Chapter 1 Proposed Project

1.1 Introduction

The Riverside County Transportation Commission (RCTC), California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA) propose to improve west-east transportation in western Riverside County between Interstate 15 (I-15) in the west and State Route 79 (SR-79) in the east. The proposed project will construct a new parkway[1], known as the Mid County Parkway (MCP), which will provide a direct and continuous route connecting major population/employment centers as identified in the Land Use Element of the County of Riverside General Plan and the plans of the cities of Corona, Perris, and San Jacinto, a distance of approximately 51 kilometers (km) (32 miles [mi]). The MCP project's regional location is shown in Figure 1.1.1.

The MCP project was identified as a key west-east regional transportation corridor as a result of several years of comprehensive land use and transportation planning in Riverside County through the Riverside County Integrated Project (RCIP). The RCIP was an unprecedented, multiyear planning effort to simultaneously prepare environmental, transportation, housing, and development guidelines for Riverside County for the first half of the 21st century. Riverside County is one of the fastest

[1] The use of the term "parkway" in this document is intended solely as an abbreviated reference to the Mid County Parkway project and should not be construed so as to define the type of roadway anticipated should the project be constructed. It is used because the public has become accustomed to the term during the history of the project; the project proposes "above standard" landscape mitigation, including the planting of native vegetation A parkway is defined as a divided arterial highway with full control of access and with grade separations at local interchanges with major local arterials. It should be noted that even though the project title is "Mid County Parkway," not all of the alternatives consist of a "parkway" for its entire length. Some of the alternatives include segments that are "expressways and arterials," as defined in the Riverside County General Plan, and are designed to freeway/expressway standards as defined in the Caltrans Highway Design Manual (HDM). The term "parkway" is not used per the definition of parkway in the Caltrans HDM.

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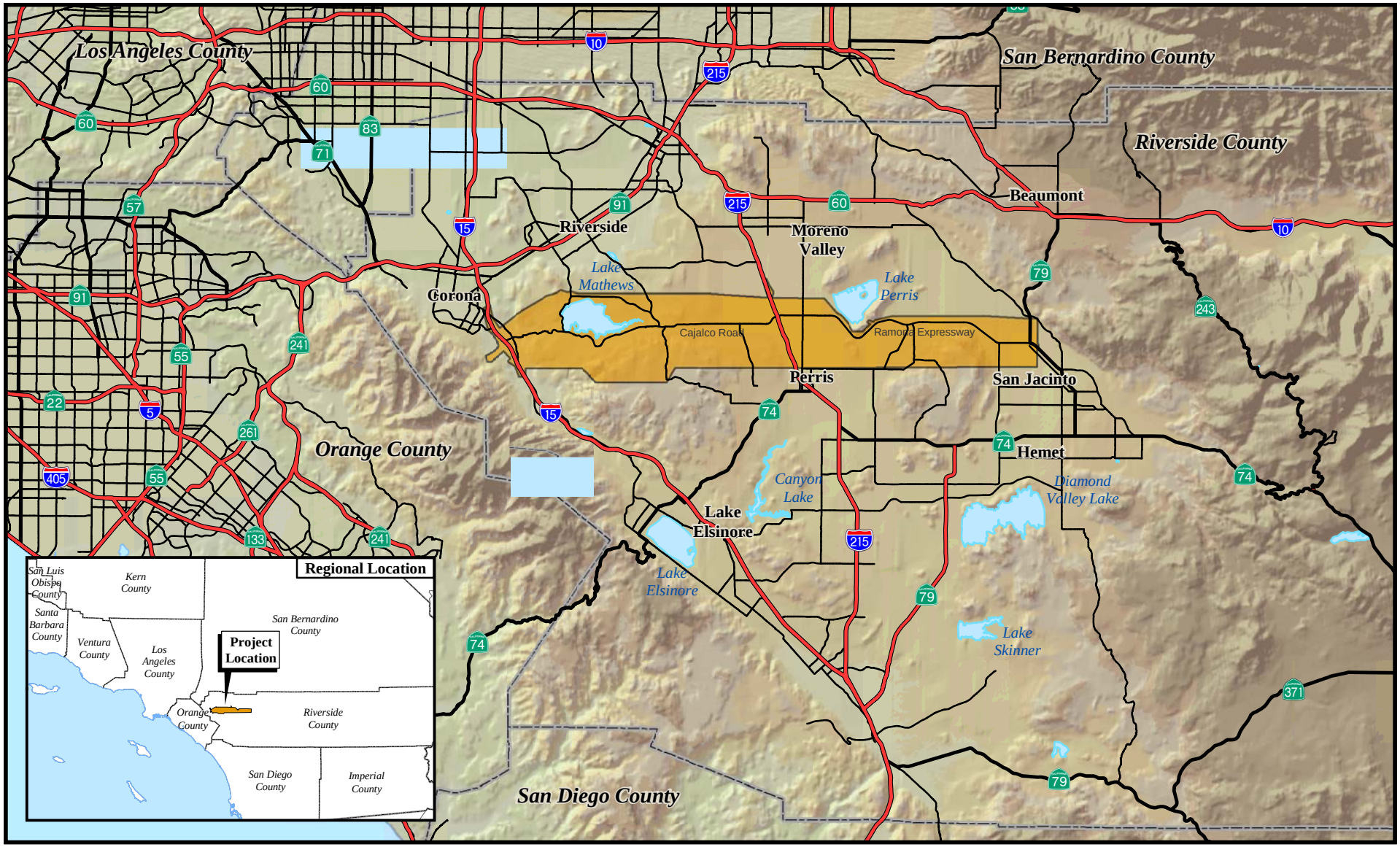

Figure 1.1.1

Legend

Mid County Parkway Study Area

SOURCE: ESRI (2006); TBM (2006), Jacobs Engineering (2/07)

0 2.5 5 10 Miles

0 4 8 16 Kilometers

Regional Location

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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growing counties in the United States. The purpose of the RCIP was to address the planning, environmental, and transportation issues that would result from the anticipated doubling of population in Riverside County, from 1.5 million residents currently to approximately 3.0 million by 2020. The RCIP included three components: (1) a new General Plan for Riverside County, adopted in October 2003; (2) a Multiple Species Habitat Conservation Plan (MSHCP) for western Riverside County (approved in June 2004); and (3) the Community and Environmental Transportation Acceptability Process (CETAP).

CETAP study efforts were jointly undertaken by the RCTC and the County of Riverside as a part of the RCIP. CETAP included the study of two intercounty corridors (Riverside County to Orange County and Riverside County to San Bernardino County) and two intracounty transportation corridors (a north-south and a west-east corridor in western Riverside County). Tier 1 analyses and environmental documents were initiated for the two intracounty corridors in fall 2000: a north-south corridor referred to as Winchester to Temecula, and a west-east corridor known as the Hemet to Corona/Lake Elsinore (HCLE) Corridor. The purpose of the Tier 1 efforts was to select preferred alternatives in order to preserve needed right of way.

The west-east corridor was known as the HCLE Corridor (Figure 1.1.2). The agencies that participated in the HCLE Corridor study process developed the following purpose of the proposed action in the HCLE Corridor: "to provide multimodal transportation improvements that will help alleviate future traffic demands and congestion and improve the east-west movement of people and goods across western Riverside County."[1] After a Draft Tier 1 Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) was completed for the HCLE Corridor and circulated for public review in 2002 with a suite of 14 "build" alternatives, the RCTC Board accepted a staff recommendation in June 2003 to proceed with the accelerated preparation of a project-level environmental document for a west-east

[1] Draft Environmental Impact Statement/Environmental Impact Report for the Riverside County Integrated Project, Hemet to Corona/Lake Elsinore Corridor, July 2002.

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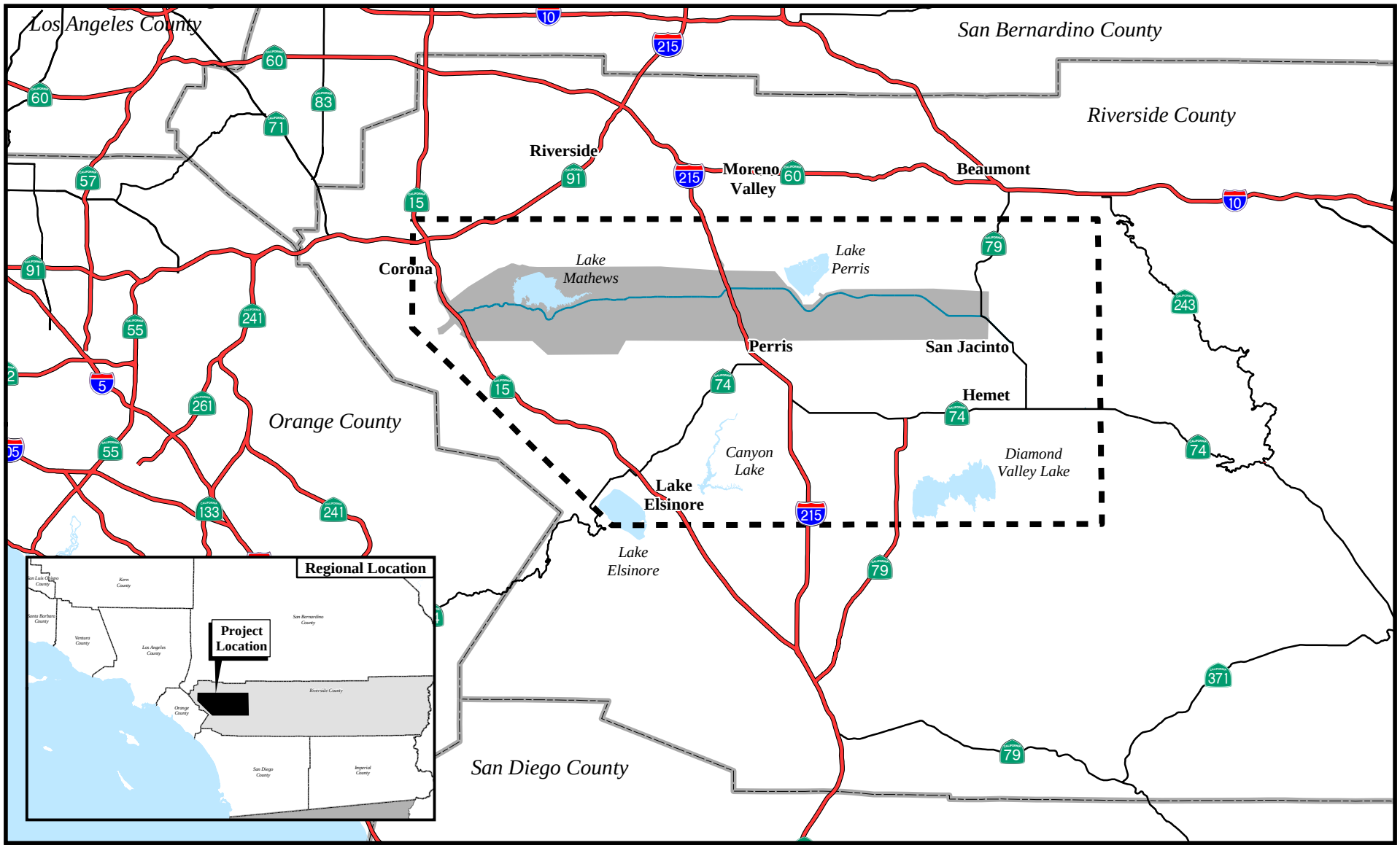

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Figure 1.1.2

Mid County Parkway Study Area

Hemet to Corona/Lake Elsinore Study Area

SOURCE: ESRI (2006); TBM (2006), Jacobs Engineering (2/07)

0 2.5 5 10 Miles

0 4 8 16 Kilometers

Hemet to Corona/Lake Elsinore Study Area

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alternative that would follow the existing alignment of Cajalco Road and Ramona Expressway, known as the MCP project.[1]

Cajalco Road and Ramona Expressway exist today as two- to six-lane arterial highways with numerous intersections and driveways for local property access. The MCP study area is an existing mix of rural, semirural, and urban land uses;

however, substantial residential and commercial development is under construction, fully entitled for future development, or undergoing review of applications for future land development.

Table 1.1.A provides the preliminary cost estimate for the proposed MCP project.

Table 1.1.A Preliminary Project Cost Estimate

Cost Breakdown[1]	Estimated Costs[2] ($ billion)
Engineering	**0.60**
Construction	**2.98**
Right of Way	0.62
Construction	2.21
Environmental Mitigation	0.15
Total Cost	**3.58**

Source: Jacobs, 2008.
[1] See Chapter 2 of this EIR/EIS for a cost breakdown by alternative.
[2] Cost provided for Locally Preferred Alternative (Alternative 9 TWS DV).
EIR/EIS = Environmental Impact Report/Environmental Impact Statement
TWS DV = Temescal Wash Area Design Variation

Detailed figures of the MCP Build Alternatives are provided later in Chapter 2, Project Description and Alternatives.

The Project Approval/Environmental Document (PA/ED) phase of the MCP project, including the preparation of the Draft EIR/EIS, was funded with Riverside County Transportation Uniform Mitigation Fee funds and a federal streamlining funding allocation. No funding has been programmed for design, right of way acquisition, or

[1] Although the document prepared for the HCLE Corridor was a Tier 1 EIS/EIR, this Draft EIR/EIS for the MCP project does not "tier off" the HCLE Draft Tier 1 EIS/EIR pursuant to Section 15152 of the California Environmental Quality Act (CEQA) Guidelines. This is because a Final Tier 1 EIS/EIR was not completed, and all of the data and analysis contained in the HCLE Draft Tier 1 EIS/EIR needed to be updated for the analysis of the MCP Alternatives.

construction; although, it is anticipated that a combination of the state Interregional Transportation Improvement Program (ITIP), Regional Transportation Improvement Program (RTIP), local Measure "A" 0.5-cent sales tax, local Transportation Uniform Mitigation Fee fees, and federal dollars would be pursued. The project is currently included in the 2008 Regional Transportation Plan (RTP) adopted May 8, 2008, listed as CETAP Mid County Parkway Corridor (RIV031218). The following description is listed for the project: "Construct a 4–8 lane limited access parkway from Corona (slightly west of I-15) to San Jacinto (to SR-79) and construct local interchanges in the corridor at 15 locations."

The 2008 RTIP (adopted in August 2008) includes the following programming description:

> Mid County Pkwy: Construct 4 to 8 through lane (2 to 4 lanes in each direction) approximately 32 mile Mid County Pkwy corridor in western Riverside County between west of I-15 (south of Cajalco Rd) east to SR79 in San Jacinto including construction/reconstruction of approximately 15 interchanges with collector distributor lane/mainline system improvements. (CETAP-Alternative 9)

1.2 Project Purpose and Need

1.2.1 Project Purpose

The purpose of the proposed action is to provide a transportation parkway that would effectively and efficiently accommodate regional west-east movement of people and goods between and through Corona, Perris, and San Jacinto. More specifically, the selected Alternative would:

- Provide increased capacity to support the forecast travel demand for the 2035 design year;
- Provide a limited access parkway;
- Provide roadway geometrics to meet state highway design standards;
- Accommodate Surface Transportation Assistance Act (STAA) National Network trucks[1]; and

[1] These are larger trucks that are permitted on the federal Interstate system and the non-Interstate Federal-aid Primary System.

- Provide a parkway that is compatible with a future multimodal transportation system.

The MCP project provides logical termini since it connects to two major north-south transportation facilities (I-15 and SR-79) with the I-215 in the middle, has independent utility since the project is usable and a reasonable expenditure even if no additional transportation improvements in the area are made, and it does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

1.2.2 Project Need

The MCP project is located in an area of western Riverside County that is currently undergoing substantial population and employment growth. Population in Riverside County overall is expected to double between 2000 and 2020 from 1.5 million to 3.1 million.[1] The population in western Riverside County is expected to increase by over 1 million people between 2000 and 2025, an increase of more than 85 percent. Growth in employment is expected to occur at an even higher rate, with an increase of over 115 percent in the number of jobs.[2] Although currently funded transportation improvements will address some of the projected future demand, additional transportation improvements are needed to provide for the efficient movement of people and goods in the future.

1.2.2.1 Capacity, Transportation Demand and Safety

Existing Capacity

The existing major west-east facilities in western Riverside County consist of State Routes 60, 91, and 74 (SR-60, SR-91, and SR-74, respectively). These facilities provide linkages between the major north-south facilities of SR-79, I-215, and I-15. In 2035, SR-60 and SR-91, as well as several segments of SR-74, are projected to operate at level of service (LOS) F. The previous HCLE CETAP studies evaluated several parkway alternatives along Ramona Expressway, Cajalco Road, and El Sobrante Road, as well as other alternatives to the south along portions of SR-74, Domenigoni Parkway, Ethanac Road, and Newport Road. While the Riverside County General Plan (2003) identifies several major west-east arterials south of SR-74 that provide alternative west-east routes, Ramona Expressway and Cajalco

[1] Source: 2004 Regional Transportation Plan, Southern California Association of Governments.

[2] Ibid.

Road comprise the only existing and proposed major continuous transportation corridor between SR-74 and SR-60/SR-91 (see Figure 1.2.1, Circulation Element). Cajalco Road is a two- to four-lane arterial with no access control, and Ramona Expressway is a two- to six-lane expressway with partial access control. Therefore, discussion of capacity, transportation demand, and safety focuses on Ramona Expressway and Cajalco Road.

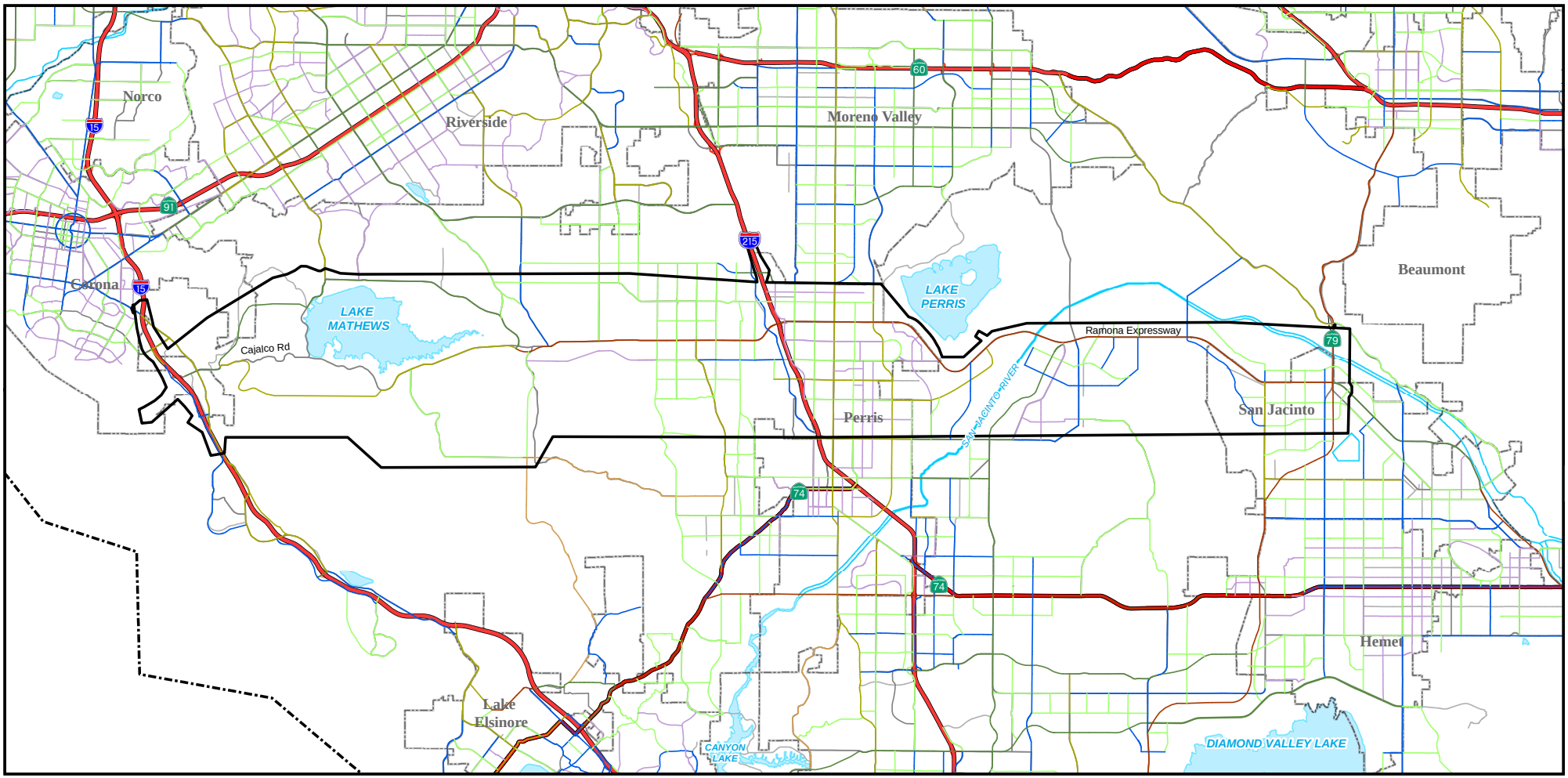
Level of Service

Cajalco Road already operates at an unacceptable LOS (LOS E/F) through many segments. By 2035, the roadway will experience further delay if additional capacity is not provided. This is illustrated in Table 1.2.A. The 2035 projections show a more than 100 percent increase in traffic demand through the corridor. Existing capacity is inadequate to meet the future traffic demand. LOS can be improved by providing more capacity, as shown in Table 1.2.A, for 2035 conditions with project.

Travel Time

A Travel Time Analysis (VRPA Technologies, 2008) was conducted for the MCP project. The following assumptions were used to estimate existing and 2035 future travel times along the MCP corridor between I-15 and SR-79:

- Average speed on the MCP would be 98.9 kilometers per hour (kph) (61.5 miles per hour [mph]), corresponding to LOS D conditions and a 112 kph (70 mph) free flow speed.
- For Alternatives 6 and 7, a reduced speed of 80 kph (50 mph) was assumed for the area west of Lake Mathews with lower-speed curves.
- For Alternatives 1A and 1B, an average travel speed of 16 kph (10 mph) was assumed based on LOS F conditions for an arterial street (Class II), using the Urban Streets methodology of the Highway Capacity Manual. If no roadway improvements are made in this corridor, LOS F is the expected operating condition in 2035.
- For Alternative 1B, an average travel speed of 33 kph (21 mph) was assumed based on LOS D conditions for an arterial street (Class I), using the Urban Streets methodology of the Highway Capacity Manual. The assumption is that Riverside County (and cities along the corridor) will provide necessary widening to achieve LOS D operating conditions in order to meet the goals of their General Plan Circulation Elements.



Legend

- Study Area
- County Boundary
- City Limits
- Highways
- Major Roads

Circulation Element Roadways

- Expressway (220' ROW)
- Urban Arterial (152' ROW)
- Arterial (128' ROW)
- Major (118' ROW)
- Mountain Arterial (110' ROW)
- Secondary (100' ROW)
- Collector (74' ROW)

SOURCE: County of Riverside, 2003; Jacobs Engineering (2/2007)

0 3 6 Miles

0 5 10 Kilometers

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Figure 1.2.1

Circulation Element

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Table 1.2.A Service Levels for Existing and Proposed Conditions

Existing Route Segment	Location	Facility Type (2035 with Project)	Existing 2005		Design Year 2035		MCP Project 2035	
			ADT	LOS	ADT	LOS	ADT	LOS
Cajalco Road	I-15 to I-215	6–8 Lane Limited Access	9,210 to 19,050	C–F	14,300 to 45,900	C–F	52,200 to 66,000	B–D
Ramona Expressway	East of I-215	6–8 Lane Limited Access	10,430 to 24,450	C–F	23,200 to 62,900	C–F	26,800 to 86,600	B–D

Source: *Traffic Technical Report,* VRPA, 2008.
ADT = average daily traffic
I-15 = Interstate 15
I-215 = Interstate 215
LOS = level of service
MCP = Mid County Parkway

The Travel Time Analysis concluded that under Alternatives 1A (No Project/No Action – Existing Ground Conditions) and Alternative 1B (No Project/No Action – General Plan Circulation Element Conditions), the travel time between I-15 and SR-79 in 2035 would be 193.4 minutes and 92.1 minutes, respectively. Under the MCP Build Alternatives (Alternatives 4, 5, 6, 7 and 9), the travel time would range between 31.1 minutes and 32.5 minutes.

Population/Traffic Forecast

The MCP project would link the existing and growing population centers of the city of Corona on the west, city of Perris in the central portion of the MCP study area, and the city of San Jacinto on the east. The city of Corona is served by SR-91 for west-east traffic and I-15 for north-south traffic. The city of Perris is currently served by I-215 in a north-south direction but is not served by a major west-east facility. Similarly, the community of San Jacinto is served by SR-79 in a north-south direction but is not served by a major west-east facility. In addition to linking communities in western Riverside County, the MCP project would link I-15, I-215, and SR-79, thereby facilitating regional traffic movement by providing a west-east connection to these major north-south transportation facilities.

Traffic modeling for the MCP studies is based on full implementation of the adopted Riverside County General Plan (2003), as well as implementation of the General Plans for the surrounding cities, including planned land uses identified in the Land Use Element and planned transportation facilities identified in the Circulation Element. Transportation modeling based on the adopted Riverside County General

Plan (2003) land uses indicates that the LOS on west-east arterials will be degraded without implementation of the MCP project.

There is no established standard for the desirable distance between major transportation facilities, and there is currently a broad range of distances between the major west-east freeways as they intersect with I-15 in this area. For example, SR-91 and SR-60 are approximately 16 km (10 mi) apart, SR-60 and Interstate 10 (I-10) are approximately 4.8 km (3.0 mi) apart, and I-10 and State Route 210 (SR-210) are approximately 9.6 km (6.0 mi) apart. SR-91 and State Route 78 (SR-78) (the closest west-east freeway south of SR-91 in northern San Diego County) are separated by approximately 100 km (62 mi). While SR-74 and State Route 76 (SR-76) (conventional highways) provide some of the needed west-east capacity, they are limited by topographic and other constraints and will accommodate only limited additional growth in traffic. The MCP project is located approximately half-way between SR-74 and SR-91, or roughly 13 km (8 mi) from each facility (see Figure 1.2.2, Freeways and Other State Highways).

The future transportation modeling for 2035 conducted for the MCP project included a base network that assumed the following: (1) implementation of the improvements included in the 2004 RTP for western Riverside County and Coachella Valley; (2) implementation of the arterial roadway improvements included in the adopted Circulation Element of the Riverside County General Plan; and (3) implementation of an west-east freeway and a north-south freeway consistent with the internal CETAP corridors included in the Riverside County General Plan. The land use assumptions in the transportation demand model reflected the land use types and intensities included in the Land Use Element of the Riverside County General Plan. It was assumed that nearly 75 percent of the households in the Land Use Element would be built by 2035.

Traffic demand forecasts and modeling indicate a majority of west-east trips will be made to the west out of Riverside County using SR-91. The ability to expand capacity on SR-91 is severely restricted by existing development. Future capacity on parallel routes is also limited. Existing SR-74 is predominantly four lanes for its entire length, two in each direction from Hemet to the I-15. SR-60 has three lanes (two mixed-flow lanes and one High-Occupancy Vehicle [HOV]) in each direction from I-10 in the east to the I-215/SR-60 junction. The model assumes that SR-74 will be widened to eight lanes west of Ethanac Road. Even with planned expansion of both of these facilities, they will not be able to meet future west-east travel demand.

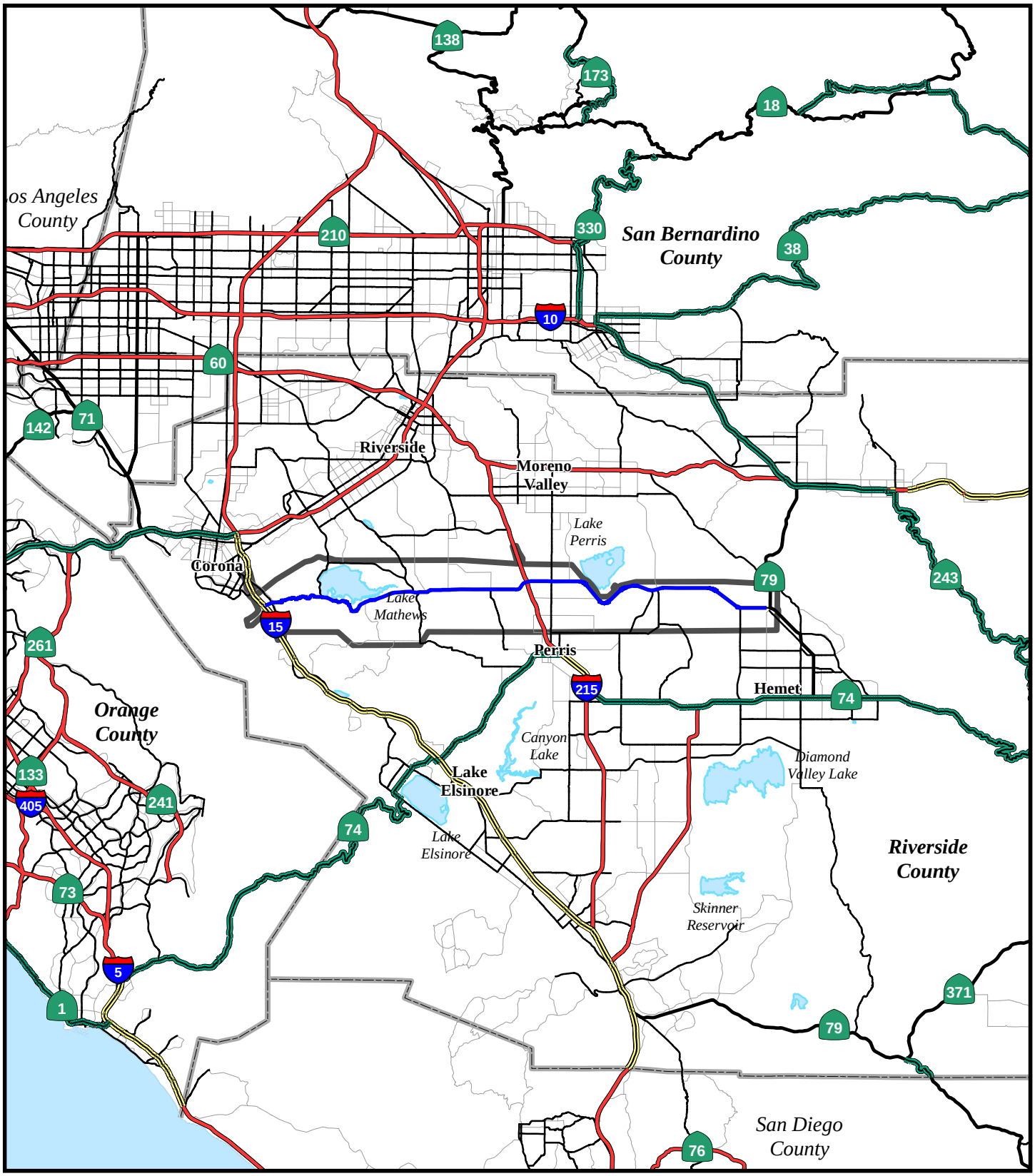

Figure 1.2.2

SOURCE: ESRI (2006); TBM (2006); Jacobs Engineering (2/07)

* San Diego County not available

Freeways and Other State Highways

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As shown in Table 1.2.A, Cajalco Road and Ramona Expressway operate at unacceptable LOS both in 2005 and 2035. In addition, projected traffic indicates 14,300 to 62,900 average daily trips on the same corridor in the future. Future traffic projections indicate all existing freeways will be operating at LOS F even with implementation of planned improvements as identified in the RTIP, Riverside County General Plan Circulation Element, the Measure A Expenditure Plan, and the implementation of transit "oases"[1] as identified in the Riverside County General Plan. Traffic demand forecasts and modeling indicate that approximately 20 percent of the trips on the MCP project would be traveling the entire length of the corridor. Based on this percentage of through trips, the MCP project is not only serving as a major arterial within the communities through which it passes, but also provides a vital regional transportation role by serving longer trip lengths.

Capacity Needs

Travel patterns in western Riverside County are characterized by large numbers of commuters traveling from western Riverside County to jobs in Los Angeles and Orange counties. Intercounty commuter traffic is expected to grow substantially in the future as Riverside County doubles its population and housing stock between 2000 and 2020. In addition, the growth of employment opportunities within western Riverside County is expected to result in substantial increases in traffic through and connecting with intracounty employment and population centers. The MCP project would serve as a major west-east connection within western Riverside County and would also provide for regional movement of people and goods to eastern Riverside County, Los Angeles County, and Orange County.

To serve the projected travel demand in this area, there is a need to maximize the capacity of the MCP project by limiting access. Access limitation is used to restrict entry onto through traffic facilities to manage traffic congestion and improve traffic operational conditions. Access on Cajalco Road and Ramona Expressway is not restricted, with intersections (both signalized and unsignalized) and driveways providing multiple points of access along these existing roadways.

[1] The transit oases concept is based on a system of locally served rubber-tired transit service (i.e., bus) to concentrations of employment, community activity, and residences in a manner that is linked with regional transportation opportunities.

There is also a need for the MCP project to accommodate truck traffic, which will be integral to future job growth in the area. The 1982 STAA allows large trucks to operate on the Interstate system, the non-Interstate Federal-aid Primary System, and certain primary routes (collectively referred to as the National Network). Caltrans has identified roadway design standards to provide for safe transportation of regional truck traffic, including STAA vehicles. Roadway design to accommodate these trucks must accommodate turning movements characterized by the rear tires following a shorter tracking path than the front tires. Currently, I-15, I-215, and SR-79 north of the MCP study area and south of SR-74 are included in the STAA National Network. Existing Cajalco Road and Ramona Expressway currently do not meet STAA standards. A climbing lane is warranted along Cajalco Road (or on a parallel facility), since the running speed of STAA vehicles falls 48 kph (30 mph) or more below the running speed of remaining traffic (2001 Caltrans Highway Design Manual, pages 200–21, Figure 204.5).The MCP project would provide another west-east link for goods movement if it is designed to meet STAA standards.

Safety

Summaries of the existing accident information for I-15, I-215, and Cajalco Road and Ramona Expressway are shown in Tables 1.2.B, 1.2.C, and 1.2.D, respectively. At some locations, accident rates on I-15, I-215, and Cajalco Road and Ramona Expressway exceed statewide averages. Some of the higher than expected accident rates are due to congestion and/or unsignalized intersections. It is expected that accident rates at these locations would be reduced with implementation of the MCP project. SR-79 accidents are not reviewed as that two-lane highway will be replaced by a six-lane expressway or freeway in roughly the same time frame as the MCP.

Accident rates on I-15 are expected to improve in connection with the proposed MCP project as many roadway features are upgraded to current design standards and capacity is increased. Additionally, signalized intersections at the ramps, improved lane geometry at the ramp intersections, and prohibiting left-turn movements at local street intersections in close proximity to adjacent ramp intersections are expected to reduce accident rates at the above locations.

Table 1.2.B Accident Data on I-15 Mainline and Ramps (April 1, 2002 to March 31, 2005)

Location	Facility	KP (PM)	Actual Accident Rates[1]			Average Accident Rates[1]		
			Fatal	Fatal + Injuries	Total	Fatal	Fatal + Injuries	Total
I-15/ Ontario Avenue	Mainline	61.85–62.68 (38.43–38.95)	0.000	0.08	0.46	0.012	0.46	1.29
	SB Off-Ramp	62.68 (38.95)	0.000	0.27	0.41	0.005	0.61	1.50
	SB On-Ramp	62.06 (38.56)	0.000	0.13	0.27	0.002	0.32	0.80
	NB Off-Ramp	61.85 (38.43)	0.000	0.14	0.84	0.005	0.61	1.50
	NB On-Ramp	62.66 (38.93)	0.000	0.21	**0.85**	0.002	0.32	0.80
I-15/ El Cerrito Road	Mainline	60.59–61.18 (37.65–38.02)	0.000	0.15	0.46	0.015	0.36	1.01
	SB Off-Ramp	61.18 (38.02)	0.000	1.04	**2.94**	0.005	0.61	1.50
	SB On-Ramp	60.64 (37.68)	0.000	0.39	**1.94**	0.002	0.32	0.80
	NB Off-Ramp	60.60 (37.66)	0.000	1.07	**4.29**	0.005	0.61	1.50
	NB On-Ramp	61.18 (38.02)	0.000	0.19	0.76	0.002	0.32	0.80
I-15/ Cajalco Road	Mainline	58.95–59.85 (36.63–37.19)	0.011	0.22	0.58	0.020	0.38	0.90
	SB Off-Ramp	58.95 (37.82)	0.000	0.24	0.36	0.007	0.24	0.70
	SB On-Ramp	59.48 (36.96)	0.000	0.83	**1.67**	0.009	0.35	0.85
	NB Off-Ramp	58.96 (36.64)	0.000	0.89	**0.89**	0.006	0.19	0.60
	NB On-Ramp	59.44 (36.93)	0.000	0.00	0.12	0.005	0.16	0.45
I-15/ Weirick Road	**Mainline**	57.04–57.73 (35.44–35.87)	0.015	0.24	**0.95**	0.019	0.36	0.85
	SB Off-Ramp	57.70 (35.85)	0.000	0.13	0.39	0.014	0.43	1.15
	SB On-Ramp	57.13 (35.50)	0.000	0.00	0.00	0.007	0.21	0.55
	NB Off-Ramp	57.05 (35.45)	0.000	0.00	**1.89**	0.014	0.43	1.15
	NB On-Ramp	57.73 (35.87)	0.000	0.13	**0.66**	0.007	0.21	0.55

Source: *Draft Project Report,* Jacobs, 2008; and Caltrans TASAS Table B.

[1] Accident rates based on total number of fatal and injury accidents, as reported in Caltrans accident reports. Accident rates for mainline segments are expressed in accidents per million vehicle miles. Accident rates for ramps are expressed in accidents per million vehicles. **Bold type** indicates locations where the accident rates exceed statewide averages.

Caltrans = California Department of Transportation
KP = kilometer post
NB = northbound
PM = post mile
SB = southbound
TASAS = Traffic Accident Surveillance and Analysis System

Table 1.2.C Accident Data on I-215 – Oleander Avenue to Nuevo Road (April 1, 2002 to March 31, 2005)

Location	Facility	KP (PM)	Actual Accident Rates[1]			Average Accident Rates[1]		
			Fatal	Fatal + Injuries	Total	Fatal	Fatal + Injuries	Total
I-215 – Oleander Avenue to Nuevo Road	Mainline	43.86–53.27 (27.25–33.10)	0.005	0.15	0.43	0.001	0.28	0.83
I-215 / Oleander Avenue	SB Off-Ramp	52.38 (32.55)	0.000	0.00	0.00	0.005	0.61	1.50
	SB On-Ramp	51.82 (32.20)	0.000	0.00	0.00	0.002	0.32	0.80
	NB Off-Ramp	51.73 (32.14)	0.000	0.00	**2.30**	0.005	0.61	1.50
	NB On-Ramp	52.28 (32.49)	0.000	0.34	**1.02**	0.002	0.32	0.80
I-215 / Cajalco Expressway / Ramona Expressway	**SB Off-Ramp**	50.07 (31.11)	0.000	0.75	**2.24**	0.005	0.61	1.50
	SB On-Ramp	49.50 (30.76)	0.000	0.00	0.63	0.002	0.32	0.80
	NB Off-Ramp	49.50 (30.77)	0.000	0.31	1.41	0.005	0.61	1.50
	NB On-Ramp	50.01 (31.08)	0.000	0.00	0.28	0.002	0.32	0.80
I-215 / Nuevo Road	SB Off-Ramp	45.18 (28.08)	0.000	0.27	1.10	0.005	0.61	1.50
	SB On-Ramp	44.58 (27.70)	0.000	0.00	0.00	0.002	0.32	0.80
	NB Off-Ramp	44.55 (27.68)	0.000	0.17	0.34	0.005	0.61	1.50
	NB On-Ramp	45.10 (28.02)	0.000	0.15	0.30	0.002	0.32	0.80

Source: *Draft Project Report,* Jacobs, 2008.

[1] Accident rates based on total number of fatal and injury accidents, as reported in Caltrans accident reports. Accident rates for mainline segments are expressed in accidents per million vehicle miles. Accident rates for ramps are expressed in accidents per million vehicles. **Bold type** indicates locations where the accident rates exceed statewide averages.

KP = kilometer post
NB = northbound
PM = post mile
SB = southbound

Table 1.2.D Summary of Accident History, Cajalco/Ramona Corridor, 2001 through 2003

Roadway	Accident Category	Location	Fatality	Injury	Property Damage Only	Total
Cajalco Road	Roadway Segment	I-15 to I-215	9	151	207	367
Ramona Expressway	Roadway Segment	I-215 to SR-79	8	138	208	354

Source: *Draft Project Report,* Jacobs, 2008.
I-15 = Interstate 15
I-215 = Interstate 215
SR-79 = State Route 79

I-215 accident rates were compared to statewide averages for similar types of facilities. Ten of the locations show actual accident rates below the average accident rates for similar facilities while three locations show actual accident rates above the average accident rates for similar facilities. Analysis of accidents for the three locations with higher than average accident experience showed no obvious accident pattern (i.e., the accident rate was the result of low traffic levels combined with a few random accidents). The accidents would expect to be reduced with implementation of the MCP project.

For Cajalco Road and Ramona Expressway, Table 1.2.D indicates that the accident experience is typical of suburban and rural arterial roadways.

Overall, while accident rates are not appreciably different from other similar facilities, there are locations along the existing route (Cajalco Road and Ramona Expressway) where design features (such as curves and/or steep grades) and land use conflicts (including direct driveway access to the roadway) represent conditions that could contribute to higher accident rates with the growth in traffic volumes on these two roadways. Further, it is not feasible to convert existing Cajalco Road or Ramona Expressway to a facility that meets Caltrans standards due to the roadway deficiencies discussed below and the terrain. By limiting access and designing a transportation facility that is consistent with current State highway standards, the MCP project would provide an alternative route and relieve regional congestion, thus resulting in an improvement in safety and a reduction in accidents.

1.2.2.2 Roadway Deficiencies (Cajalco Road/Ramona Expressway)

Existing Cajalco Road and Ramona Expressway combine to form the only existing, continuous west-east facility in the MCP study area. There are limitations related to design and capacity that restrict the ability of the existing roadways to meet future travel demand.

Operational

The Cajalco Road and Ramona Expressway roadway geometric sections do not meet current Caltrans or Riverside County standards for major roadways. The 2001 Caltrans Highway Design Manual identifies key design standards that will be applied in the design of the MCP project. Application of the Caltrans design standards represents a conservative approach, since these standards meet or exceed the design standards for Riverside County roads. Also, even if the MCP project is not designated a State highway in the future, compliance with Caltrans design standards will be

required at the interchanges with I-15, I-215, and SR-79. These standards include a design speed of 120 kph (75 mph), a minimum curve radius of 900 meters (m) (2,950 feet [ft]), and a maximum vertical grade of 6 percent. The existing roadway geometry does not meet Caltrans standards for 120 kph (75 mph) in several areas; therefore, widening the existing facility in these areas without redesign is not feasible. All of the curves on existing Cajalco Road do not meet the Caltrans minimum of 900 m (2,950 ft). Similarly, curve radii for the realigned Cajalco Road, as designated in the existing Riverside County General Plan Circulation Element, are also below the standard of 900 m (2,950 ft). Existing Ramona Expressway includes six horizontal curves that do not meet Caltrans standards.

The grade of existing Cajalco Road west of Lake Mathews also has deficiencies. The grade of the existing Cajalco Road ranges from 2.2 percent to 7.6 percent. About 1,200 m (3,936 ft) of Cajalco Road exceeds the 6 percent maximum grade requirement for mountainous freeway.

Currently, there are numerous direct access points (driveways and local roadways) onto Cajalco Road and Ramona Expressway. There are as many as 20 access points within a distance of 1.6 km (1.0 mi) These numerous access points result in opportunities for conflict that impede traffic flow. Uncontrolled access points reduce the overall capacity of the roadways and increase the possibility of accidents. Planning for the MCP project offers an opportunity to identify appropriate access points from the federal and State highway system, as well as from local streets, and to provide local access to existing and future development through the use of frontage roads or other solutions.

1.2.2.3 Social Demands or Economic Development

The MCP project was identified as a key west-east regional transportation corridor as a result of several years of comprehensive land use, habitat conservation, and transportation planning in Riverside County through the RCIP.

Initiated in 1999, the RCIP was an unprecedented, multiyear planning effort to simultaneously prepare environmental, transportation, housing, and development guidelines for Riverside County for the first half of the 21st century. The purpose of the RCIP was to address the planning, environmental, and transportation issues that would result from the anticipated doubling of population in Riverside County from 1.5 million residents in 2000 to approximately 3.0 million by 2020. The RCIP included three components: (1) a new General Plan for Riverside County, adopted on

October 2003; (2) a MSHCP for western Riverside County (approved by the County in June 2003 and by the United States Fish and Wildlife Service [USFWS] in June 2004); and (3) the CETAP through which the planning of four major transportation corridors was initiated, including what is now the MCP project. In addition, the RCIP Partnership Action Plan (September 2000) committed participating federal, State, and county governments to incorporate the western Riverside County Special Area Management Plan (SAMP) into all three RCIP planning efforts. The purpose of the SAMP is to provide for comprehensive aquatic resource protection and reasonable economic growth.

The Circulation Element of the 2003 Riverside County General Plan acknowledges the concurrent CETAP planning efforts to identify preferred west-east and north-south alternatives and preserve future right of way. The Circulation Element identifies Ramona Expressway and Cajalco Road as future expressways of four to eight lanes and proposes to realign the portion of Cajalco Road south of Lake Mathews.

The MCP project executes the intent of the prior RCTC and County of Riverside actions with regard to the planning of the HCLE CETAP Corridor and is consistent with the intent of the Riverside County Circulation Element, which recognizes that the specific alignment decisions regarding the CETAP corridors may result in appropriate amendments to the General Plan. The MCP project provides a west-east transportation parkway to support the planned land use envisioned in the Riverside County General Plan, and is being planned and designed in a way to further the conservation goals of the western Riverside County MSHCP.

The MCP project is also consistent with the 2008 RTP (Southern California Association of Governments [SCAG]), which states:

> "CETAP-Mid County Parkway: Construct a 4–8 lane limited access parkway from Corona (slightly west of I-15) to San Jacinto (to SR-79) and construct local interchanges in the corridor at 15 locations."

The MCP project is also consistent with the goals of the Riverside County General Plan (2003), which sets forth the need to incorporate future growth with transportation and multipurpose open space systems in areas that are well served by public facilities and services and preserve significant environmental features. The Riverside County General Plan also specifies the need to connect whole communities, which the MCP project would do by providing a linkage between the cities of Corona, Perris, and San Jacinto with one west-east transportation facility.

1.2.2.4 Legislation

Executive Order

On September 18, 2002, President George W. Bush signed Executive Order (EO) 13274 for environmental stewardship and streamlining. This order required transportation and natural, cultural, and historical resource agencies to establish realistic timeframes on environmental transportation documents, and required the agencies to work together to provide efficient review of the documents while protecting the environment. CETAP, of which the MCP project is a part, was one of the first seven projects to be placed on the national priority list for review under EO 13274.

County

Riverside County voters approved Measure A in 1988. Measure A permits a half-cent sales tax program to be implemented to collect funding for transportation improvement projects in Riverside County. Measure A was set to expire in 2009; however, voters approved a 30-year extension for the sales tax program in 2002. The MCP project is one transportation project being considered by the RCTC that may receive partial funding from Measure A.

The RCTC may initiate future legislation to designate the MCP as a state highway.

1.2.2.5 Modal Interrelationships and System Linkages

Modal Interrelationships

In addition to the rapid population growth in western Riverside County, the employment base is also increasing, particularly in intermodal goods distribution. Land planning and economic projections indicate that the Perris/Moreno Valley/March Air Reserve Base area will serve as a major distribution hub for goods in the Inland Empire.[1] This employment center will result in increased travel demand by commuters, as well as by trucks carrying goods in and out of the area. The MCP project is located between and through the future population and employment centers it would serve for planned developments including Corona, the Perris/Moreno Valley/ former March Air Reserve Base area, and San Jacinto (Figure 1.2.3, Jurisdictional Boundaries).

[1] The March Air Reserve Base Land Use Plan in the Riverside County General Plan (adopted 2003) provides for 2.9 million square meters (9.7 million square feet) of industrial build-out capacity and 1.5 million square meters (5.1 million square feet) of commercial build-out capacity.

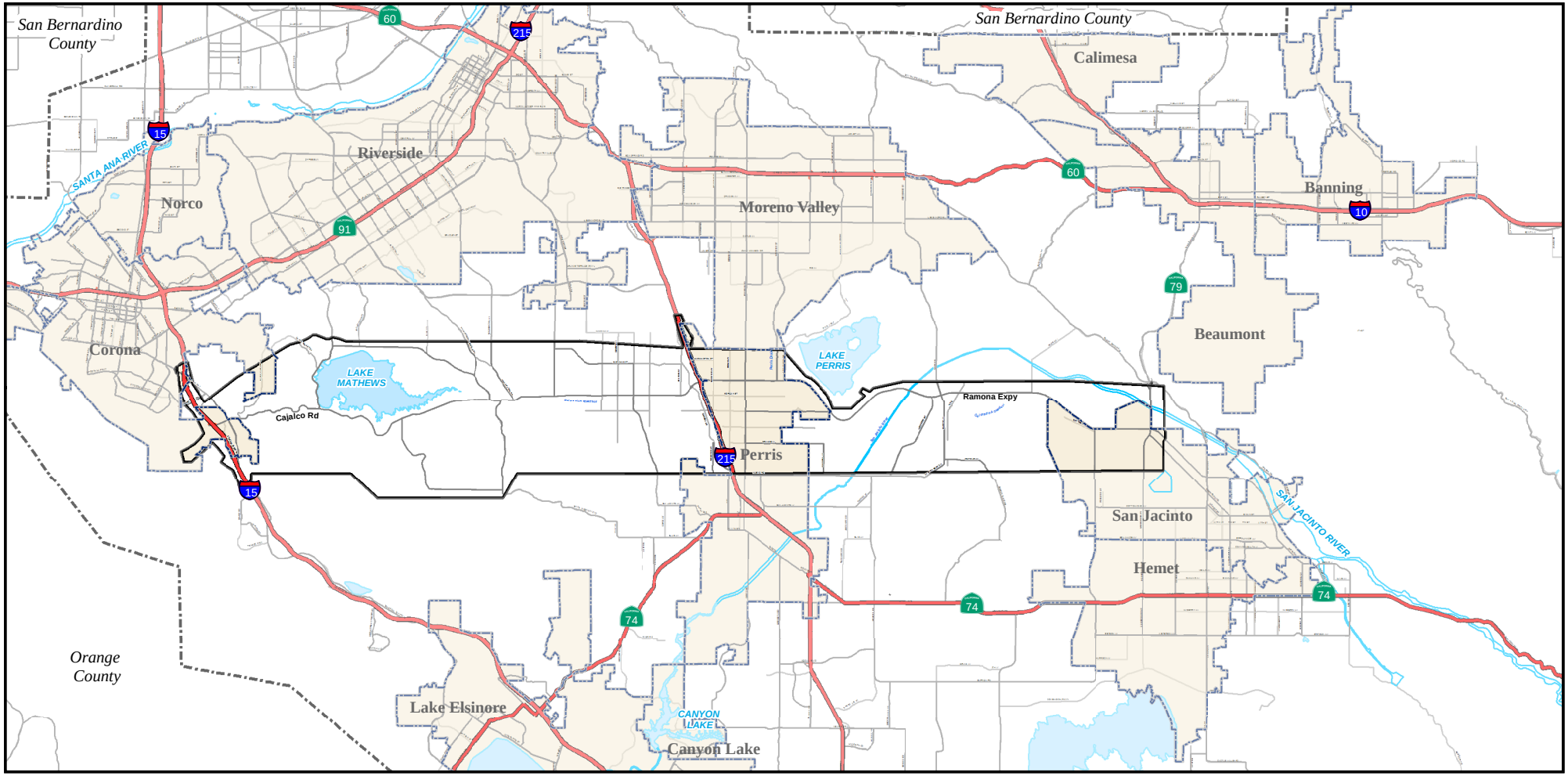

Figure 1.2.3

Legend

- County Boundary
- City Limits
- Major Roads
- Mid County Parkway Study Area

SOURCE: TBM (2006), Jacobs Engineering (2/2007)

0 1.5 3 6 Miles

0 2.5 5 10 Kilometers

Jurisdictional Boundaries

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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The location of the MCP project through the city of Perris offers an opportunity to create a linkage between the MCP project and two major planned transit projects (the Perris Valley Line [PVL] and Perris Multimodal Facility). The proposed PVL would provide commuter rail service from the city of Riverside to the city of Perris by extending existing service (Metrolink 91 Line) that links the city of Riverside with downtown Los Angeles via Fullerton. It is anticipated that the proposed PVL would connect with a new Perris Multimodal Facility to be located in downtown Perris off C Street and would provide for connecting bus (including the Riverside Transit Agency) and rail (including Metrolink) service. The Perris Multimodal Facility is in close proximity to the MCP project. Seven new stations have been identified for construction along the PVL, including one adjacent to the MCP study area. By reducing travel time and traffic congestion in the MCP study area, the MCP project would help improve accessibility to stations serving the PVL.

System Linkages

For the last several decades, western Riverside County has served as a population center for commuters to jobs in Orange and Los Angeles counties, resulting in high levels of west-east travel demand. The major north-south transportation facilities in western Riverside County are I-15, I-215, and SR-79, and the major west-east transportation facilities are SR-91, SR-60, and SR-74. The SR-91/SR-60 corridor and SR-74 are 25 km (16 mi) apart, with no other major west-east highway in between. The MCP project is located between the SR-91/SR-60 corridor and SR-74, and would provide another needed west-east corridor/connection to improve the regional transportation network and to meet future west-east travel demand.

Related Projects

Information concerning related projects provides contextual information for the MCP project and identifies how the transportation agencies have coordinated transportation planning efforts. The MCP project will be implemented in a manner that is consistent with the programmed and planned improvements listed below. These related improvements are on facilities that represent future connections or are complementary to the MCP project.

The related transportation projects to the MCP project are depicted on Figure 1.2.4 and include:

- **Constructing SR-79 as a Four-Lane Expressway:** Constructing SR-79 as a four-lane expressway on a new alignment from the SR-79/Sanderson Avenue junction to SR-79/Domenigoni Parkway, generally following an alignment west of Warren Road. This study is in progress by RCTC and Caltrans. Construction of initial phases is tentatively scheduled to begin in 2012.

- **SR-79 Widening:** SR-79 Interim Widening Project will improve SR-79 between Thompson Road and Domenigoni Parkway by extending slopes between Thompson Road and Abelia Street, widening an 8.7 km (5.4 mi) segment of SR-79 from two to four lanes between Abelia Street and Domenigoni Parkway, installing a painted center median, and constructing turn lanes at intersections.

- **I-15/Magnolia Avenue Interchange Modifications:** The City of Corona plans to reconfigure the existing interchange to add northbound/southbound loops and widen the existing northbound on-ramp.

- **Widening of I-215:** RCTC plans to widen I-215 to three lanes in each direction from I-15 in Temecula to Eucalyptus Avenue in Perris. This project is programmed in RCTC's Measure A Expenditure Plan. A construction schedule has not been established.

- **Widening of I-215 from 60/91/215 Junction to San Bernardino County Line:** Add two lanes in each direction from 60/91/215 to San Bernardino County line

- **I-15/Cajalco Road Interchange Project:** Replace the existing two-lane Cajalco Road overcrossing of I-15 with a six-lane overcrossing between Temescal Canyon Road and Bedford Canyon Road and associated ramp modifications. The City of Corona has secured partial funding for this project, and construction is planned for January 2011.

- **The Perris Valley Line (PVL):** The RCTC Board has adopted an extension of a commuter service line from the city of Riverside to the city of Perris. The project is fully funded in the 2008 RTP through construction. The project proposes to extend operation of the Metrolink 91 Line, which currently provides commuter rail service from Riverside to downtown Los Angeles via Fullerton by 2011.

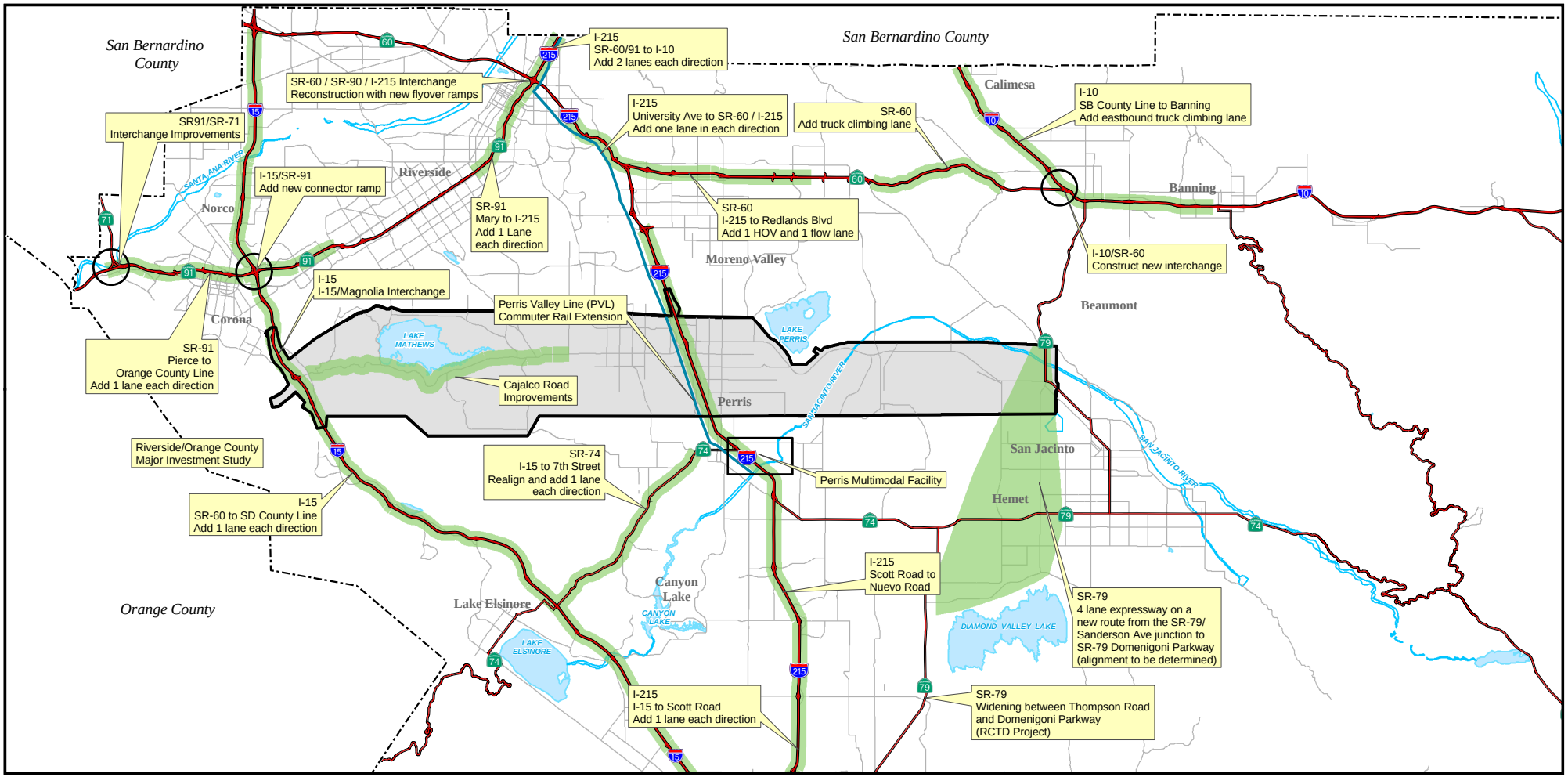

Figure 1.2.4

Legend

- County Boundary
- City Limits
- Highways
- Major Roads
- Mid County Parkway Study Area
- Related Projects

SOURCE: County of Riverside (1999); TBM (2006); Jacobs Engineering (2/07)

0 2.5 5 10 Miles

0 4 8 16 Kilometers

Related Transportation Improvement Projects

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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- **The Perris Multimodal Facility:** The Perris Multimodal Facility is intended to support operating rail and bus passenger services originating from the city of Perris. The facility will be located in downtown Perris off C Street and will include platforms, shelters, parking, and lighting to accommodate eight bus bays and additional facilities to serve future passenger train service.

- **I-15 Measure A Improvements:** Extension of the Measure A Expenditure Plan includes funding to add one lane in each direction on I-15 between SR-60 and the San Diego County line, and to make improvements to the SR-91/I-15 interchange by adding a new connector from I-15 North to SR-91 West.

- **Widening of SR-60 from University Avenue to 60/215 Interchange:** Add one lane in each direction (median) from University Avenue in Riverside easterly to 60/215 interchange in Moreno Valley, including a new interchange and bridges in Riverside. Construction is tentatively scheduled to be completed in 2009.

- **SR-60 Truck-Climbing Lane:** Add one truck-climbing lane in the Badlands area east of Moreno Valley.

- **Widening of SR-91 from Adams to 60/91/215 Interchange:** Add one lane in each direction from Adams to the 60/91/215 interchange in Riverside. Construction is tentatively scheduled to be completed in 2011.

- **Widening of SR-91 from Pierce Street to Orange County:** Add one lane in each direction from Pierce Street to the Orange County line.

- **I-10/SR-60 Interchange:** Construct a new interchange at I-16/SR-60.

- **I-10 Truck-Climbing Lane:** Add an eastbound truck-climbing lane from the San Bernardino County line to Banning.

- **State Route 91/71 Interchange:** Improve the connection between SR-91 and State Route 71 (SR-71) by replacing the existing single-lane connection between eastbound SR-91 and northbound SR-71 with a new, two-lane, direct flyover ramp, in addition to building a new, separate eastbound road just south of and parallel to SR-91 to provide improved access between the Green River Road interchange and the SR-91/SR-71 interchange. Construction is planned to be completed by 2015.

- **State Route 74:** One lane added in each direction from I-15 to 7th Street.

- **Riverside/Orange County Major Investment Study:** The Orange County Transportation Authority (OCTA) and RCTC, in cooperation with the Transportation Corridor Agencies (TCA), completed a Major Investment Study (MIS) under SCAG guidelines to identify and assess alternative ways to improve mobility between Orange and Riverside counties. Following SCAG's guidelines for Regionally Significant Transportation Investment Studies (RSTIS), the Riverside/Orange County MIS was a transportation planning study that concluded in early 2006. It included feasibility planning, travel demand forecasting, conceptual engineering, environmental evaluation, and public involvement. Caltrans Districts 8 and 12, in cooperation with FHWA, were advisory agencies in the study.

  The MIS examined a comprehensive range of capital and operational improvement alternatives to SR-91 and other options for intercounty multimodal transportation corridors. The study analyzed the benefits, costs, and consequences (economic, social, and environmental) of alternative transportation investment strategies in the Riverside County-Orange County MIS corridor. Input received throughout the study from the Policy Committee, stakeholders, cities, and elected officials was included in considering recommendations for a Locally Preferred Strategy.

  The OCTA Board of Directors met on December 12, 2005, to take action on the recommended Locally Preferred Strategy, and the RCTC Board of Commissioners met on December 14, 2005. Both Boards unanimously approved recommendations for the refined Locally Preferred Strategy. Key elements of the Board's decisions relevant to the MCP project are as follows:

  - Establish SR-91 from SR-55 to I-15 as a priority for improving transportation between Riverside and Orange counties. Emphasize SR-91 improvements between State Route 241 (SR-241) and the I-15 first, followed by improvements between State Route 55 (SR-55) and SR-241.
  - Continue to work with the Foothill/Eastern TCA in Orange County to develop a mutually acceptable plan to improve the connection between the SR-241 and SR-91 corridors and accelerate capacity improvements on State Route 133 (SR-133), SR-241, and State Route 261 (SR-261) to optimize utilization of the toll roads to improve transportation between Riverside and Orange counties.
  - Continue to evaluate the costs and impacts of Corridor A (a new facility between I-15 and SR-241 with a connection at SR-71) in the SR-91 right of

way or north of SR-91, parallel through a future preliminary engineering process in cooperation with other agencies.

- Continue to study the technical feasibility of the Corridor B concept (a new facility between Cajalco Road in Riverside County and SR-133 in Orange County through the Santa Ana Mountains), including costs, risks, joint-use opportunities, benefits, and funding options in cooperation with other interested agencies.
- Incorporate the following: components of the adopted Locally Preferred Strategy encompass maximization of the MIS corridor transit network; widen portions of SR-91 (14 to 16 lanes total plus baseline SR-91 improvements); possible managed lane modifications (including reversible lanes) for SR-91 or Corridor A; continue studies in support of a new highway facility in Corridor A; continue studies in support of a new highway (largely in tunnel sections) in Corridor B; and operational improvements (not major widening) of SR-74 (Ortega Highway) in Corridor D.

- **Cajalco Road Improvements:** While it is anticipated that much of the future travel demand on Cajalco Road would be met by the MCP project, there would be a continued need for Cajalco Road to provide local access and circulation for existing and planned residential uses in the vicinity of Lake Mathews and Mead Valley. For Cajalco Road to function safely and effectively in the short term and long term, safety, capacity, and operational improvements are being planned by the County of Riverside.

  Safety and road repair projects that occurred between 2003 and 2005 included pavement projects for specific locations and the installation of street lights at the intersections of Alexander Street, Mead Street, Haines Street, Day Street, Seaton Avenue, and between Brown Street and Clark Street. In addition, the intersection of Harley John Road/Smith Road was resurfaced and widened. Pavement was added east of the intersection to receive a second eastbound through lane to reduce the traffic backup before the intersection. These projects have been completed.

  Additional projects recently completed by the County of Riverside include:

  - Left-turn lanes added between Harley John Road and 0.40 km (0.25 mi) east of Gustin Lane;

- Pavement reconstruction and intersection widenings between Kirkpatrick Road and La Sierra Avenue;
- Installation of guard rails at various locations east of La Sierra Avenue; and
- Installation of traffic signals at Gavilan Road and Harley John Road/Smith Road.

The County of Riverside plans to widen portions of Cajalco Road in three segments. The first segment is between Harley John Road on the west and Harvill Avenue on the east. As a result of the Boulder Springs development, Cajalco Road will be widened to four lanes from Wood Road to Alexander Street. The improvements to this segment are considered by the County to be the most needed in the near term and the most feasible to construct. The second segment is between La Sierra Avenue and Harley John Road. Western Riverside County Transportation Uniform Mitigation Fee funding (approximately $22 million) has been programmed for the widening of approximately 11 km (7.0 mi) of roadway. Final environmental compliance is yet to be achieved for this segment. The third segment is between Temescal Canyon Road and La Sierra Avenue. Transportation Uniform Mitigation Fee funds are currently programmed (approximately $10 million) to improve approximately 5 km (3 mi) of Cajalco Road in this area. Topographical and Metropolitan Water District (Metropolitan) reserve constraints are to be addressed through a conceptual design and environmental clearance process to be undertaken by the Riverside County Transportation Department.

In addition to the projects listed above that may provide a direct physical connection to the MCP project, additional improvements are also planned to the freeway system in western Riverside County. As shown on Figure 1.2.4, these planned improvements are identified in the 2008 RTP as prepared by SCAG and in RCTC's Measure A Expenditure Plan. These projects represent planned and programmed improvements to the freeway system and are assumed to be implemented in the transportation modeling for the MCP project. Even with all of the proposed roadway improvements identified in the RTP, there will still be inadequate west-east roadway capacity to meet future demand. The need for the MCP project as described above exists even with implementation of the improvements reflected in the traffic model.