with inconsistency of General Plan 2030 and the 1986 ALUP requires adoption by the Riverside County Airport Land Use Commission of a revised ALUP reflecting current technology and land use patterns. Such action is not within the purview of the City of Perris as lead agency for General Plan 2030.

5.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD OCCUR IF GENERAL PLAN 2030 WERE IMPLEMENTED

State CEQA Guidelines (Section 15126.2(c)) requires consideration of irreversible environmental changes which would result from adoption and implementation of General Plan 2030. These include the commitment of nonrenewable resources for construction and operation of development consistent with General Plan 2030 that are likely to be irreversible (i.e. subsequent removal or discontinuation of uses is unlikely).

Adoption and implementation of the General Plan would indirectly result in an irreversible commitment of non-renewable resources such as energy supplies. Energy resources including petroleum and natural gas will be consumed during construction and operational phases of new development, including fuel consumed for heating and cooling of buildings, and for transportation of people and goods, as well as for lighting and other energy-related needs. Other non-renewable resources committed will include sand and gravel used in construction, iron ore and coal used in the production of steel, construction materials made from petroleum products, and copper and lead.

Electricity consumption during construction and operation phases will increase the consumption of oil, coal, and natural gas used at power plants located outside the City of Perris. Accordingly, this represents a long-term commitment to the continued consumption of these resources.

Irreversible environmental changes produced by future development projects consistent with General Plan 2030 would primarily occur as a result of the alteration of the physical environment as underdeveloped and undeveloped land is converted to urban uses. Thereafter, reversion of developed land to its natural state is unlikely.

Population increases resulting from new development will, in turn, result in increased demand for municipal services (e.g. fire and police, trash disposal, street repair and maintenance), and for general government services (e.g. courts and social services). These represent a long-term commitment of money and human resources.

This Page Left Blank Intentionally

VI. SECTION 6.0: IMPACTS FOUND NOT TO BE SIGNIFICANT

Table of Contents

Through the scoping process, the City of Perris determined that there was no substantial evidence that General Plan 2030 would cause or otherwise result in significant environmental effects in the resources areas discussed below. As indicated in the CEQA Guidelines, no further environmental review of these issues is necessary for reasons summarized in the following discussion.

6.1 AESTHETICS

- ***Create substantial adverse effects on a scenic vista:***

  Because the bulk of developable land within the City of Perris is located on the flat, broad basin, virtually all future building construction consistent with land use and development standards set forth in General Plan 2030 will obstruct views to the foothills from at least some vantage points. The criterion, however, relates to a scenic vista more narrowly defined as a view through an opening, between a row of buildings or trees, or at the end of a vehicular right-of-way. To this end, the east-west and north-south oriented roadway network and the streetscapes that define them will frame and preserve scenic vistas from public rights of way to the distant horizons and foothills. Owing to the flatness of the basin, the view corridors extend for miles along current and planned roadways preserving scenic vistas from the broad basin to the surrounding foothills. Accordingly, the impact is less than significant and no mitigation measures are proposed.

- ***Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway:***

  Large rocks scattered among the undeveloped, rolling topography in the west-central area of the City of Perris are an obvious presence in the visual landscape in this area. However, no one rock or collection of rocks in this landscape is notable by virtue of unique formation, size, or character. However, the Planning Commission encourages the preservation of rocks by requesting applicant to submit rock preservation maps with their submittals. No notable stands of native or mature trees exist in the City and no impact is associated with development consistent with the General Plan. Impacts on significant scenic resources, therefore, are less than significant.

- ***Substantially degrade the existing visual character or quality of the site and its surroundings:***

  General Plan 2030 retains the lot coverage, floor area ratios, and intensity standards for non-residential development, and density standards for residential development, as have been in place since adoption of the 1991 General Plan. Future development will be comparable in size and volume with existing development and is not expected to degrade the existing visual character or quality of the Perris environment.

General Plan 2030 calls for revision of Zoning Ordinance design standards for configurations of single-family homes on small lots as a means to improving streetscape aesthetics. Similarly, residential subdivisions will be required to include landscaped common area setbacks and masonry walls at subdivision perimeters adjoining public rights-of-way as a means to improving the appearance of residential neighborhoods.

General Plan 2030 does not expand the range of permitted uses within any land use designation to include uses that, by their nature, degrade the quality of the visual environment such as mineral extraction operations or outdoor vehicle salvage. Any alteration of the visual environment resulting from development consistent with General Plan 2030, therefore, is deemed to be less than significant.

6.2 AGRICULTURE RESOURCES

- ***Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Important, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use:***

  The 1991 General Plan Land Use Element eliminated the "agricultural" land use designation. Accordingly, the Environmental Impact Report prepared in conjunction with the 1991 General Plan identified conversion of agricultural land as a significant cumulative impact. Findings and facts indicating that certain social and economic factors outweighed the cumulative impacts associated with conversion of agricultural land to non-agricultural use and a Statement of Overriding Considerations were thereby adopted. Accordingly, adoption and implementation of General Plan 2030 will have no impact.

- ***Conflict with existing zoning for agricultural use, or a Williamson Act contract:***

  The 1991 General Plan Land Use Element redesignated all agricultural lands for uses other than agriculture. Remaining land zoned for agricultural use is subject to a Williamson Act contract for which a notice of non-renewal has been filed indicating that the land will be taken out of agricultural production. Adoption and implementation of General Plan 2030 will have no impact on the non-renewal.

- ***Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use:***

  Areas surrounding existing agricultural uses have been or will be developed for non-agricultural, urbanized uses. All properties in agricultural production are designated for similar, non-agricultural urbanized uses. General Plan 2030 will replace the 1991

General Plan whose Land Use Element included no "agricultural" designation. Therefore, adoption and implementation of General Plan 2030 will have no impact.

6.3 AIR QUALITY

- ***Conflict with or obstruct implementation of an applicable air quality plan:***

  The 1997 Air Quality Management Plan (AQMP) of the South Coast Air Quality Management District was developed consistent with the Southern California Association of Governments' (SCAG) Regional Transportation Plan (RTP). The RTP is designed to achieve a balance between the numbers of jobs and the numbers of housing units available to employees within SCAG sub-regions. The Housing Element, adopted in 2001, indicates an imbalance between the number of jobs in the City and the number of dwelling units. Approximately one (1) job exists in the City for each dwelling unit, a jobs-housing balance ratio of 1.0. The RTP sets a target jobs-to-housing ratio of 1.27 to achieve "balance" because there are normally more than one employee per household.

  Implementation of General Plan 2030 will accommodate the addition of up to 23,000 jobs by the year 2030. Approximately 23,000 total dwelling units are anticipated at that time. Based on these projections, the resultant jobs/housing ratio of 1.0 represents progress toward the RTP target of 1.27 and a jobs-housing balance. In addition, the General Plan identifies and directs implementation of control and mitigation measures recommended for local agencies in the 1997 AQMP. For these reasons, the General Plan will not conflict with or obstruct implementation of the 1997 Air Quality Management Plan. Accordingly, no impact is anticipated.

- ***Create an objectionable odor affecting a substantial number of people:***

  Appropriate filtering and emission controls consistent with Air Quality Management District regulations will limit such emissions. Accordingly, the impact associated with objectionable odors is less than significant.

6.4 BIOLOGICAL RESOURCES

- ***Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service***

- ***Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service***

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

- ***Interfere substantially with the movement of any native resident or migratory fish or wildlife species with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites***

  General Plan 2030 includes a Conservation Element for which a biological survey was conducted to identify plant communities and important wildlife habitat in the City. As described in greater detail in the Conservation Element, the Riversidean and Sage Scrub and Southern Willow Scrub plant communities in the City of Perris are considered sensitive habitats by the California Department of Fish and Game as these are home to plant and wildlife species that are either "threatened" or "endangered." The northern portion of the Perris Valley Channel contains freshwater marsh. The San Jacinto River channel includes the Southern Willow Scrub plant community that is habitat for various "threatened" or "endangered" plant and wildlife species. Disturbed Riparian Scrub plant communities are found in both the Perris Valley Channel and the San Jacinto River Channel.

  Development consistent with General Plan 2030 could disrupt or reduce habitat necessary for survival of threatened or endangered species. The continued loss of habitat to new development and the cumbersome process of environmental review and habitat mitigation on a project-by-project basis led to preparation of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The City of Perris has joined the County of Riverside and other western Riverside County cities in adopting the MSHCP ordinance.

  The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP or Plan) is intended to create a network of permanent open space to conserve a variety of natural communities and other undeveloped lands that would ensure long-term survival of 146 species of plants and animals. In effect, Plan participants will have the authority to implement land use decisions consistent with the MSHCP without project-by-project review and permitting by the Wildlife Agencies.

  The MSHCP includes a wildlife corridor habitat preserve in the City of between 720 and 1,400 acres. This area includes private properties determined to have biological value proposed for conservation based on the best available data and literature on habitat assessment, species occurrences, coastal sage scrub quality modeling, existing and planned land uses, and general conservation biology principles. This corridor is vital to the MSHCP's conceptual conservation scenario because habitat fragmentation

and isolation lead to extinction of local populations, which is the most serious threat to biological diversity.

Policy 4.A and Implementation Measures 4.A.1 and 4.A.2 of General Plan 2030 direct review of all development projects and implementation of appropriate mitigations in conformity with requirements of the adopted Multiple Species Habitat Conservation Plan. Policy 3.A and Implementation Measures 3.A.1, 3.A.2, and 3.A.3 require maintenance of sensitive plant and wildlife species data base, biological surveys prior to development project approval in areas of moderate to sensitive habitat potential, and development project compliance with State and federal stormwater runoff and water quality permitting procedures. Implementation of these measures will reduce the impact on listed species, critical habitat, wetlands, and wildlife movement to a less than significant level.

- ***Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance:***

  General Plan 2030 does not affect compliance with locally applicable policies and ordinances including mitigation fee programs such as that for preservation of the Stevens Kangaroo Rat. Accordingly, no impact will result from adoption and implementation of General Plan 2030 as a result of conflict with any locally applicable policies or ordinances protecting biological resources.

- ***Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan:***

  The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP or Plan) is intended to create a network of permanent open space to conserve a variety of natural communities and other undeveloped lands that would ensure long-term survival of 146 species of plants and animals. In effect, Plan participants will have the authority to implement land use decisions consistent with the MSHCP without project-by-project review and permitting by the Wildlife Agencies.

  The MSHCP includes a wildlife corridor habitat preserve in the City of between 720 and 1,400 acres. This area includes private properties determined to have biological value proposed for conservation based on the best available data and literature on habitat assessment, species occurrences, coastal sage scrub quality modeling, existing and planned land uses, and general conservation biology principles. This corridor is vital to the MSHCP's conceptual conservation scenario because habitat fragmentation and isolation lead to extinction of local populations, which is the most serious threats to biological diversity.

Policy 4.A and Implementation Measures 4.A.1 and 4.A.2 of General Plan 2030 direct review of all development projects and implementation of appropriate mitigations in conformity with requirements of the adopted Multiple Species Habitat Conservation Plan. Policy 3.A and Implementation Measures 3.A.1, 3.A.2, and 3.A.3 require maintenance of sensitive plant and wildlife species data base, biological surveys prior to development project approval in areas of moderate to sensitive habitat potential, and development project compliance with State and federal stormwater runoff and water quality permitting procedures. Adoption and implementation of General Plan 2030 will result in reduction of impacts on listed species, critical habitat, wetlands, and wildlife movement to a less than significant level.

6.5 CULTURAL RESOURCES

- ***Cause a substantial change in the significance of a historical resource as defined in Section §15604.5:***

  The Santa Fe Train Depot and Southern Hotel Building are listed in the National Register of Historic Places. The California Public Resources Code, by definition, includes these two structures as "historical resources." Any proposal that would result in substantial adverse change in either of these buildings including demolition, destruction, relocation, or alteration of the building or its immediate surroundings would require preparation of an Environmental Impact Report pursuant to the California Environmental Quality Act before any alteration could proceed. General Plan 2030 does not anticipate or promote any such alteration to these historic resources. Accordingly, the impact of adoption and implementation of the General Plan is determined to be less than significant.

  The Perris Valley Historical Association has identified fifty-seven structures of local interest. All structures indicated are within the geographic area subject to the City of Perris Downtown Specific Plan. The Downtown Specific Plan includes a goal to "Develop a plan where existing historic buildings and artifacts are preserved and rehabilitated and are part of the fabric of the downtown plan." Consistent with this Goal, the Specific Plan sets forth the Objective relative to historic structures or artifacts to " . . . preserve and utilize the buildings as homes, businesses or uses conducive to the benefit of the downtown." General Plan 2030 accommodates and is consistent with the Downtown Specific Plan. Consequently, adoption and implementation of the General Plan will not result in changes to the Downtown Specific Plan. Protection of historical resources pursuant to Goals and Objectives of the Specific Plan will reduce the potential for change to historical resources to a less than significant level.

- ***Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5:***

According to files at the Eastern Information Center at the University of California – Riverside, nine (9) prehistoric sites are located within the City limits of Perris while eleven (11) occur within ¼-mile-wide of the municipal limits. Most of these sites consist of milling slick sites (rocks used to crush grain), but there are several sites exhibiting extensive pictographs (rock art), and a few small stone flake scatters. Ten historic archaeological sites occur in the City limits and none are located in the planning area. These sites consist of the remnants (such as foundations) of historic buildings and/or ranch complexes. Ninety-one (91) historic sites occur in the City limits and seven (7) are located in the planning area.

Much of the geographic area of the City of Perris has a medium to high potential to contain significant fossil resources. The Conservation Element of General Plan 2030includes the following Implementation Measures appropriate to preventing changes to significant archaeological resources in the City of Perris:

IV.A.2 For all projects subject to CEQA, applicants will be required to submit results of an archaeological records search request through the Eastern Information Center, at the University of California, Riverside.

IV.A.3 Require Phase I Surveys for all projects located in areas that have not previously been surveyed for archaeological or historic resources, or which lie near areas where archaeological and/or historic sites have been recorded.

Adoption of General Plan 2030, including these Implementation Measures, will reduce the impact on significant archaeological resources to a less than significant level.

- ***Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature:***

A paleontological records search was conducted for the area within the Perris City limits and levels of sensitivity developed, based on the rock units and the kinds of fossils recovered from these and similar rock units in the general vicinity. Although few paleontological excavations have taken place in the Perris Valley, numerous fossils were recovered from various rock units during excavations at the Domenigoni Reservoir southeast of the City that allowed the likelihood for recovery of fossils in the Perris Valley to be more reliably defined.

The likelihood for fossil recovery is indicated in each of five geographic areas of the City and represented on the Paleontological Sensitivity Map in the Conservation Element of General Plan 2030. Identification and preservation of significant fossils will be effected through Implementation Measure 5.A.4 of the Conservation Element of General Plan 2030:

IV.A.4 In Area 1 and Area 2 shown on the Paleontological Sensitivity Map, paleontologic monitoring of all projects requiring subsurface excavations will be required once any excavation begins. In Areas 4 and 5, paleontologic monitoring will be required once subsurface excavations reach five feet in depth, with monitoring levels reduced if appropriate, at the discretion of a certified Project Paleontologist.

General Plan 2030 Conservation Element Implementation Measure 5.A.4 will reduce potential impacts to paleontological resources to a less than significant level.

- ***Disturb any human remains, including those interred outside formal cemeteries:***

No known sites likely to contain human remains have been identified. In the event that human remains are discovered during development of any site, the project proponent will be required to comply with the State Health and Safety Code 7050.5, cited below:

> "If human remains are encountered, the state Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the county coroner has made a determination of the origin and disposition pursuant to Public Resources Code 5097.98. The county coroner must be notified immediately of the find. If the remains are determined to be prehistoric, the coroner is required to notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the owner of the land or his/her authorized representative, the descendant may inspect the site of the discovery. The descendant shall complete the inspection within 24 hours of notification of the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials."

Mandatory compliance with the State Health and Safety Code requirements in the course of excavation for any development project accommodated through implementation of the project General Plan renders this impact less than significant.

6.6 GEOLOGY AND SOILS

- ***Expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving:***

i) Rupture of known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zone Map issued by the State Geologist for the area or based on other substantial evidence of a known fault:

Active faults that may affect the planning area covered by General Plan 2030 are the San Andreas, San Jacinto, Cucamonga, and Elsinore Faults (see Exhibit 7, Earthquake Fault Zones). None of these faults are located in the area covered by General Plan 2030. The State Division of Mines and Geology has identified no Alquist-Priolo Earthquake Fault Zones (areas likely to experience surface rupture) in the City, and ground surface rupture is expected to have no impact.

ii) Strong Seismic Shaking:

Potential ground motion values for Riverside County, according to studies by scientists in the National Seismic Hazard Mapping Program, are among the highest in southern California, because of proximity to major fault systems with high earthquake recurrence rates. The level of potential ground motion in Perris is considered "Very High" on the scale of probable motion, but is lower than that of most other cities in the County that fall into the "Extremely High" category. Ground motion of this degree can result in substantial damage.

The Safety Element of the project General Plan addresses potential seismic impacts and includes Implementation Measure I.E.5 relative to adoption and enforcement of the current California Building Codes that require that structures be designed to meet or exceed the seismic safety standards set forth therein. Therefore, ground-shaking impacts to those living and working in buildings developed pursuant to General Plan 2030 are less than significant.

iii) Seismic related ground failure, including liquefaction:

The State Division of Mines and Geology has not prepared seismic hazard mapping for Riverside County indicating areas of potential liquefaction risk. Site specific geotechnical studies are the only practical and reliable way of determining the specific liquefaction potential of a site; however, a determination of general risk potential can be provided based on soil type and depth of groundwater. Areas containing alluvium soil deposits are often susceptible to seismically induced liquefaction. As noted earlier, the Perris Valley is comprised of extensive alluvial deposits resulting from erosion of sediments from the San Jacinto Mountain Range. Although depths to ground water generally exceed 100 feet, the central and northeastern parts of the planning area are comprised of materials considered susceptible to moderate to very high liquefaction potential.

The Safety Element of the project General Plan includes discussion of potential impacts associated with liquefaction and a Liquefaction Susceptibility Map. The Map will be used in identifying future developments that will be subject to specific geotechnical investigations to determine susceptibility to liquefaction. Building and site preparation consistent with recommendations included in the geotechnical report

and conforming to seismic requirements of the California Building Codes will minimize susceptibility to risks associated with liquefaction.

Implementation Measure I.E.1 of the Safety Element of the project General Plan directs geologic and geotechnical investigations in areas of potential liquefaction risk and Implementation Measure I.E.8 directs update of the Liquefaction Susceptibility Map as new data is obtained. Conformity with these Implementation Measures and with requirements of the California Building Codes reduces the risk of seismic ground failure to future development accommodated by General Plan 2030 to a less than significant level.

iv) Landslides:

A combination of geologic conditions leads to landslide vulnerability. These include high seismic potential; rapid uplift and erosion resulting in steep slopes and deeply incised canyons; highly fractured and folded rock; and rock with inherently weak components such as silt or clay layers. The most significant factors that contribute to slope failure include slope height and steepness, shear strength and orientation of weak layers in the underlying geologic units, and pore water pressures. The western and southwestern portions of the planning area covered by the General Plan include steep slopes with slopes or of 30 percent or greater.

The Slope Instability Map of the Safety Element of the project General Plan indicates those areas of the City where new development may be at risk from seismically induced landslides and rockfalls. The Safety Element includes Implementation Measures to reduce the risk to new development of seismically-induced landslides and rockfalls. Implementation Measure I.E.1 requires geologic and geotechnical investigations prior to development in areas identified to be at risk. Implementation Measure I.E.3 requires that engineered slopes be designed according to state-of-the-art engineering standards to resist seismically induced slope failure. Implementation Measure I.E.6 prohibits reconstruction of structures for human occupancy that have been damaged or destroyed by failed slopes unless a geotechnical report shows that remedial measures will sufficiently stabilize the slope to make the site suitable for development.

Adoption of General Plan 2030 including Safety Element Implementation Measures will reduce the impact to future development from seismically induced landslides and rockfalls to a less than significant level.

- ***Result in substantial soil erosion or the loss of topsoil:***

Approximately one-half of the geographic area of the City of Perris is comprised of land previously cultivated and now lying fallow and undeveloped. This land is highly

susceptible to wind and water erosion. Adoption and subsequent implementation of the General Plan will have no direct effect on soil erosion. Indirect effects will result from development, consistent with General Plan 2030, on these fallow fields.

All new development pursuant to General Plan 2030 will be subject to California Building Standards Codes that require erosion control and grading plans prior to issuance of a grading permit as a means to mitigate soil erosion to the extent practicable both during construction and operational phases.

As a co-permittee with the County of Riverside under the National Pollutant Discharge Elimination System, the City of Perris requires that development projects incorporate structural mitigation measures and implement best management practices in both construction and operational phases to prevent stormwater runoff, including water-born soil, from leaving the project site.

Development projects subject to CEQA are required to incorporate construction-phase mitigation measures to protect air quality and minimize wind erosion pursuant to South Coast Air Quality Management District Rule 403 that includes watering of project sites during dry periods and reduction in construction vehicle speeds to minimize fugitive dust, and on-site washing of construction vehicle tires to prevent transfer of soil to surface streets.

Chapter 19.70, "Landscaping", of the City of Perris Zoning Ordinance applies to new and existing development and includes standards for ground cover, turf, and other plant materials appropriate to preventing soil erosion.

Continued implementation of applicable federal, State, and local ordinances, as indicated, through the development review process prior to issuance of project permits will result in a less than significant impact related to soil erosion.

- ***Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse:***

The Slope Instability Map of the Safety Element of General Plan 2030 indicates those areas of the City where new development may be at risk from seismically induced landslides and rockfalls. The Safety Element includes Implementation Measures to reduce the risk to new development of seismically-induced landslides and rockfalls. Implementation Measure I.E.1 requires geologic and geotechnical investigations prior to development in areas identified to be at risk. Implementation Measure I.E.3 requires that engineered slopes be designed according to state-of-the-art engineering standards to resist seismically induced slope failure. Implementation Measure I.E.6 prohibits reconstruction of structures for human occupancy that have been damaged

or destroyed by failed slopes unless a geotechnical report shows that remedial measures will sufficiently stabilize the slope to make the site suitable for development.

Adoption of General Plan 2030 including Safety Element Implementation Measures will reduce the impact to future development from seismically induced landslides and rockfalls to a less than significant level.

Liquefaction occurs when shallow, fine to medium-grained sediments saturated with water are subjected to strong seismic ground shaking. Liquefaction usually occurs when the underlying water table is 50 feet or less below the surface. Under this condition, the soil loses its ability to support uneven loads such as structures and natural or artificial slopes and acts as a liquid. Excess water pressure is vented upward through fissures and cracks, and a water slurry bubbles onto the ground surface. Liquefaction related effects include a decrease in the ability of soil to support buildings, bridges or other structures; a "wave-type" of ground movement; lateral spreading, or ground movement similar to lava flowing from a volcano; and increased pressure on retaining walls resulting in the walls tilting or sliding.

The Safety Element of General Plan 2030 includes discussion of potential impacts associated with liquefaction and a Liquefaction Susceptibility Map. The Map will be used in identifying future developments that will be subject to specific geotechnical investigations to determine their susceptibility to liquefaction. Building and site preparation consistent with recommendations included in the geotechnical report and conforming to seismic requirements of the California Building Codes reduces the risk from liquefaction to new development consistent with the project General Plan to a less than significant level.

Implementation Measure I.E.1 of the Safety Element of General Plan 2030 directs geologic and geotechnical investigations in areas of potential liquefaction risk and Implementation Measure I.E.8 directs update of the Liquefaction Susceptibility Map as new data is obtained. Conformity with these Implementation Measures and with requirements of the California Building Codes reduces the risk to future development accommodated by General Plan 2030 to a less than significant level.

Settlement is defined as areas that are prone to different rates of surface settling and densification (differential compaction), with or without seismic shaking, and are underlain by sediments that differ laterally in composition or degree of existing compaction. Differential settlement can damage structures, pipelines and other subsurface entities. Areas prone to differential compaction are difficult to identify; however, it is known that alluvial soils as exist in the Perris Valley are more susceptible to settlement than other soil types. Settlement and fissuring have been well documented in Riverside County. Most of the early documented cases affected only agricultural land or open space. As urban areas have expanded, so too have the

impacts of settlement on structures for human occupancy. Instances of settlement have been recorded in the San Jacinto Valley, but so far, not within the Perris Valley.

Development in areas subject to seismically induced settlement should include specific subsurface geotechnical investigations that address the potential for seismically induced settlement on a site-specific basis. This hazard can be mitigated with proper site preparation that involves the densification of the subsurface soils, and with proper foundation design that can accommodate a limited degree of differential settlement due to seismic shaking. The Safety Element of General Plan 2030 includes Implementation Measures to achieve these ends. Implementation Measure I.E.1 requires geological and geotechnical investigations in areas subject to liquefactions, landslides, slope instability, and settlement. Implementation Measure I.E.2 requires mitigation of site conditions consistent with results of studies required pursuant to I.E.1. Implementation Measure I.E.4 requires cut and fill transition lots to be over-excavated and requires uniform fill depths beneath structures to mitigate potential differential settling. Compliance with California Building Codes and the Safety Element of General Plan 2030 reduce the risk to new development associated with seismically-induced settlement to a less than significant level.

- ***Be located on expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property:***

  Expansive soils have a significant amount of clay particles that can give up water (shrink) or take on water (swell). The change in volume exerts stress on buildings and other loads placed on these soils. The occurrence of these soils is often associated with geologic units having marginal stability. Expansive soils can be widely dispersed, found in hillside areas as well as low-lying areas in alluvial basins. Soils testing to identify expansive characteristics and appropriate mitigation measures are now routinely required by grading and building codes. Special engineering designs have been developed to effectively alleviate problems caused by expansive soils. These include the use of reinforcing steel foundations, drainage control devices, over-excavation and backfilling with non-expansive soil.

  Mitigation Measure I.E.7 of the Safety Element of General Plan 2030 calls for all development projects accommodated by the General Plan include geotechnical studies which determine the potential for damage from expansive soils and identification of appropriate site and structural design standards necessary to reduce the potential risk of damage and injury to a less than significant level.

- ***Have soils incapable of adequately supporting the use of septic tanks or alternative wasted disposal systems where sewers are not available for the disposal of waste water:***

All new development accommodated by General Plan 2030 will be served by public sewer systems. Therefore, no impacts to soils from alternative wastewater disposal systems will result from the proposed project.

6.7 HAZARDS AND HAZARDOUS MATERIALS

- ***Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials:***

The Department of Environmental Health of the Riverside County Community Health Agency is responsible for regulating the operations of businesses and institutions that handle hazardous materials or generate hazardous wastes in the City of Perris. As part of the State-mandated Certified Unified Program administered by the California Environmental Protection Agency, the Department of Environmental Health coordinates regulation and enforcement for the following programs related to hazardous materials and wastes:

Household Hazardous Waste
Provides for periodic collection of hazardous household wastes at locations throughout the County.

Hazardous Waste Minimization
In conjunction with the Riverside County Fire Department, responds to hazardous materials and hazardous waste incidents including spills and illegal dumping.

Underground Storage Tanks (UST)
Monitors remediation of sites contaminated by leaking petroleum tanks and regulates installation and operation of underground storage tanks containing hazardous substances.

Hazardous Waste Generator Permits
Regulates facilities that generate a hazardous waste.

Hazardous Materials Handlers Program
Regulates facilities that handle and store specified types and quantities of hazardous materials.

Hazardous materials include pesticides, chlorine, gasoline, paint, and cleaning solvents. Retail sales of these materials typically require inventory quantities sufficient to require registration with and monitoring by the County Department of Environmental Health. Moreover, these common hazardous materials are often maintained in close proximity to concentrations of population. Examples include

gasoline storage at automobile service stations and swimming pool chemicals at hardware stores and home centers.

Hazardous wastes, more often than hazardous materials, are perceived as a risk in areas of concentrated heavy industry. Examples include waste acids and solvents after use in metals finishing and coating operations. In other cases, hazardous wastes are generated in non-industrial areas and include used motor oil accumulated at automobile service stations.

General Plan 2030 anticipates future development that will include uses similar to those as have located in the City of Perris over the last decade and will likely include residential uses, residential-serving retail uses, and additional distribution and warehousing uses. Subject to regulation and monitoring by the Department of Environmental Health of the Riverside County Community Health Agency, such future uses will represent a less than significant impact to the public or the environment through use, handling, or transport of hazardous materials.

Future uses that would entail the routine use, transport, or disposal of hazardous materials in quantities or in a manner sufficient to constitute a significant hazard to the public or the environment are not known at this time. Any such proposed uses will be subject to project-based CEQA review. Appropriate environmental documentation pursuant to CEQA will identify the extent of any potential hazard and all appropriate mitigation measures that may be incorporated into the project to reduce the risk to a less than significant level.

- ***Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment:***

  General Plan 2030 anticipates future development that will include uses similar to those as have located in the City of Perris over the last decade and will likely include residential uses, residential-serving retail uses, and additional distribution and warehousing uses. Subject to regulation and monitoring by the Department of Environmental Health of the Riverside County Community Health Agency, such future uses will represent a less than significant impact to the public or the environment through upset and accident conditions involving release of hazardous materials.

  Proposed future uses that could reasonably be foreseen as sources of release of hazardous materials, through upset or accident, and a potentially significant hazard to the public or the environment will be subject to project-based CEQA review. Appropriate environmental documentation pursuant to CEQA will identify the extent

of any potential hazard and all appropriate mitigation measures that may be incorporated into the project to reduce the risk to a less than significant level.

- ***Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school:***

  The Land Use Element of the project General Plan changes the land use designations at 26 locations throughout the City of Perris. Five existing or future schools sites are located within one-quarter mile of a location slated for land use designation change.

  A future school site on Indian between Walnut and Placentia and an existing school on Indian at Water are within one-quarter mile of a location on Indian between Placentia and Orange slated for change from "Business Park" to ""Residential 22." An existing school on Park between 4th and 8th is located within one-quarter mile of a location on 4th between Park and Bellamo slated for redesignation from "Commercial Community" to ""Residential 4," and within one-quarter mile of the flood detention basin on 3rd at Kruse to be redesignated from "Residential 4" to "Public Facilities." An existing school on "A" Street at 12th is within one-quarter mile of a property on Ellis at "A" Street to be redesignated from "Commercial Community" to "Residential 4." As commercial and industrial uses are the likely destinations for or generators of hazardous materials and wastes, the change to non-commercial/non-industrial use designation in each instance diminishes the likelihood of future property use at the respective locations that would produce hazardous emissions or include handling of hazardous materials or hazardous wastes in quantities sufficient to represent a significant hazard. Accordingly, the impact associated with this change is less than significant.

  No other changes based on Objectives, Policies, or Implementation Measures of General Plan 2030 is expected to promote or otherwise result in future land uses producing hazardous emissions or including the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

  Proposed future uses that could produce hazardous emissions or reasonably be foreseen as sources of release of hazardous materials, through upset or accident, and a potentially significant hazard to the public or the environment will be subject to project-based CEQA review. Appropriate environmental documentation pursuant to CEQA will identify the extent of any potential hazard and all appropriate mitigation measures that may be incorporated into the project to reduce the risk to a less than significant level.

- ***Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment:***

  A search of the California Environmental Protection Agency database, including records of the Department of Toxic Substance Control, Integrated Waste Management Board, and Santa Ana Regional Water Quality Control Board revealed one property in the City of Perris that is subject to remediation for both soils and groundwater contamination by hazardous substances. The California Environmental Protection Agency is the lead agency with oversight of testing, remediation, and monitoring on this site.

  The Department of Environmental Health of the Riverside County Community Health Agency is currently overseeing testing, remediation, and monitoring of leaking underground fuel tanks at seventeen (17) locations in the City of Perris.

  Current and future development and uses on sites identified in this section are subject to completion of remediation and monitoring by the respective State and County agencies. No changes based on Objectives, Policies, or Implementation Measures of General Plan 2030 will affect or interfere with such remediation and monitoring efforts. Proposed future uses consistent with General Plan 2030 that could result in unauthorized release of hazardous materials into soils or groundwater will be subject to project-based CEQA review. Appropriate environmental documentation pursuant to CEQA will identify the extent of any potential hazard and all appropriate mitigation measures that may be incorporated into the project to reduce the risk to a less than significant level.

- ***Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan:***

  The City of Perris adopted a Multi-Hazard Functional Plan in 1995 which addresses planned response to extraordinary emergency situations either man-made or naturally occurring. The federal Disaster Mitigation Act of 2000 requires States and Counties to create and implement mitigation strategies for responding to disasters. Accordingly, Riverside County together with local agencies, including the City of Perris, is preparing a multi-agency Multi-Hazard Functional Plan that will replace the City 1995 Multi-Hazard Functional Plan.

  Adoption of General Plan 2030 in and of itself will have no impact on implementation of the existing and contemplated Multi-Hazard Functional Plans. Future development consistent with General Plan 2030 will be subject to requirements of the Multi-Hazard Functional Plan. Accordingly, no interference with an emergency response or disaster

response plan is anticipated and adoption and implementation of General Plan 2030 is determined to be of no impact.

- ***Expose people or structures to a significant loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands:***

  The California Fire Alliance has identified the City of Perris as a "Community at Risk" from wildfires. A numerical estimate of the level of risk of "3" has been assigned to portions of the City. This represents the highest level of risk

  To address the risk of wildfire, the City of Perris has implemented weed abatement and brush clearance regulations. These include a 30-foot brush clearance radius for all structures within the City, and a 150-foot brush clearance requirement for structures on hillsides, primarily located in the westerly and southwesterly portions of the City.

  The Safety Element of the project General Plan includes Implementation Measures that will further reduce the threat of loss, injury, or death from wildfires as follow:

  I.C.1 Maintain fuel modifications standards to ensure proper clearance of brush around homes and businesses abutting undeveloped areas
  I.C.2 Adopt landscaping standards to include a fire-resistant plant palette, where appropriate
  I.C.3 Enforce current California Building Codes standards to exclude the use of materials that pose a fire risk such as untreated wood roofing materials
  I.C.4 Maintain weed abatement Code Enforcement efforts

  Riverside County together with local agencies, including the City of Perris, is preparing a multi-agency Multi-Hazard Functional Plan that will replace the City 1995 Multi-Hazard Functional Plan. Adoption and compliance with the existing and contemplated Multi-Hazard Functional Plan will further reduce the threat of loss, injury, or death in areas developed consistent with General Plan 2030. Subject to these regulations, implementation measures, and policies, the risk to people and property from wildfire is reduced to a less than significant level.

6.8 HYDROLOGY AND WATER QUALITY

- ***Violate any water quality standards or waste discharge requirements:***

- ***Substantially degrade water quality:***

- ***Result in significant alteration of receiving water quality during or following construction:***

- ***Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas:***

- ***Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters:***

  Future development consistent with General Plan 2030 will increase stormwater runoff and non-stormwater run-off, and the volume of stormwater discharge into the San Jacinto River. Runoff from developed urban areas is likely to be contaminated with petroleum products, fertilizers, sediment, trash, heavy metals, nutrients, pathogens, and pesticides. Through the development review process, the City of Perris complies with various statutory requirements necessary to achieve regional water quality objectives and protect groundwater and surface waters from pollution from contaminated stormwater runoff.

  The National Pollutant Discharge Elimination System (NPDES) implements provisions of the federal Clean Water Act through a permit process applicable to any discharges to surface waters. As a Co-Permittee with the County of Riverside under a permit (Municipal Separate Storm Sewer System or MS4) issued by the Santa Ana Regional Water Quality Control Board, the City of Perris is responsible for eliminating illegal discharges and connections into storm drains that ultimately discharge into surface waters.

  The City is required to consider water quality impacts during review of development project proposals to ensure that appropriate structural and non-structural Best Management Practices are incorporated into project design, construction, and operation phases to reduce contaminants in stormwater discharges, consistent with requirements of the NPDES permit. The City of Perris is also required to develop additional water quality control practices applicable to new development. Most significant of these is the requirement that the City adopt a Water Quality Management.

  In addition to the NPDES Municipal Separate Storm Sewer System permit, new development in Perris is also subject to requirements of the San Jacinto Watershed NPDES Storm Water Permit. The requirements of this permit are intended to minimize the amount of pollutants in stormwater and non-stormwater discharges to surface waters resulting from construction on parcels greater than one-acre in size. Each project developer is required to prepare a Stormwater Pollution Prevention Plan

(SWPPP) as part of the process of receiving a permit from the Regional Water Quality Control Board prior to commencement of construction activities.

Future actions to improve water quality through reduction in contamination of stormwater and non-stormwater run-off are set forth as Implementation Measures in the Conservation Element of the project General Plan as follow:

VII.A.1 Adopt a Stormwater Ordinance per Santa Ana Regional Area Management Plan (DAMP) requirements for stormwater management and discharge control.

VII.A.2 Evaluate the Planning Department's CEQA implementation procedures to ensure adequate consideration of water quality impacts and mitigation measures as part of Initial Studies/Mitigated Negative Declarations and Environmental Impact Reports.

VII.A.3 Prior to issuance of any grading permit involving a disturbance of one or more acres of land, require proof of a RWQCB San Jacinto Watershed Construction Activities Permit and a Storm Water Pollution Prevention Plan.

VII.A.4 Review water quality impacts during the project review and approval phases to ensure appropriate Best Management Practices are incorporated into the project design and long-term operations.

VII.A.5 In accordance with the Riverside County NPDES, enact a Water Quality Management Plan to review and regulate new development approvals.

Subject to existing permitting procedures and Implementation Measures of the Conservation Element of General Plan 2030, adoption and implementation of General Plan 2030 will not result in violation of any water quality standard, create or contribute to or provide additional sources of polluted run-off, degrade water quality, alter receiving water quality, result in stormwater discharge of toxic substances, or result in discharge that affects the beneficial use of receiving waters. Accordingly, impacts to water quality resulting from adoption and implementation of General Plan 2030 are less than significant.

- ***Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site:***

Development consistent with General Plan 2030 may occur within the identified floodplain of the Perris Valley Channel. Development in the floodplain would alter the existing drainage pattern. All future development in the floodplain must be in compliance with Title 15, "Floodplain Regulations," of the City of Perris Municipal Code which regulates, restricts, or prohibits development in flood hazard areas as

necessary to minimize increases in erosion, floodwater elevations, and floodwater velocities. To this end, Title 15 regulates filling, grading, dredging, and other alteration of floodplains, including the Perris Valley Channel floodplain, and conforms to requirements of the Federal Emergency Management Agency and National Flood Insurance Program. Subject to Title 15, development consistent with General Plan 2030 will not result in alteration of existing drainage patterns that would substantially increase erosion or siltation along watercourses in the City or downstream, or that would result in flooding along watercourses in the City or those upstream or downstream. Accordingly, the impact of adoption and implementation of General Plan 2030 is less than significant.

- ***Create or contribute runoff water, which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff:***

- ***Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm:***

- ***Create significant increases in erosion of the project site or surrounding areas:***

The 250-foot wide, earthen Perris Valley Channel (PVC) is the backbone of the storm drainage system as the primary stormwater collector for the northern half of land area in the City. The Channel extends from Heacock Street in Moreno Valley in the north to the San Jacinto River on the south. All existing City storm drains flow laterally into the PVC from the east and west.

The 100-year sotrmwater flow rate for the Perris Valley Channel increases from 12,800 cubic feet per second (cfs) in the City of Moreno Valley to 18,900 cfs near Interstate 215 in southeastern Perris. General Plan 2030 anticipates conversion of remaining agricultural uses and undeveloped land to urbanized land uses, increasing the amount of impervious surfaces throughout the City. Consequently, surface water run-off will increase, resulting in greater volume and higher velocities of stormwater flow in the Channel.

The San Jacinto River crosses into Perris from the east near the intersection of Interstate 215 and Ellis Avenue and traverses southwesterly for approximately six miles to the southwesterly City boundary south of Ethanac Road. Portions of the River are improved earthen channel within the City although the flood plain is over one and a half miles wide. The San Jacinto River collects stormwater from the Perris Valley Channel and conveys it to Railroad Canyon Reservoir which, in turn, discharges into Lake Elsinore.

The San Jacinto River Improvement Project was initially proposed in 1974 and included channelization and other flood control improvements including deepening of the Perris Valley Channel. The Army Corps of Engineers issued a permit for the Plan, but approval from the United States Fish and Wildlife Service was never granted, and the Army Corps permit expired in 2001. The recently adopted Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is intended to balance wildlife and sensitive plant species conservation with needed stormwater and flood control infrastructure improvements. Improvements to the Perris Valley Channel are covered by the MSHCP as well as undefined improvements to the San Jacinto River channel. Any subsequent plan for San Jacinto River improvements must comply with conservation criteria of the MSHCP. Accordingly, any improvements to the San Jacinto River channel will be subject to MSHCP conservation criteria and will be, therefore, mitigated to a less than significant level of impact on the environment.

Until required flood and storm drain improvements are approved and constructed, development on much of the land area in the southeastern area of the City will be limited to areas outside the 100-year floodplain. Similarly, development in areas tributary to the Perris Valley Channel will be required to provide alternative means of containing stormwater run-off. At present, these alternatives include construction of on-site stormwater detention basins that limit discharge to storm drain facilities at or near capacity flows.

Design criteria for interim stormwater facilities require that new development does not disrupt existing drainage patterns. These include requirements that runoff from adjoining contributory drainage areas are included in calculations of potential stormwater run-off volumes and accommodated in design of the interim facilities and that stormwater discharge to storm drain facilities does not increase from pre-development volumes. In addition, the interim detention facilities are designed to prevent "first flush" stormwater discharges and nuisance drainage discharges such as irrigation overspray that contain contaminants from entering storm drain facilities that eventually discharge to the San Jacinto River.

The City is also required to consider water quality impacts during review of development project proposals to ensure that appropriate structural and non-structural Best Management Practices are incorporated into project design, construction, and operation phases to reduce contaminants in stormwater discharges, consistent with requirements of the NPDES permit. The City of Perris is also required to develop additional water quality control practices applicable to new development. Most significant of these is the requirement that the City adopt a Water Quality Management Plan.

New development in Perris on sites of one acre or greater are also subject to terms of the Santa Ana Regional Water Quality Control Board San Jacinto Watershed National

Pollutant Discharge Elimination System Storm Water Permit. Proponents of such development must prepare Stormwater Pollution Prevention Plans (SWPPP's) to minimize the amount of pollutants, including sedimentation, in storm water and non-storm water discharges to surface waters. A SWPPP is a prerequisite to receiving a permit from the Regional Water Quality Control Board allowing commencement of construction activities.

Implementation Measure II.A. of the Land Use Element of the project General Plan will reinforce efforts to minimize discharges of pollutants through reduction in contamination of stormwater and non-stormwater run-off:

II.A.1 Prepare and adopt a revised Area Drainage Plan including regional storm water detentions basins capable of serving contributory areas of at least 100 acres.

Implementation Measures in the Conservation Element of the project General Plan will supplement permitting requirements aimed at reducing contamination of stormwater and non-stormwater run-off:

VII.A.1 Adopt a Stormwater Ordinance per Santa Ana Regional Area Management Plan (DAMP) requirements for stormwater management and discharge control.

VII.A.3 Prior to issuance of any grading permit involving a disturbance of one or more acres of land, require proof of a RWQCB San Jacinto Watershed Construction Activities Permit and a Storm Water Pollution Prevention Plan.

VII.A.4 Review water quality impacts during the project review and approval phases to ensure appropriate Best Management Practices are incorporated into the project design and long-term operations.

VII.A.5 In accordance with the Riverside County NPDES, enact a Water Quality Management Plan to review and regulate new development approvals.

Future development pursuant to General Plan 2030 and subject to these permitting, policy, and General Plan requirements will reduce impacts associated with increases in stormwater discharge in excess of drainage system capacities and increases in polluted runoff and runoff velocity or soil erosion to a less than significant level.

- ***Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing***

nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted):

The Santa Ana River Water Quality Control Plan (WQCP), prepared by the Santa Ana Regional Water Quality Control Board, divided the San Jacinto Watershed, of which Perris is a part, into 14 groundwater sub-basins. The City of Perris covers a portion of Perris South I, Perris South II, and Perris South III. The Santa Ana Watershed Project Authority's Total Inorganic Nitrogen/Total Dissolved Solids Study – Phase 2A of the Santa Ana Watershed (2000) combines these three sub-basins into two groundwater management zones, referred to as Perris North and Perris South.

Recharge of the Perris North groundwater management zone occurs through infiltration of flow from unlined stream channels, underflow from saturated alluvium and fractures in surrounding bedrock mountains and hills, underflow from the Lower San Jacinto Graben management zone in the southeast, and underflow from leakage beneath the Lake Perris dam, and artificial recharge of recycled water in storage/percolation ponds at the Moreno Valley Water Reclamation Facility.

Recharge of the Perris South groundwater management zone occurs through infiltration of flow from unlined stream channels, underflow from saturated alluviums and fractures in surrounding bedrock mountains and hills, underflow from groundwater in the Winchester area to the southeast, artificial recharge or recycled water at various storage/percolation ponds, and deep percolation of precipitation.

Groundwater quality in both Perris sub-basins is generally poor due to high concentrations of Total Dissolved Solids (TDS) and Nutrients resulting from past and present agricultural runoff. Consequently, groundwater is no longer used for domestic purposes and only a minimal amount is used for agricultural purposes. The East Municipal Water District (EMWD), however, plans to increase groundwater production in the Perris sub-basins through construction of new wells and blending of poor quality water with low salinity imported water.

The Eastern Municipal Water District which supplies water within the City of Perris supplements groundwater recharge in the Perris sub-basins with untreated water from the State Water Project. The imported water is stored in permeable basins through which the untreated water reaches groundwater basins. EMWD subsequently pumps water from the recharged basins in lieu of imported, treated water.

To maintain groundwater resources beneath the City of Perris, the Eastern Municipal Water District is working with local governments, water agencies, agricultural interests, and owners of private wells to implement a groundwater management plan for the groundwater basins including those beneath the City of Perris. Once a management plan is agreed to and implemented, EMWD together with the

Metropolitan Water District, will explore opportunities for water transfers with local Native American tribes and other water districts to increase seasonal recharge and storage capacities and to increase groundwater production in the Perris sub-basins.

Development consistent with General Plan 2030 will result in an increase in the amount of impermeable surfaces and concurrent diminution in the volume of recharge that occurs through percolation of precipitation into Perris groundwater sub-basins. Recharge from percolation of precipitation is one of numerous processes of aquifer recharge and reduction in volume from this source is not likely to be significant. Recharge of these sub-basins from current and planned EMWD storage/percolation ponds, and formulation and implementation of an inter-agency management plan for Perris-area groundwater basins will promote maintenance of existing groundwater levels.

Continuation of groundwater management efforts of the Eastern Municipal Water District will reduce the potential impact of development consistent with General Plan 2030 on groundwater recharge to a less than significant level.

- ***Place housing within a 100-year flood hazard as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map:***

- ***Place within a 100-year flood hazard area structures which would impede or redirect flood flow.***

Development consistent with General Plan 2030 may occur within the 100-year flood hazard area within the floodplain of the Perris Valley Channel. Development in the floodplain would alter the existing drainage pattern. All future development in the floodplain must be in compliance with Title 15, "Floodplain Regulations," of the City of Perris Municipal Code which regulates, restricts, or prohibits development in flood hazard areas as necessary to minimize increases in erosion, floodwater elevations, and floodwater velocities. To this end, Title 15 regulates filling, grading, dredging, and other alteration of floodplains, including the Perris Valley Channel floodplain, and conforms to requirements of the Federal Emergency Management Agency and National Flood Insurance Program.

Subject to Title 15, housing development accommodated by General Plan 2030 and located within the 100-year floodplain will not be exposed to significant risk from flooding. Development consistent with General Plan 2030 will be regulated to ensure that flood flow is not redirected or impeded to the detriment of properties within the City of Perris or properties upstream or downstream. Accordingly, adoption and implementation of General Plan 2030 will have a less than significant impact relative to the risk to property and life resulting from construction within the 100-year flood plain.

6.9 LAND USE AND PLANNING

- ***Physically divide an established community:***

  Adoption of General Plan 2030 and subsequent implementation will not require, promote, make possible, or allow interference with physical access between any one part of the City and any other part of the City. No roadways for vehicular or rights-of-way for pedestrian travel would be reduced, impeded, or severed as a direct or indirect result of the project. No changes in roadway configurations or land use patterns that would have the practical effect of visually or physically dividing the community would attend or result from adoption and implementation of General Plan 2030.

- ***Conflict with any applicable habitat conservation plan or natural community conservation plan:***

  The Multiple Species Habitat Conservation Plan (MSHCP) is applicable along the San Jacinto River and the wildlife corridor it supports. The land areas or "cells" wherein development will be subject to performance criteria established to maintain and preserve the wildlife corridor and sensitive species therein are incorporated into the Land Use Plan of the Land Use Element of General Plan 2030.

  Implementation Measures are included in the Conservation Element of General Plan 2030 as a means of incorporating the MSHCP into the City of Perris land use regulatory framework and are as follow:

  IV.A.1 Maintain a current copy of the *Western Riverside County Multiple Species Habitat Conservation Plan* (MSHCP), including all of its appendices, as part of the Planning Department's environmental database.

  IV.A.2 Provide training to City Planning Staff with respect to the project review procedures, conservation goals, biological survey and analysis criteria, mitigation fee structure, and coordination with the regional agencies to ensure effective and efficient administration of habitat protection plans.

  A conflict between General Plan 2030 Policies and Implementation Measures and the ALUP would represent a significant impact. The Land Use Plan and corresponding development standards in the Land Use Element of General Plan 2030 do not reflect the land use restrictions set forth in the ALUP for Influence Areas 2 and 3.

  Subject to these measures, adoption and implementation of General Plan 2030 will not result in a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigation an environmental effect or with the Multiple

Species Habitat Conservation Plan. The project, therefore, is determined to have no impact.

6.10 MINERAL RESOURCES

- ***Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state:***

In order to protect the availability of mineral resources of value, the California Department of Conservation identifies sites to which continuing access is important to satisfying mineral production needs of the region and the State. The relative importance of potential mineral resource sites is indicated by inclusion in one of four Mineral Resource Zones (MRZ):

MRZ 1:	No mineral resources;
MRZ 2:	Significant resource area (quality and quantity known);
MRZ 3:	Significant resource area (quality and quantity unknown);
MRZ 4:	No information (applies primarily to high-value ores).

The California Department of Conservation is primarily interested in preservation of access to significant resources areas included in MRZ 2. Lands within the City of Perris and its Sphere of Influence are designated MRZ 3 and MRZ 4 which are not defined as significant resource areas. Accordingly, no impact to availability of valuable mineral resources will occur.

- ***Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan:***

No sites have been designated as locally-important mineral resource recovery sites on any local plan. Accordingly, no impact to availability of a locally-important mineral resource recovery site will occur.

6.11 NOISE

- ***Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels:***

Train movements are sources of ground-borne vibration and noise in the City of Perris. Two Burlington Northern Santa Fe freight trains currently travel through the City each day. Freight train operations are expected to increase to four trains per day by the year 2030. The typical freight train is comprised of three engines and twenty-

five rail cars traveling at 10 miles per hour. Half of freight train movements are projected to occur between the hours of 10 P.M. and 7 A.M.

The Riverside County Transportation Commission (RCTC) proposes to begin Metrolink commuter rail service into Perris by the year 2008. Eight (8) trains per day will travel from Riverside to a Metrolink station planned for a site adjacent to the historic Santa Fe Station at 4th and "C" Streets in Perris. By the year 2030, 16 Metrolink trains are expected to travel this route. Metrolink trains will likely include one engine and three railcars traveling at 30 miles per hour. No nighttime operations are planned. Metrolink trains will use the existing tracks which are owned by the RCTC and used by the Burlington Northern Santa Fe Railroad.

The Orange Empire Railway Museum operates a weekend tourist train that shuttles passengers between downtown Perris and the Orange Empire Railway Museum along a rail spur that beings just north of 7th Street and runs southward to the Museum south of Mountain Avenue. The tourist train runs every half-hour between 9 A.M. and 6 P.M. on Saturdays and Sunday. A typical train includes a locomotives with 2 to 4 railcars.

The train tracks through Perris are to be upgraded to continuous welded rails for Metrolink trains which will reduce noise and vibrations associated with rail traffic. Because rail movements, however, are not subject to local land use regulations, adoption and implementation of General Plan 2030 will have no effect on ground-borne vibration or ground-borne noise levels that may have an impact on existing land uses in Perris.

Future sensitive receptors such as dwellings, schools, and motels may be affected by ground-borne noise and vibrations from train traffic. Vibrations, like noise, are measured in decibels. Results of railway vibration analysis in a study for the Alaska Railroad in 2002, "Anchorage Rail Capacity Improvements Milepost 110 to Milepost 114 – Phase 1 Noise and Vibration Study Summary" were used to approximate distances from the BNSF rails at which future development would experience ground-borne vibrations and noise. The Alaskan study concluded that transmission of ground-borne vibrations varies according to soil type and that increased train speeds are likely to increase vibration levels. Vibration levels associated with passenger trains at all speeds were found to be less than freight trains at speeds comparable to or less than that of the passenger trains. The worst case scenario in this study, high-transmission soils and vibration from freight trains, indicated that homes within three hundred feet of the tracks had perceptible ground-borne vibrations. Ground-borne vibrations were not likely to carry beyond this distance.

Consistent with the conclusions of this study, and in conjunction with analysis of noise impacts on future development, the Noise Element includes the following

Implementation Measures that will reduce the impact of ground-borne noise and vibrations on future development:

III.A.1 The City will work proactively with BNSF and Riverside County Transportation Commission to replace aging rail with new continuous welded rail, and to install sound-deadening matting leading to, from, and between the rails where public roads cross tracks in residential areas.

III.A.2 Acoustical and vibration studies will be prepared for all new development proposals involving noise sensitive land uses within 500 feet of the BNST railroad tracks. Wherever these studies determine that exterior living areas in the proposed development plan would be exposed to noise levels of 60 dBA or greater, or that interior and/or exterior living areas would be exposed to vibrations in excess of 65 VdB, the plans shall incorporate setbacks and/or building design/noise and/or vibration attenuation and insulation measures necessary to reduce exterior noise levels to no more than 65 dBA, to reduce interior noise levels to no more than 45 dBA, and to reduce exterior and interior vibration levels to no more than 65 VbA.

III.A.3 As part of any approvals of noise sensitive projects where reduction of exterior noise to 65 dBA is not reasonably feasible, the City will require the developer to issue disclosure statements that identify regular exposure to train noise. This disclosure shall be issued at the time of initial and all subsequent sales of the affected properties.

III.A.4 No new residential dwellings shall be placed in areas with mitigated or unmitigated exterior exposure to train noise levels in excess of 70 dBA CNEL.

Subject to the Implementation Measures of the Noise Element, adoption of the project General Plan will reduce the impact of groundborne vibration and noise levels on future land uses to a less than significant level.

- ***A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project:***

Future development undertaken consistent with General Plan 2030 will include construction of physical improvements. During the construction phase, noise levels will vary with the types of equipment and sizes of the respective constructions sites. The Noise Element of the project General Plan includes analysis of noise impacts likely to result from this construction. Assuming that construction occurs for 8 hours each day, a Community Noise Equivalent Level (CNEL) was calculated at 84 dBA at 50 feet from the site. The 64 dBA CNEL representing the maximum long-term exterior noise

level acceptable at sensitive receptors such as single-family dwellings extends a distance of approximately 446 feet from the construction site.

Recognizing that construction noise is difficult to control but inevitable, Section 18-63, "Enumeration of Prohibited Noises" of the Perris Municipal Code exempts construction activity from noise restrictions between the hours of 7 A.M. and 6 P.M. on weekdays. Consistent with the intent of this restriction, noise impacts resulting from construction are considered a nuisance rather than a significant impact. Continued compliance with these restrictions after adoption of General Plan 2030 will reduce construction noise impacts to a level considered less than significant.

Temporary or periodic increases in ambient noise levels may also occur in areas where residential uses are in proximity to commercial and industrial land uses. Exterior operations, truck loading areas, and large parking lots are examples of noise associated with commercial and industrial uses. Significant noise impacts can be avoided through site designs that place exterior activities away from residential properties and through operational controls that prohibit exterior operations, including truck loading and unloading, during late night and early morning hours.

In order to minimize noise impacts from new commercial and industrial uses on sensitive noise receptors, the Noise Element of the draft General Plan includes the following Implementation Measure:

V.A.1 An acoustical impact analysis may be required in conjunction with a development application for industrial, commercial, or institutional facilities and to determine interior and exterior on-site noise sources including parking lots and loading areas on any property within 160 feet of the property line of any property developed with a noise sensitive land use(s) or designated in the Land Use Element of the General Plan for sensitive land use(s). This analysis shall document the nature of the proposed facility as well as all interior or exterior facility operations that would generate exterior noise.

The analysis shall document the placement of any existing or future noise-sensitive land uses situated within the 160- foot distance. The analysis shall determine the potential noise levels that could be received at these sensitive land uses and identify specific measures necessary to ensure that noise levels to be generated in conjunction with operation of proposed commercial, industrial, or institutional facility do not exceed 60 dBA CNEL at the property line of the adjoining sensitive land use.

No development permits or approval of land use applications shall be issued until any required acoustic analysis is received and approved by City staff.

Subject to Implementation Measure V.A.1 of the Noise Element of the project General Plan, the impact of temporary or periodic increases in ambient noise levels from commercial and industrial uses on sensitive noise receptors will be reduced to a less than significant level.

6.12 POPULATION AND HOUSING

- ***Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere:***

- ***Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere:***

General Plan 2030 does not include any Objective, Policy, or Implementation Measure that directs or anticipates any action that would displace existing housing units or people. Therefore, the construction of replacement housing will not be necessitated and no impact will directly or indirectly result from adoption of General Plan 2030.

6.13 RECREATION

- ***Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated:***

The Open Space Element of the project General Plan identifies the amount of parkland that will be required commensurate with new development accommodated by the General Plan. The Open Space Element of the project General Plan includes Implementation Measures for planning, acquiring, and improving community parks that will serve new residential communities:

I.E.1 Require dedication of, in-lieu fees toward, or improvement of Open Space Element sites for community parks serving new development

I.E.2 Prepare a policy memorandum detailing the process for assigning developer obligations for parkland acquisition and improvement consistent with the procedures outlined in New Community Parks in this Element

I.E.3 Locate new community parks consistent with the "Generalized Locations of Future Parks" and the "Infrastructure Concept Plan" as described in New Community Parks in this Element

I.E.4 Work with the Riverside County Flood Control and Conservation District to develop the 9-acre Flood Control detention basin at West Third Street and Kruse Street for dual use as active parkland

I.E.5 Require development and dedication to the City of a community park (active parkland) as part of a dual use drainage basin in the Parkwest Specific Plan

I.E.6 Require development and dedication to the City of a community park (active parkland) as part of a dual use drainage basin in the New Perris Specific Plan

I.E.7 Develop a community park (active parkland) at the site of the closed landfill at Bellamo Lane

Adherence to these Implementation Measures and the procedures to which they relate will result in development of new parkland in locations and of sufficient size to serve the additional demand created through development of new residential uses. Accordingly, adoption and implementation of General Plan 2030 will have no impact on existing park facilities.

- ***Does the project include recreational facilities or require the construction of or expansion of recreational facilities, which might have an adverse physical effect on the environment:***

An increase in resident population will result from subsequent land development consistent with General Plan 2030. The Open Space Element of General Plan 2030 quantifies additional acreage to be acquired and developed to satisfy the need for additional park venues resulting from development of new dwelling units. Generalized locations for these community parks are identified in the Open Space Element.

Specific locations for community parks will be determined, consistent with the process set forth in the New Community Parks section of the Open Space Element, at the time residential development is proposed within an area designated as a "Generalized Park Location." This process assures that adequate parkland will be reserved and developed commensurate with demand attendant to new residential development.

Because development of detailed, site-specific information for the community parks is not feasible prior to adoption of General Plan 2030, potential direct physical impacts of each community park will be analyzed together with those of proposed residential development that triggers the General Plan Open Space Element process for

identifying a specific community park site. The broad environmental effects associated with future park construction, however, will be discussed in the EIR.

6.14 TRANSPORTATION/TRAFFIC

- ***Result in a change of air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks:***

  General Plan 2030 does not anticipate changes in locations of March Air Reserve Base/March Globalport which adjoins the north boundary of the City of Perris or of Perris Valley Airport and Skydiving Center located in the southern portion of the City. Although anticipated population and employment growth consistent with adoption and implementation of General Plan 2030 are expected to result in an increase in air traffic at commercial airports in Riverside County, no changes in traffic patterns are anticipated. Accordingly, no new hazards are anticipated.

- ***Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersection) or incompatible uses (e.g. farm equipment):***

  The General Plan Circulation Element identifies future roadway improvements necessary to accommodate existing and future development. None of the proposed future roadway alignments includes design features that would introduce a safety hazard or hazards. All future improvements will conform to applicable roadway design standards of the City of Perris and the County of Riverside. The potential impacts, therefore, associated with future roadway improvements are determined to be less than significant.

- ***Result in inadequate parking capacity***

  General Plan 2030 does not include or facilitate a reduction in parking requirements in the City's Zoning Ordinance/Development Code. Existing requirements are determined to be adequate and appropriate for anticipated future development. Adoption and implementation of General Plan 2030 will have no impact.

- ***Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)***

  The Circulation Element of the project General Plan establishes, accommodates and promotes alternative modes of transportation in the City. Since General Plan 2030 must be internally consistent, all other Elements support and promote the following Circulation Element Implementation Measures relative to alternative transportation:

I.A.1 Revise the downtown Specific Plan to address the planned Metrolink station and other modes of transportation

I.A.4 Plan off-street parking facilities in downtown Perris to support and enhance the concept of walkable and transit-oriented communities

I.A.5 Consider ancillary parking facilities with transit connections to activity centers such as downtown

I.B.1 Require on-site improvements that accommodate public transit vehicles (i.e. bus pullouts and transit stops and cueing lanes, bus turnarounds and other improvements) at major trip attractions (i.e. community centers, tourist and employment centers, etc.)

IV.A.1 Develop a multi-purpose recreational bikeway plan for the City of Perris based on standards in the Caltrans Highway Design Manual and in the Riverside County General Plan as identified in Chapter 4

IV.A.4 Maximize access for pedestrians and encourage the removal of a barriers in public rights-of-way (walls, easements, and fences) for safe and convenient movement of pedestrians

IV.A.5 Incorporate pedestrian paths or sidewalks in road design standards and provide tree easements between curbs and paths or sidewalks except within the Downtown Specific Plan Area

Consistency will be maintained among the Elements of the project General Plan and with policies, plans, and programs adopted pursuant to the General Plan. Accordingly, no conflict will exist among policies, plans, and programs supporting alternative transportation and no impact will result from adoption and implementation of General Plan 2030.

6.15 UTILITIES AND SERVICE SYSTEMS

- ***Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed:***

The Eastern Municipal Water District Urban (EMWD) Water Management Plan addresses the reliability of its water supplies. Over 75% of the District's total supplies are purchased from the Metropolitan Water District (MWD). Through implementation of the Water Surplus and Drought Management Plan (WSDM) which includes a 3-year drought scenario, the MWD expects to provide 100% of the water that local suppliers such as EMWD expect to purchase through the year 2010.

After the year 2010, in a worst case scenario, water supplies to the Metropolitan Water District could theoretically be limited to 2010 levels, thereby reducing future increases in supply to EMWD. Resultant water shortages would require drastic changes in domestic water consumption patterns. Based on progress at the regional level, however, in developing off-stream storage for surplus and imported water and on

local plans for resource development, Eastern Municipal Water District expects to be able to meet the water demands of its service area, including development consistent with the project General Plan, through the year 2020.

Extensive land development anticipated in the project General Plan through the year 2030 will require periodic updates to the General Plan to reflect changed conditions, including those relating to water supplies. Implementation Measure V.A.1 of the Conservation Element of General Plan 2030 requires that the City of Perris work with EMWD to ensure that development does not outpace water supply consistent with EMWD's Urban Water Management Plan. Accordingly, water supply impacts associated with future development will be re-evaluated between the present time and the year 2020. Until such time as EMWD determines that water entitlements may not be adequate for projected growth, the impacts associated with adoption and implementation of General Plan 2030 on the adequacy of existing water entitlements is determined to be less than significant.

- ***Comply with federal, state, and local statutes and regulations related to solid waste:***

  Collection and disposal of solid waste generated by development consistent with General Plan 2030 will conform to applicable federal, state, and local plans and regulations including the Integrated Waste Management Act and the Riverside County Waste Management Plan. Accordingly, no conflict with applicable statutes and regulations will be occasioned by adoption of General Plan 2030 and no impact will result.

This Page Left Blank Intentionally

VII. SECTION 7.0: ALTERNATIVES TO THE PROPOSED PROJECT

Table of Contents

List of Tables

CEQA requires that an EIR describe a range of reasonable alternatives to the project that could feasibly avoid or lessen any significant environmental impacts while substantially attaining the basic objectives of the project. An EIR should also evaluate the comparative merits of the alternatives. Evaluation of alternatives is intended to promote informed decision making. This chapter sets forth potential alternatives to the proposed project and evaluates them, as required by CEQA.

Three alternatives have been developed for evaluation in the City of Perris General Plan 2030 EIR:

Alternative 1 – "No Project"

CEQA requires that the No Project alternative be evaluated. Under this alternative, General Plan 2030 would not be adopted and development would proceed consistent with the existing General Plan.

Alternative 2 – "Floodplain Preservation Alternative"

Under this alternative, only development of very low density or intensity would be permitted within floodplains. This would preclude development of much of the undeveloped area of the City east of Perris Boulevard.

Alternative 3 – "Northeast Residential Alternative"

Approximately 465 acres north of the Ramona Expressway between Redlands Avenue and Lake Perris Recreation Area, designated in General Plan 2030 primarily for future Business Park and Industrial development, are designated for future residential development at R-6,000 and MFR-14 densities.

While Alternative 1 was predetermined, Alternatives 2 and 3 were formulated to be feasible alternatives to the project, as required by CEQA, in terms of economic, regulatory, and locational viability. Each alternative is evaluated in the EIR to determine the extent to which it may lessen or avoid impacts to the environment associated with General Plan 2030, and to the extent that each attains objectives established for preparation of the City of Perris General Plan 2030. Project objectives for preparation of General Plan 2030 are as follow:

- Recognize and adapt to changed conditions since preparation of the previous General Plan;
- Provide for balance in the types and acreages of land uses necessary for people to live, work, play and shop in Perris;
- Promote quality housing in attractive neighborhoods for households at all income levels and all stages of life;
- Accommodate new development consistent with infrastructure capacity and municipal services capabilities;
- Attract commerce and industry to provide jobs for residents at all economic levels and improve the City's jobs-housing balance;

- Facilitate upgrading of existing infrastructure including master storm drain improvements;
- Develop recreational opportunities for all segments of the community;
- Implement the Multi-Species Habitat Conservation Plan (MSHCP).

Potential impacts of Project Alternatives are evaluated for each of the environmental issue thresholds for which General Plan 2030 was evaluated in the EIR; Project Alternatives will be evaluated relative to environmental issues thresholds in EIR Section 6.0, "Impacts Found Not To Be Significant", only if the significance of the potential impact for the Alternative differs from that of the Project.

7.1 ALTERNATIVE 1: NO PROJECT ALTERNATIVE

7.1.1 DESCRIPTION

As required by Section 15126.6(e) of the CEQA Guidelines, the No Project Alternative describes development within the City of Perris in accordance with the land use designations and the policies and implementing strategies of the General Plan adopted in 1991.

The No Project Alternative presumes that build-out of the existing 1991 General Plan would occur. The existing General Plan encompasses the same geographic area as that in General Plan 2030. Total land available for development and redevelopment under this alternative is the same as for General Plan 2030 although the locations and acreages included within various land use designations are changed. The acreages and land use designations as a percentage of all land in the City for General Plan 1991 (No Project) are contrasted with those of General Plan 2030 (Project) in Table 7.1-1.

Table 7.1-1: Existing 1991 General Plan and General Plan 2030

Land Use Designation	General Plan 2030 Acreage	General Plan 2030 % of City	1991 General Plan Acreage	1991 General Plan % of City
Residential				
R-20,000 (RR/A)	1,055	5.7%	1,127	6.1%
R-10,000 (R4)	1,299	7.0%	1,967	10.7%
R-6,000 (R7)	3,646	19.9%	3,311	18.0%
MFR-14 (R14)	2,713	14.7%	2,587	14.0%
MFR-22 (R22)	105	0.6%	105	0.6%
Total	**8,817**	**47.8%**	**9,097**	**49.4%**
Commercial				
NC	80	0.4%	103	0.6%
CC	1,557	8.4%	1,901	10.3%
Total	**1,637**	**8.8%**	**2,004**	**10.9%**
Industrial				
BP	1,003	5.4%	619	3.4%
LI	2,835	15.4%	2,429	13.2%
GI	935	5.1%	935	5.1%
Total	**4,773**	**25.9%**	**3,983**	**21.7%**
Office				
PO	74	0.4%	97	0.5%

Land Use Designation	General Plan 2030 Acreage	General Plan 2030 % of City	1991 General Plan Acreage	1991 General Plan % of City
Other				
P	1,302	7.1%	1,327	7.2%
OS	1,748	9.5%	1,919	10.4%
SP	75	0.4%	0	0.0%
TOTALS	**18,427**		**18,427**	
% of City		**100%**		**100%**

* 1991 land use designation nomenclature is in parentheses

7.1.2 IMPACT EVALUATION

The following provides a comparison of impacts of the current City of Perris General Plan adopted in 1991 with those of General Plan 2030. An analysis is provided for each of the impact areas identified in this EIR.

LAND USE AND PLANNING

Implementation of the No Project Alternative would result in continued implementation of the existing General Plan to guide growth and development in the City. Continuation of the existing General Plan would be inconsistent with applicable land use plans, policies, and regulations of the Western Riverside Multi-Species Habitat Conservation Plan (MSHCP). As such, implementation of the No Project Alternative would result in inconsistencies with the adopted MSHCP and fail to meet the General Plan 2030 objective to implement the MSHCP.

The existing General Plan Land Use Plan and policies are not consistent with the Riverside County Airport Land Use Plan.

The impact related to land use and planning resulting from the No Project Alternative would be significant and unavoidable and comparable to that of General Plan 2030.

POPULATION, EMPLOYMENT AND HOUSING

Development of housing and employment opportunities with the No Project Alternative would be reduced compared to General Plan 2030. Implementation of this alternative would result in fewer residential units at build-out. General Plan 2030 accommodates approximately 44,533 dwelling units at build-out, while the existing General Plan accommodates approximately 33,160, a difference of 11,373 units. Population growth would also be significantly less pursuant to the No Project Alternative. This would result in a reduction in the growth inducing impact compared with General Plan 2030.

Due to the increase of approximately 790 acres in land area allocated to industrial uses, employment opportunities would be significantly higher under General Plan 2030. The No Project Alternative would yield fewer employment opportunities which would result in an exacerbated jobs-housing balance ratio and lack of progress in reaching the jobs/housing balance target established by SCAG.

The growth-inducing impacts of the No Project Alternative would be reduced compared to those of General Plan 2030, but would remain significant and unavoidable.

The No Project Alternative would have a negative impact on the jobs-housing balance.

AESTHETICS

Since new development consistent with this alternative would be similar in character to that of General Plan, impacts associated with scenic vistas, visual quality, scenic resources within a state or locally designated scenic highway or corridor, and increased light and glare would be similar to those associated with General Plan 2030.

As such, impacts associated with the No Project Alternative would be less than significant and comparable to that of General Plan 2030.

AIR QUALITY

Since the No Project Alternative would generate fewer residents, residential units and employment, total air emissions would be relatively less than that of General Plan 2030. However, construction related emissions would not necessarily be reduced on a daily basis, since those emissions are dependent upon variables such as location, size and number of active construction projects that will be driven by the economic conditions at that time.

Given that increases in residential uses and non-residential uses would occur under both the No Project Alternative and General Plan 2030, impacts associated with air quality will remain significant and unavoidable. The total emission reduction resulting from the No Project Alternative would be reduced compared to levels resulting from General Plan 2030, yet the volumes would remain above SCAQMD-recommended daily thresholds for all criteria pollutants, except NOX. In addition, as discussed in Section 4.3 of this EIR, projected emissions from wood-burning room heaters and fireplaces would represent a substantial percentage of total emissions of all criteria pollutants, and the majority of sources of CO, ROG, SOX and PM-10. With the No Project Alternative, total emissions of these pollutants would remain well above the SCAQMD-recommended daily thresholds.

The impacts of the No Project Alternative associated with air quality impacts would occur with regards to construction, mobile sources and stationary sources and would be reduced compared to those of General Plan 2030, but would remain significant and unavoidable.

HAZARDS

Implementation of the No Project Alternative as well as implementation of General Plan 2030 would allow development within Airport Land Use Plan Influence Areas 2 and 3 for March Air Reserve Base and in Interim Influence Area 1 for Perris Valley Airport. Although the impacts relative to aircraft hazards associated with March Air Reserve Base are essentially the same in both cases, Safety Element Implementation Measure I.D.3 of General Plan 2030 requires evaluation of potential crash hazards and incorporation of appropriate revisions into any development proposal within Perris Valley Airport Interim Influence Area 1.

Accordingly, impacts of the No Project Alternative associated with hazards from aircraft overflights would be significant and unavoidable, whereas impacts under General Plan 2030 are less than significant.

HYDROLOGY

The No Project Alternative includes development of substantially the same land area as General Plan 2030. Potential increases in the area of impervious surfaces would require new storm drain infrastructure much the same as would General Plan 2030 and the potential impact of construction of same would be less than significant.

The No Project Alternative would accommodate new development that could potentially increase the rate or amount of runoff from properties, but such development would be required to include retention basins to reduce the outflow rate consistent with that which existed prior to development. Development pursuant to General Plan 2030 will be subject to the same requirements. The potential impacts are less than significant for both No Project and General Plan 2030.

New development consistent with the No Project Alternative will comply with requirements of City of Perris Municipal Code Title 15, "Flood Plain Regulations," which regulate development in flood hazard areas. Development pursuant to General Plan 2030 would also be subject to Title 15 and the impact is considered less than significant for the No Project Alternative and for General Plan 2030.

Development pursuant to the No Project Alternative would be subject to National Pollutant Discharge Elimination System (NPDES) requirements as would development consistent with General Plan 2030. Impacts in both the No Project and General Plan 2030 scenarios would be less than significant.

Implementation Measures in the Safety Element of General Plan 2030 provide directives for development of more extensive precautions including evacuation procedures in the unlikely event of dam inundation that are not included in the No Project Alternative. Accordingly, the potential impact associated with loss of life from flooding as a result of dam failure may be marginally reduced for General Plan 2030.

In addition, Infrastructure Concept Plans required by General Plan 2030 provide for coordinated regional storm drainage improvements not indicated in the No Project Alternative. Furthermore, without inclusion of the MSHCP, the No Project Alternative would not accommodate development of the San Jacinto River project storm drain improvements. Accordingly, the risk of flooding is greater with No Project Alternative and remains a potentially significant impact.

PUBLIC SERVICES

Public services include police, fire and emergency rescue response, acute care and emergency medical services, schools, libraries, and municipal administration. The demand for each of these services is driven and generally measured according to resident population. Based on the number of estimated dwelling units, the No Project Alternative projects a build-out population of approximately 116,000; build-out population projected in General Plan 2030 is 155,800. The difference in build-out population between the No Project Alternative and General Plan 2030 is an estimated 39,800 persons. With fewer residents, the demand for public services and the need for new facilities to house them will also be less under the No Project Alternative.

Impacts of the No Project Alternative associated with public services would be reduced compared to those of General Plan 2030, and would remain less than significant.

NOISE

Implementation of the No Project Alternative as well as implementation of General Plan 2030 would both increase the number of future noise sensitive uses that would be exposed to exterior noise levels. Although the impacts relative to noise are essentially the same in both cases, General Plan 2030 implements policies on a site-by-site basis that would minimize noise effects though methods such as incorporating increased setbacks and providing for sufficient noise barriers (buffering) around sensitive noise receptors, incorporating building design/noise insulation measures to reduce exterior and interior noise levels to no more than 65 dBA and 45 dBA respectively, and requiring acoustical studies to identify appropriate site design and building design measures to reduce exterior and interior noise exposure.

Accordingly, impacts under the No Project Alternative would be increased compared with those of General Plan 2030, but would remain less than significant.

RECREATION

The Open Space Element in General Plan 2030 addresses park and recreation facilities within the City, as does the Open Space Element in the existing General Plan. However, the overall amount of land designated for parks and active open space under the No Project Alternative in the City would be less than General Plan 2030, thus requiring less parkland dedication. This, in turn, would reduce the need for new recreational facilities under the No Project Alternative.

Impacts of the No Project Alternative associated with recreation would be reduced compared to those of General Plan 2030, and would remain less than significant.

TRANSPORTATION/CIRCULATION

Levels of Service and traffic volumes and levels of service associated with No Project Alternative future conditions are shown in Table 7.1-3. The performance criteria used for evaluating volumes and capacities on the City street system are shown in Table 7.1-2. It is anticipated that traffic impacts would be similar to General Plan 2030. Under the No Project Alternative, the traffic conditions at the existing intersections within the City, including the four existing intersections that are significantly impacted under current traffic conditions (I-215 SB and Cajalco Expressway – PM, I-215 NB and Ramona Expressway – PM, Nuevo Road and Ruby Drive – AM and PM (unsignalized), and I-215 NB and Redlands Avenue – PM), are anticipated to be further impacted as growth and development continues to occur under the existing General Plan. A majority of the future year street and highway segments will be operating at LOS A through D. Twelve (12) segments are projected to be operating at LOS E or F by the Year 2030 compared to Fourteen (14) under General Plan 2030. It is expected that impacts associated with future traffic conditions would be similar to conditions under General Plan 2030.

Impacts under the No Project Alternative associated with transportation and circulation would be comparable to that of General Plan 2030 and would remain significant and avoidable.

UTILITIES AND SERVICE SYSTEMS

Utilities and service systems include water systems, wastewater (sewer), solid waste, energy and communication services. The demand for each of these services is driven and generally measured according to resident population. Based on the number of estimated dwelling units, the No Project Alternative projects a build-out population of approximately 116,000; build-out population projected in General Plan 2030 is 155,800. The difference in build-out population between the No Project Alternative and General Plan 2030 is an estimated 39,800 persons. With fewer residents, the demand for utilities and service systems and the need for new facilities to house them will also be less under the No Project Alternative.

Impacts of the No Project Alternative associated with utilities and service systems would be reduced compared to those of General Plan 2030, and would remain less than significant.

7.1.3 CONCLUSIONS

Adoption and implementation of the No Project Alternative would result in the following impacts:

Significant, Unavoidable Impact

Population, Employment, Housing

Air Quality
Transportation/Circulation
Land Use and Planning

Less Than Significant Impact

Aesthetics
Biological Resources
Cultural Resources
Geology and Soils
Hazards and Hazardous materials
Hydrology and Water Quality
Mineral Resources
Noise
Public Services
Recreation
Utilities and Service Systems

No Impact

Agricultural Resources
Mineral Resources

The No Project alternative would result in significant, unavoidable impacts in the categories of Population, Employment and Housing, Air Quality, Transportation/Circulation, and Land Use and Planning. Impacts to each category would be less than those resulting from adoption and implementation of General Plan 2030.

Alternative 1, the No Project Alternative, satisfies the following General Plan 2030 objectives:

- Provide for balance in the types and acreages of land uses necessary for people to live, work, play and shop in Perris;
- Promote quality housing in attractive neighborhoods for households at all income levels and all stages of life; and
- Attract commerce and industry to provide jobs for residents at all economic levels and improve the City's jobs-housing balance;

Alternative 1, the No Project Alternative, does not satisfy the following General Plan 2030 objectives:

- Recognize and adapt to changed conditions since preparation of the previous General Plan;
- Accommodate new development consistent with infrastructure capacity and municipal services capabilities;
- Facilitate upgrading of existing infrastructure including master storm drain improvements;

- Develop recreational opportunities for all segments of the community; and
- Implement the Multi-Species Habitat Conservation Plan (MSHCP).

Table 7.1-2: Perris Roadway Future No Project Capacity / Level of Service

Roadway Classification	Number of Lanes	Maximum Two-Way Average Daily Traffic (ADT) [2]				
		LOS A	LOS B	LOS C	LOS D	LOS E
Collector/Local	2	7,800	9,100	10,400	11,700	13,000
Major Collector	2	10,800	12,600	14,400	16,200	18,000
Secondary Arterial	4	21,540	25,130	28,700	32,300	35,900
Primary Arterial or Secondary Arterial	6	32,340	37,730	43,100	48,500	53,900
Expressway	6	36,780	42,910	49,000	55,200	61,300
Expressway	8	49,020	57,190	65,400	73,500	81,700
Freeway	4	45,900	53,550	61,200	68,900	76,500
Freeway	6	70,500	82,250	94,000	105,800	117,500
Freeway	8	96,300	112,350	128,400	144,500	160,500
Freeway	10	120,360	140,420	160,500	180,500	200,600

[1] All Capacity Exhibits are based on optimum conditions and are intended as guidelines for planning purposes only.

[2] Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables.

Table 7.1-3: Future No Project Segment Average Daily Traffic (ADT) and Level of Service (LOS)

Future No Project Segment Daily Traffic (ADT) and Level of Service (LOS)					
Street	Segment	2030 No-Project			
		Classification	Number of Lanes	Future No-Project ADT	Future No-Project LOS
11th Street	West of "A"	Collector	2	3200	A
11th Street	A Street - D Street	Collector	2	4300	A
11th Street	D Street - G Street	Collector	2	10700	D
A Street	San Jacinto - 4th (SR 74)	Secondary Arterial	4	9800	A
A Street	4th Street - 11th Street	Secondary Arterial	4	5500	A
Cajalco Expressway	Harvill Avenue - I-215	Expressway	6	38400	B
Case Road	Goetz - Ellis	Primary Arterial	4	11300	A
Case Road	Ellis - Murietta	Primary Arterial	4	19400	A
Case Road	Murietta - I-215	Primary Arterial	4	9700	A

Future No Project Segment Daily Traffic (ADT) and Level of Service (LOS)					
Street	Segment	2030 No-Project			
		Classification	Number of Lanes	Future No-Project ADT	Future No-Project LOS
Citrus	Perris - Wilson	Collector	2	5900	A
Citrus	Wilson - Murrieta	Collector	2	1500	A
Citrus	West of Evans	Collector	2	1700	A
D Street	I-215 - 4th Street	Secondary Arterial	6	22800	B
D Street	4th Street - 11th	Collector	2	8800	B
Ethanac Road	Goetz Road - Murrieta Road	Primary Arterial	6	8100	A
Ethanac Road	Murrieta Road – I-215	Primary Arterial	6	12200	A
Ethanac Road	I-215 - SR-74	Primary Arterial	6	22200	A
Goetz Road	Ellis - Ethanac	Primary Arterial	6	19200	A
Goetz Road	Ethanac – Kaplan Creek Drive	Secondary Arterial	6	14400	A
I-215*	North of Oleander	Freeway	6	182200	F
I-215*	Oleander - Ramona Expressway	Freeway	6	178500	F
I-215*	Ramona Expressway - Placentia	Freeway	6	159500	F
I-215*	Placentia Avenue - Nuevo	Freeway	6	159500	F
I-215*	Nuevo Road - SR 74 (4th St.)	Freeway	6	125100	F
I-215*	SR 74 - Case	Freeway	6	138500	F
I-215*	Case - Ethanac	Freeway	6	122900	F
I-215*	South of Ethanac	Freeway	6	122300	F
Indian Avenue	Ramona Expressway - Rider Street	Secondary Arterial	4	12000	A
May Ranch Parkway	Evans - Rider Street	Secondary Arterial	2	9100	A
Murrieta Road	Case Road - Ethanac	Secondary Arterial	6	10300	A
Murrieta Road	Ethanac - McCall	Secondary Arterial	6	17600	A
Nuevo Road	I-215 - Redlands	Primary Arterial	6	29700	A
Nuevo Road	Wilson Avenue - Murrietta Road	Primary Arterial	6	22900	A
Orange Avenue	E. Frontage Rd. - Indian Avenue	Secondary Arterial	4	3300	A
Orange Avenue	Indian Road - Perris	Secondary Arterial	4	3100	A
Orange Avenue	Perris Boulevard - Redlands	Secondary Arterial	4	4500	A
Orange Avenue	Redlands - Wilson	Secondary Arterial	4	5600	A
Perris Boulevard	Oleander – Ramona Expressway	Primary Arterial	6	29600	A
Perris Boulevard	Ramona Expressway – Rider Street	Primary Arterial	6	23800	A
Perris Boulevard	Rider Street - Orange	Primary Arterial	6	20600	A
Perris Boulevard	Orange - Nuevo	Primary Arterial	6	22400	A
Perris Boulevard	Nuevo – San Jacinto	Primary Arterial	6	26200	A
Perris Boulevard	San Jacinto - 4th	Primary Arterial	6	24900	A
Perris Boulevard	4th Street - 11th	Primary Arterial	6	15900	A
Placentia Avenue	Indian Avenue - Perris Boulevard	Primary Arterial	6	7000	A
Placentia Avenue	Perris Boulevard - Redlands Avenue	Primary Arterial	6	5300	A
Ramona Expressway	Nevada Avenue - Webster Avenue	Expressway	6	61700	F

Future No Project Segment Daily Traffic (ADT) and Level of Service (LOS)					
Street	Segment	2030 No-Project			
		Classification	Number of Lanes	Future No-Project ADT	Future No-Project LOS
Ramona Expressway	Webster Avenue - Indian Avenue	Expressway	6	60300	E
Ramona Expressway	Indian Avenue - Perris Boulevard	Expressway	6	46500	C
Ramona Expressway	Perris Boulevard - Redlands Avenue	Expressway	6	56400	D
Ramona Expressway	Redlands Avenue - Evans Road	Expressway	6	62000	F
Ramona Expressway	Evans Road - Bradley Road	Expressway	6	37800	B
Ramona Expressway	Bradley Road - Rider Street	Expressway	6	37800	B
Redlands Avenue	I-215 - 4th (SR 74)	Secondary Arterial	4	14200	A
Rider Street	Indian Avenue - Perris Boulevard	Secondary Arterial	4	5500	A
Rider Street	Perris - Evans	Secondary Arterial	4	11500	A
Rider Street	Bradley - Ramona	Secondary Arterial	4	4100	A
San Jacinto Road	Wilson - Murrieta	Primary Arterial	4	15600	A
SR-74	A Street - D Street	Secondary Arterial	4	37000	F
SR-74	D Street - Perris Boulevard	Secondary Arterial	4	25900	C
SR-74	Perris Boulevard - Redlands	Secondary Arterial	4	15400	A
Webster Avenue	Oleander - Markham	Secondary Arterial	4	24000	B

7.2 ALTERNATIVE 2: FLOODPLAIN PRESERVATION ALTERNATIVE

7.2.1 DESCRIPTION

In contrast with General Plan 2030, the Floodplain Preservation Alternative assumes that major improvements to the Perris Valley Channel and the San Jacinto River channel will not be implemented. These improvements would alleviate flooding problems along these two water courses and allow urbanized development in the respective floodplains. The Floodplain Preservation Alternative would accommodate development within the floodplains only at very low densities (residential) and intensities (non-residential). All such development would have to be appropriately flood-proofed and consistent with Municipal Code Title 15, "Floodplain Ordinance." This would preclude the more intensive residential and non-residential development indicated in General Plan 2030 for much of the City east of Perris Boulevard and Goetz Road.

The Floodplain Preservation Alternative Land Use Plan designates as Open Space those floodplains along the Perris Valley Channel and the San Jacinto River. This same area, approximately 6,151 acres (see table, below), is indicated for various higher density residential and non-residential uses in General Plan 2030.

Overall, the Floodplain Preservation Alternative would result in a reduction of approximately 10,000 dwelling units and 35,000 residents at build-out as compared to General Plan 2030. This represents an approximate 25% reduction from the number of General Plan 2030 dwellings. Less intensive, non-residential development associated with this Alternative is projected to result in a 30% reduction in additional employment potential at build-out from that of the project, or as many as 17,000 jobs.

Table 7.2-1: Floodplain Preservation Alternative and General Plan 2030

Land Use Designation	General Plan 2030 Acreage	General Plan 2030 % of City	Alt. 2 Acreage	Alt. 2 % of City
Residential				
RR/A	1,055	5.7%	1,020	5.5%
R4	1,299	7.0%	1,086	5.9%
R7	3,646	19.9%	2,867	15.6%
R14	2,713	14.7%	1,627	8.8%
R22	105	0.6%	28	0.2%
Total	**8,817**	**47.8%**	**6,628**	**36.0%**
Commercial				
NC	80	0.4%	41	0.2%
CC	1,557	8.4%	864	4.7%
Total	**1,637**	**8.8%**	**905**	**4.9%**
Industrial				
BP	1,003	5.4%	425	2.4%
LI	2,835	15.4%	1,723	9.4%
GI	935	5.1%	720	3.9%
Total	**4,773**	**25.9%**	**2,868**	**15.7%**
Office				
PO	74	0.4%	0	0.0%
Other				
P	1,302	7.1%	592	3.2%
OS	1,748	9.5%	7,444	40.4%
SP	75	0.4%	0	0
TOTALS	**18,427**		**18,427**	
% of City		**100%**		**100%**

7.2.2 IMPACT EVALUATION

The following is a comparison of the impacts associated with the Floodplain Preservation Alternative and the impacts associated with General Plan 2030.

LAND USE AND PLANNING

Implementation of the Floodplain Preservation Alternative would include applicable land use plans, policies, and regulations of the Western Riverside Multi-Species Habitat Conservation Plan (MSHCP). As such, implementation of this Alternative would be consistent with the adopted MSHCP and the impact to land use and planning less than significant.

The Floodplain Preservation Alternative would be not be consistent the Riverside County Airport Land Use Plan.

The impacts related to land use and planning resulting from the Floodplain Preservation Alternative would be significant and unavoidable and comparable to those resulting from adoption and implementation of General Plan 2030.

POPULATION, EMPLOYMENT AND HOUSING

Implementation of this alternative would result in a reduction in both residential and non-residential development from that of General Plan 2030. As a result, implementation of this Alternative would reduce the City's projected population and employment in the year 2030. The City's ability to accommodate its share of regional population growth included in SCAG projections for western Riverside County would be diminished. The size of the reduction in potential employment relative to the reduction in number of dwellings will result in a negative effect on the future jobs/housing balance. The reduction in both residential and non-residential development, and commensurate reduction in population and employment, would reduce the growth-inducing impact substantially as compared with General Plan 2030, but the impact would remain significant and unavoidable.

Impacts of the Floodplain Preservation Alternative associated with Population, Employment and Housing would be reduced compared with those of General Plan 2030, but would remain significant and unavoidable.

AESTHETICS

General Plan Implementation Measures applicable to the Floodplain Preservation Alternative would reduce the level of impact associated with light and glare to a less than significant level. Impacts resulting from General Plan 2030 relative to light and glare are also deemed to be less than significant.

The impact of the Floodplain Preservation Alternative associated with light and glare would be less than significant and comparable to that of General Plan 2030.

AIR QUALITY

The overall reduction in development associated with the Floodplain Preservation Alternative would be reflected in significant reductions in total air pollutant emissions in both the cumulative construction and cumulative operation conditions. Although total emissions would be significantly lower than those resulting from development consistent with General Plan 2030, the volumes would remain above SCAQMD recommended daily thresholds for all criteria pollutants, except for NOx. NOx emissions are projected to be below current levels, despite substantial growth throughout the planning area, due to anticipated improvements in automotive fuels, cleaner burning engines and improved exhaust technologies.

Projected emissions from wood-burning room heaters and fireplaces would represent a substantial percentage of total emissions of all criteria pollutants, and the majority of sources of CO, ROG, Sox and OM-10. Implementation of this alternative would reduce emissions by roughly 16 percent compared with General Plan 2030 levels, but would remain well above SCAQMD recommended daily thresholds.

Impacts of the Floodplain Preservation Alternative associated with Air Quality would be reduced compared with those of General Plan 2030, but would remain significant and unavoidable.

HAZARDS

Implementation of the Floodplain Preservation Alternative would allow development within Airport Land Use Plan Influence Areas 2 and 3 for March Air Reserve Base and in Interim Influence Area 1 for Perris Valley Airport. Reduction in overall physical development and population from that of General Plan 2030 would result in fewer people and buildings within these Influence Areas. General Plan Implementation Measures applicable to the Floodplain Preservation Alternative would reduce the potential impact related to injury, loss of life, and damage to property from aircraft hazards would be reduced to a less than significant level.

The impact of the Floodplain Preservation Alternative associated with hazards from aircraft overflights would be less than significant and comparable to that of General Plan 2030.

HYDROLOGY AND WATER QUALITY

The Floodplain Preservation Alternative will result in substantial reduction in physical development from that of General Plan 2030 and, accordingly, significant reduction in the amount of impervious surfaces. The amount of stormwater runoff will be reduced. On-site detention/retention basins will be required, however, as in General Plan 2030, but will remain as permanent stormwater infrastructure rather than interim infrastructure as in General Plan 2030. The long-term need for these basins will continue as this alternative will retain the floodplains along the Perris Valley Channel and San Jacinto River rather than include stormwater drainage improvements to these drainage courses that are reflected in General Plan 2030. Without these improvements, a master storm drain system for the majority of land area in Perris cannot be developed. Construction and operation of these basins, in lieu of permanent master plan storm drains, will be subject to the San Jacinto Watershed Construction Permit and the National Pollution Discharge Elimination System requirements.

Subject to regulatory measures indicated above, impacts from construction and operation of stormwater retention/detention basins will be less than significant and comparable to those of General Plan 2030.

The Floodplain Preservation Alternative will result in a reduction of stormwater runoff compared with General Plan 2030. The use of detention/retention basins in both scenarios, however, reduces the impact of flooding from increases in the rate or amount of stormwater discharge resulting from adoption of this Alternative or from adoption of General Plan 2030 to a less than significant level.

The impact of the Floodplain Preservation Alternative resulting from flooding because of increases in the rate or amount of stormwater runoff is less than significant and comparable to that of General Plan 2030.

Development consistent with the Floodplain Preservation Alternative will result in fewer buildings and fewer people at risk in the unlikely event of dam failure and subsequent

inundation of the Perris Valley. Subject to Implementation Measures that would accompany this land use alternative, including emergency evacuation procedures, the impacts resulting from the Floodplain Preservation Alternative relative to risk of loss, injury, or death from flooding as a result of dam failure are less than significant and less than that associated with General Plan 2030.

This alternative would substantially reduce the amount of development in floodplains. Development that would still be permissible in floodplains would be subject to the requirements of Municipal Code Title 15, "Floodplain Regulations," as would development consistent with General Plan 2030. Subject to these regulatory provisions, impacts related to the risk to injury, loss of life, or property damage resulting from adoption and implementation of the Floodplains Preservation Alternative would be less than significant but would impact fewer structures and occupants than implementation of General Plan 2030.

Impacts from inundation by seiche, tsunami, or mudflow resulting from adoption of the Floodplain Preservation Alternative, subject to Implementation Measures that would be adopted therewith, would be less than significant and less than those of General Plan 2030.

PUBLIC SERVICES

Public services include police, fire and emergency rescue response, acute care and emergency medical services, schools, libraries, and municipal administration. The demand for each of these services is driven and generally measured according to resident population. The increase in population consistent with the Floodplain Preservation Alternative would be less than that resulting from adoption and implementation of General Plan 2003. Demand for public services would be less commensurate with the smaller population. Construction of new and expanded facilities would still be required, but total additional building area would likely decrease. Subject to regulatory requirements to reduce air quality, water, and noise impacts from construction of these facilities and project-level CEQA evaluation, impacts of the Floodplain Preservation Alternative associated with construction of public services facilities would be less than significant and comparable to those resulting from General Plan 2030.

NOISE

Adoption and implementation of the Floodplain Preservation Alternative would result in an increase in the number of sensitive noise receptors e.g. dwelling units in the City, although by a smaller number than General Plan 2030. Subject to Implementation Measures that would accompany this alternative, noise impacts to sensitive receptors would be minimal as a result of increased setback requirements, mandatory noise insulation standards, and buffers. Noise impacts associated with this alternative would be less than significant and affect fewer sensitive receptors than implementation of General Plan 2030.

PARKS AND RECREATION

Under this alternative, reduced population would result in reduced demand for parkland. Subject to existing regulatory requirements and project-level mitigation, air quality, water quality, and noise impacts of new park construction consistent with the Floodplain Preservation Alternative would be less than significant and less than those resulting from General Plan 2030.

TRANSPORTATION/CIRCULATION

Traffic volumes and levels of service (LOS) associated with development consistent with the Floodplain Preservation Alternative are shown in Table 7.1-3. Traffic volumes on the majority of roadway segments are typically reduced by 15% – 20% from volumes associated with General Plan 2030. Most segments are projected to be operating at acceptable Levels of Service A through D. All segments of Interstate 215 through the City of Perris, however, will be operating at a Level of Service F even with improvements to be completed through the year 2030. Patterson Avenue between Oleander and Markham will also be operating a LOS F. Impacts to roadway levels of services resulting from implementation and adoption of the Floodplain Preservation Alternative, therefore, are significant and unavoidable and comparable to those of General Plan 2030.

UTILITIES AND SERVICE SYSTEMS

Reduction in overall development of this alternative compared with General Plan 2030 will result in a corresponding reduction in population from General Plan 2030 levels. Consequently, the increased demand for potable water, wastewater treatment, natural gas, and electricity will be reduced from that associated with General Plan 2030 but new facilities will be required to provide utilities and services as a result of the cumulative demand of development in Perris and throughout the region.Impacts resulting from construction of new facilities is less than significant and comparable to that of General Plan 2030.

Reduction in overall development of this alternative compared with General Plan 2030 will result in a corresponding reduction in population from General Plan 2030 levels. Consequently, the amount of waste generated will be reduced. The impact of the Floodplain Preservation Alternative relative to solid waste disposal will be less than significant and reduced from that of General Plan 2030.

7.2.3 CONCLUSIONS

Adoption and implementation of the Floodplain Preservation Alternative would result in the following impacts:

Significant, Unavoidable Impact

Population, Employment, Housing
Air Quality
Transportation/Circulation
Land Use and Planning

Less Than Significant Impact

Aesthetics
Biological Resources
Cultural Resources
Geology and Soils
Hazards and Hazardous materials
Hydrology and Water Quality
Mineral Resources
Noise
Public Services
Recreation
Utilities and Service Systems

No Impact

Agricultural Resources
Mineral Resources

Although this alternative would result in significant, unavoidable impacts in the categories of Population, Employment and Housing, of Air Quality, of Transportation/Circulation, and of Land Use and Planning, the impacts to each would be less than those resulting from adoption and implementation of General Plan 2030.

Alternative 2, the Floodplain Preservation Alternative, satisfies the following General Plan 2030 objectives:

- Recognize and adapt to changed conditions since preparation of the previous General Plan;
- Provide for balance in the types and acreages of land uses necessary for people to live, work, play and shop in Perris;
- Promote quality housing in attractive neighborhoods for households at all income levels and all stages of life;
- Accommodate new development consistent with infrastructure capacity and municipal services capabilities;
- Develop recreational opportunities for all segments of the community; and
- Implement the Multi-Species Habitat Conservation Plan (MSHCP).

Alternative 2, the Floodplain Preservation Alternative, does not satisfy the following General Plan 2030 objectives:

- Attract commerce and industry to provide jobs for residents at all economic levels and improve the City's jobs-housing balance; and
- Facilitate upgrading of existing infrastructure including master storm drain improvements.

7.3 ALTERNATIVE 3: NORTHEAST RESIDENTIAL ALTERNATIVE

7.3.1 DESCRIPTION

The Northeast Residential Alternative includes adoption of the same Goals, Policies, and Implementation Measures of General Plan 2030 with a revised Land Use Plan for the northeastern area of the City. The Northeast Residential Alternative would include minor text modifications to reflect a Land Use Plan that accommodates fewer Business Park and Light Industrial building areas, more residential units, additional Commercial building area and more Open Space acreage than the Land Use Plan of General Plan 2030.

The Northeast Residential Alternative encompasses the same geographic area as that in General Plan 2030. Total land available for development and redevelopment under this alternative is the same as for General Plan 2030 although the locations and acreages included within various land use designations are changed. The acreages and land use designations as a percentage of all land in the City for Alternative 3 Northeast Residential Alternative are contrasted with those of General Plan 2030 (Project) in Table 7.3-1.

Under the Northeast Residential Alternative, approximately 465 acres north of the Ramona Expressway between Redlands Avenue and Lake Perris Recreation Area would be redesignated. Specifically, an estimated 140 acres would be redesignated from Light Industrial to R-6,000. Approximately 30 acres would be redesignated from Community Commercial to Open Space, and 295 acres of Business Park would be redesignated to a mixture of MFR-14, R-6,000, Community Commercial and Open Space. The remaining proposed land uses are identical to General Plan 2030.

As a result of these land use changes, there would be approximately 1,900 additional residential units under this alternative. The incremental growth in residential units would in turn increase the population. At the same time, the reduction in industrial uses would consequently reduce the amount of new employment opportunities that would be generated in the City.

Table 7.3-1: Northeast Residential Alternative and General Plan 2030

Land Use Designation	General Plan 2030 Acreage	General Plan 2030 % of City	Alt. 3 Acreage	Alt. 3 % of City
Residential				
R-20,000	1,055	5.7%	1,055	5.7%
R-10,000	1,299	7.0%	1,299	7.0%
R-6,000	3,646	19.9%	3,877	21.0%
MFR-14	2,713	14.7%	2,784	15.1%
MFR-22	105	0.6%	105	0.6%
Total	**8,817**	**47.8%**	**9,120**	**49.5%**
Commercial				
NC	80	0.4%	80	0.4%
CC	1,557	8.4%	1,636	8.9%
Total	**1,637**	**8.8%**	**1,716**	**9.3%**
Industrial				
BP	1,003	5.4%	707	3.8%
LI	2,835	15.4%	2,694	14.6%
GI	935	5.1%	935	5.1%
Total	**4,773**	**25.9%**	**4,336**	**23.5%**
Office				
PO	74	0.4%	74	0.4%
Other				
P	1,302	7.1%	1,302	7.1%
OS	1,748	9.5%	1,807	9.8%
SP	75	0.4%	75	0.4%
TOTALS	**18,427**		**18,427**	
% of City		**100%**		**100%**

7.3.2 IMPACT EVALUATION

The following impact evaluation provides a comparison between the Northeast Residential Alternative and General Plan 2030. An analysis is provided for each of the impact areas identified in this EIR.

LAND USE AND PLANNING

Implementation of the Northeast Residential Alternative would include applicable land use plans, policies, and regulations of the Western Riverside Multi-Species Habitat Conservation Plan (MSHCP). As such, implementation of this Alternative would be consistent with the adopted MSHCP and the impact to land use and planning would be less than significant.

This alternative would not be consistent the Riverside County Airport Land Use Plan.

The impacts related to land use and planning resulting from the Northeast Residential Alternative would be significant and unavoidable and comparable to those resulting from adoption and implementation of General Plan 2030.

POPULATION, EMPLOYMENT AND HOUSING

Housing opportunities with the Northeast Residential Alternative would be greater than General Plan 2030. Implementation of this alternative would result in more residential units at build-out. Specifically, this alternative designates 303 additional acres for residential uses. This equates to approximately 1,900 more housing units than General Plan 2030. Based on the number of additional housing units, population growth would be greater under the Northeast Residential Alternative. Using a household size of 3.5 persons per household, the Northeast Residential Alternative would yield a build-out population of approximately 162,450; build-out population projected in General Plan 2030 is 155,800. The difference in build-out population between the Northeast Residential Alternative and General Plan 2030 is an estimated 6,650 persons. This would result in an a greater growth inducing impact compared with General Plan 2030.

Due to the reduction of approximately 435 acres in land area allocated to industrial uses, employment opportunities would be lower under General Plan 2030. In other words, the Northeast Residential Alternative would yield fewer employment opportunities which would result in a negative effect on the jobs-housing balance ratio.

Impacts of the Northeast Residential Alternative associated with Population, Employment and Housing would be greater compared with those of General Plan 2030, and would remain significant and unavoidable.

AIR QUALITY

Implementation of the Northeast Residential Alternative would result in reduction of non-residential development and an increase in residential development in the northeastern portion of the City, yet overall development potential in the City would remain the same. As such, the total amount of emissions generated, including criteria pollutants, under this alternative would remain generally the same as that of General Plan 2030. Short-term emission of NOX, ROG, and PM-10 related to construction activities will remain above the

SCAQMD thresholds. Total volumes of long-term emissions associated with implementation of the Northeast Residential Alternative would exceed SCAMQ-recommended daily thresholds for all criteria pollutants, except for NOX. Net changes in emissions, compared to current conditions, can be reduced to below current total emission, for NOX, CO and PM-10, and to levels that are below a level of significance, for ROG and SOX, if wood-fireplaces and/or room heaters are prohibited in new residential constriction.

Under the Northeast Residential Alternative, significant and unavoidable impacts to air quality would occur with regards to construction, mobile sources and stationary sources. This is similar to that of General Plan 2030.

HAZARDS

Implementation of the Northeast Residential Alternative as well as implementation of General Plan 2030 would allow development within Airport Land Use Plan Influence Areas 2 and 3 for March Air Reserve Base and in Interim Influence Area 1 for Perris Valley Airport. The impacts relative to aircraft hazards associated with March Air Reserve Base are essentially the same in both cases. Both alternatives would require evaluation of potential crash hazards and incorporation of appropriate revisions into any development proposal within Perris Valley Airport Interim Influence Area 1.

Accordingly, impacts of the Northeast Residential Alternative associated with hazards from aircraft overflights would be less than significant and comparable to that of General Plan 2030.

HYDROLOGY

New development consistent with the Northeast Residential Alternative will comply with requirements of City of Perris Municipal Code Title 15, "Flood Plain Regulations", which regulate development in flood hazard areas. Development pursuant to General Plan 2030 would also be subject to Title 15 and the impact is considered less than significant for the Northeast Residential Alternative and for General Plan 2030.

Development pursuant to the Northeast Residential Alternative would be subject to National Pollutant Discharge Elimination System (NPDES) requirements as would development consistent with General Plan 2030.

The Northeast Residential Alternative includes development of substantially the same land area as General Plan 2030. Potential increases in the area of impervious surfaces would require new storm drain infrastructure much the same as would General Plan 2030 and the potential impact of construction of same would be less than significant.

The Northeast Residential Alternative would accommodate new development that could potentially increase the rate or amount of runoff from properties, but such development

would be required to include retention basins to reduce the outflow rate consistent with that which existed prior to development. Development pursuant to General Plan 2030 will be subject to the same requirements. The potential impacts are less than significant for both Northeast Residential Alternative and General Plan 2030.

Implementation Measures in the Safety Element of General Plan 2030 provide directives for development of more extensive precautions including evacuation procedures in the unlikely event of dam inundation. These directives would also be included in the Northeast Residential Alternative. Accordingly, the potential impact associated with loss of life from flooding as a result of dam failure is considered less than significant for the Northeast Residential Alternative and for General Plan 2030.

In addition, Infrastructure Concept Plans required by General Plan 2030 provide for coordinated regional storm drainage improvements as indicated in the Northeast Residential Alternative. The Northeast Residential Alternative also includes substantial improvements to the stormwater carrying capacity of the Perris Valley Channel that would reduce downstream flooding. In addition, inclusion of the MSHCP in both General Plan 2030 and the Northeast Residential Alternative would accommodate development of the San Jacinto River project storm drain improvements. Accordingly, the risk of flooding is less than significant under the Northeast Residential Alternative and less than that associated with General Plan 2030.

PUBLIC SERVICES

Public services include police, fire and emergency rescue response, acute care and emergency medical services, schools, libraries, and municipal administration. The demand for each of these services is driven and generally measured according to resident population. Based on the number of estimated dwelling units, the Northeast Residential Alternative projects a build-out population of approximately 162,450; build-out population projected in General Plan 2030 is 155,800. The difference in build-out population between the No Project Alternative and General Plan 2030 is an estimated 6,650 persons. With more residents, the demand for public services and the need for new facilities to house them will also be more under the Northeast Residential Alternative.

Impacts of the Northeast Residential Alternative associated with public services would be greater than those of General Plan 2030, yet would remain less than significant.

NOISE

Implementation of the Northeast Residential Alternative as well as implementation of General Plan 2030 would both increase the number of future noise sensitive uses that would be exposed to exterior noise levels. The impacts relative to noise are essentially the same in both cases. General Plan 2030 implements policies on a site-by-site basis that would minimize noise effects though methods such as incorporating increased setbacks and providing for sufficient noise barriers (buffering) around sensitive noise receptors, incorporating building

design/noise insulation measures to reduce exterior and interior noise levels to no more than 65 dBA and 45 dBA respectively, and requiring acoustical studies to identify appropriate site design and building design measures to reduce exterior and interior noise exposure; the Northeast Residential Alternative would also implement those policies.

Accordingly, impacts under the Northeast Residential Alternative would be similar with those of General Plan 2030, and would remain less than significant.

RECREATION

The overall amount of land designated for parks and open space under the Northeast Residential Alternative would be more than General Plan 2030. Specifically, this alternative designates an additional 60 acres of Open Space providing more parkland per 1,000 population than that of General Plan 2030. Subject to existing regulatory requirements and project-level mitigation, air quality, water quality, and noise impacts of new park construction consistent with this alternative would be less than significant and comparable to those of General Plan 2030.

TRANSPORTATION/CIRCULATION

It is anticipated that traffic impacts would be similar to General Plan 2030. Under the Northeast Residential Alternative, the traffic conditions at the existing intersections within the City, including the four existing intersections that are significantly impacted under current traffic conditions (I-215 SB and Cajalco Expressway – PM, I-215 NB and Ramona Expressway – PM, Nuevo Road and Ruby Drive – AM and PM (unsignalized), and I-215 NB and Redlands Avenue – PM), are anticipated to be further impacted as growth and development continues to occur under the Northeast Residential Alternative. A majority of the future year street and highway segments will be operating at LOS A through D. Twelve (12) segments are projected to be operating at LOS E or F by the Year 2030 compared to Fourteen (14) under General Plan 2030.

Accordingly, impacts under the Northeast Residential Alternative would be similar with those of General Plan 2030, and would remain significant and unavoidable.

UTILITIES

Utilities and service systems include water systems, wastewater (sewer), solid waste, energy and communication services. The demand for each of these services is driven and generally measured according to resident population. Based on the number of estimated dwelling units, the Northeast Residential Alternative projects a build-out population of approximately 162,450; build-out population projected in General Plan 2030 is 155,800. The difference in build-out population between the Northeast Residential Alternative and General Plan 2030 is an estimated 6,650 persons. With more residents, the demand for utilities and service systems

and the need for new facilities to house them will also be more under the Northeast Residential Alternative.

Impacts of the Northeast Residential Alternative associated with utilities and service systems would be increased compared to those of General Plan 2030, but would remain less than significant.

7.3.3 CONCLUSIONS

Adoption and implementation of the Northeast Residential Alternative would result in the following impacts:

Significant, Unavoidable Impact

Population, Employment, Housing
Air Quality
Transportation/Circulation
Land Use and Planning

Less Than Significant Impact

Aesthetics
Biological Resources
Cultural Resources
Geology and Soils
Hazards and Hazardous materials
Hydrology and Water Quality
Mineral Resources
Noise
Public Services
Recreation
Utilities and Service Systems

No Impact

Agricultural Resources
Mineral Resources

Although the Northeast Residential Alternative would result in significant, unavoidable impacts in the categories of Population, Employment and Housing, Air Quality, and Transportation/Circulation, the impacts to each would be marginally greater than those resulting from adoption and implementation of General Plan 2030.

Alternative 3, the Northeast Residential Alternative, satisfies all General Plan 2030 objectives:

- Recognize and adapt to changed conditions since preparation of the previous General Plan;
- Provide for balance in the types and acreages of land uses necessary for people to live, work, play and shop in Perris;
- Promote quality housing in attractive neighborhoods for households at all income levels and all stages of life;
- Accommodate new development consistent with infrastructure capacity and municipal services capabilities;
- Attract commerce and industry to provide jobs for residents at all economic levels and improve the City's jobs-housing balance;
- Facilitate upgrading of existing infrastructure including master storm drain improvements;
- Develop recreational opportunities for all segments of the community; and
- Implement the Multi-Species Habitat Conservation Plan (MSHCP).

This Page Left Blank Intentionally

VIII. SECTION 8.0: REFERENCES

Table of Contents

8.1 ORGANIZATIONS AND PERSONS CONSULTED

CITY OF PERRIS

- Olivia Barnes, Planning and Community Development Director, City of Perris
- Brad Eckhardt, Associate Planner, Department of Community Development, City of Perris
- Diane Sbardellati, Senior Planner, Department of Community Development, City of Perris
- Habib Motlagh, City Engineer, City of Perris
- Rich Johnson, Building Official/Fire Marshall, City of Perris

COUNTY OF RIVERSIDE

- Justin McGough, Fir Captain, Riverside County Fire Department – Perris Station
- Tim Williams, Battalion Chief, Riverside County Fire Department – Perris Station
- Lt. Pete Herrera, Police and Sheriff Department, Riverside County Sheriff Department – Perris Station
- Captain Guy Kestell, Chief of Police, Riverside County Sheriff Department – Perris Station
- Keith Downs, Executive Director, Riverside County Airport Land Use Commission
- Mark Smith, Deputy Administrator, Riverside County Library System
- Jason Uhley, Principle Engineer, Riverside County Flood Control and Water Conservation District

OTHER AGENCIES

- Emmanuelle Reynolds, Business Manager, Perris Union High School District
- Janet McClendon, Assistant Facilities Manager, Val Verde Unified School District
- Sandee Hackett, Director of Facilities, Val Verde Unified School District
- William E. Gagner, Jr., Director of Administrative Services, Perris Elementary School District
- Bruce E. Shaw, Director of Facilities, Menifee Union School District
- Elizabeth Lovsted, Facilities Planner/Engineer, Resource Development, Eastern Municipal Water District
- Frank Vargas, technical Supervisor, The Gas Company
- Judy Woolen, Public Affairs Manager, The Gas Company
- Bob Lopez, Regional Manager, Southern California Edison
- Ila Woodhall, Adelphia Cable
- Ted Teshima, Senior Architect, Office of Statewide Health Planning and Development
- Barbara Spoonhour, Solid Waste Program Manager, Western Riverside Council of Governments
- Russell Miller, California Department of Conservation

- Tom Mullins, California Office of Emergency Services
- State of California, Office of State Geologist
- Mark S. Milakovich, Manager, Economic Development, The Burlington Northern Santa Fe Railway Company
- Raymond Seamans, California Integrated Waste Management Board

8.2 REPORT PREPARATION AND PERSONNEL

CITY OF PERRIS

- Olivia Barnes, Director, Planning and Community Development, City of Perris
- Brad Eckhardt, Associate Planner, Department of Community Development, City of Perris

HOGLE-IRELAND, INC.

- David Lepo, Senior Project Manager, Hogle-Ireland, Inc.
- Alexa Washburn, Associate Project Manager, Hogle-Ireland, Inc.
- Brian Kurnow, Assistant Project Manager II, Hogle-Ireland, Inc.
- Charles Davis, Graphic Designer, Hogle-Ireland, Inc.
- Ray Bullard, Graphic Designer, Hogle-Ireland, Inc.

TECHNICAL SUBCONSULTANTS

Air Quality
- Michael Hendrix, Air Quality Analyst, Michael Brandman Associates
- Randy A. Nichols, AICP, Senior Project Manager, Michael Brandman Associates

Transportation and Circulation
- Georgiena M. Vivien, Vice President, VRPA Technologies, Inc.
- Stacey Stewart Kurz, Senior Transportation Planner, VRPA Technologies, Inc.

Noise
- Michael Brandman Associates

Biological Resources, Cultural and Paleontological Resources, Geologic and Seismic Hazards, Hydrology and Water Quality, Water Resources
- Randy A. Nichols, AICP, Senior Project Manager, Michael Brandman Associates

8.3 LITERATURE REFERENCES

- AICUZ Study, 1998, United States Air force, March ARB, California
- California Department of Water Resources, "Dam Breach and Inundation Study for Perris Dam," 2000
- City of Perris, General Plan, October 1991
- City of Perris, Housing Element Update, April 2001
- City of Perris, Municipal Code (various sections)
- EIP Associates, City of Corona General Plan Draft Environmental Impact Report, December 2003
- "Guidelines for California Environmental Quality Act", as amended December 1, 2003
- Michael Brandman Associates, Perris General Plan Update Noise Impact Assessment, January 2004
- Michael Brandman Associates, Air Quality Impact Analysis Report for the City of Perris General Plan Update, January 2004
- Michael Brandman Associates, City of Perris Conservation Element Update Background Reports, September 2003
- Riverside County Integrated Project, October 2003
- Riverside County General Plan Final Program EIR, October 2003
- Riverside County Airport Land Use Plan, 1986
- Southern California Association of Governments, "2004 Regional Transportation Plan," April 2004
- South Coast Air Quality Management District, "Final 2003 Air Quality Management Plan," August 2003
- South Coast Air Quality Management District, "1997 Air Quality Management Plan," November 1996
- South Coast Air Quality Management District, "CEQA Air Quality Handbook," November 2003

IX. Appendices

Appendix A: Initial Study

CITY OF PERRIS GENERAL PLAN AMENDMENT NO. PO1-0185: INITIAL STUDY

1. Project Title:

General Plan Amendment No. PO1-0185

2. Lead Agency Name and Address:

City of Perris
Department of Planning and Community Development
135 North "D" Street
Perris, California 92570-1998

3. Project Sponsor's Name and Address:

City of Perris
101 North "D" Street
Perris, California 92570-1998

4. Contact Person and Phone Number:

Olivia Gutierrez, Director
Planning and Community Development
City of Perris
135 North "D" Street
Perris, CA 92570-1998
(909) 943-5003
ogutierrez@perris-ca.org

5. Project Location:

Perris, Riverside County, California

6. Description of Project:

General Plan Amendment No. PO1-0185. Update of the General Plan for the City of Perris. The General Plan is a guide for the long-term physical development of the City

and is the basis for municipal land use regulations including the Zoning and Subdivision Ordinances.

7. Surrounding Land Uses and Setting:

The City of Perris encompasses approximately forty (40) square miles in northwestern Riverside County in the Perris Valley midway between the San Jacinto and the Santa Ana Mountains. The City is bordered on the north by the March Air Reserve Base/March Globalport and by the City of Moreno Valley, on the south by the unincorporated communities of Quail Valley and Sun City, on the southwest by the City of Canyon Lake, on the east by unincorporated areas of Riverside County, and on the west by the unincorporated community of Mead Valley and unincorporated Riverside County. Although the central, downtown area was developed around a railway station by the early 20th Century, the vast majority of land area now comprising the City of Perris was committed to agricultural production. With the diminution of agriculture and the rapid population growth of southern California, new housing was developed at a rapid pace in the late 1980's and early 1990's. Residential-serving commercial uses followed. Recent non-residential development has been dominated by large regional product distribution centers. Vast land areas within the City remain undeveloped.

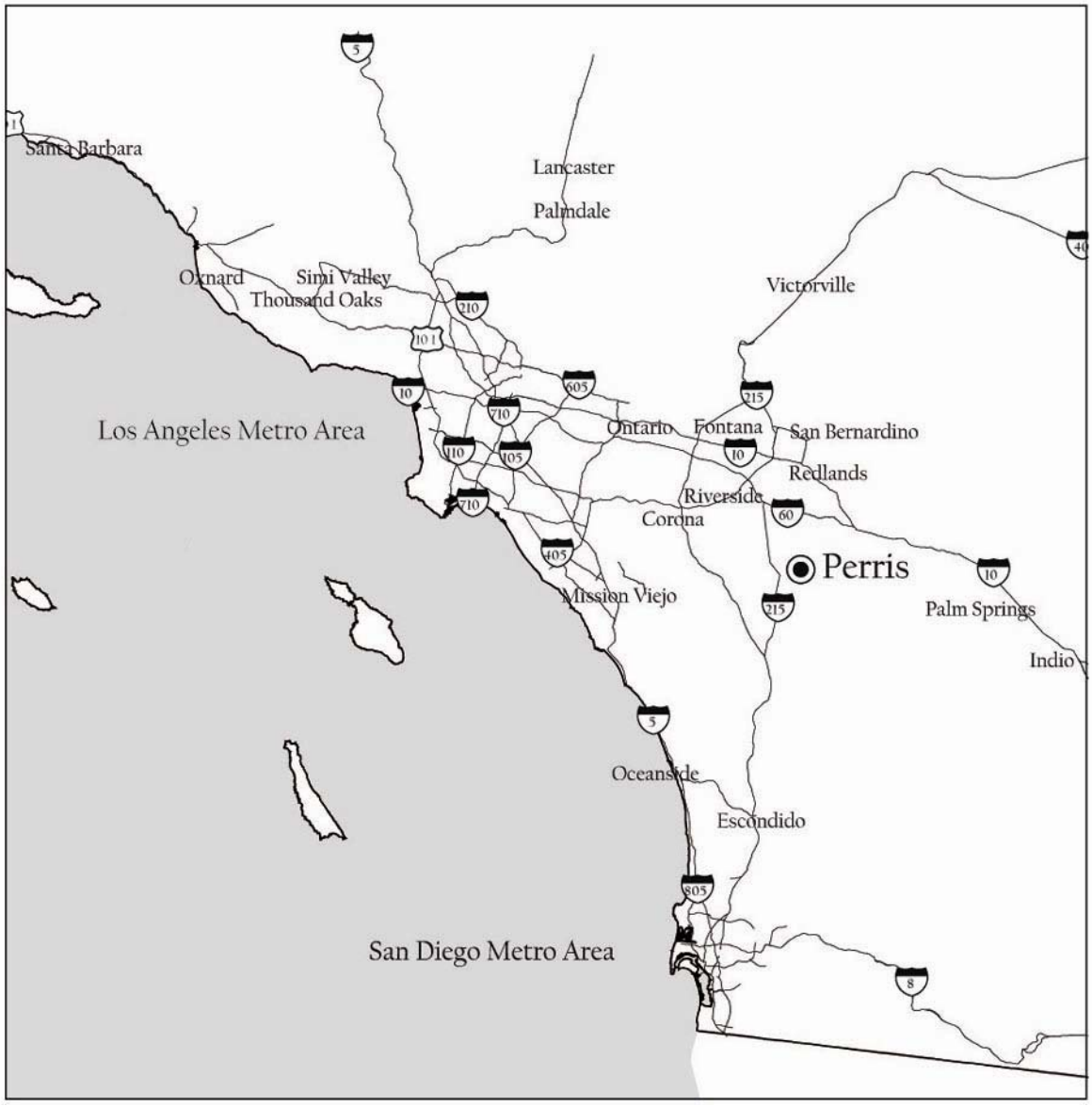
8. Other public agency approvals:

None

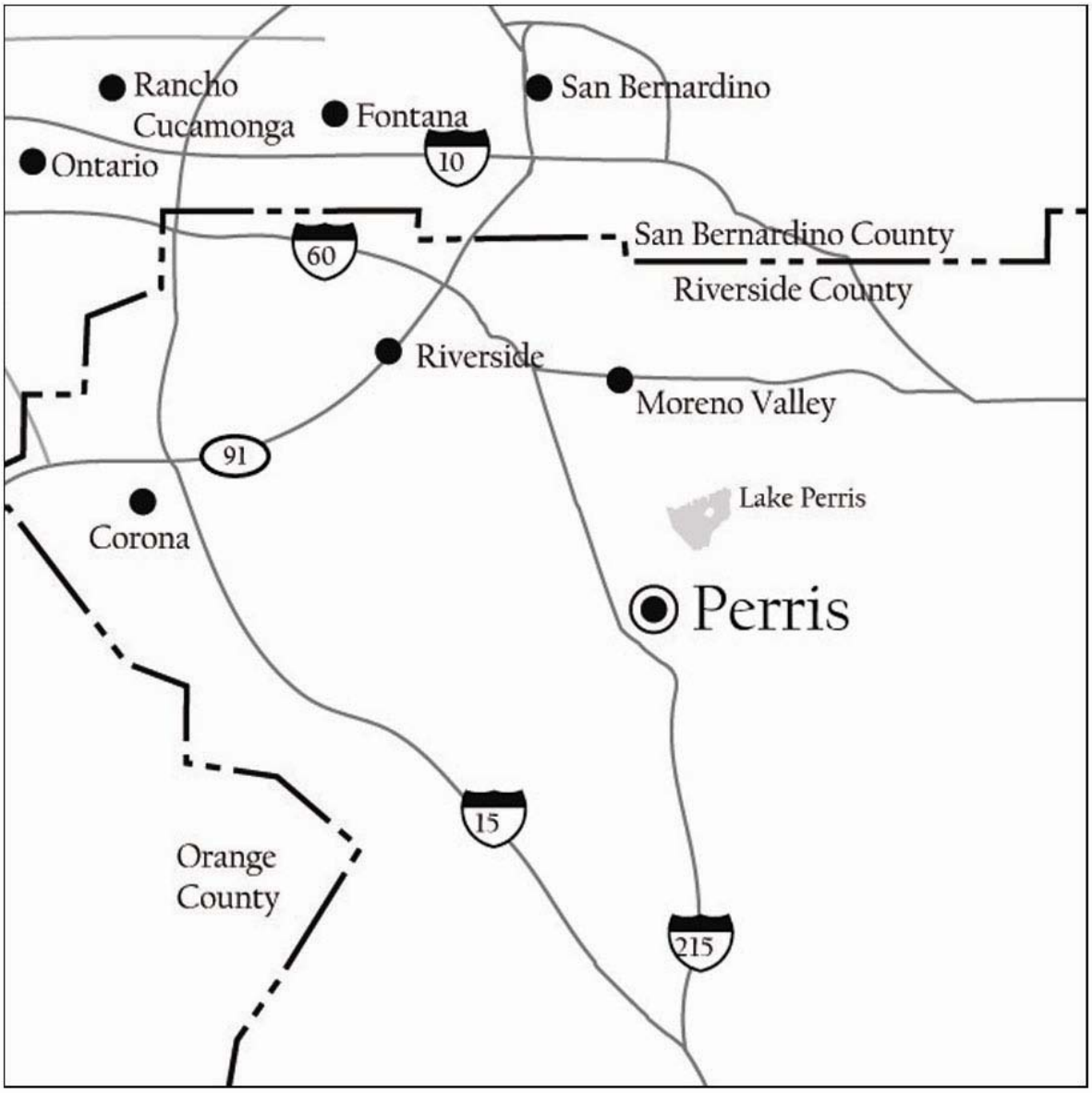
9. Initial Study prepared by:

David Lepo, Project Manager
Hogle-Ireland, Inc.
Consultant to the Lead Agency
42 Corporate Park, Suite 250
Irvine, CA 92606

Map 1: Regional Map



Map 2: Vicinity Map



SECTION 1: Environmental Checklist Form

Environmental Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics - Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐
II. Agriculture Resources - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒
III. Air Quality - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
IV. Biological Resources - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐
V. Cultural Resources - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
VI. Geology and Soils - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
VII. Hazards and Hazardous Materials - Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☒	☐	☐	☐

Environmental Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☒	☐	☐	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐
VIII. Hydrology and Water Quality – Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐
k) Result in significant alteration of receiving water quality during or following construction?	☐	☐	☒	☐
l) Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas?	☐	☐	☒	☐
m) Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters?	☐	☐	☒	☐
n) Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?	☒	☐	☐	☐
o) Create significant increases in erosion of the project site or surrounding areas?	☒	☐	☐	☐
IX. Land Use and Planning - Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?	☐	☐	☐	☒
X. Mineral Resources - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
XI. Noise - Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐

Environmental Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐
XII. Population and Housing - Would the project:				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☒	☐	☐	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIII. Public Services - Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire Protection?	☒	☐	☐	☐
ii) Police Protection?	☒	☐	☐	☐
iii) Schools?	☒	☐	☐	☐
iv) Parks?	☒	☐	☐	☐
v) Other public facilities?	☒	☐	☐	☐
XIV. Recreation:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Transportation/Traffic - Would the project:				
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☒	☐	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☒	☐	☐	☐
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒
XVI. Utilities and Service Systems - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☒	☐	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐

Environmental Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☒	☐	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☒	☐	☐	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
h) Would the project include a new or retrofitted stormwater treatment control Best Management Practice (BMP), (e.g., water quality treatment basin, constructed treatment wetland), the operation of which could result in significant environmental effects (e.g., increased vectors and odors)?	☒	☐	☐	☐
XVII. Mandatory Findings of Significance:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐

Environmental Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☒	☐	☐	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Environmental Factors That Could Result in a Potentially Significant Impact		
The environmental factors checked below would be potentially affected by the project, involving at least one impact that is a "potentially significant impact" as indicated by the preceding checklist and supported by evidence provided in Section 3.		
☒ Aesthetics	☐ Agriculture Resources	☒ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☒ Hazards & Hazardous Materials	☒ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☒ Noise	☒ Population/Housing
☒ Public Services	☒ Recreation	☒ Transportation/Traffic
☒ Utilities/Service Systems	☒ Mandatory Findings of Significance	

ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation (To be completed by the Lead Agency.):

☐ I find that the proposed project could not have a significant effect on the environment, and a Negative Declaration will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A Mitigated Negative Declaration will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an Environmental Impact Report is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An Environmental Impact Report is required, but it must analyze only the effects that remain to be addressed.

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

Signed _____ Date _____

David Lepo, Project Manager
Hogle-Ireland, Inc.
Consultant to the Lead Agency
42 Corporate Park, Suite 250
Irvine, CA 92606

SECTION 2: Environmental Checklist Responses

The following narrative corresponds with and provides the rationale for the level of impact indicated for each environmental issue related to the proposed project and identified in the "Environmental Checklist Form".

I. AESTHETICS

ENVIRONMENTAL CHECKLIST RESPONSES

a) Have a substantial adverse effect on a scenic vista.

Less than Significant Impact

Because the bulk of developable land within the City of Perris is located on the flat, broad basin, virtually all future building construction consistent with land use and development standards set forth in the project General Plan will obstruct views to the foothills from at least some vantage points. The criterion, however, relates to a scenic vista more narrowly defined as a view through an opening, between a row of buildings or trees, or at the end of a vehicular right-of-way. To this end, the east-west and north-south oriented roadway network and the streetscapes that define them will frame and preserve scenic vistas from public rights of way to the distant horizons and foothills. Owing to the flatness of the basin, the view corridors extend for miles along current and planned roadways preserving scenic vistas from the broad basin to the surrounding foothills. Accordingly, the impact is less than significant and no mitigation measures are proposed.

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway?

Less Than Significant Impact

Large rocks scattered among the undeveloped, rolling topography in the west-central area of the City of Perris are an obvious presence in the visual landscape in this area. No one rock or collection of rocks in this landscape is notable by virtue of unique formation, size, or character. The presence of the rocks has been noted in development project applications reviewed by the Planning Commission and has not resulted in a request for or a finding that the rocks are a significant scenic resource requiring protection. No notable stands of native or mature trees exist in the City and no impact is associated with development consistent with the General Plan. Impacts on significant scenic resources, therefore, are less than significant.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact

The project General Plan retains the lot coverage, floor area ratios, and intensity standards for non-residential development, and density standards for residential development, as have been in place since adoption of the 1991 General Plan. Future development will be comparable in size and volume with existing development and is not expected to degrade the existing visual character or quality of the Perris environment.

The project General Plan directs revision of Zoning Ordinance design standards for configurations of single-family homes on small lots as a means to improving

streetscape aesthetics. Similarly, residential subdivisions will be required to include landscaped common area setbacks and masonry walls at subdivision perimeters adjoining public rights-of-way as a means to improving the appearance of residential neighborhoods.

The project General Plan does not expand the range of permitted uses within any land use designation to include uses that, by their nature, degrade the quality of the visual environment such as mineral extraction operations or outdoor vehicle salvage. Any alteration of the visual environment resulting from development consistent with the project General Plan, therefore, is deemed to be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime view in the area?

Potentially Significant Impact

Development consistent with the General Plan in an area that was previously and largely undeveloped will introduce direct and reflected light sources resulting in a typical urban night sky such that visibility of celestial bodies is diminished. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

II . AGRICULTURAL RESOURCES

ENVIRONMENTAL CHECKLIST RESPONSES

a)Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Important, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact

The 1991 General Plan Land Use Element eliminated the "agricultural" land use designation. Accordingly, the Environmental Impact Report prepared in conjunction with the 1991 General Plan identified conversion of agricultural land as a significant cumulative impact. Findings and facts indicating that certain social and economic factors outweighed the cumulative impacts associated with conversion of agricultural land to non-agricultural use and a Statement of Overriding Considerations were thereby adopted. Accordingly, adoption and implementation of the project General Plan will have no impact.

a) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact

The 1991 General Plan Land Use Element redesignated all agricultural lands for uses other than agriculture. Remaining land zoned for agricultural use is subject to a Williamson Act contract for which a notice of non-renewal has been filed indicating that the land will be taken out of agricultural production. Adoption and implementation of the project General Plan will have no impact on the non-renewal.

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

No Impact

Areas surrounding existing agricultural uses have been or will be developed for non-agricultural, urbanized uses. All properties in agricultural production are designated for similar, non-agricultural urbanized uses. The project General Plan will replace the 1991 General Plan whose Land Use Element included no "agricultural" designation. Therefore, adoption and implementation of the project General Plan will have no impact.

III. AIR QUALITY

ENVIRONMENTAL CHECKLIST RESPONSES

a) Conflict with or obstruct implementation of an applicable air quality plan?

No Impact

The 1997 Air Quality Management Plan (AQMP) of the South Coast Air Quality Management District was developed consistent with the Southern California Association of Governments' (SCAG) Regional Transportation Plan (RTP). The RTP is designed to achieve a balance between the numbers of jobs and the numbers of housing units available to employees within SCAG sub-regions. The Housing Element, adopted in 2001, indicates an imbalance between the number of jobs in the City and the number of dwelling units. Approximately one (1) job exists in the City for each dwelling unit, a jobs-housing balance ratio of 1.0. The RTP sets a target jobs-to-housing ratio of 1.27 to achieve "balance".

Implementation of the project General Plan will accommodate the addition of up to 21,000 jobs by the year 2030. Approximately 19,000 total dwelling units are anticipated at that time. Based on these projections, the resultant jobs/housing ratio of 1.1 represents progress toward the RTP target of 1.27 and a jobs-housing balance. In addition, the General Plan identifies and directs implementation of control and mitigation measures recommended for local agencies in the 1997 AQMP. For these reasons, the General Plan will not conflict with or obstruct implementation of the 1997 Air Quality Management Plan. Accordingly, no impact is anticipated.

b) Violate any air quality standard or contribute to an existing or projected air quality violation?

Potentially Significant Impact

Emissions resulting from development associated with the General Plan may contribute criteria pollutants to the South Coast Air Basin, which is currently a non-attainment area and in violation of air quality standards. As a result, adoption and implementation of the General Plan may indirectly result in potentially significant

impacts and additional analysis is needed. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

c) *Result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?*

Potentially Significant Impact

As indicated in the 1997 Air Quality Management Plan of the South Coast Air Quality Management District, attainment of State and federal standards for all criteria pollutants is expected by 2006. However, development associated with the General Plan may contribute criteria pollutants to the South Coast Air Basin that is currently a non-attainment area. Therefore, implementation of the General Plan may result in potentially significant cumulative impacts, and additional analysis is needed. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

d) *Expose sensitive receptors to substantial pollutant concentrations?*

Potentially Significant

Land use designations that permit sensitive receptors including residential uses, schools, hospitals, and convalescent homes near roadways and under approach and departure flight paths at March Air Reserve Base may result in exposure of sensitive receptors to significant levels of pollutant concentrations. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

e) *Create an objectionable odor affecting a substantial number of people?*

Less Than Significant Impact

General Industrial and Light Industrial uses accommodated in the project General Plan are the most likely sources of odors. These may include food processing, automobile painting, and furniture finishing operations. Commercial uses including restaurants may emit food cooking odors through kitchen exhaust fans of restaurants.

Appropriate filtering and emission controls consistent with Air Quality Management District regulations will limit such emissions. Accordingly, the impact associated with objectionable odors is less than significant.

IV. BIOLOGICAL RESOURCES

ENVIRONMENTAL CHECKLIST RESPONSES

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

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

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

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact

The project General Plan includes a Conservation Element for which a biological survey was conducted to identify plant communities and important wildlife habitat in the City. As described in greater detail in the Conservation Element, the Riversidean and Sage Scrub and Southern Willow Scrub plant communities in the City of Perris are considered sensitive habitats by the California Department of Fish and Game as these are home to plant and wildlife species that are either "threatened" or "endangered". The northern portion of the Perris Valley Channel contains freshwater marsh. The San Jacinto River channel includes the Southern Willow Scrub plant community that is habitat for various "threatened" or "endangered" plant and wildlife species. Disturbed Riparian Scrub plant communities are found in both the Perris Valley Channel and the San Jacinto River Channel.

Development consistent with the project General Plan could disrupt or reduce habitat necessary to survival of threatened or endangered species. The continued loss of habitat to new development and the cumbersome process of environmental review and habitat mitigation on a project-by-project basis led to preparation of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The City of Perris has joined the County of Riverside and other western Riverside County cities in adopting the MSHCP ordinance.

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP or Plan) is intended to create a network of permanent open space to conserve a variety of natural communities and other undeveloped lands that would ensure long-term survival of 146 species of plants and animals. In effect, Plan participants will have the authority to implement land use decisions consistent with the MSHCP without project-by-project review and permitting by the Wildlife Agencies.

The MSHCP includes a wildlife corridor habitat preserve in the City of between 720 and 1,400 acres. This area includes private properties determined to have biological value proposed for conservation based on the best available data and literature on habitat assessment, species occurrences, coastal sage scrub quality modeling, existing and planned land uses, and general conservation biology principles. This corridor is vital to the MSHCP's conceptual conservation scenario because habitat fragmentation and isolation lead to extinction of local populations, which is the most serious threat to biological diversity.

Policy 4.A and Implementation Measures 4.A.1 and 4.A.2 of the project General Plan direct review of all development projects and implementation of appropriate mitigations in conformity with requirements of the adopted Multiple Species Habitat Conservation Plan. Policy 3.A and Implementation Measures 3.A.1, 3.A.2, and 3.A.3 require maintenance of sensitive plant and wildlife species data base, biological surveys prior to development project approval in areas of moderate to sensitive habitat potential, and development project compliance with State and federal stormwater runoff and water quality permitting procedures. Implementation of these measures will reduce the impact on listed species, critical habitat, wetlands, and wildlife movement to a less than significant level.

e) *Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?*

No Impact

The project General Plan does not affect compliance with locally applicable policies and ordinances including mitigation fee programs such as that for preservation of the Stevens Kangaroo Rat. Accordingly, no impact will result from adoption and implementation of the project General Plan as a result of conflict with any locally applicable policies or ordinances protecting biological resources.

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Less Than Significant Impact

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP or Plan) is intended to create a network of permanent open space to conserve a variety of natural communities and other undeveloped lands that would ensure long-term survival of 146 species of plants and animals. In effect, Plan participants will have the authority to implement land use decisions consistent with the MSHCP without project-by-project review and permitting by the Wildlife Agencies.

The MSHCP includes a wildlife corridor habitat preserve in the City of between 720 and 1,400 acres. This area includes private properties determined to have biological value proposed for conservation based on the best available data and literature on habitat assessment, species occurrences, coastal sage scrub quality modeling, existing and planned land uses, and general conservation biology principles. This corridor is

vital to the MSHCP's conceptual conservation scenario because habitat fragmentation and isolation lead to extinction of local populations, which is the most serious threats to biological diversity.

Policy 4.A and Implementation Measures 4.A.1 and 4.A.2 of the project General Plan direct review of all development projects and implementation of appropriate mitigations in conformity with requirements of the adopted Multiple Species Habitat Conservation Plan. Policy 3.A and Implementation Measures 3.A.1, 3.A.2, and 3.A.3 require maintenance of sensitive plant and wildlife species data base, biological surveys prior to development project approval in areas of moderate to sensitive habitat potential, and development project compliance with State and federal stormwater runoff and water quality permitting procedures. Adoption and implementation of the project General Plan will result in reduction of impacts on listed species, critical habitat, wetlands, and wildlife movement to a less than significant level.

V. CULTURAL RESOURCES

ENVIRONMENTAL CHECKLIST RESPONSES

a) Cause a substantial change in the significance of a historical resource as defined in Section §15604.5?

Less Than Significant Impact

The Santa Fe Train Depot and Southern Hotel Building are listed in the National Register of Historic Places. The California Public Resources Code, by definition, includes these two structures as "historical resources". Any proposal that would result in substantial adverse change in either of these buildings including demolition, destruction, relocation, or alteration of the building or its immediate surroundings would require preparation of an Environmental Impact Report pursuant to the California Environmental Quality Act before any alteration could proceed. The project General Plan does not anticipate or promote any such alteration to these historic resources. Accordingly, the impact of adoption and implementation of the General Plan is determined to be less than significant.

The Perris Valley Historical Association has identified fifty-seven structures of local interest. All structures indicated are within the geographic area subject to the City of Perris Downtown Specific Plan. The Downtown Specific Plan includes as "Goal – Historic" to "Develop a plan where existing historic buildings and artifacts are preserved and rehabilitated and are part of the fabric of the downtown plan." Consistent with this Goal, the Specific Plan sets forth the Objective relative to historic structures or artifacts to " . . . preserve and utilize the buildings as homes, businesses or uses conducive to the benefit of the downtown." The project General Plan accommodates and is consistent with the Downtown Specific Plan. Consequently, adoption and implementation of the General Plan will not result in changes to the Downtown Specific Plan. Protection of historical resources pursuant to Goals and Objectives of the Specific Plan will reduce the potential for change to historical resources to a less than significant level.

b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?

Less Than Significant Impact

According to files at the Eastern Information Center at the University of California – Riverside, nine (9) prehistoric sites are located within the City limits of Perris while eleven (11) occur within ¼-mile-wide of the municipal limits. Most of these sites consist of milling slick sites, but there are several sites exhibiting extensive pictographs (rock art), and a few small stone flake scatters. Ten historic archaeological sites occur in the City limits and none are located in the buffer zone. These sites consist of the remnants (such as foundations) of historic buildings and/or ranch complexes. Ninety-one (91) historic sites occur in the City limits and seven (7) are located in the buffer zone.

Much of the geographic area of the City of Perris has a medium to high potential to contain significant fossil resources. The Conservation Element of the project General Plan includes the following Implementation Measures appropriate to preventing changes to significant archaeological resources in the City of Perris:

IV.A.2 For all projects subject to CEQA, applicants will be required to submit results of an archaeological records search request through the Eastern Information Center, at the University of California, Riverside.

IV.A.3 Require Phase I Surveys for all projects located in areas that have not previously been surveyed for archaeological or historic resources, or which lie near areas where archaeological and/or historic sites have been recorded.

Adoption of the project General Plan, including these Implementation Measures, will reduce the impact on significant archaeological resources to a less than significant level.

c) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?

Less Than Significant Impact

A paleontological records search was conducted for the area within the Perris City limits and levels of sensitivity developed, based on the rock units and the kinds of fossils recovered from these and similar rock units in the general vicinity. Although few paleontological excavations have taken place in the Perris Valley, numerous fossils were recovered from various rock units during excavations at the Domenigoni Reservoir southeast of the City that allowed the likelihood for recovery of fossils in the Perris Valley to be more reliably defined.

The likelihood for fossil recovery is indicated in each of five geographic areas of the City and represented on the Paleontological Sensitivity Map in the Conservation Element of the project General Plan. Identification and preservation of significant fossils will be effected through Implementation Measure 5.A.4 of the Conservation Element of the project General Plan:

IV.A.4 In Area 1 and Area 2 shown on the Paleontological Sensitivity Map, paleontologic monitoring of all projects requiring subsurface excavations will be required once any excavation begins. In Areas 4 and 5, paleontologic monitoring will be required once subsurface excavations reach five feet in depth, with monitoring levels reduced if appropriate, at the discretion of a certified Project Paleontologist.

Project General Plan Conservation Element Implementation Measure 5.A.4 will reduce potential impacts to paleontological resources to a less than significant level.

d) Disturb any human remains, including those interred outside formal cemeteries?

Less Than Significant Impact.

No known sites likely to contain human remains have been identified. In the event that human remains are discovered during development of any site, the project proponent will be required to comply with the State Health and Safety Code 7050.5, cited below:

"If human remains are encountered, the state Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the county coroner has made a determination of the origin and disposition pursuant to Public Resources Code 5097.98. The county coroner must be notified immediately of the find. If the remains are determined to be prehistoric, the coroner is required to notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the owner of the land or his/her authorized representative, the descendant may inspect the site of the discovery. The descendant shall complete the inspection within 24 hours of notification of the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials."

Mandatory compliance with the State Health and Safety Code requirements in the course of excavation for any development project accommodated through implementation of the project General Plan renders this impact less than significant.

VI. GEOLOGY AND SOILS

ENVIRONMENTAL CHECKLIST RESPONSES

a) Expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving:

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

No Impact.

Active faults that may affect the planning area covered by the project General Plan are the San Andreas, San Jacinto, Cucamonga, and Elsinore Faults (see Exhibit 7, Earthquake Fault Zones). None of these faults are located in the area covered by the project General Plan. The State Division of Mines and Geology has identified no Alquist-Priolo Earthquake Fault Zones (areas likely to experience surface rupture) in the City, and ground surface rupture is expected to have no impact.

ii) Strong Seismic Shaking?

Less Than Significant Impact

Potential ground motion values for Riverside County, according to studies by scientists in the National Seismic Hazard Mapping Program, are among the highest in southern California, because of proximity to major fault systems with high earthquake recurrence rates. The level of potential ground motion in Perris is considered "Very High" on the scale of probable motion, but is lower than that of most other cities in the County that fall into the "Extremely High" category. Ground motion of this degree can result in substantial damage.

The Safety Element of the project General Plan addresses potential seismic impacts and includes Implementation Measure I.E.5 relative to adoption and enforcement of the current California Building Codes that require that structures be designed to meet or exceed the seismic safety standards set forth therein. Therefore, ground-shaking impacts to those living and working in buildings developed pursuant to the project General Plan are less than significant.

iii) Seismic related ground failure, including liquefaction?

Less Than Significant Impact

The State Division of Mines and Geology has not prepared seismic hazard mapping for Riverside County indicating areas of potential liquefaction risk. Site specific geotechnical studies are the only practical and reliable way of determining the specific liquefaction potential of a site; however, a determination of general risk potential can be provided based on soil type and depth of groundwater. Areas containing alluvium

soil deposits are often susceptible to seismically induced liquefaction. As noted earlier, the Perris Valley is comprised of extensive alluvial deposits resulting from erosion of sediments from the San Jacinto Mountain Range. Although depths to ground water generally exceed 100 feet, the central and northeastern parts of the planning area are comprised of materials considered susceptible to moderate to very high liquefaction potential.

The Safety Element of the project General Plan includes discussion of potential impacts associated with liquefaction and a Liquefaction Susceptibility Map. The Map will be used in identifying future developments that will be subject to specific geotechnical investigations to determine susceptibility to liquefaction. Building and site preparation consistent with recommendations included in the geotechnical report and conforming to seismic requirements of the California Building Codes will minimize susceptibility to risks associated with liquefaction.

Implementation Measure I.E.1 of the Safety Element of the project General Plan directs geologic and geotechnical investigations in areas of potential liquefaction risk and Implementation Measure I.E.8 directs update of the Liquefaction Susceptibility Map as new data is obtained. Conformity with these Implementation Measures and with requirements of the California Building Codes reduces the risk of seismic ground failure to future development accommodated by the project General Plan to a less than significant level.

Less Than Significant Impact

iv) Landslides?

A combination of geologic conditions leads to landslide vulnerability. These include high seismic potential; rapid uplift and erosion resulting in steep slopes and deeply incised canyons; highly fractured and folded rock; and rock with inherently weak components such as silt or clay layers. The most significant factors that contribute to slope failure include slope height and steepness, shear strength and orientation of weak layers in the underlying geologic units, and pore water pressures. The western and southwestern portions of the planning area covered by the General Plan include steep slopes with slopes or of 30 percent or greater.

The Slope Instability Map of the Safety Element of the project General Plan indicates those areas of the City where new development may be at risk from seismically induced landslides and rockfalls. The Safety Element includes Implementation Measures to reduce the risk to new development of seismically-induced landslides and rockfalls. Implementation Measure I.E.1 requires geologic and geotechnical investigations prior to development in areas identified to be at risk. Implementation Measure I.E.3 requires that engineered slopes be designed according to state-of-the-art engineering standards to resist seismically induced slope failure. Implementation Measure I.E.6 prohibits reconstruction of structures for human occupancy that have been damaged or destroyed by failed slopes unless a geotechnical report shows that remedial measures will sufficiently stabilize the slope to make the site suitable for development.

Adoption of the Project General Plan including Safety Element Implementation Measures will reduce the impact to future development from seismically induced landslides and rockfalls to a less than significant level.

b) *Result in substantial soil erosion or the loss of topsoil?*

Less Than Significant Impact

Approximately one-half of the geographic area of the City of Perris is comprised of land previously cultivated and now lying fallow and undeveloped. This land is highly susceptible to wind and water erosion. Adoption and subsequent implementation of the General Plan will have no direct effect on soil erosion. Indirect effects will result from development, consistent with the project General Plan, on these fallow fields.

All new development pursuant to the project General Plan will be subject to California Building Standards Codes that require erosion control and grading plans prior to issuance of a grading permit as a means to mitigate soil erosion to the extent practicable both during construction and operational phases.

As a co-permittee with the County of Riverside under the National Pollutant Discharge Elimination System, the City of Perris requires that development projects incorporate structural mitigation measures and implement best management practices in both construction and operational phases to prevent stormwater runoff, including water-born soil, from leaving the project site.

Development projects subject to CEQA are required to incorporate construction-phase mitigation measures to protect air quality and minimize wind erosion pursuant to South Coast Air Quality Management District Rule 403 that includes watering of project sites during dry periods and reduction in construction vehicle speeds to minimize fugitive dust, and on-site washing of construction vehicle tires to prevent transfer of soil to surface streets.

Chapter 19.70, "Landscaping", of the City of Perris Zoning Ordinance applies to new and existing development and includes standards for ground cover, turf, and other plant materials appropriate to preventing soil erosion.

Continued implementation of applicable federal, State, and local ordinances, as indicated, through the development review process prior to issuance of project permits will result in a less than significant impact related to soil erosion.

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

Less Than Significant

The Slope Instability Map of the Safety Element of the project General Plan indicates those areas of the City where new development may be at risk from seismically induced landslides and rockfalls. The Safety Element includes Implementation

Measures to reduce the risk to new development of seismically-induced landslides and rockfalls. Implementation Measure I.E.1 requires geologic and geotechnical investigations prior to development in areas identified to be at risk. Implementation Measure I.E.3 requires that engineered slopes be designed according to state-of-the-art engineering standards to resist seismically induced slope failure. Implementation Measure I.E.6 prohibits reconstruction of structures for human occupancy that have been damaged or destroyed by failed slopes unless a geotechnical report shows that remedial measures will sufficiently stabilize the slope to make the site suitable for development.

Adoption of the Project General Plan including Safety Element Implementation Measures will reduce the impact to future development from seismically induced landslides and rockfalls to a less than significant level.

Liquefaction occurs when shallow, fine to medium-grained sediments saturated with water are subjected to strong seismic ground shaking. Liquefaction usually occurs when the underlying water table is 50 feet or less below the surface. Under this condition, the soil loses its ability to support uneven loads such as structures and natural or artificial slopes and acts as a liquid. Excess water pressure is vented upward through fissures and cracks, and a water slurry bubbles onto the ground surface. Liquefaction related effects include a decrease in the ability of soil to support buildings, bridges or other structures; a "wave-type" of ground movement; lateral spreading, or ground movement similar to lava flowing from a volcano; and increased pressure on retaining walls resulting in the walls tilting or sliding.

The Safety Element of the project General Plan includes discussion of potential impacts associated with liquefaction and a Liquefaction Susceptibility Map. The Map will be used in identifying future developments that will be subject to specific geotechnical investigations to determine their susceptibility to liquefaction. Building and site preparation consistent with recommendations included in the geotechnical report and conforming to seismic requirements of the California Building Codes reduces the risk from liquefaction to new development consistent with the project General Plan to a less than significant level.

Implementation Measure I.E.1 of the Safety Element of the project General Plan directs geologic and geotechnical investigations in areas of potential liquefaction risk and Implementation Measure I.E.8 directs update of the Liquefaction Susceptibility Map as new data is obtained. Conformity with these Implementation Measures and with requirements of the California Building Codes reduces the risk to future development accommodated by the project General Plan to a less than significant level.

Settlement is defined as areas that are prone to different rates of surface settling and densification (differential compaction), with or without seismic shaking, and are underlain by sediments that differ laterally in composition or degree of existing compaction. Differential settlement can damage structures, pipelines and other subsurface entities. Areas prone to differential compaction are difficult to identify; however, it is known that alluvial soils as exist in the Perris Valley are more susceptible to settlement than other soil types. Settlement and fissuring have been well

documented in Riverside County. Most of the early documented cases affected only agricultural land or open space. As urban areas have expanded, so too have the impacts of settlement on structures for human occupancy. Instances of settlement have been recorded in the San Jacinto Valley, but so far, not within the Perris Valley.

Development in areas subject to seismically induced settlement should include specific subsurface geotechnical investigations that address the potential for seismically induced settlement on a site-specific basis. This hazard can be mitigated with proper site preparation that involves the densification of the subsurface soils, and with proper foundation design that can accommodate a limited degree of differential settlement due to seismic shaking. The Safety Element of the project General Plan includes Implementation Measures to achieve these ends. Implementation Measure I.E.1 requires geological and geotechnical investigations in areas subject to liquefactions, landslides, slope instability, and settlement. Implementation Measure I.E.2 requires mitigation of site conditions consistent with results of studies required pursuant to I.E.1. Implementation Measure I.E.4 requires cut and fill transitions lots to be over-excavated and requires uniform fill depths beneath structures to mitigate potential differential settling. Compliance with California Building Codes and the Safety Element of the project General Plan reduce the risk to new development associated with seismically-induced settlement to a less than significant level.

d) *Be located on expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.*

Less Than Significant Impact

Expansive soils have a significant amount of clay particles that can give up water (shrink) or take on water (swell). The change in volume exerts stress on buildings and other loads placed on these soils. The occurrence of these soils is often associated with geologic units having marginal stability. Expansive soils can be widely dispersed, found in hillside areas as well as low-lying areas in alluvial basins. Soils testing to identify expansive characteristics and appropriate mitigation measures are now routinely required by grading and building codes. Special engineering designs have been developed to effectively alleviate problems caused by expansive soils. These include the use of reinforcing steel foundations, drainage control devices, over-excavation and backfilling with non-expansive soil.

Mitigation Measure I.E.7 of the Safety Element of the project General Plan directs that all development projects accommodated by the General Plan include geotechnical studies necessary to determine the potential for damage from expansive soils and identification of appropriate site and structural design standards necessary to reduce the potential risk of damage and injury to a less than significant level.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wasted disposal systems where sewers are not available for the disposal of waste water?

No Impact.

All new development accommodated by the project General Plan will be served by public sewer systems. Therefore, no impacts to soils from alternative wastewater disposal systems will result from the proposed project.

VII. HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL CHECKLIST RESPONSES

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Less Than Significant Impact

The Department of Environmental Health of the Riverside County Community Health Agency is responsible for regulating the operations of businesses and institutions that handle hazardous materials or generate hazardous wastes in the City of Perris. As part of the State-mandated Certified Unified Program administered by the California Environmental Protection Agency, the Department of Environmental Health coordinates regulation and enforcement for the following programs related to hazardous materials and wastes:

Household Hazardous Waste
Provides for periodic collection of hazardous household wastes at locations throughout the County.

Hazardous Waste Minimization
In conjunction with the Riverside County Fire Department, responds to hazardous materials and hazardous waste incidents including spills and illegal dumping.

Underground Storage Tanks (UST)
Monitors remediation of sites contaminated by leaking petroleum tanks and regulates installation and operation of underground storage tanks containing hazardous substances.

Hazardous Waste Generator Permits
Regulates facilities that generate a hazardous waste.

Hazardous Materials Handlers Program
Regulates facilities that handle and store specified types and quantities of hazardous materials.

Hazardous materials include pesticides, chlorine, gasoline, paint, and cleaning solvents. Retail sales of these materials typically require inventory quantities

sufficient to require registration with and monitoring by the County Department of Environmental Health. Moreover, these common hazardous materials are often maintained in close proximity to concentrations of population. Examples include gasoline storage at automobile service stations and swimming pool chemicals at hardware stores and home centers.

Hazardous wastes, more often than hazardous materials, are perceived as a risk in areas of concentrated heavy industry. Examples include waste acids and solvents after use in metals finishing and coating operations. In other cases, hazardous wastes are generated in non-industrial areas and include used motor oil accumulated at automobile service stations.

The project General Plan anticipates future development that will include uses similar to those as have located in the City of Perris over the last decade and will likely include residential uses, residential-serving retail uses, and additional distribution and warehousing uses. Subject to regulation and monitoring by the Department of Environmental Health of the Riverside County Community Health Agency, such future uses will represent a less than significant impact to the public or the environment through use, handling, or transport of hazardous materials.

Future uses that would entail the routine use, transport, or disposal of hazardous materials in quantities or in a manner sufficient to constitute a significant hazard to the public or the environment are not known at this time. Any such proposed uses will be subject to project-based CEQA review. Appropriate environmental documentation pursuant to CEQA will identify the extent of any potential hazard and all appropriate mitigation measures that may be incorporated into the project to reduce the risk to a less than significant level.

b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Less than Significant Impact

The project General Plan anticipates future development that will include uses similar to those as have located in the City of Perris over the last decade and will likely include residential uses, residential-serving retail uses, and additional distribution and warehousing uses. Subject to regulation and monitoring by the Department of Environmental Health of the Riverside County Community Health Agency, such future uses will represent a less than significant impact to the public or the environment through upset and accident conditions involving release of hazardous materials.

Proposed future uses that could reasonably be foreseen as sources of release of hazardous materials, through upset or accident, and a potentially significant hazard to the public or the environment will be subject to project-based CEQA review. Appropriate environmental documentation pursuant to CEQA will identify the extent

of any potential hazard and all appropriate mitigation measures that may be incorporated into the project to reduce the risk to a less than significant level.

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Less Than Significant Impact

The Land Use Element of the project General Plan changes the land use designations at 26 locations throughout the City of Perris. Five existing or future schools sites are located within one-quarter mile of a location slated for land use designation change.

A future school site on Indian between Walnut and Placentia and an existing school on Indian at Water are within one-quarter mile of a location on Indian between Placentia and Orange slated for change from "Business Park" to ""Residential 22". An existing school on Park between 4th and 8th is located within one-quarter mile of a location on 4th between Park and Bellamo slated for redesignation from "Commercial Community" to ""Residential 4", and within one-quarter mile of the flood detention basin on 3rd at Kruse to be redesignated from "Residential 4" to "Public Facilities". An existing school on "A" Street at 12th is within one-quarter mile of a location on Ellis at "A" Street to be redesignated from "Commercial Community" to "Residential 4". As commercial and industrial uses are the likely destinations for or generators of hazardous materials and wastes, the change to non-commercial/non-industrial use designation in each instance diminishes the likelihood of future property use at the respective locations that would produce hazardous emissions or include handling of hazardous materials or hazardous wastes in quantities sufficient to represent a significant hazard. Accordingly, the impact associated with this change is less than significant.

No other changes based on Objectives, Policies, or Implementation Measures of the project General Plan is expected to promote or otherwise result in future land uses producing hazardous emissions or including the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Proposed future uses that could produce hazardous emissions or reasonably be foreseen as sources of release of hazardous materials, through upset or accident, and a potentially significant hazard to the public or the environment will be subject to project-based CEQA review. Appropriate environmental documentation pursuant to CEQA will identify the extent of any potential hazard and all appropriate mitigation measures that may be incorporated into the project to reduce the risk to a less than significant level.

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

Less Than Significant Impact

A search of the California Environmental Protection Agency database, including records of the Department of Toxic Substance Control, Integrated Waste Management Board, and Santa Ana Regional Water Quality Control Board revealed one property in the City of Perris that is subject to remediation for both soils and groundwater contamination by hazardous substances. The California Environmental Protection Agency is the lead agency with oversight of testing, remediation, and monitoring on this site.

The Department of Environmental Health of the Riverside County Community Health Agency is currently overseeing testing, remediation, and monitoring of leaking underground fuel tanks at seventeen (17) locations in the City of Perris.

Current and future development and uses on sites identified in this section are subject to completion of remediation and monitoring by the respective State and County agencies. No changes based on Objectives, Policies, or Implementation Measures of the project General Plan will affect or interfere with such remediation and monitoring efforts. Proposed future uses consistent with the project General Plan that could result in unauthorized release of hazardous materials into soils or groundwater will be subject to project-based CEQA review. Appropriate environmental documentation pursuant to CEQA will identify the extent of any potential hazard and all appropriate mitigation measures that may be incorporated into the project to reduce the risk to a less than significant level.

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

Potentially Significant Impact

The County of Riverside *Airport Land Use Plan* (ALUP) is applicable in portions of the planning area of the project General Plan. The ALUP includes Airport Influenced Area boundaries around March Air Reserve Base that were adopted by the Airport Land Use Commission in May 1986. The ALUP has not been updated since the base realignment process in the middle 1990's.

Influence Area 1 adjacent to March Air Reserve Base extends southeasterly from the end of the runway into the City of Perris consistent with Accident Potential Zones I and II delineated in the Air Installation Compatible Use Zone (AICUZ) study completed by the Department of the Air Force in 1998. High risk and sensitive uses including residential uses are prohibited in this area consistent with the ALUP and the AICUZ. Development standards for the City of Perris reflect restrictions on use and

density and intensity standards within this Influence Area and are consistent with the ALUP and AICUZ for Influence Area 1.

Influence Areas 2 and 3 encompass much of the City of Perris east of Interstate I-215. Restrictions in the ALUP for Influence Area 2 limit residential development to one dwelling unit per 2 ½ acres, but permit agricultural, industrial, and commercial uses. Navigation easements for properties in Influence Area 3 are required by the ALUP.

The City of Perris is currently participating as a member of a multi-jurisdictional committee working with the "March Operations Assurance Task Force" to resolve inconsistencies between ALUP policies and restrictions and the land development policies and standards of affected local jurisdictions. Until agreement is reached, development consistent with the project General Plan could be determined to result in a safety hazard for people working or living in Influence Areas 2 and 3. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Potentially Significant Impact

Perris Valley Airport is located within the General Plan planning area. Perris Valley Airport is a small, private airport with uses that include skydiving and hot air ballooning. The Airport Land Use Plan (ALUP) of the County of Riverside Airport Land Use Commission (ALUC) designates an area around Perris Valley Airport as Influence Area 1.

The ALUP standards preclude high risk and sensitive uses including residential uses in this area consistent. Current land use regulations and Land Use designations in the project General Plan do not reflect these use restrictions. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact

The City of Perris adopted a Multi-Hazard Functional Plan in 1995 which addresses planned response to extraordinary emergency situations either man-made or naturally occurring. The federal Disaster Mitigation Act of 2000 requires States and Counties to create and implement mitigation strategies for responding to disasters. Accordingly, Riverside County together with local agencies, including the City of Perris, is preparing a multi-agency Multi-Hazard Functional Plan that will replace the City 1995 Multi-Hazard Functional Plan.

Adoption of the project General Plan in and of itself will have no impact on implementation of the existing and contemplated Multi-Hazard Functional Plans.

Future development consistent with the project General Plan will be subject to requirements of the Multi-Hazard Functional Plan. Accordingly, no interference with an emergency response or disaster response plan is anticipated and adoption and implementation of the project General Plan is determined to be of no impact.

h) Expose people or structures to a significant loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Less Than Significant Impact

The California Fire Alliance has identified the City of Perris as a "Community at Risk" from wildfires. A numerical estimate of the level of risk of "3" has been assigned to portions of the City. This represents the highest level of risk

To address the risk of wildfire, the City of Perris has implemented weed abatement and brush clearance regulations. These include a 30-foot brush clearance radius for all structures within the City, and a 150-foot brush clearance requirement for structures on hillsides, primarily located in the westerly and southwesterly portions of the City.

The Safety Element of the project General Plan includes Implementation Measures that will further reduce the threat of loss, injury, or death from wildfires as follow:

I.C.1 Maintain fuel modifications standards to ensure proper clearance of brush around homes and businesses abutting undeveloped areas

I.C.2 Adopt landscaping standards to include a fire-resistant plant palette, where appropriate

I.C.3 Enforce current California Building Codes standards to exclude the use of materials that pose a fire risk such as untreated wood roofing materials

I.C.4 Maintain weed abatement Code Enforcement efforts

Riverside County together with local agencies, including the City of Perris, is preparing a multi-agency Multi-Hazard Functional Plan that will replace the City 1995 Multi-Hazard Functional Plan. Adoption and compliance with the existing and contemplated Multi-Hazard Functional Plan will further reduce the threat of loss, injury, or death in areas developed consistent with the project General Plan. Subject to these regulations, implementation measures, and policies, the risk to people and property from wildfire is reduced to a less than significant level.

VIII. HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL CHECKLIST RESPONSES

a) Violate any water quality standards or waste discharge requirements?

b) Otherwise substantially degrade water quality?

c) *Result in significant alteration of receiving water quality during or following construction?*

d) *Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas?*

e) *Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters?*

Less Than Significant Impact

Future development consistent with the project General Plan will increase stormwater runoff and non-stormwater run-off, and the volume of stormwater discharge into the San Jacinto River. Runoff from developed urban areas is likely to be contaminated with petroleum products, fertilizers, sediment, trash, heavy metals, nutrients, pathogens, and pesticides. Through the development review process, the City of Perris complies with various statutory requirements necessary to achieve regional water quality objectives and protect groundwater and surface waters from pollution from contaminated stormwater runoff.

The National Pollutant Discharge Elimination System (NPDES) implements provisions of the federal Clean Water Act through a permit process applicable to any discharges to surface waters. As a Co-Permittee with the County of Riverside under a permit (Municipal Separate Storm Sewer System or MS4) issued by the Santa Ana Regional Water Quality Control Board, the City of Perris is responsible for eliminating illegal discharges and connections into storm drains that ultimately discharge into surface waters.

The City is also required to consider water quality impacts during review of development project proposals to ensure that appropriate structural and non-structural Best Management Practices are incorporated into project design, construction, and operation phases to reduce contaminants in stormwater discharges, consistent with requirements of the NPDES permit. The City of Perris is also required to develop additional water quality control practices applicable to new development. Most significant of these is the requirement that the City adopt a Water Quality Management Plan by the end of June 2004.

In addition to the NPDES Municipal Separate Storm Sewer System permit, new development in Perris is also subject to requirements of the San Jacinto Watershed NPDES Storm Water Permit. The requirements of this permit are intended to minimize the amount of pollutants in stormwater and non-stormwater discharges to surface waters resulting from construction on parcels greater than one-acre in size. Each project developer is required to prepare a Stormwater Pollution Prevention Plan (SWPPP) as part of the process of receiving a permit from the Regional Water Quality Control Board prior to commencement of construction activities.

Future actions to improve water quality through reduction in contamination of stormwater and non-stormwater run-off are set forth as Implementation Measures in the Conservation Element of the project General Plan as follow:

VII.A.1 Adopt a Stormwater Ordinance per Santa Ana Regional Area Management Plan (DAMP) requirements for stormwater management and discharge control.

VII.A.2 Evaluate the Planning Department's CEQA implementation procedures to ensure adequate consideration of water quality impacts and mitigation measures as part of Initial Studies/Mitigated Negative Declarations and Environmental Impact Reports.

VII.A.3 Prior to issuance of any grading permit involving a disturbance of one or more acres of land, require proof of a RWQCB San Jacinto Watershed Construction Activities Permit and a Storm Water Pollution Prevention Plan.

VII.A.4 Review water quality impacts during the project review and approval phases to ensure appropriate Best Management Practices are incorporated into the project design and long-term operations.

VII.A.5 In accordance with the Riverside County NPDES, enact a Water Quality Management Plan to review and regulate new development approvals.

Subject to existing permitting procedures and Implementation Measures of the Conservation Element of the project General Plan, adoption and implementation of the project General Plan will not result in violation of any water quality standard, create or contribute to or provide additional sources of polluted run-off, degrade water quality, alter receiving water quality, result in stormwater discharge of toxic substances, or result in discharge that affects the beneficial use of receiving waters. Accordingly, impacts to water quality resulting from adoption and implementation of the project General Plan are less than significant.

f) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?

g) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in flooding on- or off-site?

Less Than Significant Impact

Development consistent with the project General Plan may occur within the identified floodplain of the Perris Valley Storm Channel. Development in the floodplain would alter the existing drainage pattern. All future development in the floodplain must be in compliance with Title 15, "Floodplain Regulations", of the City of Perris Municipal Code which regulates, restricts, or prohibits development in flood hazard areas as

necessary to minimize increases in erosion, floodwater elevations, and floodwater velocities. To this end, Title 15 regulates filling, grading, dredging, and other alteration of floodplains, including the Perris Valley Storm Channel floodplain, and conforms to requirements of the Federal Emergency Management Agency and National Flood Insurance Program. Subject to Title 15, development consistent with the project General Plan will not result in alteration of existing drainage patterns that would substantially increase erosion or siltation along watercourses in the City or downstream, or that would result in flooding along watercourses in the City or those upstream or downstream. Accordingly, the impact of adoption and implementation of the project General Plan is less than significant.

h) *Create or contribute runoff water, which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

i) *Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?*

j) *Create significant increases in erosion of the project site or surrounding areas?*

Less Than Significant Impact

The 250-foot wide, earthen Perris Valley Storm Channel (PVSC) is the backbone of the storm drainage system as the primary stormwater collector for the northern half of land area in the City. The Channel extends from Heacock Street in Moreno Valley in the north to the San Jacinto River on the south. All existing City storm drains flow laterally into the PVSC from the east and west.

The 100-year sotrmwater flow rate for the Perris Valley Storm Channel increases from 12,800 cubic feet per second (cfs) in the City of Moreno Valley to 18,900 cfs near Interstate 215 in southeastern Perris. The project General Plan anticipates conversion of remaining agricultural uses and undeveloped land to urbanized land uses, increasing the amount of impervious surfaces throughout the City. Consequently, surface water run-off will increase, resulting in greater volume and higher velocities of stormwater flow in the Channel.

The San Jacinto River crosses into Perris from the east near the intersection of Interstate 215 and Ellis Avenue and traverses southwesterly for approximately six miles to the southwesterly City boundary south of Ethanac Road. Portions of the River are improved earthen channel within the City although the flood plain is over one and a half miles wide. The San Jacinto River collects stormwater from the Perris Valley Storm Channel and conveys it to Railroad Canyon Reservoir which, in turn, discharges into Lake Elsinore.

The San Jacinto River Improvement Project was initially proposed in 1974 and included channelization and other flood control improvements including deepening of the Perris Valley Storm Channel. The Army Corps of Engineers issued a permit for the Plan, but approval from the United States Fish and Wildlife Service was never granted, and the Army Corps permit expired in 2001. The recently adopted Western Riverside

County Multiple Species Habitat Conservation Plan (MSHCP) is intended to balance wildlife and sensitive plant species conservation with needed stormwater and flood control infrastructure improvements. Improvements to the Perris Valley Storm Channel are covered by the MSHCP as well as undefined improvements to the San Jacinto River channel. Any subsequent plan for San Jacinto River improvements must comply with conservation criteria of the MSHCP. Accordingly, any improvements to the San Jacinto River channel will be subject to MSHCP conservation criteria and will be, therefore, mitigated to a less than significant level of impact on the environment.

Until required flood and storm drain improvements are approved and constructed, development on much of the land area in the southeastern area of the City will be limited to areas outside the 100-year floodplain. Similarly, development in areas tributary to the Perris Valley Storm Channel will be required to provide alternative means of containing stormwater run-off. At present, these alternatives include construction of on-site stormwater detention basins that limit discharge to storm drain facilities at or near capacity flows.

Design criteria for interim stormwater facilities require that new development does not disrupt existing drainage patterns. These include requirements that runoff from adjoining contributory drainage areas are included in calculations of potential stormwater run-off volumes and accommodated in design of the interim facilities and that stormwater discharge to storm drain facilities does not increase from pre-development volumes. In addition, the interim detention facilities are designed to prevent "first flush" stormwater discharges and nuisance drainage discharges such as irrigation overspray that contain contaminants from entering storm drain facilities that eventually discharge to the San Jacinto River.

The City is also required to consider water quality impacts during review of development project proposals to ensure that appropriate structural and non-structural Best Management Practices are incorporated into project design, construction, and operation phases to reduce contaminants in stormwater discharges, consistent with requirements of the NPDES permit. The City of Perris is also required to develop additional water quality control practices applicable to new development. Most significant of these is the requirement that the City adopt a Water Quality Management Plan by the end of June 2004.

New development in Perris on sites of one acre or greater are also subject to terms of the Santa Ana Regional Water Quality Control Board San Jacinto Watershed National Pollutant Discharge Elimination System Storm Water Permit. Proponents of such development must prepare Stormwater Pollution Prevention Plans (SWPPP's) to minimize the amount of pollutants, including sedimentation, in storm water and non-storm water discharges to surface waters. A SWPPP is a prerequisite to receiving a permit from the Regional Water Quality Control Board allowing commencement of construction activities.

Implementation Measure II.A. of the Land Use Element of the project General Plan will reinforce efforts to minimize discharges of pollutants through reduction in contamination of stormwater and non-stormwater run-off:

II.A Prepare and adopt a revised Area Drainage Plan including regional storm water detentions basins capable of serving contributory areas of at least 100 acres.

Implementation Measures in the Conservation Element of the project General Plan will supplement permitting requirements aimed at reducing contamination of stormwater and non-stormwater run-off:

VII.A.1 Adopt a Stormwater Ordinance per Santa Ana Regional Area Management Plan (DAMP) requirements for stormwater management and discharge control.

VII.A.3 Prior to issuance of any grading permit involving a disturbance of one or more acres of land, require proof of a RWQCB San Jacinto Watershed Construction Activities Permit and a Storm Water Pollution Prevention Plan.

VII.A.4 Review water quality impacts during the project review and approval phases to ensure appropriate Best Management Practices are incorporated into the project design and long-term operations.

VII.A.5 In accordance with the Riverside County NPDES, enact a Water Quality Management Plan to review and regulate new development approvals.

Future development pursuant to the project General Plan and subject to these permitting, policy, and General Plan requirements will reduce impacts associated with increases in stormwater discharge in excess of drainage system capacities and increases in polluted runoff and runoff velocity or soil erosion to a less than significant level.

k) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

Less Than Significant Impact

The Santa Ana River Water Quality Control Plan (WQCP), prepared by the Santa Ana Regional Water Quality Control Board, divided the San Jacinto Watershed, of which Perris is a part, into 14 groundwater sub-basins. The City of Perris is located above Perris South I, Perris South II, and Perris South III. The Santa Ana Watershed Project Authority's Total Inorganic Nitrogen/Total Dissolved Solids Study – Phase 2A of the Santa Ana Watershed (2000) combines these three sub-basins into two groundwater management zones, referred to as Perris North and Perris South.

Recharge of the Perris North groundwater management zone occurs through infiltration of flow from unlined stream channels, underflow from saturated alluvium and fractures in surrounding bedrock mountains and hills, underflow from the Lower San Jacinto Graben management zone in the southeast, and underflow from leakage

beneath the Lake Perris dam, and artificial recharge of recycled water in storage/percolation ponds at the Moreno Valley Water Reclamation Facility.

Recharge of the Perris South groundwater management zone occurs through infiltration of flow from unlined stream channels, underflow from saturated alluviums and fractures in surrounding bedrock mountains and hills, underflow from groundwater in the Winchester area to the southeast, artificial recharge or recycled water at various storage/percolation ponds, and deep percolation of precipitation.

Groundwater quality in both Perris sub-basins is generally poor due to high concentrations of Total Dissolved Solids (TDS) and Nutrients resulting from past and present agricultural runoff. Consequently, groundwater is no longer used for domestic purposes and only a minimal amount is used for agricultural purposes. The East Municipal Water District (EMWD), however, plans to increase groundwater production in the Perris sub-basins through construction of new wells and blending of poor quality water with low salinity imported water.

The Eastern Municipal Water District which supplies water within the City of Perris supplements groundwater recharge in the Perris sub-basins with untreated water from the State Water Project. The imported water is stored in permeable basins through which the untreated water reaches groundwater basins. EMWD subsequently pumps water from the recharged basins in lieu of imported, treated water.

To maintain groundwater resources beneath the City of Perris, the Eastern Municipal Water District is working with local governments, water agencies, agricultural interests, and owners of private wells to implement a groundwater management plan for the groundwater basins including those beneath the City of Perris. Once a management plan is agreed to and implemented, EMWD together with the Metropolitan Water District, will explore opportunities for water transfers with local Native American tribes and other water districts to increase seasonal recharge and storage capacities and to increase groundwater production in the Perris sub-basins.

Development consistent with the project General Plan will result in an increase in the amount of impermeable surfaces and concurrent diminution in the volume of recharge that occurs through percolation of precipitation into Perris groundwater sub-basins. Recharge from percolation of precipitation is one of numerous processes of aquifer recharge and reduction in volume from this source is not likely to be significant. Recharge of these sub-basins from current and planned EMWD storage/percolation ponds, and formulation and implementation of an inter-agency management plan for Perris-area groundwater basins will promote maintenance of existing groundwater levels.

Continuation of groundwater management efforts of the Eastern Municipal Water District will reduce the potential impact of development consistent with the project General Plan on groundwater recharge to a less than significant level.

l) Place housing within a 100-year flood hazard as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

m) Place within a 100-year flood hazard area structures which would impede or redirect flood flow.

Less Than Significant Impact

Development consistent with the project General Plan may occur within the 100-year flood hazard area within the floodplain of the Perris Valley Storm Channel. Development in the floodplain would alter the existing drainage pattern. All future development in the floodplain must be in compliance with Title 15, "Floodplain Regulations", of the City of Perris Municipal Code which regulates, restricts, or prohibits development in flood hazard areas as necessary to minimize increases in erosion, floodwater elevations, and floodwater velocities. To this end, Title 15 regulates filling, grading, dredging, and other alteration of floodplains, including the Perris Valley Storm Channel floodplain, and conforms to requirements of the Federal Emergency Management Agency and National Flood Insurance Program.

Subject to Title 15, housing development accommodated by the project General Plan and located within the 100-year floodplain will not be exposed to significant risk from flooding. Development consistent with the project General Plan will be regulated to ensure that flood flow is not redirected or impeded to the detriment of properties within the City of Perris or properties upstream or downstream. Accordingly, adoption and implementation of the project General Plan will have a less than significant impact relative to the risk to property and life resulting from construction within the 100-year flood plain.

n) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Potentially Significant Impact

The City of Perris is subject to inundation from dam failure at any of three reservoirs: Lake Perris Dam adjoining the northeasterly boundary of the City of Perris; Pigeon Pass Reservoir in Moreno Valley; and Little Lake Reservoir in Hemet.

Because of proximity to the City of Perris, inundation from breach of the Lake Perris dam is assumed to be the worst-case scenario in terms of volume and minimal elapsed time from breach to maximum flow within the City. The dam inundation study for Lake Perris Reservoir indicates that sudden failure of the dam as a result of a seismic event is so unlikely that the inundation simulation is based on a dam breach that follows an initial, small leak near the base of the dam. Based on this study, a maximum flood flow of 365,000 cubic feet of water per second would reach central Perris approximately 3.1 hours after the initial dam leak. A maximum flood depth of twenty-eight (28) feet could be reached in the lowest lying areas. Virtually all of Perris east of Perris Blvd., where the majority of existing development is located, would be flooded.

Adoption and implementation of the project General Plan will result in a significant increase in the number of people residing and working in the City of Perris. The bulk of this future development will occur in the area east of Perris Blvd. that is subject to

inundation after breach of the Lake Perris dam. The impact associated with breach of the Lake Perris dam is potentially significant and will be evaluated in the Draft EIR.

o) Inundation by seiche, tsunami, or mudflow?

Potentially Significant Impact

New development consistent with the project General Plan will significantly increase the number of structures and inhabitants below the surface water elevation of Lake Perris. Lake Perris reservoir is a confined basin of water susceptible to a reverberating surface wave action induced by seismic action. While the dam, according to the dam inundation study by the California Water Resources Agency, is not likely to be breached as a result of seismic activity, a seiche could cause water to spill over the top of the dam. No known data is available to quantify the probability of such an event, the volume of water that could be released over the top of the dam, or the extent of the resulting flow in the areas below the dam. This impact is potentially significant and will be evaluated in the Draft EIR.

IX. LAND USE AND PLANNING

ENVIRONMENTAL CHECKLIST RESPONSES

a) Physically divide an established community?

No Impact.

Adoption of the project General Plan and subsequent implementation will not require, promote, make possible, or allow interference with physical access between any one part of the City and any other part of the City. No roadways for vehicular or rights-of-way for pedestrian travel would be reduced, impeded, or severed as a direct or indirect result of the project. No changes in roadway configurations or land use patterns that would have the practical effect of visually or physically dividing the community would attend or result from adoption and implementation of the project General Plan.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact

Adoption and implementation of the project General Plan will establish the land use plan and policies that will guide the future physical development of the City of Perris. All land use regulatory schemes including the Zoning Ordinance, Specific Plans therein, and the Subdivision Ordinance will be revised as appropriate to be consistent with the project General Plan.

The Multiple Species Habitat Conservation Plan (MSHCP) is applicable along the San Jacinto River and the wildlife corridor it supports. The land areas or "cells" wherein development will be subject to performance criteria established to maintain and preserve the wildlife corridor and sensitive species therein are incorporated into the Land Use Plan of the Land Use Element of the project General Plan.

Implementation Measures are included in the Conservation Element of the project General Plan as a means to incorporating the MSHCP into the City of Perris land use regulatory framework and are as follow:

IV.A.1 Maintain a current copy of the *Western Riverside County Multiple Species Habitat Conservation Plan* (MSHCP), including all of its appendices, as part of the Planning Department's environmental database.

IV.A.2 Provide training to City Planning Staff with respect to the project review procedures, conservation goals, biological survey and analysis criteria, mitigation fee structure, and coordination with the regional agencies to ensure effective and efficient administration of habitat protection plans.

Subject to these measures, adoption and implementation of the project General Plan will not result in a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigation an environmental effect or with the Multiple Species Habitat Conservation Plan. The project, therefore, is determined to have no impact

X. MINERAL RESOURCES

ENVIRONMENTAL CHECKLIST RESPONSES

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact

In order to protect the availability of mineral resources of value, the California Department of Conservation identifies sites to which continuing access is important to satisfying mineral production needs of the region and the State. The relative importance of potential mineral resource sites is indicated by inclusion in one of four Mineral Resource Zones (MRZ):

MRZ 1: No mineral resources;
MRZ 2: Significant resource area (quality and quantity known;
MRZ 3: Significant resource area (quality and quantity unknown);
MRZ 4: No information (applies primarily to high-value ores).

The California Department of Conservation is primarily interested in preservation of access to significant resources areas included in MRZ 2. Lands within the City of Perris and its Sphere of Influence are designated MRZ 3 and MRZ 4 which are not defined as

significant resource areas. Accordingly, no impact to availability of valuable mineral resources will occur.

b) *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

No Impact

No sites have been designated as locally-important mineral resource recovery sites on any local plan. Accordingly, no impact to availability of a locally-important mineral resource recovery site will occur.

XI. NOISE

ENVIRONMENTAL CHECKLIST RESPONSES

a) *Expose persons to or generate noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies?*

Potentially Significant Impact

Increased automobile traffic associated with new development consistent with the project General Plan could result in increased noise levels at existing sensitive receptors e.g. homes and schools. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

b) *Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?*

Less Than Significant Impact

Train movements are sources of ground-borne vibration and noise in the City of Perris. Two Burlington Northern Santa Fe freight trains currently travel through the City each day. Freight train operations are expected to increase to four trains per day by the year 2030. The typical freight train is comprised of three engines and twenty-five rail cars traveling at 10 miles per hour. Half of freight train movements are projected to occur between the hours of 10 P.M. and 7 A.M.

The Riverside County Transportation Commission (RCTC) proposes to begin Metrolink commuter rail service into Perris by the year 2008. Eight (8) trains per day will travel from Riverside to a Metrolink station planned for a site adjacent to the historic Santa Fe Station at 4th and "C" Streets in Perris. By the year 2030, 16 Metrolink trains are expected to travel this route. Metrolink trains will likely include one engine and three railcars traveling at 30 miles per hour. No nighttime operations are planned. Metrolink trains will use the existing tracks which are owned by the RCTC and used by the Burlington Northern Santa Fe Railroad.

The Orange Empire Railway Museum operates a weekend tourist train that shuttles passengers between downtown Perris and the Orange Empire Railway Museum along

a rail spur that beings just north of 7th Street and runs southward to the Museum south of Mountain Avenue. The tourist train runs every half-hour between 9 A.M. and 6 P.M. on Saturdays and Sunday. A typical train includes a locomotives with 2 to 4 railcars.

The train tracks through Perris are to be upgraded to continuous welded rails for Metrolink trains which will reduce noise and vibrations associated with rail traffic. Because rail movements, however, are not subject to local land use regulations, adoption and implementation of the project General Plan will have no effect on ground-borne vibration or ground-borne noise levels that may have an impact on existing land uses in Perris.

Future sensitive receptors such as dwellings, schools, and motels may be affected by ground-borne noise and vibrations from train traffic. Vibrations, like noise, are measured in decibels. Results of railway vibration analysis in a study for the Alaska Railroad in 2002, "Anchorage Rail Capacity Improvements Milepost 110 to Milepost 114 – Phase 1 Noise and Vibration Study Summary" were used to approximate distances from the BNSF rails at which future development would experience ground-borne vibrations and noise. The Alaskan study concluded that transmission of ground-borne vibrations varies according to soil type and that increased train speeds are likely to increase vibration levels. Vibration levels associated with passenger trains at all speeds were found to be less than freight trains at speeds comparable to or less than that of the passenger trains. The worst case scenario in this study, high-transmission soils and vibration from freight trains, indicated that homes within three hundred feet of the tracks had perceptible ground-borne vibrations. Ground-borne vibrations were not likely to carry beyond this distance.

Consistent with the conclusions of this study, and in conjunction with analysis of noise impacts on future development, the Noise Element includes the following Implementation Measures that will reduce the impact of ground-borne noise and vibrations on future development:

III.A.1 The City will work proactively with BNSF and Riverside County Transportation Commission to replace aging rail with new continuous welded rail, and to install sound-deadening matting leading to, from, and between the rails where public roads cross tracks in residential areas.

III.A.2 Acoustical and vibration studies will be prepared for all new development proposals involving noise sensitive land uses within 500 feet of the BNST railroad tracks. Wherever these studies determine that exterior living areas in the proposed development plan would be exposed to noise levels of 60 dBA or greater, or that interior and/or exterior living areas would be exposed to vibrations in excess of 65 VdB, the plans shall incorporate setbacks and/or building design/noise and/or vibration attenuation and insulation measures necessary to reduce exterior noise levels to no more than 65 dBA, to reduce interior noise levels to no more than 45 dBA, and to reduce exterior and interior vibration levels to no more than 65 VbA.

III.A.3 As part of any approvals of noise sensitive projects where reduction of exterior noise to 65 dBA is not reasonably feasible, the City will require the developer to issue disclosure statements that identify regular exposure to train noise. This disclosure shall be issued at the time of initial and all subsequent sales of the affected properties.

III.A.4 No new residential dwellings shall be placed in areas with mitigated or unmitigated exterior exposure to train noise levels in excess of 70 dBA CNEL.

Subject to the Implementation Measures of the Noise Element, adoption of the project General Plan will reduce the impact of groundborne vibration and noise levels on future land uses to a less than significant level.

c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Potentially Significant Impact

Increased automobile traffic associated with new development consistent with the project General Plan could result in increased noise levels at existing sensitive receptors e.g. homes and schools. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less Than Significant Impact

Future development undertaken consistent with the project General Plan will include construction of physical improvements. During the construction phase, noise levels will vary with the types of equipment and sizes of the respective constructions sites. The Noise Element of the project General Plan includes analysis of noise impacts likely to result from this construction. Assuming that construction occurs for 8 hours each day, a Community Noise Equivalent Level (CNEL) was calculated at 84 dBA at 50 feet from the site. The 64 dBA CNEL representing the maximum long-term exterior noise level acceptable at sensitive receptors such as single-family dwellings extends a distance of approximately 446 feet from the construction site.

Recognizing that construction noise is difficult to control but inevitable, Section 18-63, "Enumeration of Prohibited Noises" of the Perris Municipal Code exempts construction activity from noise restrictions between the hours of 7 A.M. and 6 P.M. on weekdays. Consistent with the intent of this restriction, noise impacts resulting from construction are considered a nuisance rather than a significant impact. Continued compliance with these restrictions after adoption of the project General Plan will reduce construction noise impacts to a level considered less than significant.

Temporary or periodic increases in ambient noise levels may also occur in areas where residential uses are in proximity to commercial and industrial land uses. Exterior

operations, truck loading areas, and large parking lots are examples of noise associated with commercial and industrial uses. Significant noise impacts can be avoided through site designs that place exterior activities away from residential properties and through operational controls that prohibit exterior operations, including truck loading and unloading, during late night and early morning hours.

In order to minimize noise impacts from new commercial and industrial uses on sensitive noise receptors, the Noise Element of the draft General Plan includes the following Implementation Measure:

V.A.1 An acoustical impact analysis shall be prepared in conjunction with a development application for industrial, commercial, or institutional facilities and shall represent interior and exterior on-site noise sources including parking lots and loading areas on any property within 160 feet of the property line of any property developed with a noise sensitive land use(s) or designated in the Land Use Element of the General Plan for sensitive land use(s). This analysis shall document the nature of the proposed facility as well as all interior or exterior facility operations that would generate exterior noise.

The analysis shall document the placement of any existing or future noise-sensitive land uses situated within the 160- foot distance. The analysis shall determine the potential noise levels that could be received at these sensitive land uses and specify specific measures necessary to ensure that noise levels to be generated in conjunction with operation of proposed commercial, industrial, or institutional facility do not exceed 60 dBA CNEL at the property line of the adjoining sensitive land use.

No development permits or approval of land use applications shall be issued until the acoustic analysis is received and approved by City staff.

Subject to Implementation Measure V.A.1 of the Noise Element of the project General Plan, the impact of temporary or periodic increases in ambient noise levels from commercial and industrial uses on sensitive noise receptors will be reduced to a less than significant level.

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

Potentially Significant Impact

Sensitive noise receptors including dwelling units may be developed in the future within the 65 – 70 dBA noise contours associated with March Air Reserve Base/March Globalport. Such development is considered "normally unacceptable" pursuant to noise guidelines of the California Department of Health. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

f) For projects within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Potentially Significant Impact

Perris Valley Airport and Skydiving Center is a privately operated airport and a center for skydiving enthusiasts. Aircraft typically consist of Twin Otter Turbo Prop, 20-passenter planes equipped with jet engines and propellers. On a peak weekend skydiving day, with optimal weather conditions and a day-long stream of skydiving customers, approximately 60 separate flights may occur. There are occasional night flights. In the future, a DC-9 may be used for higher altitude skydiving excursions. The Airport is located south of Ellis Road and east of Goetz Road in the southern portion of the City of Perris.

Noise levels were measured under the flight path for both aircraft approach and landing operations at Perris Valley Airport. Modeling of 24-hour average noise contours associated with air traffic operations into and out of this facility were not performed; however, the noise levels measured under the flight path are indicative of a range of noise levels that occur. A "parachute plane" taking off measured an instantaneous noise level of 77.4 dBA. This same plane, passing overhead on its approach for landing, produced an instantaneous reading of 75.9 dBA

Existing dwelling units within the flight paths of the Perris Valley Airport and Skydiving Center will continue to be exposed to a range of noise levels from period aircraft overflights originating at this facility. Adoption and implementation of the proposed project General Plan will have no impact on the number of flights or the types of aircraft operating from this airport, or upon any specific activities associated with the airport. Accordingly, the project would not cause people living and working in existing structures under the flight paths to be exposed to excessive noise levels.

The project General Plan would allow new residential development within the flight path south of the Perris Valley Airport, in the area south of Ellis Road between Goetz Road and Murrieta Avenue. Additional residential development is anticipated under the northern flight path in the area north of Case Road at Ramona Avenue. Future dwellings in both areas would be exposed to temporary flyover noise impacts that could occur up to 60 times per day on peak days. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

XII. POPULATION AND HOUSING

ENVIRONMENTAL CHECKLIST RESPONSES

a) Induce substantial population growth in an area either directly (for example by proposing new homes or businesses) or indirectly (for example through the extension of roads or other infrastructure).

Potentially Significant Impact

Adoption and implementation of the project General Plan will accommodate development of as many as 26,000 additional dwellings at build-out including up to 6,000 additional units by the year 2030. Compared with year 2000 population of 35,848, the population of the City of Perris consistent with the project General Plan is projected to reach approximately 72,000 by 2030 and as much as 142,000 upon land area build-out. By planning for and accommodating these levels of growth, the project General Plan will indirectly induce population growth. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact

The project General Plan does not include any Objective, Policy, or Implementation Measure that directs or anticipates any action that would displace existing housing units or people. Therefore, the construction of replacement housing will not be necessitated and no impact will directly or indirectly result from adoption of the project General Plan.

XIII. PUBLIC SERVICES

ENVIRONMENTAL CHECKLIST RESPONSES

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

i) Fire protection?

ii) Police protection?

iii) Other public facilities?

Potentially Significant

Increases in population and employment indirectly related to adoption and implementation of the project General Plan will require expanded physical facilities for the police and fire departments and for municipal administrative facilities (City Hall). In order that the need for new facilities is recognized and funded as physical development in the City of Perris continues, the project General Plan includes the following Implementation Measures:

Land Use Element

II.A.3 Revise the capital facilities fee program so that all infrastructure construction and improvements identified as attributable to new development are fully funded

Safety Element

II.B.1 Adopt capital facilities fees to fund improvements in public safety facilities and equipment

II.B.2 Revise the capital facilities fee program so that all infrastructure construction and improvements identified as attributable to new development are fully funded

As of this writing, the City's Capital Fee Ordinance is being revised based on projections of the number of future dwelling units and the floor areas of non-residential buildings, and on population and employment projections associated with adoption and implementation of the project General Plan. Analysis for updating the Capital Fee Ordinance will include approximation of spatial requirements for expanded fire, police, and municipal administrative facilities.

Municipal administrative facilities may be expanded on land currently designated and used for public purposes at the City of Perris Civic Center. Expanded and/or renovated facilities for police services may be located on existing Civic Center properties and/or ad the current location of the Perris Police Department at 403 East 4th Street. Subsequent assessment of project-specific impacts for additional development of these sites will be undertaken when facility sizes and configurations are determined and funding is available at a future date.

Additional fire stations will be needed to provide acceptable emergency response times for projected, new development. The locations and target dates for development of these facilities will not be identified until a sufficient amount of impact fees are collected and sufficient development has occurred within a fire facility service area to warrant property acquisition and facility development. Identification of specific site(s) in the General Plan, possibly many years in advance of actual facility need, could necessitate immediate purchase of a site(s) by the City to avoid private property owner claims of governmental taking of property without compensation.

The extent of undeveloped land area in the City and impediments to development including lack of flood control facilities are limitations to projecting the sequence and speed of future development. Similarly, the timing of infrastructure placement including improved roadways necessary to rapid emergency response will be known only as development consistent with the General Plan Land Use Plan proceeds. Accordingly, attempts to identify sites and evaluate potential project-specific physical impacts associated with fire station construction would be speculative. Subsequent evaluation of project-specific impacts for new fire stations will be undertaken prior to site acquisition. The broad environmental effects associated with future construction of fire, police, and other public facilities, however, will be discussed in the EIR.

iii) Schools?

Potentially Significant

Increases in population and employment indirectly related to adoption and implementation of the project General Plan will require new school facilities throughout the City. State law limits the ability of cities to impose mitigation measures on new development for the purpose of funding and/or providing new school facilities attributable to increased student population. The City of Perris requires that development impacts fees be paid to the respective school districts prior to issuance of permits for new construction projects. In addition, the Land Use Element of the project General Plan includes the following Implementation Measure:

II.B.1 Circulate all development plans to local school districts to assess the need to include potential future school sites

Future school sites necessary to provide educational opportunities to new residents within the foreseeable future have been identified in the Land Use Element of the General Plan consistent with information received from the respective school districts. Site specific physical impacts associated with new school construction on each such site were or will be analyzed in CEQA documents prepared by the respective school districts. No additional impact analysis is required for these sites.

Other future school sites, in addition to those identified above, may be required. The broad environmental effects associated with future construction of such other future schools sites, however, will be discussed in the EIR.

iv) Parks?

Potentially Significant Impact

An increase in resident population will result from subsequent land development consistent with the project General Plan. The Open Space Element of the project General Plan quantifies additional acreage to be acquired and developed to satisfy the need for additional park venues resulting from development of new dwelling units. Generalized locations for these community parks are identified in the Open Space Element.

Specific locations for community parks will be determined, consistent with the process set forth in the "New Community Parks" section of the Open Space Element, at the time residential development is proposed within an area designated as a "Generalized Park Location". This process assures that adequate parkland will be reserved, then developed commensurate with demand attendant to new residential development.

Because development of detailed, site-specific information for the community parks is not feasible prior to adoption of the project General Plan, potential direct physical impacts of each community park will be analyzed together with those of the proposed residential development that triggers the General Plan Open Space Element process for identifying a specific community park site. The broad environmental effects associated with future park construction, however, will be discussed in the EIR.

XIV. RECREATION

ENVIRONMENTAL CHECKLIST RESPONSES

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

No Impact

The Open Space Element of the project General Plan identifies the amount of parkland that will be required commensurate with new development accommodated by the General Plan. The Open Space Element of the project General Plan includes Implementation Measures for planning, acquiring, and improving community parks that will serve new residential communities:

I.E.1 Require dedication of, in-lieu fees toward, or improvement of Open Space Element sites for community parks serving new development

I.E.2 Prepare a policy memorandum detailing the process for assigning developer obligations for parkland acquisition and improvement consistent with the procedures outlined in New Community Parks in this Element

I.E.3 Locate new community parks consistent with the "Generalized Locations of Future Parks" and the "Infrastructure Concept Plan" as described in New Community Parks in this Element

I.E.4 Work with the Riverside County Flood Control and Conservation District to develop the 9-acre Flood Control detention basin at West Third Street and Kruse Street for dual use as active parkland

I.E.5 Require development and dedication to the City of a community park (active parkland) as part of a dual use drainage basin in the Parkwest Specific Plan

I.E.6 Require development and dedication to the City of a community park (active parkland) as part of a dual use drainage basin in the New Perris Specific Plan

I.E.7 Develop a community park (active parkland) at the site of the closed landfill at Bellamo Lane

Adherence to these Implementation Measures and the procedures to which they relate will result in development of new parkland in locations and of sufficient size to serve the additional demand created through development of new residential uses. Accordingly, adoption and implementation of the project General Plan will have no impact on existing park facilities.

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

Less than Significant Impact.

An increase in resident population will result from subsequent land development consistent with the project General Plan. The Open Space Element of the project General Plan quantifies additional acreage to be acquired and developed to satisfy the need for additional park venues resulting from development of new dwelling units. Generalized locations for these community parks are identified in the Open Space Element.

Specific locations for community parks will be determined, consistent with the process set forth in the "New Community Parks" section of the Open Space Element, at the time residential development is proposed within an area designated as a "Generalized Park Location". This process assures that adequate parkland will be reserved and developed commensurate with demand attendant to new residential development.

Because development of detailed, site-specific information for the community parks is not feasible prior to adoption of the project General Plan, potential direct physical impacts of each community park will be analyzed together with those of proposed residential development that triggers the General Plan Open Space Element process for identifying a specific community park site. The broad environmental effects associated with future park construction, however, will be discussed in the EIR.

XV. TRANSPORTATION AND CIRCULATION

ENVIRONMENTAL CHECKLIST RESPONSES

a) *Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e. result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?*

Potentially Significant

Analysis of future traffic volumes resulting from development consistent with adoption and implementation of the project General Plan indicates that cumulative development within western Riverside County may have an impact on levels of service on roadways. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

b) *Exceed either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?*

Potentially Significant

Analysis of future traffic volumes resulting from development consistent with adoption and implementation of the project General Plan indicates that cumulative development within western Riverside County may have an impact on levels of service on roadways. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

c) *Result in a change of air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

Less Than Significant

The project General Plan does not anticipate changes in locations of March Air Reserve Base/March Globalport which adjoins the north boundary of the City of Perris or of Perris Valley Airport and Skydiving Center located in the southern portion of the City. Although anticipated population and employment growth consistent with adoption and implementation of the project General Plan are expected to result in an increase in air traffic at commercial airports in Riverside County, no changes in traffic patterns are anticipated. Accordingly, no new hazards are anticipated.

d) *Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersection) or incompatible uses (e.g. farm equipment)?*

Less Than Significant Impact

The project General Plan Circulation Element identifies future roadway improvements necessary to accommodate existing and future development. None of the proposed future roadway alignments includes design features that would introduce a safety hazard or hazards. All future improvements will conform to applicable roadway

design standards of the City of Perris and the County of Riverside. The potential impacts, therefore, associated with future roadway improvements are determined to be less than significant.

e) Result in inadequate emergency access?

Potentially Significant Impact

In the event of a 100-year flood, access roads to areas of future development east of the Perris Valley Channel and west of the San Jacinto River between Rider Road and Ellis Road could become impassible. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

f) Result in inadequate parking capacity?

No Impact

The project General Plan does not include or facilitate a reduction in parking requirements in the City's Zoning Ordinance/Development Code. Existing requirements are determined to be adequate and appropriate for anticipated future development. Adoption and implementation of the project General Plan will have no impact.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?

No Impact

The Circulation Element of the project General Plan establishes accommodates and promotes alternative modes of transportation in the City. Since the project General Plan must be internally consistent, all other Elements support and promote the following Circulation Element Implementation Measures relative to alternative transportation:

I.A.1 Revise the downtown Specific Plan to address the planned Metrolink station and other modes of transportation

I.A.4 Plan off-street parking facilities in downtown Perris to support and enhance the concept of walkable and transit-oriented communities

I.A.5 Consider ancillary parking facilities with transit connections to activity centers such as downtown

I.B.1 Require on-site improvements that accommodate public transit vehicles (i.e. bus pullouts and transit stops and cueing lanes, bus turnarounds and other improvements) at major trip attractions (i.e. community centers, tourist and employment centers, etc.)

IV.A.1 Develop a multi-purpose recreational bikeway plan for the City of Perris based on standards in the Caltrans Highway Design Manual and in the Riverside County General Plan as identified in Chapter 4

IV.A.4 Maximize access for pedestrians and encourage the removal of a barriers in public rights-of-way (walls, easements, and fences) for safe and convenient movement of pedestrians

IV.A.5 Incorporate pedestrian paths or sidewalks in road design standards and provide tree easements between curbs and paths or sidewalks except within the Downtown Specific Plan Area

Consistency will be maintained among the Elements of the project General Plan and with policies, plans, and programs adopted pursuant to the General Plan. Accordingly, no conflict will exist among policies, plans, and programs supporting alternative transportation and no impact will result from adoption and implementation of the project General Plan.

XVI. UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL CHECKLIST RESPONSES

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Potentially Significant Impact

Development accommodated through adoption and implementation of the project General Plan may result in the need for additional sewage treatment facilities in excess of those currently permitted by the Santa Ana Regional Water Quality Control Board. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Potentially Significant Impact

Development accommodated through adoption and implementation of the project General Plan may result in the need for additional sewage treatment facilities the construction of which could cause significant environmental effects. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Potentially Significant Impact

Development accommodated through adoption and implementation of the project General Plan will require construction of new storm water drainage facilities which could cause significant environmental effects. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

Less Than Significant Impact

The Eastern Municipal Water District Urban (EMWD) Water Management Plan addresses the reliability of its water supplies. Over 75% of the District's total supplies are purchased from the Metropolitan Water District (MWD). Through implementation of the Water Surplus and Drought Management Plan (WSDM) which includes a 3-year drought scenario, the MWD expects to provide 100% of the water that local suppliers such as EMWD expect to purchase through the year 2010.

After the year 2010, in a worst case scenario, water supplies to the Metropolitan Water District could theoretically be limited to 2010 levels, thereby reducing future increases in supply to EMWD. Resultant water shortages would require drastic changes in domestic water consumption patterns. Based on progress at the regional level, however, in developing off-stream storage for surplus and imported water and on local plans for resource development, Eastern Municipal Water District expects to be able to meet the water demands of its service area, including development consistent with the project General Plan, through the year 2020.

Extensive land development anticipated in the project General Plan through the year 2030 will require periodic updates to the General Plan to reflect changed conditions, including those relating to water supplies. Implementation Measure V.A.1 of the Conservation Element of the project General Plan requires that the City of Perris work with EMWD to ensure that development does not outpace projection consistent with EMWD's Urban Water Management Plan. Accordingly, water supply impacts associated with future development will be re-evaluated between the present time and the year 2020. Until such time as EMWD determines that water entitlements may not be adequate for projected growth, adoption and implementation of the General Plan on the adequacy of existing water entitlements is determined to be less than significant.

e) *Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Potentially Significant Impact

Development accommodated through adoption and implementation of the project General Plan may result in the need for additional sewage treatment facilities the construction of which could cause significant environmental effects. Potential impacts

will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Potentially Significant Impact

Development accommodated through adoption and implementation of the project General Plan may exceed the growth assumptions included in the Riverside County Solid Waste Management Plan. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact

Collection and disposal of solid waste generated by development consistent with the project General Plan will conform to applicable federal, state, and local plans and regulations including the Integrated Waste Management Act and the Riverside County Waste Management Plan. Accordingly, no conflict with applicable statutes and regulations will be occasioned by adoption of the project General Plan and no impact will result.

h) Would the project include a new or retrofitted stormwater treatment control Best Management Practice (BMP), (e.g., water quality treatment basin, constructed treatment wetland), the operation of which could result in significant environmental effects (e.g., increased vectors and odors)?

Potentially Significant Impact

The project General Plan anticipates construction of storm detention basins for purposes of controlling stormwater run-off and of meeting water quality standards for stormwater run-off. These facilities could increase vectors and result in odors if not properly designed. Potential impacts will be discussed in the EIR and mitigation measures or changes to the project, as appropriate, will be recommended.

XVII. MANDATORY FINDINGS OF SIGNIFICIANCE

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

Potentially Significant Impact

Adoption and implementation of the project General Plan has the potential to indirectly result in degradation of Air Quality as indicated in Section III., above.

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

Potentially Significant Impact

Adoption and implementation of the project General Plan has the potential to indirectly contribute to cumulative traffic impacts that are considerable as indicated in Section XV., above.

c) *Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?*

Potentially Significant Impact

Adoption and implementation of the project General Plan has the potential to result in substantial adverse effect on human beings as follows: indirectly contributing to degradation of Air Quality as indicated in Section II, above; accommodating development in the flight paths of airports resulting in a safety hazard to people living and working there as in Section VII., above; accommodating development potentially subject to 0flooding resulting from dam inundation or seiche as in VIII., above; accommodating development that may result in exposure of persons to noise levels in excess of those set forth in guidelines of the California Department of Health as in Section XI., above; and, accommodating development that could be cut off from emergency services and evacuation routes as a result of flooding as in Section XV., above.

Appendix B: Notice of Preparation

NOTICE OF PREPARATION

TO:

FROM:

City of Perris
Department of Planning and
Community Development
135 North "D" Street
Perris, CA 92570-1998

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report

The City of Perris will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project.

The project description, location, and the probable environmental effects are included in the attached Initial Study.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to: **Olivia Gutierrez, Director**
Planning and Community Development
135 North "D" Street
Perris, CA 92570-1998
(909) 943-5003
ogutierrez@perris-ca.org

Project Title: **General Plan Amendment No. PO1-0185**

Project Proponent: **City of Perris**

Date: March 19, 2004 BY:

David Lepo, Project Manager
Hogle-Ireland, Inc.
Consultant to the Lead Agency

Appendix C: Citywide Noise Level Measurements and Acoustical Environment

Monitoring Location	Leq (dBA)	L02 (dBA)	L08 (dBA)	L25 (dBA)	L50 (dBA)	Lmin (dBA)	Lmax (dBA)
Monday, December 8, 2003							
NR-1	53.5	63.3	56.2	49.9	47.5	41.4	72.7
NR-2	62.0	70.7	66.4	61.1	54.6	46.5	78.4
NR-3	70.3	77.5	74.5	71.2	67.8	49.4	84.4
NR-4	71.9	79.1	76.5	73.7	69.0	47.6	83.0
NR-5	62.0	68.4	65.5	62.6	59.3	48.4	79.5
NR-6	68.4	74.1	72.1	69.9	67.2	52.9	82.8
NR-7	60.9	67.2	65.2	62.6	58.4	40.1	72.5
NR-8	60.3	68.1	63.4	59.7	56.0	46.2	80.6
Tuesday, December 9, 2003							
NR-9	59.5	68.0	63.0	57.5	53.5	48.1	76.3
NR-10	51.1	61.9	56.4	46.1	43.4	39.8	63.8
NR-11	62.3	71.5	67.3	61.6	51.4	33.2	77.4
NR-12	69.5	77.2	76.2	70.2	63.4	45.4	77.7
NR-13	69.1	72.1	70.9	69.8	68.7	64.1	75.2
NR-14	64.3	74.0	70.1	62.1	48.9	31.6	80.1
NR-15	61.7	70.0	66.8	61.9	51.6	36.1	76.5
NR-16	62.3	70.8	67.8	62.3	54.1	40.9	77.9
NR-17	63.5	70.1	67.8	65.1	60.4	45.9	75.0
Wednesday, December 10, 2003							
NR-18	55.0	64.1	60.6	52.6	48.9	44.8	67.6
NR-19	62.5	71.9	67.8	62.2	53.1	35.5	76.3
NR-20	64.1	72.3	70.1	64.4	55.3	39.4	76.9
NR-21	58.8	69.3	59.2	49.3	43.4	40.1	77.4
The Leq represents the equivalent sound level and is the numeric value of a constant level that over the given period of time transmits the same amount of acoustic energy as the actual time-varying sound level. The L02, L08, L25, and L50 are the levels that are exceeded 2, 8, 25, and 50 percent of the time, respectively. Alternatively, these values represent the noise level that would be exceeded for 1, 5, 15, and 30 minutes							

during a 1-hour period. The Lmin and Lmax represent the minimum and maximum root-mean-square noise levels obtained over a period of 1 second.

Monday, December 8, 2003

On Monday, December 8, 2003 the meter was field-calibrated at 10:22 AM The calibration was rechecked at 5:05 PM and no meter drift was noted. Eight readings were obtained during the day.

NR-1 **-** This reading was obtained in the field along the north side of Markham Street across from the residence located at 637 Markham. Specifically, the meter was placed 50 feet north of the centerline of travel (grease stain) of the near, westbound lane and approximately 270 feet west of Brennen Avenue. The area to the south of Markham is designated in the proposed Land Use Plan as "Rural Residential/Agriculture" and the reading at NR-1 is considered representative of noise levels found in that area. The reading started at 10:28 AM. Markham Street traffic included five eastbound autos. Westbound traffic included eight autos, one medium truck, and one heavy truck. Noise sources included local traffic, but background traffic was also notable. Other sources identified as part of "background noise" included construction activities and aircraft overflights.

NR-2 **-** This reading was obtained within the sphere-of-influence in the field across from the residence located at 22625 Markham Street. The area is also designated for "Rural Residential/Agriculture" and most of the homes in the area are of modular design. The meter was placed 50 feet north of the centerline of the near, westbound lane and approximately 760 feet west of Donna Lane. The reading started at 11:08 AM. Markham Street traffic included 39 autos, two medium trucks, and one heavy truck (actually a farm tractor). Westbound traffic included 28 autos and two medium trucks. Local traffic was the dominant noise source, but background and freeway traffic were also notable. Other noted sources included music at one of the local residences, dogs barking, and a honking horn in the distance.

NR-3 **-** This reading was also obtained in the sphere-of-influence area, along the Cajalco Expressway, approximately 318 feet west of Robinson Street. Modular homes are located along the expressway. Additionally, a tract of single-family residential units is located approximately 600 feet to the north. These homes are protected by a wooden fence. The meter was placed at a distance of 50 feet north of the centerline of travel of the westbound lane. The reading started at 11:45 AM. Cajalco Expressway traffic included 116 autos, five

medium trucks, and six heavy trucks traveling eastbound. One of these heavy trucks sounded its horn as it passed producing the noted Lmax. Westbound traffic included 115 autos, seven medium trucks, and nine heavy trucks. Aircraft overflights were noted as part of the background noise.

NR-4 - This reading was obtained along the south side of Ramona Expressway approximately 315 feet west of Rider Street. The expressway was in the process of being widened and the meter was placed over the newly graded pad, 50 feet from the centerline of the near, eastbound lane. The area immediately south of the reading location was also under construction and residential building pads were evident. The reading started at 1:24 PM. Traffic on Ramona Expressway included 99 autos, eight medium trucks, and eight heavy trucks traveling eastbound. Westbound traffic included 91 autos, five medium trucks, and nine heavy trucks. Noise was detected from a piece of heavy equipment operating at a distance of about 500 feet to the southeast.

NR-5 - This reading was obtained in the field along the north side of Rider Street, approximately 725 feet west of Evans Road. The field is designated in the proposed Land Use Plan as "Residential 7" (4-7 du/acre). The meter was placed 50 feet north of the centerline of the westbound lane. The reading started at 2:08 PM. Traffic on Rider Street included 66 autos, two medium trucks, and one heavy truck traveling eastbound. Westbound traffic included 54 autos, one medium truck, and one heavy truck. Active construction being performed in the field approximately 800 to 1,000 feet to the south was the dominant noise source.

NR-6 - This reading was obtained in the field located along the east side of Perris Boulevard, south of Placentia Avenue. The field, as well as the field to the north of Placentia Avenue, is designated in the proposed Land Use Plan as "Residential 22" (14-22 du/acre), while the vacant land to the north of Placentia is designated as "Residential 7" (4-7 du/acre). Single-family homes were located immediately to the south of the monitored location. The meter was placed across from the "Power Plus" facility approximately 520 feet south of Placentia and 50 feet east of the centerline of Perris Avenue's near, northbound lane. The reading started at 2:58 PM. Traffic on Perris Avenue included 169 autos, six medium trucks, and three

heavy trucks traveling northbound. Southbound traffic included 186 autos, eight medium trucks, and two heavy trucks.

NR-7 **-** This reading was obtained in the field along the south side of Orange Avenue, approximately 430 feet east of Evans Road. This area is designated in the proposed Land Use Plan as "Residential 4" (2-4 du/acre). The reading was obtained in the vacant field 50 feet south of the centerline of the near, eastbound lane. Homes with stables were located across Orange Avenue to the north. The reading started at 3:35 PM. Eastbound traffic on Orange Avenue included 36 autos while westbound traffic consisted of 60 autos. No trucks were noted during the measurement. A dog barking at approximately 250 feet and aircraft overflights were also noted.

NR-8 **-**This reading was obtained in the vacant lot along the east side of Redlands Avenue, approximately 195 feet north of Citrus Avenue, within an area of single family homes. New residential units were under construction, also along Redlands Avenue, just south of Citrus Avenue. The meter was placed at a distance of 50 feet east of the centerline for Redlands Avenue's eastern-most northbound lane. The reading started at 4:45 PM. Northbound and southbound traffic on Redlands Avenue included 29 and 31 autos, respectively. Traffic along Citrus, including two passing sirens, also added to the overall noise level. A barking dog, estimated at a distance of about 50 feet was also noted.

Tuesday, December 9, 2003

On Tuesday, December 9, 2003 the meter was field calibrated at 9:12 AM. The calibration was rechecked at 5:08 PM and no meter drift was noted. Nine readings were obtained throughout the day, as described below.

NR-9 **-** This reading was obtained in the field along the north side of San Jacinto Avenue approximately 82 feet east of F Street, in an area designated on the proposed Land Use Plan as "Residential 14" (7-14 du/acre). Residential units and the "Perris Full Gospel Church" are located across San Jacinto. The meter was placed at a distance of 50 feet north of the centerline of the westbound lane. The reading started at 9:17 AM. Eastbound traffic on San Jacinto Avenue included 12 autos. Westbound traffic included 23 autos and two medium trucks. Background noise included traffic on the I-215 Freeway to the east, operations at the

aggregate plant located along Perris Boulevard to the south, operations at the Moore Fencing Company located to the south along F Street, a dog barking at a distance of about 200 feet, aircraft overflights, and birdcalls.

NR-10 **-** This reading was obtained in the open field beyond the southern terminus of A Street, south of Watson Road. The area is designated in the proposed Land Use Plan as "Residential 7" (4-7 du/acre) and active construction of residential development was observed to the southeast. The reading started at 10:10 AM. Ambient noise sources included vehicles traveling along the I-215 Freeway, noise from the Techalloy Company, at about 500 feet, and aircraft overflights, including a direct overflight for skydiving. No vehicles were observed on A Street during the measurement.

NR-11 **-** This reading was obtained in the field along the south side of Ethanac Road approximately 385 feet east of Byers Street. The meter was placed at a distance of 50 feet south of the centerline of travel for Ethanac Road's eastbound lane. The field across Ethanac Road to the north is used for the Perris Valley Airport. Single-family residential units and horse stables were located to the south and west of the monitored location. The reading started at 10:55 AM. Eastbound traffic included 33 autos, one medium truck, and three heavy trucks. Westbound traffic included 25 autos, four medium trucks, and two heavy trucks. While vehicles traveling along Ethanac proved to be the most dominant source of noise, aircraft also added to the overall noise level.

The reading was obtained directly in the flight path for both departing and approaching aircraft. One of the "parachute planes" was observed to take-off directly over the location producing an instantaneous noise level of 77.4 dBA. This same plane landed, again passing over the meter, producing an instantaneous reading of 75.9 dBA. Additionally, two ultra light planes were observed to proceed in an east/west direction, just inside of the airport fence line. These aircraft produced instantaneous noise levels of 63.3 and 66.7 dBA.

NR-12 **-** This reading was obtained in the same location as NR-11 and was intended to capture the noise produced by a departing parachute aircraft. The 47-second reading began

as the plane was observed to lift off the runway and ended after the plane had passed over and the meter had again settled to the ambient level. Three autos were observed to pass along Ethanac Road during the measurement.

NR-13 **-** This reading was obtained in the parking area of the Perris Valley Airport to document the noise produced by the Perris Airport Skydiving Simulator. The meter was located 250 feet to the east of the simulator which was active at the time of the reading The reading started at 12:28 PM and ran for 15 minutes. Some minor noise was attributed to vehicles using the parking area and equipment use at the Spalding facility located to the south, but these added only minimally to that produced by the simulator.

NR-14 **-** This reading was obtained in the field along the north side of San Jacinto Avenue approximately 40 feet west of Evans Road (unpaved). The currently agricultural area is designated in the proposed Land Use Plan as "Residential 14 (7-14 du/acre). The meter was placed at a distance of 50 feet north of the centerline of the San Jacinto westbound lane. The reading started at 2:00 PM. Eastbound traffic included 28 autos and one medium truck. Westbound traffic included 18 autos and one medium truck. Background noise included traffic on the I-215 Freeway to the west and jet aircraft operating from March Air Force Base to the northwest.

NR-15 **-** This reading was obtained in the agricultural field along the southwest side of Case Road, approximately 1,235 feet south of Murrieta Road. The meter was placed at a distance of 60 feet southwest of the centerline for Case Road's southbound lane. (The standard 50-foot distance was increased to 60 feet due to the presence of a drainage ravine that parallels the road.) The reading started at 2:47 PM Northwest-bound traffic on Case included 43 autos, three medium trucks, and three heavy trucks, one of which was a piece of heavy equipment. Southeast-bound traffic included 32 autos and two medium trucks. Aircraft operations, both jet and light plane, were also noted during the measurement.

NR-16 **-** This reading was also obtained in the sphere-of-influence area along Ellis Avenue. The meter was placed approximately 398 west of Neitzeal Road across from the single-family residence located at 23440 Ellis Avenue. The meter was placed at a distance of 50 feet south of

the centerline of travel of the near, eastbound lane.. The reading started at 3:48 PM. Ellis Avenue traffic included 28 autos traveling eastbound, and 42 autos and one medium truck proceeding westbound. Ambient noise was elevated by the operation of off-road motorcycles to the north across Ellis Avenue, background traffic noise produced along Highway 74, and light plane overflights.

NR-17 **-** This reading was obtained in sphere-of-influence area in the field along the south side of San Jacinto Avenue approximately 40 feet east of Raymond Road. The area is designated in the proposed Land Use Plan as "Residential 7" (4-7 du/acre). The meter was placed at a distance of 50 feet south of the centerline of travel of the near, eastbound lane. Modular homes were located to the north and west. Single-family residential units were also located to the east across Diana Street. The reading started at 4:48 PM. Eastbound traffic included 70 autos and two medium trucks. Westbound traffic included 54 autos and one medium truck. Background noise included hammering at the residential unit located across San Jacinto Avenue and aircraft over flights.

Wednesday, December 10, 2003

On Wednesday, December 10, 2003 the meter was field calibrated at 9:55 AM. The calibration was rechecked at 2:55 PM and no meter drift was noted. Four readings were obtained over the day.

NR-18 **-** This reading was obtained in the field along the north side of 7th Street, approximately 527 feet west of Redlands Avenue. This placed the meter across from the post office parking lot. The area is designated in the proposed Land Use Plan as "Residential 14" (7-14 du/acre). Existing single-family units are located to the west along G Street. The meter was placed at a distance of 50 feet north of the centerline of the westbound lane. The reading began at 10:00 AM Eastbound traffic included 14 autos and one medium truck while westbound traffic included 10 autos. Background noise included construction equipment used in road repair along G Street, approximately 800 feet to the west.

NR-19 **-** This reading was obtained in the field across from the airport along Goetz Road, approximately 267 feet south of Mapes Road. The meter was placed 50 feet west of the

centerline of travel of the southbound lane. The reading began at 10:56 AM. Traffic on Goetz Road included 33 autos and two heavy trucks traveling northbound. Southbound traffic included 20 autos and four heavy trucks. Local aircraft also added to the noise.

NR-20 **-** This reading was obtained in the sphere-of-influence area in front of the residential unit located at 21231 Old Elsinore Road. The residence is located approximately 1,575 feet south of Orange Avenue. The meter was placed at a distance of 50 feet west of the centerline of the southbound travel lane. The reading began at 1:28 PM. Northbound traffic included 16 autos, three medium trucks, and two heavy trucks. Southbound traffic included 42 autos, one medium truck, and one heavy truck. Other sources of noise included aircraft overflights and music at the residence across Old Elsinore Road.

NR-21 **-** This reading was obtained in the field along the east side of Patterson Road approximately 192 feet north of Placentia Street. This placed the meter across from the residential unit located at 20441 Patterson Road. In this location, Patterson Road is unpaved. While the monitored location is planned for light industrial uses, the west side of Patterson Road includes single-family residential units. The meter was placed at a distance of approximately 56 east of the centerline of Patterson Road. The reading started at 2:35 PM. Southbound traffic on Patterson included one auto. The primary sources of noise included jet aircraft operations out of March Air Force Base. Three Boeing 707 jets were noted during the reading, two of which circled almost directly overhead. Traffic on the I-215 Freeway was also audible in the background.

Appendix D: Perris Auto Speedway Noise Level Measurements and Acoustical Environment

Monitoring Location	Leq (dBA)	L02 (dBA)	L08 (dBA)	L25 (dBA)	L50 (dBA)	Lmin (dBA)	Lmax (dBA)
Outside main entrance, approximately 575 feet from speedway							
PS-1	77.5	80.5	80.1	78.6	77.8	70.9	80.9
PS-2	73.6	76.4	75.8	74.6	73.7	63.4	77.0
PS-3	82.2	84.9	84.3	83.5	82.0	77.7	85.1
PS-4	79.8	83.9	82.4	81.1	79.6	65.5	87.5
PS-5	77.3	83.2	81.2	79.2	74.5	65.6	83.6
PS-6	83.0	88.1	86.1	84.5	82.5	74.2	90.4
PS-7	82.8	87.9	86.0	84.0	82.7	74.2	88.3
PS-8	82.8	87.8	86.1	84.4	81.8	73.6	88.3
In nearest residential area, approximately 1,900 feet from speedway							
PS-9	67.0	75.0	69.6	68.3	65.3	56.5	76.4
PS-10	64.5	72.9	68.9	66.5	60.3	51.6	73.6
PS-11	62.4	72.2	66.4	61.0	57.1	50.5	72.4
PS-12	70.3	78.0	72.9	70.9	68.7	60.9	79.4
PS-13	47.4	52.3	49.5	47.7	46.6	43.9	55.7

The Leq represents the equivalent sound level and is the numeric value of a constant level that over the given period of time transmits the same amount of acoustic energy as the actual time-varying sound level. The L02, L08, L25, and L50 are the levels that are exceeded 2, 8, 25, and 50 percent of the time, respectively. Alternatively, these values represent the noise level that would be exceeded for 1, 5, 15, and 30 minutes during a 1-hour period. The Lmin and Lmax represent the minimum and maximum root-mean-square noise levels obtained over a period of 1 second.

The first eight readings were obtained directly in front of the Speedway entrance at the Lake Perris Drive right-of-way. This placed the meter approximately 575 feet from the actual track. The other five readings were obtained in front of the most proximate residential units located to the south at a distance of about 1,900 feet. The meter was field calibrated at 5:30 PM. The calibration was rechecked at 8:25 PM and no meter drift was noted.

Characteristics of the noise environment at each monitoring site are described below.

PS-1 - As noted, this reading was obtained along Lake Perris Driver in front of the entrance. The 1-minute reading was obtained from 5:52 PM. Vehicles were either practicing or qualifying during the measurement. The reading included racing noise, but also included passing vehicles on Lake Perris Drive behind the meter.

PS-2 - The 44-second measurement was obtained at 5:59 PM. Vehicles were either practicing or qualifying during the measurement and no vehicles passed during the reading.

PS-3 - This 37-second measurement began at 6:05 PM. Again, cars were practicing or qualifying during the measurement and no vehicles passed during the reading.

PS-4 - This 1-minute reading was obtained at 7:15 PM. Vehicles were racing at this time and no vehicles passed on Lake Perris Drive.

PS-5 - This 48-second reading was started at 7:22 PM. Vehicles were racing at this time and no road traffic was noted.

PS-6 - This 1-minute reading was started at 7:28 PM. Vehicles were racing at this time and no road traffic was noted.

PS-7 - This 1-minute reading was started at 7:32 PM. Vehicles were racing at this time and no road traffic was noted.

PS-8 - This 1-minute reading began at 7:36 PM. Vehicles were racing at this time and no road traffic was noted.

PS- 9 - The remaining five readings were obtained in the residential area to the south of the Ramona Expressway, in May Ranch. The meter was placed over the sidewalk between the residential units located at 1074 and 1086 Milestone Avenue approximately 1,900 feet to the south of the stadium's southernmost point. This reading started at 7:50 PM and ran for 1 minute. Even though the reading was obtained on the sidewalk in front of the homes and was partially shielded by the dwelling structures, noise from the raceway was very noticeable.

PS-10 - This 1-minute reading began at 7:55 PM and included approximately 50 seconds of racing. In addition to the Perris Auto Speedway, noise from racing at the Starwest Motocross park was also audible. The public address system(s) were also audible.

PS-11 **-** This 1-minute reading started at 8:00 PM. Again, both the Perris Auto Speedway and Starwest Motocross park were audible.

PS-12 **-** This 1-minute reading started at 8:03 PM. Racing at the Perris Auto Speedway was most notable.

PS-13 **-** This 1-minute reading started at 8:10 PM. The reading included noise from the motocross park and that from the public address system. No racing at the Speedway occurred during the measurement.

Appendix E: Florida Table Level of Service (LOS) Methodology

Florida Department of Transportation (DOT) Level of Service (LOS) Tables have been utilized to analyze street and highway segments along the Tulare County Street and Highway System. The Tables (referred to as "Modified Highway Capacity Manual LOS Tables) have been used to specifically evaluate the impacts of existing and planned growth and development on the existing and proposed traffic circulation system. The Florida LOS Tables were developed in 1988 by Florida FDOT in response to the passage of significant growth management legislation during the mid-1980s, as well as to the need to comply to standards published in the revised 1985 Highway Capacity Manual (HCM). The Tables were established to:

- Provide a grade LOS (A thru F) for future transportation corridor segment analysis. Such analysis is not available from HCM applications;

- Provide a better estimate of segment LOS versus reliance on the volume to capacity (V/C) ratio methodology which is not HCM-based, since it does not consider the effects of delay and congestion, especially at signalized intersections along rural facilities where passing opportunities are limited; and

- Provide a consistent process to measure LOS

The Tables were recently updated in 2002 to reflect methodologies contained in the 1997 HCM. Because the Tables consider the effects that cause congestion and delay, they are considered HCM-based and in accordance with the 1997 HCM wherein delay is the primary factor used to measure LOS.

The standards incorporated in the Modified HCM-Based LOS Tables include the correlation between urban size and highway congestion, urban infill, the different roles provided by state facilities, the impact of development and the provision of necessary infrastructure, flexibility in assessing special transportation areas, consideration of the relationship between highways and exclusive transit systems servicing commuters, and recognition that numerous state facilities are constrained and backlogged with no potential for expansion due to physical or policy barriers. Furthermore, the LOS Tables are applicable in determining street and highway system needs and deficiencies; directing development of long-range transportation activities within urban areas; assessing project priorities; evaluating additional access points such as interchanges, roads and driveways; analyzing regional and local government transportation/circulation plans; and determining impacts from proposed developments.

Information provided in the LOS Tables includes three different types of area analysis including: urbanized areas; areas transitioning into urbanized areas or non-urbanized areas with a population of over 5,000; and rural undeveloped areas or developed areas with a

population of less than 5,000. The Tables are representative of peak hour and peak direction conditions with daily volumes encompassing directional, subhourly, hourly, daily, monthly, and seasonal peaking characteristics of traffic. Traffic conditions are evaluated considering 1) service flow rates (considered as the maximum hourly rate at which vehicles can safely pass through an intersection during a 15-minute interval under current traffic signalization conditions), and 2) a specified LOS.

Data provided by the LOS Tables are based upon methodologies provided from the 1997 HCM, as well as from actual traffic and signalization conditions. It should be noted that the Tables are considered measurement guidelines for street and highway LOS estimations, and are not to be considered as statewide standards. The use of LOS Tables is recommended for general planning applications necessary to evaluate street and highway LOS and through lane requirements. The Tables are directly applicable for use within more comprehensive planning activities in which less field data is available when planning takes longer to implement.

When dealing with the LOS Tables, default variables can be applied and include a variety of street and highway characteristics such as number of lanes, number of signalized intersections per mile, saturation flow rate, etc. The default variables referenced by street and highway types above, were only applied to calculate LOS when actual known data (existing and future) was not available. To the extent possible, actual or planned street and highway geometrics, speeds, saturation flow, etc., were applied to calculate LOS. This information was gathered from the County of Riverside, the cities, and the Riverside County Transportation Commission (RCTC).

Given the extensive application of LOS Tables to various types of projects and analysis, the Tables are considered extremely applicable to the goal of segment LOS. This conclusion is based upon detailed comparative analysis considering various other HCM and delay-based methodologies referenced in the HCM.

Appendix F: HCS Analysis - Existing

HCS2000: Signalized Intersections Release 4.1

Analyst: VRPA Technologies — Inter.: I-215 SB Ramps & Cajalco Expwy
Agency: Perris — Area Type: All other areas
Date: 09/30/02 — Jurisd:
Period: Existing AM — Year : 2002
Project ID: Perris Circ. Element
E/W St: Cajalco Expressway — N/S St: I-215 SB Ramps

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	1	2	0	0	0	0	0	1	1
LGConfig		TR		L	T						LT	R
Volume		403	210	268	675					620	11	152
Lane Width		12.0		12.0	12.0						12.0	12.0
RTOR Vol			53									38

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru		A			Thru			
Right		A			Right			
Peds					Peds			
WB Left	A				SB Left	A		
Thru	A	A			Thru	A		
Right					Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	23.0	27.0			55.0			
Yellow	4.0	4.0			4.0			
All Red	1.0	1.0			1.0			

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
TR	714	3173	0.87	0.22	57.7	E	57.7	E
Westbound								
L	317	1656	0.94	0.19	101.7	F		
T	1518	3312	0.49	0.46	19.0	B	42.5	D
Northbound								
Southbound								
LT	761	1661	0.92	0.46	46.3	D	42.1	D
R	679	1482	0.19	0.46	19.4	B		

Intersection Delay = 46.2 (sec/veh) Intersection LOS = D

HCS2000: Signalized Intersections Release 4.1

Analyst:
Agency: Perris
Date: 09/30/02
Period: Existing PM
Project ID: Perris Circ. Element
E/W St: Cajalco Expressway

Inter.: I-215 SB Ramps & Cajalco Expwy
Area Type: All other areas
Jurisd:
Year : 2002

N/S St: I-215 SB Ramps

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	1	2	0	0	0	0	0	1	1
LGConfig		TR		L	T						LT	R
Volume		631	246	309	497					757	1	186
Lane Width		12.0		12.0	12.0						12.0	12.0
RTOR Vol			62									47

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru		A			Thru			
Right		A			Right			
Peds					Peds			
WB Left	A				SB Left	A		
Thru	A	A			Thru	A		
Right					Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	9.0	22.0			25.0			
Yellow	3.0	5.0			4.0			
All Red	0.0	1.0			1.0			

Cycle Length: 70.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
	Capacity		v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
TR	1044	3322	0.87	0.31	30.6	C	30.6	C
Westbound								
L	221	1719	1.55	0.13		F		
T	1670	3438	0.33	0.49	8.8	A	406.5	F
Northbound								
Southbound								
LT	615	1723	1.37	0.36	696.2	F	590.9	F
R	549	1538	0.28	0.36	15.3	B		

Intersection Delay = 350.5 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1

Analyst: VRPA Technologies — Inter.: Perris Blvd & Nuevo Road
Agency: Perris — Area Type: All other areas
Date: 09/30/02 — Jurisd:
Period: Existing AM — Year : 2002
Project ID: Perris Circ. Element
E/W St: Nuevo Road — N/S St: Perris Blvd

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	2	1	2	2	0	1	3	0	2	2	1
LGConfig	L	T	R	L	TR		L	TR		L	T	R
Volume	157	368	88	195	636	81	166	221	608	113	239	217
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	12.0
RTOR Vol			22			20			152			54

Duration 1.00 — Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A		
Thru		A			Thru	A		
Right		A			Right	A		
Peds					Peds			
WB Left	A				SB Left	A		
Thru		A			Thru	A		
Right		A			Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right	A				WB Right			
Green	12.0	43.0				16.0	29.0	
Yellow	4.0	4.0				4.0	4.0	
All Red	1.0	1.0				1.0	1.0	

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	347	3467	0.50	0.10	52.3	D		
T	1281	3574	0.32	0.36	26.3	C	33.1	C
R	573	1599	0.13	0.36	26.0	C		
Westbound								
L	347	3467	0.63	0.10	55.4	E		
TR	1264	3527	0.61	0.36	30.5	C	36.0	D
Northbound								
L	238	1787	0.77	0.13	66.3	E		
TR	1116	4617	0.67	0.24	42.9	D	47.5	D
Southbound								
L	462	3467	0.27	0.13	47.1	D		
T	864	3574	0.31	0.24	37.5	D	36.0	D
R	613	1599	0.30	0.38	26.0	C		

Intersection Delay = 38.8 (sec/veh) Intersection LOS = D

HCS2000: Signalized Intersections Release 4.1

Analyst: Inter.: Perris Blvd & Nuevo Road
Agency: Perris Area Type: All other areas
Date: 09/30/02 Jurisd:
Period: Existing PM Year : 2002
Project ID: Perris Circ. Element
E/W St: Nuevo Road N/S St: Perris Blvd

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	2	1	2	2	0	1	3	0	2	2	1
LGConfig	L	T	R	L	TR		L	TR		L	T	R
Volume	333	638	143	178	400	121	184	523	156	129	472	139
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	12.0
RTOR Vol			36			30			39			35

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A		
Thru		A			Thru		A	
Right		A			Right		A	
Peds					Peds			
WB Left	A				SB Left	A		
Thru		A			Thru		A	
Right		A			Right		A	
Peds					Peds			
NB Right					EB Right			
SB Right	A				WB Right			
Green	20.0	35.0				20.0	25.0	
Yellow	4.0	4.0				4.0	4.0	
All Red	1.0	1.0				1.0	1.0	

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	567	3400	0.65	0.17	49.5	D		
T	1022	3505	0.69	0.29	39.5	D	41.9	D
R	457	1568	0.26	0.29	32.9	C		
Westbound								
L	567	3400	0.35	0.17	44.6	D		
TR	994	3407	0.55	0.29	36.2	D	38.4	D
Northbound								
L	292	1752	0.70	0.17	54.6	D		
TR	1020	4898	0.70	0.21	46.1	D	48.0	D
Southbound								
L	567	3400	0.25	0.17	43.7	D		
T	730	3505	0.72	0.21	47.7	D	43.2	D
R	653	1568	0.18	0.42	22.2	C		

Intersection Delay = 43.0 (sec/veh) Intersection LOS = D

HCS2000: Signalized Intersections Release 4.1

Analyst: VRPA Technologies
Agency: Perris
Date: 09/30/02
Period: Existing AM
Project ID: Perris Circ. Element
E/W St: Ramona Expressway

Inter.: I-215 NB Ramps & Ramona Expwy
Area Type: All other areas
Jurisd:
Year : 2002

N/S St: I-215 NB Ramps

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	0	0	2	0	1	1	0	0	0	0
LGConfig	L	T			TR		L	TR				
Volume	176	899			738	706	280	1	276			
Lane Width	12.0	12.0			12.0		12.0	12.0				
RTOR Vol						192			60			

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left A			
Thru	A	A			Thru A			
Right					Right A			
Peds					Peds			
WB Left					SB Left			
Thru		A			Thru			
Right		A			Right			
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	20.0	55.0			30.0			
Yellow	4.0	4.0			4.0			
All Red	1.0	1.0			1.0			

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	284	1703	0.69	0.17	54.3	D		
T	2271	3406	0.44	0.67	3.8	A	12.0	B
Westbound								
TR	1465	3196	0.95	0.46	43.5	D	43.5	D
Northbound								
L	426	1703	0.73	0.25	47.8	D		
TR	381	1525	0.63	0.25	43.5	D	45.9	D
Southbound								

Intersection Delay = 32.0 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1

Analyst:	Inter.: I-215 NB Ramps & Ramona Expwy
Agency: Perris	Area Type: All other areas
Date: 12/12/02	Jurisd:
Period: Existing PM	Year : 2002
Project ID: Perris Circ. Element	
E/W St: Ramona Expressway	N/S St: I-215 NB Ramps

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	0	0	2	0	1	1	0	0	0	0
LGConfig	L	T			TR		L	TR				
Volume	205	1027			610	766	229	1	239			
Lane Width	12.0	12.0			12.0		12.0	12.0				
RTOR Vol						192			60			

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left	A				NB	Left	A			
	Thru	A	A				Thru	A			
	Right						Right	A			
	Peds						Peds				
WB	Left					SB	Left				
	Thru		A				Thru				
	Right		A				Right				
	Peds						Peds				
NB	Right					EB	Right				
SB	Right					WB	Right				
Green		12.5	35.0					10.0			
Yellow		3.0	5.0					3.5			
All Red		0.5	0.0					0.5			

Cycle Length: 70.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
	Capacity		v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	304	1703	0.75	0.18	37.9	D		
T	2482	3406	0.46	0.73	0.6	A	6.8	A
Westbound								
TR	1579	3158	0.83	0.50	15.7	B	15.7	B
Northbound								
L	243	1703	1.05	0.14	195.6	F		
TR	218	1525	0.92	0.14	87.2	F	147.9	F
Southbound								

Intersection Delay = 30.9 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1

Analyst: VRPA Technologies — Inter.: Indian Ave & Ramona Expressway
Agency: Perris — Area Type: All other areas
Date: 09/30/02 — Jurisd:
Period: Existing AM — Year : 2002
Project ID: Perris Circ. Element
E/W St: Ramona Expressway — N/S St: Indian Ave

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	0	1	1	1	1	2	0
LGConfig	L	T	R	L	TR		L	T	R	L	TR	
Volume	7	926	73	24	1387	1	54	5	14	1	1	1
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vol			18			0			3			0

Duration 1.00 — Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	A				NB Left	A			
Thru		A			Thru		A		
Right		A			Right		A		
Peds					Peds				
WB Left	A				SB Left	A			
Thru		A			Thru		A		
Right		A			Right		A		
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	13.0	63.0				12.0	12.0		
Yellow	4.0	4.0				4.0	4.0		
All Red	1.0	1.0				1.0	1.0		

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	179	1656	0.04	0.11	48.0	D		
T	1739	3312	0.59	0.52	14.8	B	15.0	B
R	778	1482	0.08	0.52	14.2	B		
Westbound								
L	179	1656	0.15	0.11	48.9	D		
TR	1739	3312	0.89	0.52	24.9	C	25.3	C
Northbound								
L	166	1656	0.36	0.10	51.8	D		
T	174	1743	0.03	0.10	48.8	D	51.2	D
R	148	1482	0.08	0.10	49.2	D		
Southbound								
L	166	1656	0.01	0.10	48.6	D		
TR	306	3064	0.01	0.10	48.6	D	48.6	D

Intersection Delay = 21.9 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1

Analyst:
Agency: Perris
Date: 09/30/02
Period: Existing PM
Project ID: Perris Circ. Element
E/W St: Ramona Expressway

Inter.: Indian Ave & Ramona Expressway
Area Type: All other areas
Jurisd:
Year : 2002

N/S St: Indian Ave

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	0	1	1	1	1	2	0
LGConfig	L	T	R	L	TR		L	T	R	L	TR	
Volume	7	1237	51	33	1074	4	139	2	130	1	7	4
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vol			13			1			33			1

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	A				NB Left	A			
Thru		A			Thru		A		
Right		A			Right		A		
Peds					Peds				
WB Left	A				SB Left	A			
Thru		A			Thru		A		
Right		A			Right		A		
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	13.0	52.0				20.0	15.0		
Yellow	4.0	4.0				4.0	4.0		
All Red	1.0	1.0				1.0	1.0		

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	188	1736	0.04	0.11	48.0	D		
T	1504	3471	0.91	0.43	37.6	D	37.1	D
R	673	1553	0.06	0.43	19.8	B		
Westbound								
L	188	1736	0.20	0.11	49.3	D		
TR	1504	3470	0.80	0.43	28.3	C	29.0	C
Northbound								
L	289	1736	0.53	0.17	47.7	D		
T	228	1827	0.01	0.13	46.0	D	49.8	D
R	194	1553	0.56	0.13	53.0	D		
Southbound								
L	289	1736	0.00	0.17	41.7	D		
TR	416	3329	0.03	0.13	46.1	D	45.7	D

Intersection Delay = 34.9 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1

Analyst: VRPA Technologies — Inter.: Perris Blvd & Ramona Expwy
Agency: Perris — Area Type: All other areas
Date: 09/30/02 — Jurisd:
Period: Existing AM — Year : 2002
Project ID: Perris Circ. Element
E/W St: Ramona Expressway — N/S St: Perris Blvd

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	3	0	1	2	1	1	2	1	1	2	1
LGConfig	L	TR		L	T	R	L	T	R	L	T	R
Volume	189	539	158	59	780	101	234	346	62	87	361	260
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			40			25			16			65

Duration 1.00 — Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A		
Thru		A			Thru	A		
Right		A			Right	A		
Peds					Peds			
WB Left	A				SB Left	A		
Thru		A			Thru	A		
Right		A			Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right	A				WB Right	A		
Green	20.0	35.0				21.0	24.0	
Yellow	4.0	4.0				4.0	4.0	
All Red	1.0	1.0				1.0	1.0	

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	292	1752	0.72	0.17	56.1	E		
TR	1429	4900	0.51	0.29	35.4	D	40.0	D
Westbound								
L	292	1752	0.23	0.17	43.7	D		
T	1022	3505	0.85	0.29	47.0	D	44.3	D
R	771	1568	0.11	0.49	16.4	B		
Northbound								
L	307	1752	0.85	0.17	70.7	E		
T	701	3505	0.55	0.20	44.0	D	53.7	D
R	314	1568	0.16	0.20	39.9	D		
Southbound								
L	307	1752	0.32	0.17	43.8	D		
T	701	3505	0.57	0.20	44.5	D	38.4	D
R	640	1568	0.34	0.41	24.7	C		

Intersection Delay = 43.8 (sec/veh) Intersection LOS = D

HCS2000: Signalized Intersections Release 4.1

Analyst: Inter.: Perris Blvd & Ramona Expwy
Agency: Perris Area Type: All other areas
Date: 09/30/02 Jurisd:
Period: Existing PM Year : 2002
Project ID: Perris Circ. Element
E/W St: Ramona Expressway N/S St: Perris Blvd

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	3	0	1	2	1	1	2	1	1	2	1
LGConfig	L	TR		L	T	R	L	T	R	L	T	R
Volume	222	772	275	105	563	83	256	543	90	142	418	174
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			69			21			23			44

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A		
Thru		A			Thru		A	
Right		A			Right		A	
Peds					Peds			
WB Left	A				SB Left	A		
Thru		A			Thru		A	
Right		A			Right		A	
Peds					Peds			
NB Right					EB Right			
SB Right	A				WB Right		A	
Green	20.0	32.0				22.0	26.0	
Yellow	4.0	4.0				4.0	4.0	
All Red	1.0	1.0				1.0	1.0	

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	298	1787	0.83	0.17	68.5	E		
TR	1326	4973	0.82	0.27	45.7	D	49.9	D
Westbound								
L	298	1787	0.39	0.17	45.4	D		
T	953	3574	0.66	0.27	40.8	D	39.4	D
R	773	1599	0.09	0.48	16.8	B		
Northbound								
L	328	1787	0.87	0.18	72.9	E		
T	774	3574	0.78	0.22	49.6	D	55.7	E
R	346	1599	0.21	0.22	38.9	D		
Southbound								
L	328	1787	0.48	0.18	45.0	D		
T	774	3574	0.60	0.22	43.6	D	39.8	D
R	680	1599	0.21	0.43	22.0	C		

Intersection Delay = 47.1 (sec/veh) Intersection LOS = D

HCS2000: Unsignalized Intersections Release 4.1

TWO-WAY STOP CONTROL SUMMARY

Analyst:	VRPA Technologies
Agency/Co.:	
Date Performed:	9/30/02
Analysis Time Period:	Existing AM
Intersection:	Nuevo Road & Ruby Drive
Jurisdiction:	Fresno County
Analysis Year:	2002
Project ID:	
East/West Street:	Nuevo Road
North/South Street:	Ruby Drive

Intersection Orientation: EW Study period (hrs): 1.00

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	28	460	90	77	863	9
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	31	511	100	85	958	10
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type	Undivided					
RT Channelized?						
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal?		No			No	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	21	0	72	8	3	41
Peak Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	23	0	80	8	3	45
Percent Heavy Vehicles	2	0	2	0	0	2
RT Channelized?						
Lanes	1	1	0	1	1	0
Configuration	L		TR	L		TR

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	L	L	L		TR	L		TR
v (vph)	31	85	23		80	8		48
C(m) (vph)	707	964	99		690	75		375
v/c	0.04	0.09	0.23		0.12	0.11		0.13
95% queue length	0.14	0.29	0.89		0.39	0.35		0.44
Control Delay	10.3	9.1	52.3		10.9	58.7		16.0
LOS	B	A	F		B	F		C
Approach Delay			20.1			22.1		
Approach LOS			C			C		

HCS2000: Unsignalized Intersections Release 4.1

TWO-WAY STOP CONTROL SUMMARY

Analyst:	VRPA Technologies
Agency/Co.:	
Date Performed:	9/30/02
Analysis Time Period:	Existing PM
Intersection:	Nuevo Road & Ruby Drive
Jurisdiction:	Fresno County
Analysis Year:	2002
Project ID:	
East/West Street:	Nuevo Road
North/South Street:	Ruby Drive

Intersection Orientation: EW Study period (hrs): 1.00

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	37	830	38	6	572	12
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	41	922	42	6	635	13
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type	Undivided					
RT Channelized?						
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal?		No			No	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	29	1	12	14	3	29
Peak Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	32	1	13	15	3	32
Percent Heavy Vehicles	2	0	2	0	0	2
RT Channelized?						
Lanes	1	1	0	1	1	0
Configuration	L		TR	L		TR

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	L	L	L		TR	L		TR
v (vph)	41	6	32		14	15		35
C(m) (vph)	934	710	96		393	134		428
v/c	0.04	0.01	0.33		0.04	0.11		0.08
95% queue length	0.14	0.03	1.44		0.11	0.38		0.27
Control Delay	9.0	10.1	61.0		14.5	35.2		14.2
LOS	A	B	F		B	E		B
Approach Delay				46.8			20.5	
Approach LOS				E			C	

ALL-WAY STOP CONTROL(AWSC) ANALYSIS

Analyst: VRPA
Agency/Co.:
Date Performed: 10/1/02
Analysis Time Period: Existing AM
Intersection: Redlands & I-215 NB Ramps
Jurisdiction:
Analysis Year: 2002
Project ID: Perris Circ. Element
East/West Street: Redlands Ave
North/South Street: I-215 NB Ramps

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	148	130	0	0	315	189	362	0	150	0	0	0
% Thrus Left Lane												

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LT		T	R	L	R		
PHF	1.00		1.00	1.00	1.00	1.00		
Flow Rate	278		315	189	362	150		
% Heavy Veh	0		0	0	0	0		
No. Lanes	1		2		2			
Opposing-Lanes	2		1		0			
Conflicting-lanes	2		2		2			
Geometry group	3b		5		1			

Duration, T 1.00 hrs.

Worksheet 3 - Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rates:								
Total in Lane	278		315	189	362	150		
Left-Turn	148		0	0	362	0		
Right-Turn	0		0	189	0	150		
Prop. Left-Turns	0.5		0.0	0.0	1.0	0.0		
Prop. Right-Turns	0.0		0.0	1.0	0.0	1.0		
Prop. Heavy Vehicle	0.0		0.0	0.0	0.0	0.0		
Geometry Group	3b		5		1			
Adjustments Table 10-40:								
hLT-adj	0.2		0.2		0.2			
hRT-adj	-0.6		-0.6		-0.6			
hHV-adj	1.7		1.7		1.7			
hadj, computed	0.1		0.0	-0.6	0.2	-0.6		

Worksheet 4 - Departure Headway and Service Time

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow rate	278		315	189	362	150		
hd, initial value	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
x, initial	0.25		0.28	0.17	0.32	0.13		
hd, final value	6.57		6.47	5.86	6.17	5.36		
x, final value	0.51		0.57	0.31	0.62	0.22		
Move-up time, m	2.0		2.3		2.0			
Service Time	4.6		4.2	3.6	4.2	3.4		

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rate	278		315	189	362	150		
Service Time	4.6		4.2	3.6	4.2	3.4		
Utilization, x	0.51		0.57	0.31	0.62	0.22		
Dep. headway, hd	6.57		6.47	5.86	6.17	5.36		
Capacity	528		543	439	567	400		
Delay	16.27		17.52	11.16	19.08	9.89		
LOS	C		C	B	C	A		
Approach:								
Delay	16.27		15.14		16.39			
LOS	C		C		C			
Intersection Delay	15.88		Intersection LOS C					

ALL-WAY STOP CONTROL(AWSC) ANALYSIS

Analyst: VRPA
Agency/Co.:
Date Performed: 10/1/02
Analysis Time Period: Existing PM
Intersection: Redlands & I-215 NB Ramps
Jurisdiction:
Analysis Year: 2002
Project ID: Perris Circ. Element
East/West Street: Redlands Ave
North/South Street: I-215 NB Ramps

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	173	388	0	0	326	107	504	0	353	0	0	0
% Thrus Left Lane												

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LT		T	R	L	R		
PHF	1.00		1.00	1.00	1.00	1.00		
Flow Rate	561		326	107	504	353		
% Heavy Veh	0		0	0	0	0		
No. Lanes	1		2		2			
Opposing-Lanes	2		1		0			
Conflicting-lanes	2		2		2			
Geometry group	3b		5		1			

Duration, T 1.00 hrs.

Worksheet 3 - Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rates:								
Total in Lane	561		326	107	504	353		
Left-Turn	173		0	0	504	0		
Right-Turn	0		0	107	0	353		
Prop. Left-Turns	0.3		0.0	0.0	1.0	0.0		
Prop. Right-Turns	0.0		0.0	1.0	0.0	1.0		
Prop. Heavy Vehicle	0.0		0.0	0.0	0.0	0.0		
Geometry Group	3b		5		1			
Adjustments Table 10-40:								
hLT-adj	0.2		0.2		0.2			
hRT-adj	-0.6		-0.6		-0.6			
hHV-adj	1.7		1.7		1.7			
hadj, computed	0.1		0.0	-0.6	0.2	-0.6		

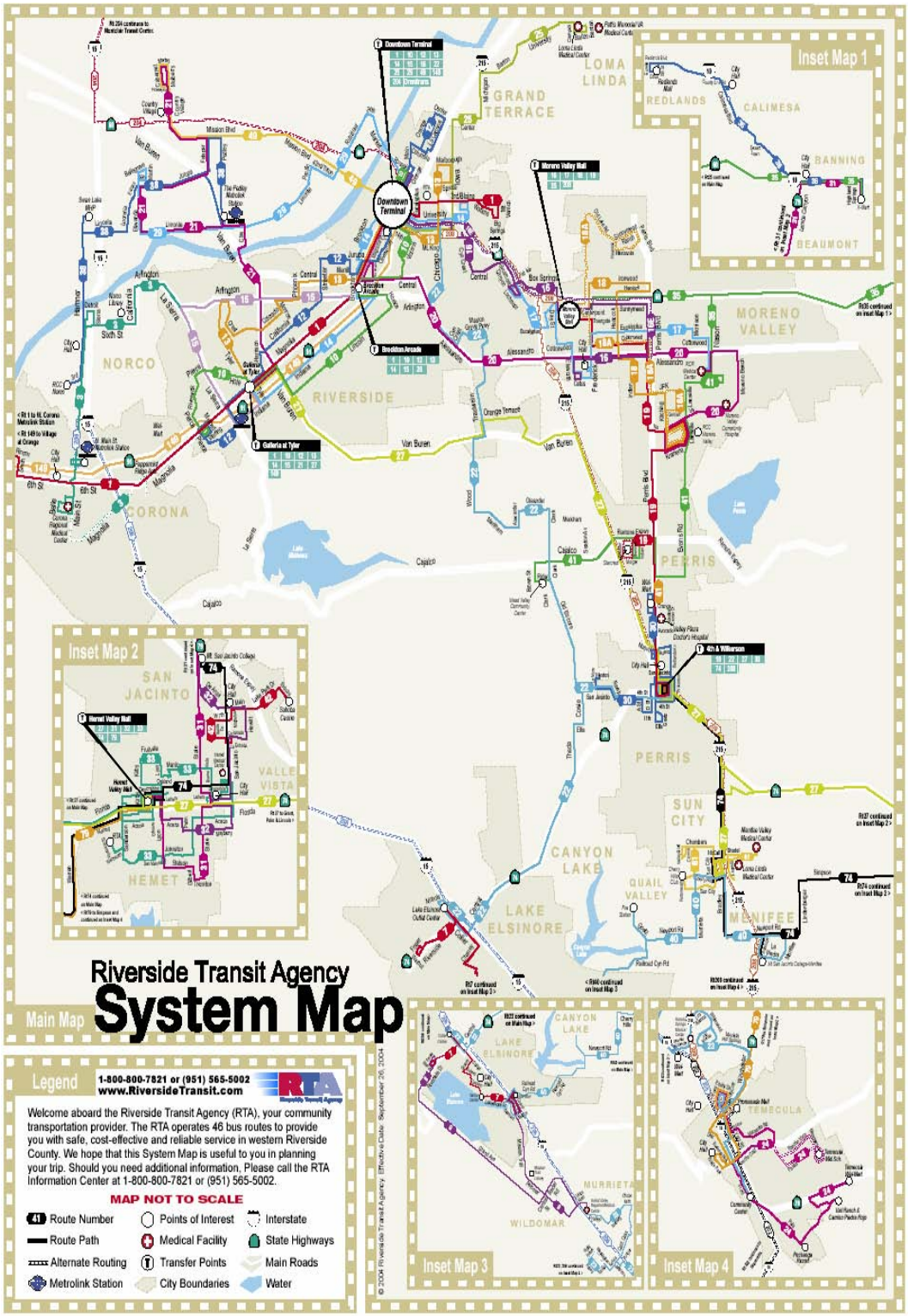
Worksheet 4 - Departure Headway and Service Time

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow rate	561		326	107	504	353		
hd, initial value	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
x, initial	0.50		0.29	0.10	0.45	0.31		
hd, final value	7.27		7.85	7.23	7.01	6.19		
x, final value	1.13		0.71	0.21	0.98	0.61		
Move-up time, m	2.0		2.3		2.0			
Service Time	5.3		5.5	4.9	5.0	4.2		

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rate	561		326	107	504	353		
Service Time	5.3		5.5	4.9	5.0	4.2		
Utilization, x	1.13		0.71	0.21	0.98	0.61		
Dep. headway, hd	7.27		7.85	7.23	7.01	6.19		
Capacity	561		457	357	514	581		
Delay	301.01		29.17	11.90	105.51	18.62		
LOS	F		D	B	F	C		
Approach:								
Delay	301.01		24.91		69.72			
LOS	F		C		F			
Intersection Delay	129.34		Intersection LOS		F			

Appendix G: Transit Map



Appendix H: HCS Analysis - Future & Mitigation

HCS2000: Signalized Intersections Release 4.1

Analyst: VRPA Technologies — Inter.: Perris Blvd & Nuevo Road
Agency: Perris — Area Type: All other areas
Date: 08/18/03 — Jurisd:
Period: Future AM — Year : 2003
Project ID: Perris Circ. Element
E/W St: Nuevo Road — N/S St: Perris Blvd

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	2	1	2	2	0	1	3	0	2	2	1
LGConfig	L	T	R	L	TR		L	TR		L	T	R
Volume	167	416	111	244	719	85	209	262	761	119	283	231
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	12.0
RTOR Vol			28			21			190			58

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	A				NB Left	A			
Thru		A			Thru		A		
Right		A			Right		A		
Peds					Peds				
WB Left	A				SB Left	A			
Thru		A			Thru		A		
Right		A			Right		A		
Peds					Peds				
NB Right					EB Right				
SB Right	A				WB Right				
Green	12.0	40.0				19.0	29.0		
Yellow	4.0	4.0				4.0	4.0		
All Red	1.0	1.0				1.0	1.0		

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	347	3467	0.54	0.10	53.0	D		
T	1191	3574	0.39	0.33	29.6	C	35.3	D
R	533	1599	0.17	0.33	28.4	C		
Westbound								
L	347	3467	0.78	0.10	64.5	E		
TR	1177	3531	0.74	0.33	36.5	D	43.1	D
Northbound								
L	283	1787	0.82	0.16	68.5	E		
TR	1114	4608	0.83	0.24	48.9	D	52.8	D
Southbound								
L	549	3467	0.24	0.16	44.4	D		
T	864	3574	0.36	0.24	38.1	D	35.8	D
R	613	1599	0.31	0.38	26.2	C		

Intersection Delay = 43.3 (sec/veh) Intersection LOS = D

HCS2000: Signalized Intersections Release 4.1

Analyst: — Inter.: Perris Blvd & Nuevo Road
Agency: Perris — Area Type: All other areas
Date: 08/18/03 — Jurisd:
Period: Future PM — Year : 2003

Project ID: Perris Circ. Element
E/W St: Nuevo Road N/S St: Perris Blvd

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	2	1	2	2	0	1	3	0	2	2	1
LGConfig	L	T	R	L	TR		L	TR		L	T	R
Volume	233	452	128	354	721	180	232	619	195	136	559	148
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	12.0
RTOR Vol			32			45			49			37

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left	A				NB	Left	A			
	Thru		A				Thru		A		
	Right		A				Right		A		
	Peds						Peds				
WB	Left	A				SB	Left	A			
	Thru		A				Thru		A		
	Right		A				Right		A		
	Peds						Peds				
NB	Right					EB	Right				
SB	Right	A				WB	Right				
Green		15.0	37.0					20.0	28.0		
Yellow		4.0	4.0					4.0	4.0		
All Red		1.0	1.0					1.0	1.0		

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	433	3467	0.60	0.13	52.0	D		
T	1102	3574	0.46	0.31	33.0	C	38.4	D
R	493	1599	0.22	0.31	31.0	C		
Westbound								
L	433	3467	0.91	0.13	81.5	F		
TR	1076	3490	0.88	0.31	48.6	D	58.2	E
Northbound								
L	298	1787	0.87	0.17	76.3	E		
TR	1164	4989	0.73	0.23	44.9	D	52.2	D
Southbound								
L	578	3467	0.26	0.17	43.8	D		
T	834	3574	0.74	0.23	46.4	D	42.8	D
R	640	1599	0.19	0.40	23.5	C		

Intersection Delay = 49.3 (sec/veh) Intersection LOS = D

HCS2000: Signalized Intersections Release 4.1

Analyst: VRPA Technologies
Agency: Perris
Date: 08/18/03
Period: Future AM
Project ID: Perris Circ. Element
E/W St: Ramona Expressway

Inter.: Indian Ave & Ramona Expressway
Area Type: All other areas
Jurisd:
Year : 2002

N/S St: Indian Ave

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	3	1	2	3	1	1	1	1	1	2	1
LGConfig	L	T	R	L	T	R	L	T	R	L	T	R
Volume	42	2274	116	46	3407	6	86	28	27	6	6	6
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			29			1			8			1

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left	A				NB	Left	A			
	Thru		A				Thru		A		
	Right		A				Right		A		
	Peds						Peds				
WB	Left	A				SB	Left	A			
	Thru		A				Thru		A		
	Right		A				Right		A		
	Peds						Peds				
NB	Right	A	A			EB	Right	A			
SB	Right	A				WB	Right	A			
Green		6.0	78.0					9.0	7.0		
Yellow		4.0	4.0					4.0	4.0		
All Red		1.0	1.0					1.0	1.0		

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	161	3213	0.29	0.05	56.0	E		
T	3093	4759	0.82	0.65	8.7	A	9.4	A
R	1136	1482	0.09	0.77	3.5	A		
Westbound								
L	161	3213	0.32	0.05	56.2	E		
T	3093	4759	1.22	0.65	415.7	F	410.2	F
R	1136	1482	0.01	0.77	3.3	A		
Northbound								
L	124	1656	0.77	0.08	84.5	F		
T	102	1743	0.30	0.06	55.9	E	66.7	E
R	1247	1482	0.02	0.84	1.5	A		
Southbound								
L	124	1656	0.06	0.08	51.7	D		
T	193	3312	0.04	0.06	53.4	D	49.9	D
R	222	1482	0.03	0.15	43.6	D		

Intersection Delay = 241.3 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1

Analyst:
Agency: Perris
Date: 08/18/03
Period: Future PM
Project ID: Perris Circ. Element
E/W St: Ramona Expressway

Inter.: Indian Ave & Ramona Expressway
Area Type: All other areas
Jurisd:
Year : 2002

N/S St: Indian Ave

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	3	1	1	3	1	1	1	1	1	1	1
LGConfig	L	T	R	L	T	R	L	T	R	L	T	R
Volume	42	3038	81	64	2638	26	220	11	251	6	39	24
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			20			6			63			6

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	A				NB Left	A			
Thru		A			Thru		A		
Right		A			Right		A		
Peds					Peds				
WB Left	A				SB Left	A			
Thru		A			Thru		A		
Right		A			Right		A		
Peds					Peds				
NB Right	A				EB Right	A			
SB Right	A				WB Right	A			
Green	8.0	76.0				15.0	7.0		
Yellow	4.0	4.0				4.0	4.0		
All Red	1.0	1.0				1.0	1.0		

Cycle Length: 126.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	105	1656	0.45	0.06	59.9	E		
T	2871	4759	1.18	0.60	334.9	F	324.8	F
R	1129	1482	0.06	0.76	3.8	A		
Westbound								
L	105	1656	0.68	0.06	74.9	E		
T	2871	4759	1.02	0.60	71.8	E	71.4	E
R	1129	1482	0.02	0.76	3.6	A		
Northbound								
L	197	1656	1.24	0.12	528.0	F		
T	97	1743	0.12	0.06	57.2	E	320.8	F
R	235	1482	0.89	0.16	94.0	F		
Southbound								
L	197	1656	0.04	0.12	49.2	D		
T	97	1743	0.44	0.06	60.9	E	55.3	E
R	235	1482	0.09	0.16	45.4	D		

Intersection Delay = 213.1 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1

Analyst: VRPA Technologies
Agency: Perris
Date: 08/18/03
Period: Future AM
Project ID: Perris Circ. Element
E/W St: Ramona Expressway

Inter.: Perris Blvd & Ramona Expwy
Area Type: All other areas
Jurisd:
Year : 2003

N/S St: Perris Blvd

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	3	1	2	3	1	2	3	1	2	3	1
LGConfig	L	T	R	L	T	R	L	T	R	L	T	R
Volume	405	1585	339	135	2294	231	501	514	142	199	537	557
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			85			58			36			139

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A		
Thru		A			Thru		A	
Right		A			Right		A	
Peds					Peds			
WB Left	A				SB Left	A		
Thru		A			Thru		A	
Right		A			Right		A	
Peds					Peds			
NB Right	A				EB Right	A		
SB Right	A				WB Right	A		
Green	17.0	44.0				21.0	16.0	
Yellow	4.0	4.0				4.0	4.0	
All Red	1.0	1.0				1.0	1.0	

Cycle Length: 118.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	490	3400	0.92	0.14	79.8	E		
T	1878	5036	0.94	0.37	44.7	D	47.3	D
R	930	1568	0.30	0.59	12.1	B		
Westbound								
L	490	3400	0.31	0.14	45.6	D		
T	1878	5036	1.36	0.37	680.9	F	603.4	F
R	930	1568	0.21	0.59	11.2	B		
Northbound								
L	605	3400	0.92	0.18	73.3	E		
T	683	5036	0.84	0.14	59.4	E	62.8	E
R	505	1568	0.23	0.32	29.6	C		
Southbound								
L	605	3400	0.37	0.18	43.0	D		
T	683	5036	0.87	0.14	63.9	E	61.7	E
R	505	1568	0.92	0.32	67.9	E		

Intersection Delay = 255.3 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1

Analyst:
Agency: Perris
Date: 08/18/03
Period: Future AM
Project ID: Perris Circ. Element
E/W St: Redlands Ave

Inter.: I-215 NB Ramps & Redlands Ave
Area Type: All other areas
Jurisd:
Year : 2003

N/S St: I-215 NB Ramps

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	1	0	0	2	1	2	1	0	0	0	0
LGConfig	L	T			T	R	L	TR				
Volume	347	260			630	464	735	1	321			
Lane Width	12.0	12.0			12.0	12.0	12.0	12.0				
RTOR Vol						116			80			

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	A				NB Left	A			
Thru	A	A			Thru	A			
Right					Right	A			
Peds					Peds				
WB Left					SB Left				
Thru		A			Thru				
Right		A			Right				
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	20.0	45.0				40.0			
Yellow	4.0	4.0				4.0			
All Red	1.0	1.0				1.0			

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	551	3303	0.70	0.17	51.2	D		
T	1045	1792	0.28	0.58	7.8	A	32.6	C
Westbound								
T	1277	3406	0.55	0.38	27.6	C	30.1	C
R	572	1524	0.68	0.38	34.6	C		
Northbound								
L	1101	3303	0.74	0.33	38.2	D		
TR	508	1525	0.53	0.33	32.1	C	36.7	D
Southbound								

Intersection Delay = 33.2 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1

Analyst: Inter.: I-215 NB Ramps & Redlands Ave
Agency: Perris Area Type: All other areas
Date: 08/18/03 Jurisd:
Period: Future PM Year : 2003
Project ID: Perris Circ. Element
E/W St: Redlands Ave N/S St: I-215 NB Ramps

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	1	0	0	2	1	2	1	0	0	0	0
LGConfig	L	T			T	R	L	TR				
Volume	405	775			651	263	1023	1	756			
Lane Width	12.0	12.0			12.0	12.0	12.0	12.0				
RTOR Vol						66			189			

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left	A				NB	Left	A			
	Thru	A	A				Thru	A			
	Right						Right	A			
	Peds						Peds				
WB	Left					SB	Left				
	Thru		A				Thru				
	Right		A				Right				
	Peds						Peds				
NB	Right					EB	Right				
SB	Right					WB	Right				
Green		20.0	35.0					50.0			
Yellow		4.0	4.0					4.0			
All Red		1.0	1.0					1.0			

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group	Adj Flow Rate (s)	Ratios		Lane Group		Approach	
	Capacity		v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	551	3303	0.82	0.17	58.3	E		
T	896	1792	0.96	0.50	54.1	D	55.5	E
Westbound								
T	993	3406	0.73	0.29	40.7	D	39.6	D
R	444	1524	0.49	0.29	36.0	D		
Northbound								
L	1376	3303	0.83	0.42	35.6	D		
TR	635	1524	0.99	0.42	95.9	F	57.1	E
Southbound								

Intersection Delay = 52.5 (sec/veh) Intersection LOS = D

Mitigation

HCS2000: Signalized Intersections Release 4.1

Analyst: VRPA Technologies — Inter.: I-215 SB Ramps & Cajalco Expwy
Agency: Perris — Area Type: All other areas
Date: 09/30/02 — Jurisd:
Period: Existing AM - Mitigated — Year : 2002
Project ID: Perris Circ. Element
E/W St: Cajalco Expressway — N/S St: I-215 SB Ramps

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	1	2	0	0	0	0	1	1	0
LGConfig		TR		L	T					L	LTR	
Volume		403	210	268	675					620	11	152
Lane Width		12.0		12.0	12.0					12.0	12.0	
RTOR Vol			53									38

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left			
Thru		A			Thru			
Right		A			Right			
Peds					Peds			
WB Left	A				SB Left	A		
Thru	A	A			Thru	A		
Right					Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	25.0	32.0			48.0			
Yellow	4.0	4.0			4.0			
All Red	1.0	1.0			1.0			

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
TR	846	3173	0.74	0.27	43.6	D	43.6	D
Westbound								
L	345	1656	0.86	0.21	69.6	E		
T	1711	3312	0.44	0.52	13.6	B	29.5	C
Northbound								
Southbound								
L	662	1656	0.62	0.40	30.6	C		
LTR	644	1610	0.64	0.40	28.3	C	29.5	C

Intersection Delay = 33.0 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1

Analyst: Inter.: I-215 SB Ramps & Cajalco Expwy
Agency: Perris Area Type: All other areas
Date: 09/30/02 Jurisd:
Period: Existing PM + Mitigation Year : 2002
Project ID:
E/W St: Cajalco Expressway N/S St: I-215 SB Ramps

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	1	2	0	0	0	0	1	1	0
LGConfig		TR		L	T					L	LTR	
Volume		631	246	309	497					757	1	186
Lane Width		12.0		12.0	12.0					12.0	12.0	
RTOR Vol			62									47

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left					NB	Left				
	Thru		A				Thru				
	Right		A				Right				
	Peds						Peds				
WB	Left	A				SB	Left	A			
	Thru	A	A				Thru	A			
	Right						Right	A			
	Peds						Peds				
NB	Right					EB	Right				
SB	Right					WB	Right				
Green		21.0	26.0					29.0			
Yellow		3.0	5.0					4.0			
All Red		0.0	1.0					1.0			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group	Adj Flow Rate (s)	Ratios		Lane Group		Approach	
	Capacity		v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
TR	960	3322	0.94	0.29	54.1	D	54.1	D
Westbound								
L	401	1719	0.86	0.23	52.2	D		
T	1910	3438	0.29	0.56	7.2	A	24.4	C
Northbound								
Southbound								
L	554	1719	0.91	0.32	53.3	D		
LTR	537	1667	0.91	0.32	54.8	D	54.0	D

Intersection Delay = 44.6 (sec/veh) Intersection LOS = D

HCS2000: Signalized Intersections Release 4.1

Analyst:
Agency: Perris
Date: 12/12/02
Period: Existing PM- Mitigated timing
Project ID: Perris Circ. Element
E/W St: Ramona Expressway

Inter.: I-215 NB Ramps & Ramona Expwy
Area Type: All other areas
Jurisd:
Year : 2002

N/S St: I-215 NB Ramps

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	0	0	2	0	1	1	0	0	0	0
LGConfig	L	T			TR		L	TR				
Volume	205	1027			610	766	229	1	239			
Lane Width	12.0	12.0			12.0		12.0	12.0				
RTOR Vol						192			60			

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left A			
Thru	A	A			Thru A			
Right					Right A			
Peds					Peds			
WB Left					SB Left			
Thru		A			Thru			
Right		A			Right			
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	17.0	44.0			16.5			
Yellow	3.0	5.0			3.5			
All Red	0.5	0.0			0.5			

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	322	1703	0.71	0.19	41.5	D		
T	2441	3406	0.47	0.72	1.1	A	7.8	A
Westbound								
TR	1544	3158	0.85	0.49	20.9	C	20.9	C
Northbound								
L	312	1703	0.81	0.18	52.3	D		
TR	280	1525	0.71	0.18	43.3	D	48.4	D
Southbound								

Intersection Delay = 19.2 (sec/veh) Intersection LOS = B