

STAFF REPORT

SUBJECT: 2019 Regional Congestion
Management Program (RCMP)
Monitoring and Conformance Report

RECOMMENDED ACTION: Adopt the Biennial 2019 RCMP
Monitoring Report & Find All
Jurisdictions Conform to the RCMP

DISCUSSION:

SUMMARY:

SJCOG is required by state and federal law to monitor all elements of the Regional Congestion Management Program (RCMP) and to ensure that the county and cities are conforming to the RCMP. Conformance findings are a requisite step for local agency eligibility for Section 2105 state gas tax subvention funds made available by Proposition 111, federal Regional Surface Transportation Program (RSTP) funds, federal Congestion Mitigation and Air Quality (CMAQ) funds, state Regional Transportation Improvement Plan (RTIP) funds, and local Measure K funds.

SJCOG staff has found San Joaquin County and the cities of Escalon, Lathrop, Lodi, Ripon, Stockton, and Tracy in conformance with the requirements of the RCMP.

The biennial RCMP Monitoring and Conformance Report includes: 1) a determination of consistency with RCMP traffic level of service (LOS) standards, and 2) implementation of the RCMP land-use analysis program for mitigation of impacts of local land-use decisions on the RCMP network. SJCOG conducted the LOS technical analysis for committee review and found that all jurisdictions are meeting LOS standards. SJCOG staff has also requested information on the implementation of identified mitigation measures as part of the Land Use Analysis Program.

The draft 2019 RCMP Monitoring and Conformance Report is available at:
www.sjcog.org/RCMP.

RECOMMENDATION:

SJCOG staff recommends the SJCOG Board of Directors adopt the 2019 biennial RCMP Monitoring Report and find all jurisdictions conform with all the requirements of RCMP.

FISCAL IMPACT:

Resources to conduct this activity are included in the FY 2018/19 SJCOG OWP.

BACKGROUND:

Federal Legislative Requirements

The Federal Highway Administration (FHWA) requires metropolitan areas exceeding a population of 200,000 to implement a Congestion Management Process, defined as “a systematic and regionally-accepted approach for managing congestion that provides accurate, up-to-date information on transportation system performance and assesses alternative strategies for congestion management that meet state and local needs.”¹ This requirement was first introduced by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and was refined in subsequent transportation bills, including the most recent Fixing America’s Surface Transportation (FAST) Act of 2015.

State Legislative Requirements

In 1990, California voters approved legislation to increase transportation funding through an additional fuel tax (Proposition 111). With the passage of Proposition 111, urbanized counties were required to prepare, adopt, implement, and biennially update a Congestion Management Program. The state’s primary focus is to monitor the impacts of growth on the regional transportation network and establish strategies to avoid and/or respond to segments of the network that are failing. Proposition 111 provides Section 2105 state gas tax subvention funds for cities and counties to implement their CMP as shown in Table 1.

San Joaquin County Measure K

The region’s local Measure K Renewal Ordinance, approved by voters in 2006, required SJCOG to establish and begin implementing the Regional CMP (RCMP) by January 1, 2008.

Table 1: Fiscal Year 2017-2018

Highway User Tax Account

Section 2105 Total Payments

<u>Jurisdiction</u>	<u>Total Payments</u>
Escalon	\$ 39,099.17
Lathrop	\$ 125,410.39
Lodi	\$ 347,621.73
Manteca	\$ 413,767.44
Ripon	\$ 82,116.41
San Joaquin County	\$ 3,438,968.15
Stockton	\$ 1,739,541.34
Tracy	\$ 493,230.22

Source: State Controller’s Office

¹ “Congestion Management Process: A Guidebook,” US Department of Transportation, Federal Highway Administration, 2011.

RCMP Monitoring and Conformance Report

SJCOG is required by state and federal law to monitor all elements of the RCMP and to ensure that the county and cities are conforming to the RCMP. Compliance findings are a requisite step for local agency eligibility for Section 2105 state gas tax subvention funds made available by Proposition 111, Federal Regional Surface Transportation Program (RSTP) funds, Federal Congestion Mitigation and Air Quality (CMAQ) funds, state Regional Transportation Improvement Plan (RTIP) funds, and local Measure K funds. The compliance monitoring includes a biennial monitoring and conformance report and a program update, including a technical analysis of current Level of Service (LOS) on the RCMP Network and documentation of compliance with the requirements of the RCMP Land Use Analysis Program.

Discussion:

RCMP Technical Analysis Results

GHD, Inc. completed the technical analysis for the 2019 RCMP Monitoring and Conformance Report. The results of technical analysis are included in the 2019 Monitoring and Conformance Report.

SJCOG's adopted RCMP standard is LOS D. LOS E/F are deemed deficient and may require intersection and/or roadway improvements to increase the LOS rating to LOS D. The tables, below, illustrate the results of LOS analysis before exemption process. LOS analysis found a total of 18 basic freeway segments and 17 two-lane highway segments deficient during AM peak period. A total of 30 basic freeway segments and 15 two-lane highway segments were found deficient during PM peak period. In addition, a total of 17 intersections during AM peak period and 16 intersections of PM peak period along with 10 urban street segments were found deficient. It should be noted that one segment and one intersection lies at the edge of two jurisdictions.

Basic Freeway Segment Deficiencies

Freeway	AM	PM
I-5	1	13
SR-99	13	11
SR-120	0	2
I-205	4	4

Two-Lane Highway Segment Deficiencies

Freeway	AM	PM
SR-4	5	4
SR-12	5	5
SR-26	1	0
SR-88	3	4
SR-120	1	2
SR-132	2	2

Urban Streets Segment Deficiencies

Jurisdiction	#
Escalon	1
Lodi	1
Manteca	2
Stockton	3
Tracy	1*
County	2*

* 1 segment is between the County and City of Tracy

Intersection Deficiencies

Jurisdiction	AM	PM
Lathrop	2	2
Lodi	0	1
Ripon	0	1
Stockton	5*	6*
Tracy	3	0
County	7	6

* 1 intersection lies between the County and City of Stockton

The LOS analysis found that after applying exemptions allowed under state law, including deducting interregional trips, accounting for construction impacts and planned improvements, accounting for programmed transportation projects that would relieve congestion, and exempting facilities that operated below the established LOS standard when the CMP was established (“grandfathered” facilities), all roadways and intersections in San Joaquin County meet the LOS standard except for:

- SR-99 between SR-4 east and SR-26 west
- Byron Road between Lammers Road and County Line

SJCOG RCMP policy requires that a roadway or intersection be found deficient after all exemptions are applied in two consecutive monitoring periods before proceeding with a deficiency finding. Given that neither of these segments were found to be deficient based on the last monitoring cycle in 2016, SJCOG is deferring the finding of non-conformance with the RCMP at this time.

Merge/Diverge Analysis

A merge /diverge analysis was introduced to this report as an informational item. City of Manteca expressed a concern that the 2016 RCMP Monitoring Report did not show SR-120 segment between Airport Way and SR-99 deficient before exemptions for interregional trips during the November 2016 TAC Meeting. As a result, this additional layer of analysis was added.

The scope of the merge/diverge analysis included SR-120 between I-5 & SR-99 and specific corridors along SR-99 and I-5 chosen based on their LOS rating. However, six segments lacked the current Caltrans turning movement data to perform a merge/diverge analysis. Two segments were along SR-120; including 1) SR-120 between I-5 and Guthmiller Road and 2) SR-120 between Main Street and SR-99.

There are five merge/diverge locations during AM peak commute period and eight during PM peak commute period with a rating of LOS E or F. In these occurrences, average speed was deemed “unstable” due to the high density of passenger cars per mile per lane. There are four occurrences on I-5, 7 on SR-99, and two on SR-120.

Merge/Diverge Deficiencies

Freeway	Intersection	Direction	Ramp Type	Freeway Section Type	LOS	Peak Period
5	Louise Avenue	NB	On	Merge	F	PM
	Lathrop Road	NB	On	Merge	F	PM
		SB	On	Merge	F	PM
	Monte Diablo Avenue	NB	On	Weave	F	PM
99	Harney Lane	NB	On	Merge	F	PM
		SB	Off	Diverge	F	AM
	Cherokee Lane	SB	On	Merge	F	PM
		SB	ON	Merge	E	AM
	Turner Road	NB	On	Weave	E	AM
	Mokelumne River	NB	Off	Weave	E	AM
	Woodbridge Road	SB	On	Merge	E	AM
120	Airport Way	EB	On	Merge	F	PM
	Union Avenue	EB	On	Merge	F	PM

RCMP Land Use Analysis Program

The RCMP is required to contain a program to analyze the impacts of land use decisions made by local jurisdictions on the regional transportation system. To comply with this state mandate, SJCOG and its members have integrated a “regional layer” of review within the California Environmental Quality Act (CEQA) review process to analyze impacts of development projects to the CMP transportation system. The RCMP Monitoring and Conformance Report must document each local agency’s performance over the previous two years to comply with the RCMP, including but not limited to the following:

- Implementation progress of mitigation measures identified as part of the RCMP Land Use Analysis Program.
- Compliance with the CEQA mitigation monitoring requirements for RCMP impacts.

SJCOG staff analyzed development projects that local agencies approved between 2010 and 2018 for which SJCOG staff had provided comments relating to the RCMP. SJCOG staff contacted local agency planning staff to determine the status of each project and implementation progress of mitigation measures along the regional roadway network. A map and summary of the project’s status and its mitigation measures is in Appendix B of the 2019 Monitoring and Conformance Report.

COMMITTEE ACTIONS

- **Technical Advisory Committee** - On 6/13/19, TAC approved staff’s recommendation to submit the 2019 RCMP Monitoring Report to the Board for approval without any comments or concerns.

NEXT STEPS:

SJCOG staff will continue to monitor the impact of land use decisions on the RCMP Network for the next biennial RCMP Monitoring and Conformance Report. In addition, an update to RCMP will be generated in Fiscal Year 19/20. The tasks that the update will address include:

- Update and monitor RCMP Land Use Analysis Program
- Update RCMP Network and Seven-Year Capital Improvement Program
- Consider the introduction of specific criteria, set forth by Senate Bill 743 in regards to RCMP

ATTACHMENTS:

- A. 2018 RCMP Roadway Network
- B. San Joaquin County RCMP 2019 Monitoring and Conformance Report Executive Summary
- C. RCMP Land Use Analysis Program – Summary of Projects with RCMP Impacts

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Executive Summary

EXECUTIVE SUMMARY

As the designated Congestion Management Agency (CMA) for San Joaquin County, the San Joaquin Council of Governments (SJCOG) is responsible for updating County's Regional Congestion Management Program (RCMP) and biennially monitoring its implementation. Pursuant to Section 65089.3 of the California Government Code, SJCOG must biennially determine if each City and the County is conforming to the following RCMP requirements:

- Consistency with the RCMP LOS standards;
- Implementation of the RCMP Land Use Analysis Program to mitigate impacts to RCMP designated roadways and intersections from local land use decisions;
- Progress towards implementing the RCMP Regional Deficiency Plan action list as identified in SJCOG's Regional TDM Plan (August, 2010).

In addition to the above state requirements governing congestion management compliance, this RCMP Biennial Monitoring and Conformance Assessment Report also serves to track and report the following:

- Monitoring of SJCOG's RCMP performance measures;
- Compliance with the SJCOG's Measure K renewal requirements to implement a state compliant Congestion Management Program;
- Compliance with the federal FAST Act required congestion management process¹.

This report provides a snapshot of the "state of congestion" on the County's designated RCMP roadway network including segments, intersections, multi-modal corridors, bicycle network and transit network. To inform this assessment, SJCOG performed a comprehensive data collection effort in 2018. Where congestion problems are identified, this biennial monitoring process establishes the need for development of RCMP deficiency plans to remedy such locations. However, State statutes require that the CMA first examine if vehicle trips outside the control of local land use decisions are the cause of the deficiency². The primary RCMP trip exemption types applicable to San Joaquin County include: interregional trips (trips that do not originate in San Joaquin County); and, trip diversion associated with construction related activity. Two additional factors that obviate the need for development of deficiency plans include: improvements associated with the deficient facility are already programmed in SJCOG's Federal Transportation Improvement Program; and/or, the deficient facility was identified as RCMP exempt per state statute in the 1992 RCMP (i.e., program initiation) because they were already operating

¹ The federal Congestion Management Process requires an increased multimodal travel demand management (TDM) and system management emphasis at both the local and regional level to comply. Noncompliance with any of these directives can have local and regional funding implications.

² State statutes requires local agencies to prepare RCMP Deficiency Plans specific to the deficient facilities that identify capital improvements that will either directly remedy the capacity deficiency or provide multi-modal system-wide benefits to circulation and air quality. Unlike the direct fix approach, a system-wide deficiency plan CIP list must receive concurrence from the San Joaquin Valley Unified Air Pollution Control District before it can be approved by the local agency and SJCOG (Section 65089.4(c)(3)).

at LOS E or F. Pre-existing deficient segments at the time of program initiation are deemed “grandfathered.”

Table 1: "Grandfathered" Segments

LOS Standard of “E”		
County	SR-26	SR-99 to Cardinal Ave.
County	SR-88	Brandt Rd. to Sierra Drive (through Lockeford)
County	SR-99	Cherokee Rd. to Wilson Way
County	I-205	MacArthur Drive to I-5
Stockton	March Lane	West Lane to Pacific Avenue
Stockton	SR-4	SR-99 to .66 mi. east of Wilson Way
Stockton	SR-4	.66 mi. east of Wilson Way to Navy Drive
LOS Standard of “F”		
County	I-205	Alameda Co. line to Tracy Blvd.
Escalon	SR-120	Escalon-Bellota Rd. to east of Mitchell Ave.
Manteca	SR-120	Yosemite Ave. undercrossing to SR-99

Source: SJCOG 2007 RCMP Policy Document

If SJCOG determines that a local jurisdiction is not conforming to the requirements of the RCMP, the agency will have 90 days to correct any issues of non-conformance. If the local agency fails to resolve these issues, SJCOG is required to notify the State Controller, who shall then withhold all apportionments of Section 2105 gas tax subvention funds to the nonconforming jurisdiction until the issue of nonconformance is resolved. If the local jurisdiction has not resolved the issue of nonconformance after 12 months, the State Controller must allocate the withheld gas tax apportionment to SJCOG who is then required to spend the apportionment on regionally significant projects identified in the RCMP's Capital Improvement Program or improvements identified in adopted deficiency plans (i.e., *SJCOG Regional Deficiency Plan*, August 2010). In addition, the Metropolitan Planning Organization (SJCOG) shall not program federal Surface Transportation Program (STP) or Congestion Mitigation and Air Quality (CMAQ) funds for any project in the nonconforming jurisdiction unless it is considered a regionally significant project or is identified in an adopted deficiency plan.

SUMMARY OF FINDINGS

The 2018 biennial conformance findings indicate that all jurisdictions in San Joaquin County are currently conforming to the RCMP. SJCOG is deferring the need for the San Joaquin County to prepare RCMP Deficiency Plans for one deficient RCMP local arterial segment at this time to allow another monitoring round to confirm these findings. As biennial monitoring continues, greater documentation of local agency compliance with the RCMP LUAP is anticipated. A summary of the monitoring results is provided below.

RCMP Roadway Network Intersections

RCMP Intersections were established by SJCOG with input from its member agencies, focusing primarily on state highway ramp termini and state/local arterial intersections of regional importance. A total of 108 intersections are currently designated as RCMP intersections. A total of 93 intersections were analyzed in 2018. Based on 2018 AM/PM intersection turn movement counts, the Highway Capacity Manual operational method was applied to determine intersection operations. Results indicate that all intersections operate at acceptable LOS during both weekday a.m. and p.m. peak hours, with the exception of 13 intersections that were determined to be operating at LOS E or F. These 13 intersections were then subject to an Exemption Analysis to determine if the intersection could be exempted from the observed LOS deficiency due to interregional trips, optimized signal timing, construction impacts, programmed improvements, and/or “grandfathered” segments. These exemptions are described further in Section 3.4 of this report. A summary of these RCMP intersection results are provided in **Table 2**.

Table 2. Intersection Deficiency Assessment

			No Exemption		With Interregional Exemption		Interregional + Optimized Signal Timing		
ID	Intersection	Control	Delay	LOS	Delay	LOS	Delay	LOS	Exemption Type or Deficiency
AM Peak Period									
8	Matthews Road & I-5 NB	TWSC	90.9	F	21.2	C	21.2	C	Interregional Trip
9	99 Frontage (s/o Eight Mile Road) & Hwy 99 NB Ramps	TWSC	39.3	E	19.1	C	19.1	C	Interregional Trip
22	McHenry Avenue & E River Road	AWSC	319.0	F	18.8	C	18.8	C	Interregional Trip
33	Yosemite Avenue & French Camp Road	TWSC	48.5	E	13.0	B	13.0	B	Interregional Trip
35	Jack Tone Road & Mariposa Avenue	AWSC	43.9	E	10.1	B	10.1	B	Interregional Trip
41	Lathrop Road & I-5 NB Ramps	Signal	126.7	F	78.1	E	67.0	E	Programmed Improvement
44	Louise Ave & I-5 SB Ramps	Signal	70.2	E			50.4	D	Optimization
70	March Ln & I-5 SB Ramps	Signal	137.2	F			54.4	D	Optimization
82	Airport Wy & Sperry Rd/Arch-Airport Rd	Signal	73.6	E			41.8	D	Optimization
87	Kelley Dr & Hammer Ln	Signal	56.5	E			46.3	D	Optimization
90	Thornton Rd & Lower Sacramento Road	Signal	65.5	E	62.8	E	62.8	E	Programmed Improvement
93	Trinity Pkwy & Eight Mile Rd	Signal	57.6	E			30.4	C	Optimization
99	Corral Hollow Rd & 11th Street	Signal	63.8	E			50.2	D	Optimization
100	Corral Hollow Road & Linne Rd	TWSC	147.3	F	16.9	C	16.9	C	Interregional Trip
101	Lammers Rd & 11th Street	Signal	128.9	F			54.1	D	Optimization

			No Exemption		With Interregional Exemption		Interregional + Optimized Signal Timing		
ID	Intersection	Control	Delay	LOS	Delay	LOS	Delay	LOS	Exemption Type or Deficiency
107	Mountain House Parkway & I-580 WB Ramps	TWSC	53.8	F	6.4	A	6.4	A	Interregional Trip
PM Peak Period									
8	Matthews Road & I-5 NB	TWSC	186.1	F	26.2	D	26.2	D	Interregional Trip
22	McHenry Avenue & E River Road	ASWC	299.7	F	88.8	F	88.8	F	Programmed Improvement
29	Vernalis Road & SR-132/Vernalis Road	TWSC	126.5	F	11.1	B	11.1	B	Interregional Trip
33	Yosemite Avenue & French Camp Road	TWSC	347.8	F	21.7	C	21.7	C	Interregional Trip
41	Lathrop Road & I-5 NB Ramps	Signal	57.0	E			54.8	D	Optimization
45	Lathrop Road & I-5 SB Ramps	Signal	81.8	F			24.9	C	Optimization
53	Hutchins Street & Harney Lane	Signal	60.7	E	53.8	D	53.8	D	Interregional Trip
62	Jack Tone Rd & River Rd	TWSC	73.1	F	22.0	C	22.0	C	Interregional Trip
70	March Ln & I-5 SB Ramps	Signal	108.0	F			33.7	C	Optimization
82	Airport Wy & Sperry Rd/Arch-Airport Rd	Signal	79.4	E			49.6	D	Optimization
86	Pacific Ave & March Ln	Signal	60.6	E			51.0	D	Optimization
90	Thornton Rd & Lower Sacramento Road	Signal	61.4	E			52.0	D	Optimization
92	Hwy 99 NB Ramps & Arch Rd (east of freeway)	Signal	60.5	E			48.0	D	Optimization
93	Trinity Pkwy & Eight Mile Rd	Signal	180.0	F			54.5	D	Optimization
104	Austin Road & French Camp Road	AWSC	104.0	F	13.2	B	13.2	B	Interregional Trip

>Cap=Over Capacity. Highway Capacity Manual methods cannot calculate delay with volumes this high.

Basic Freeway Segments

Based on the most recent published volumes by Caltrans (2017), portions of I-5, SR-99, SR-120, SR-4 and I-205 were determined to be operating at LOS E or F during the a.m. or p.m. peak hours. After accounting for locally generated trips (interregional trip exemption), only one segment of SR-99 would operate at LOS E or worse. Given that this segment was not found deficient in 2016 Monitoring Report, staff deferred the request for a RCMP Deficiency Plan from SJCOG, “the responsible party,” until the next Monitoring Report. If this one segment is found deficient after exclusion analysis in 2020 monitoring, a RCMP Deficiency Plan will be needed. A summary of these results are provided in Table 3. Freeway Deficiency Analysis

Table 3. Freeway Deficiency Analysis

			No Exemption				With Interregional Exemption		
	From	To	AM LOS	PM LOS	AM II/IX* Share	PM II/IX* Share	AM LOS	PM LOS	Exemption Type
Northbound / Eastbound Segments									
5	Jct. Rte. 205 West	Jct. Rte. 120 East	D	F	42%	35%	B	B	Interregional Trip
	Lathrop Road	French Camp Overcrossing	C	E	41%	43%	A	B	Interregional Trip
	French Camp Overcrossing	Mathews Road	D	E	43%	43%	B	B	Interregional Trip
	Mathews Road	French Camp Turnpike	D	E	43%	46%	B	B	Interregional Trip
	French Camp Turnpike	Eighth St	D	F	52%	56%	B	C	Interregional Trip
	Eighth St.	Jct. Rte. 4	D	F	52%	57%	B	C	Interregional Trip
	Country Club Boulevard	Plymouth Rd/Ryde Ave	C	F	48%	63%	A	C	Interregional Trip
	March Lane	Benjamin Holt Drive	B	E	51%	63%	A	C	Interregional Trip
	Benjamin Holt Drive	Hammer Lane	D	F	40%	88%	A	D	Interregional Trip
99	Stanislaus County Line	Main Street	F	C	13%	10%	A	A	Interregional Trip
	Main Street	Milgeo Avenue	F	C	18%	15%	A	A	Interregional Trip
	Milgeo Avenue	Jacktone Road	F	C	21%	21%	A	A	Interregional Trip
	Jacktone Road	South Jct. Rte. 120	E	C	16%	26%	A	A	Interregional Trip
	South Jct. Rte. 120	N. Jct. Rte. 120	E	B	28%	30%	A	A	Interregional Trip
	Mariposa Rd	Jct. Rte. 4 East	E	C	44%	57%	B	A	Interregional Trip
	Jct. Rte. 4 East	Jct. Rte. 26 West	F	C	41%	57%	F	B	Deficiency
	Jct. Rte. 26 West	Jct. Rte. 4 West	F	C	44%	60%	C	B	Interregional Trip
	Jct. Rte. 88 Northeast	Cherokee Road	E	E	42%	64%	B	C	Interregional Trip
	Cherokee Road	Wilson Way	E	E	43%	66%	B	C	Interregional Trip
	Wilson Way	Hammer Lane	D	E	48%	69%	B	C	Interregional Trip
	South Lodi Interchange	Lodi, Jct. Rte. 12 West	D	E	38%	58%	B	C	Interregional Trip
120	Jct. Rte. 5	Yosemite Ave Undercrossing	D	E	98%	89%	C	D	Interregional Trip
	Yosemite Ave Undercrossing	Airport Way	C	E	65%	28%	B	A	Interregional Trip
205	Alameda County Line	Patterson Pass Road	C	F	15%	1%	A	A	Interregional Trip
	Patterson Pass Road	Old Route 50	B	F	15%	1%	A	A	Interregional Trip
	Old Route 50	Mac Arthur Drive	C	E	30%	10%	A	A	Interregional Trip
	Mac Arthur Drive	Jct. Rte. 5	A	F	41%	20%	A	A	Interregional Trip
Southbound / Westbound Segments									
5	Jct. Rte. 205 West	Jct. Rte. 120 East	F	D	36%	73%	B	C	Interregional Trip
	French Camp Overcrossing	Mathews Road	D	E	32%	71%	A	C	Interregional Trip
	Mathews Road	French Camp Turnpike	D	E	33%	71%	A	C	Interregional Trip
	French Camp Turnpike	Eighth St	D	E	39%	68%	B	C	Interregional Trip
	Eighth Street	Jct. Rte. 4	D	E	40%	71%	B	C	Interregional Trip
99	Stanislaus County Line	Main Street	B	F	62%	71%	A	D	Interregional Trip
	Main Street	Milgeo Avenue	C	F	61%	68%	B	D	Interregional Trip
	Milgeo Avenue	Jack Tone Road	C	F	61%	68%	B	D	Interregional Trip
	Jack Tone Road	South Jct. Rte. 120	B	F	64%	68%	A	D	Interregional Trip

			No Exemption				With Interregional Exemption		
	From	To	AM LOS	PM LOS	AM II/IX* Share	PM II/IX* Share	AM LOS	PM LOS	Exemption Type
	Jct. Rte. 26 West	Jct. Rte. 4 West	C	E	44%	65%	A	C	Interregional Trip
	Jct. Rte. 26 East	Jct. Rte. 88 Northeast	C	E	54%	71%	B	D	Interregional Trip
	Jct. Rte. 88 Northeast	Cherokee Road	D	E	57%	66%	C	C	Interregional Trip
	Wilson Way	Hammer Lane	E	D	54%	66%	C	C	Interregional Trip
	South Lodi Interchange	Lodi, Jct. Rte. 12 West	F	D	38%	44%	B	B	Interregional Trip
	Lodi, Turner Road	Woodbridge Road	E	D	35%	38%	B	A	Interregional Trip
205	Alameda County Line	Patterson Pass Road	F	B	30%	62%	B	A	Interregional Trip
	Patterson Pass Road	Old Route 50	F	B	28%	72%	B	A	Interregional Trip
	Old Route 50	Mac Arthur Drive	F	B	29%	71%	B	B	Interregional Trip
	Mac Arthur Drive	Jct. Rte. 5	F	D	34%	75%	B	C	Interregional Trip

*II stands for Internal to Internal, or trips that both originate and end within San Joaquin County, while IX stands for Internal to External, or trips that originate in San Joaquin County, but end elsewhere.

Merge / Diverge Analysis

A merge /diverge analysis was introduced to this report as an informational item. At the November 2016 TAC Meeting, City of Manteca expressed a concern that the 2016 RCMP Monitoring Report did not show SR-120 segment between Airport Way and SR-99 deficient before exemptions for interregional trips. This additional layer of analysis was added as a result.

Merge / diverge analysis assesses the average speed, capacity (passenger cars per mile per lane), and LOS in select freeway interchanges during AM and PM peak commute periods. Segments analyzed included SR-99 near middle to northern San Joaquin County, I-5 near City of Lathrop and Stockton, and all of SR-120. It is important to note that the merge/diverge analysis could not be performed at the following interchanges due to a lack of current Caltrans and turning movement data.

- I-5 & Pershing Avenue
- I-5 & Fremont Street
- SR-99 & Armstrong Road
- SR-99 & Harney Lane
- SR-120 & Guthmiller Rd
- SR-120 & Main Street

The results found 13 merge/diverge locations rated LOS E or F, 5 during AM peak commute period and 8 during PM peak commute period. The majority of locations with unfavorable conditions (i.e. LOS E or F) in the merge/diverge analysis lied along segments rated LOS D or better in the standard RCMP LOS analysis. For example, the eastbound merge at SR-120 and Airport Way was rated LOS F while SR-120 between Airport Way and Main Street received a LOS D rating during PM peak period. Eastbound merge at SR-120 and Union Road also received LOS F rating while the same above segment receiving LOS D rating during PM peak period.

As an informational analysis, LOS ratings of E or F in the merge/diverge analysis are not classified as RCMP deficiencies and do not trigger the need for a Deficiency Plan. However, SJCOG and member agencies may still program state, federal, and local funds to remedy the congestion in the area.

Table 4: Deficient Merge/Diverge Basic Freeway Segments

Freeway	Intersection	Direction	Ramp Type	Freeway Section Type	LOS	Peak Period
5	Louise Avenue	NB	On	Merge	F	PM
	Lathrop Road	NB	On	Merge	F	PM
		SB	On	Merge	F	PM
	Monte Diablo Avenue	NB	On	Weave	F	PM
99	Harney Lane	NB	On	Merge	F	PM
		SB	Off	Diverge	F	AM
	Cherokee Lane	SB	On	Merge	F	PM
		SB	ON	Merge	E	AM
	Turner Road	NB	On	Weave	E	AM
	Mokelumne River	NB	Off	Weave	E	AM
	Woodbridge Road	SB	On	Merge	E	AM
120	Airport Way	EB	On	Merge	F	PM
	Union Avenue	EB	On	Merge	F	PM

Multi-Lane Highway Segments

State Route 132 (SR 132) from Interstate 580 (I-580) to I-5 is the only multi-lane highway segment evaluated for RCMP monitoring purposes. Based on a traffic operational analysis, the multi-lane highway segments of SR 132 currently operate at LOS A during both a.m. and p.m. peak hours.

Two-Lane Highway Segments

Based on 2017 published volumes by Caltrans, portions of SR-4, SR-12, SR-26, SR-88, SR-120 and SR-132 were determined to be operating at LOS E or F during the a.m. or p.m. peak hours. After accounting for locally generated trips (interregional trip exemption), all two-lane highway segments perform at LOS D or better. A summary of these results is provided in **Table 5. Two-lane Segment Deficiency Analysis**

Table 5. Two-lane Segment Deficiency Analysis

			No Exemption				With Exemption		
	From	To	AM LOS	PM LOS	AM II/IX Share	PM II/IX Share	AM LOS	PM LOS	Exemption Type
4	Contra Costa/San Joaquin Co Line	Tracy Boulevard	E	E	25%	38%	C	C	Interregional Trip
	Tracy Boulevard	Inland Drive	E	D	30%	43%	C	C	Interregional Trip
	Inland Drive	Maybeck Road	E	E	31%	43%	C	C	Interregional Trip
	Maybeck Road	Roberts Island Road	E	E	28%	41%	C	C	Interregional Trip
	Roberts Island Road	Fresno Avenue	E	E	33%	46%	D	D	Interregional Trip
12	Sacramento County Line	Glasscock/Tower Parkway	E	E	29%	33%	C	C	Interregional Trip
	Glasscock/Tower Parkway	Guard Road	E	E	38%	41%	C	C	Interregional Trip
	Guard Road	Jct. Rte. 5	E	E	40%	43%	D	D	Interregional Trip
	Jct. I-5	Thornton Road	E	E	53%	58%	D	D	Interregional Trip
	Thornton Road	Lower Sacramento Road	E	E	47%	57%	D	D	Interregional Trip

			No Exemption				With Exemption		
	From	To	AM LOS	PM LOS	AM II/IX Share	PM II/IX Share	AM LOS	PM LOS	Exemption Type
26	Cardinal Avenue	Alpine Road	E	D	60%	78%	D	D	Interregional Trip
88	Wilcox Road	White Lane	E	E	49%	78%	D	D	Interregional Trip
	White Lane	Fairchild Lane	D	E	49%	79%	D	D	Interregional Trip
	Jct. Rte. 12 W	Jack Tone Road	E	E	42%	70%	D	D	Interregional Trip
	Disch Road	Mackville Road	E	E	19%	50%	C	C	Interregional Trip
120	Jack Tone Road	French Camp Road	E	E	42%	28%	C	C	Interregional Trip
	French Camp Road	Main/Kern Street	D	E	12%	38%	B	B	Interregional Trip
132	Jct. Rte. 5	Jct. Rte. 33	E	E	27%	18%	C	C	Interregional Trip
	Jct. Rte. 33	Stanislaus County Line	E	E	35%	17%	C	C	Interregional Trip

Arterial Street Segments

Based on a traffic operational analysis, portions of seven arterial street segments currently operate at LOS E or F. These include: Eight Mile Road; SR-4/Farmington Road; Byron Road; SR-12/Kettleman Lane, Airport Way, SR-120/Yosemite Avenue; SR-120; and Arch Airport Road. After accounting for locally generated trips (interregional trip exemption), five segments operate at LOS D or better and five segments operate at LOS F. Of the segments with LOS F rating, four segments were programmed in SJCOG's Regional Transportation Plan / Sustainable Communities Strategy. One deficient segment was not programmed; however, staff found this segment was not previously deficient in 2016 Monitoring Report and should be deficient in consecutive Monitoring Reports before requesting San Joaquin County to prepare RCMP Deficiency Plan. Staff will reassess this segment during the next Monitoring Report. A summary of these results is provided in **Table 6**.

Table 6. Local Arterial Deficiency Analysis

Roadway	From	To	Jurisdiction	No Exemption LOS	AM II/IX Share	PM II/IX Share	AVG II/IX Share	LOS	Exemption Type
Eight Mile Road	Lower Sacramento Road	Hwy. 99	County	F	94%	89%	92%	F	Programmed
SR-4/Farmington Road	S. Jct. Rte. 99	Walker Lane	County	E	29%	82%	55%	D	Interregional Trip
Byron Road	Alameda County	Lammers Road	County/Tracy	F	94%	91%	92%	F	RCMP Deficiency
SR-120	Main Street of Escalon	David Avenue of Escalon	Escalon	E	13%	36%	24%	C	Interregional Trip

Roadway	From	To	Jurisdiction	No Exemption LOS	AM II/IX Share	PM II/IX Share	AVG II/IX Share	LOS	Exemption Type
SR-12/Kettleman Lane	South Hutchins Street	Hwy. 99	Lodi	E	77%	85%	81%	D	Interregional Trip
Airport Way	Lathrop Road	SR-120	Manteca	F	84%	93%	89%	F	Programmed
SR-120 /Yosemite Avenue	Fremont Street	Hwy. 99	Manteca	E	50%	79%	64%	D	Interregional Trip
Arch Airport Road	Highway 99	Airport Way	Stockton	F	88%	93%	90%	F	Programmed
Eight Mile Road	Trinity Parkway	I-5	Stockton	F	98%	95%	97%	D	Interregional Trip
Eight Mile Road	I-5	Thornton Road	Stockton	F	88%	82%	85%	F	Programmed

Jurisdiction: Reflects location – not owner/operator (e.g., SR-12/88 is owned/operated by Caltrans but traverses through the County's jurisdiction)

RCMP Regional Deficiency Plan

As applicable, local agency conformance with the following RCMP Deficiency Plan requirements is also tracked:

- Complying with the RCMP Monitoring Program traffic count sharing responsibilities;
- Local adoption and SJCOG approval of RCMP Deficiency Plans within 12 months of the RCMP deficiency finding by SJCOG (as applicable); and,
- Progress made in the implementation of previously adopted Deficiency Plan CIP improvement projects.

The only RCMP Deficiency Plan adopted in San Joaquin County was the RCMP Regional Deficiency Plan (August, 2010) prepared by SJCOG in coordination with all its member agencies. This Regional Deficiency Plan identified I-5 between French Camp to Charter Way as deficient. The following CIP projects were identified in the SJCOG Regional Deficiency Plan:

Short-term Improvements:

Park-and-Ride Lot Implementation:

- I-5 and Hammer Lane in Stockton: \$1,200,000
- I-5 and Eighth Mile Road in Stockton: \$1,200,000
- Stanislaus County locations along the I-5 and SR-99 corridors (2 lots): \$2,400,000
- Expansion of Lots (I-5 and Ben Holt Drive) & (Kelley Dr. in Stockton): \$950,000 (add 80 spaces total)
- Expansion of Lot (Junction of I-5 and SR-12) – **Implemented** \$400,000 (add 40 spaces total)

Long-term Improvement:

- Widen I-5 from 6-8 lanes to add an HOV lane in each direction (French Camp to Charter Way): \$64,000,000³

Widening I-5 to accommodate an HOV lane in each direction will provide the requisite capacity to remedy this deficiency. This project is identified in the 2018 Regional Transportation Plan and is a Measure K Renewal Project, but as of today is not programmed in the FTIP.

The I-5 North Stockton Improvement Project that widens the I-5 between Martin Luther King Jr. Boulevard/Charter Way and Hammer Lane from 6 to 8 lanes to add HOV lanes was completed in 2016. This relieves some congestion north of the deficient facility but does not fully remedy the issue.

All jurisdictions have complied with the RCMP LUAP and RCMP Deficiency Plan requirements. The following improvements to program implementation are recommended however:

- Both SJCOG and its member agencies need to better inform the transportation and environmental consulting community of the RCMP LUAP requirements.
- Both SJCOG and its member agencies need to improve traffic count data sharing/transmittal and better inform the transportation and environmental consulting community of the RCMP traffic count database.
- Local agencies need to more proactively consider funding opportunities for RCMP facility improvements identified as CEQA mitigation during state/federal discretionary funding cycles as well as priorities for local RTIF funding.
- SJCOG and its member agencies need to more proactively pursue opportunities to fund improvements identified in the RCMP Regional Deficiency Plan (SJCOG, 2010).

RCMP Multimodal Corridors

SJCOG, in coordination with its member agencies, has designated twelve roadways as RCMP multimodal corridors. These corridors were selected based on their “Complete Street” functionality and are generally located in “downtown” areas that are characterized by higher than average numbers of shared roadway users (pedestrians, bicyclists, transit passengers, and motorists). For more information, please refer to Appendix A.

³ Note: Cost estimate was current as of publication of 2010 SJCOG Regional Deficiency Plan. Cost estimate for this project in the 2018 Regional Transportation Plan was \$97,880,000.

RCMP Land Use Analysis Program – Summary of Projects with RCMP Impacts

The RCMP is required to contain a program to analyze the impacts of land use decisions made by local jurisdictions on the regional transportation system. To comply with this state mandate, SJCOG and its member have integrated a “regional layer” of review within the CEQA review process to analyze impacts of development projects to the CMP transportation system. The RCMP Monitoring and Conformance Report must document each local agency’s performance over the previous two years to comply with the RCMP, including but not limited to the following:

- Implementation progress of mitigation measures identified as part of the RCMP Land Use Analysis Program.
- Compliance with the CEQA mitigation monitoring requirements for RCMP impacts.

SJCOG staff analyzed development projects that local agencies approved between Fiscal Year 2010-2011 and Fiscal Year 2017-2018 for which SJCOG staff had provided comments relating to RCMP impacts. During this monitoring period, SJCOG staff included other development projects with transportation mitigation measures, but did not receive comments from SJCOG. The reasoning is the project did not trigger a Tier 2 review or the project’s environmental document was not received by SJCOG staff. This additional process increases the mitigation measures captured; in hopes of reducing the impact of new development on the regional roadway network within San Joaquin County. SJCOG staff contacted local agency planning staff to determine the status of each project and implementation progress of mitigation measures as appropriate.

These projects are summarized in Tables 1 and displayed geographically on the map in Figure 1, below.

Figure 9: Development Projects with RCMP Impacts

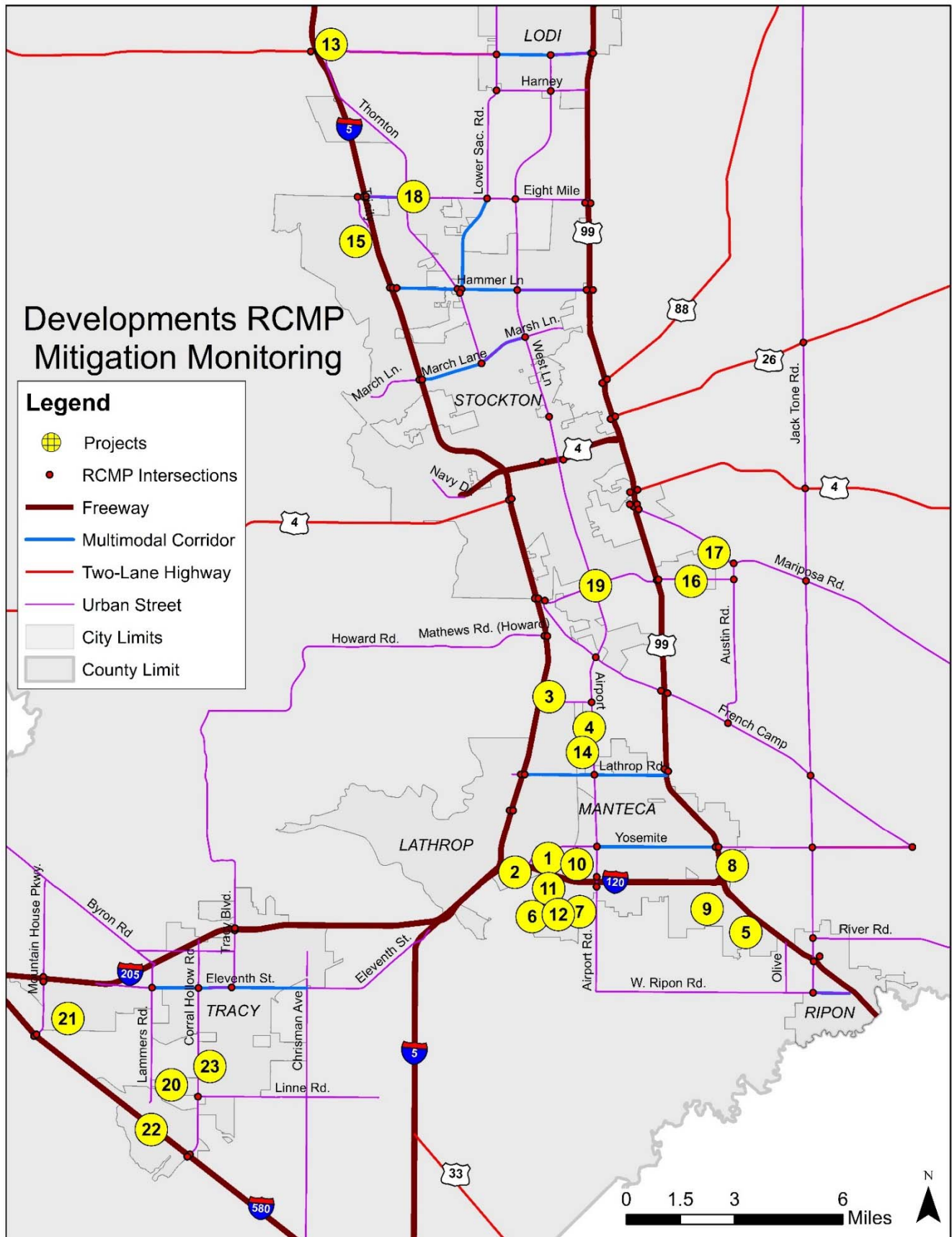


Table 3: Development Projects with RCMP Impacts

#	Lead Agency	Project Name	Project Description	Date Approved
1	Lathrop	Lathrop Gateway Business Park	139.7 acres of commercial, 167.6 acres of industrial, and 20.1 acres of infrastructure /open space north of SR-120 and between 2 rail lines. <u>Location:</u> East/West of UPRR, South of Yosemite Avenue, & North of SR-120 in Lathrop, California	05/06/2011
2	Lathrop	South Lathrop Specific Plan	10 acres of commercial office, 222 acres of light industrial, 31.5 acres of open space, 36 acres of public/quasi public facilities <u>Location:</u> South of SR-120 and north of Chiavari Way in Lathrop, California	07/20/2015
3	Lathrop	Lathrop Pilot Flying J	Two 9 diesel fueling lanes with 10 fueling islands, 12 gas fueling lanes with 6 fueling islands, 106 truck parking spaces, 67 passenger car parking spaces, and 13,011 sq. ft. building that includes a drivers' lounge, retail space, and multiple restaurants. <u>Location:</u> North of Roth Road and east of I-5 in Lathrop, California	06/06/2016
4	Manteca	Northwest Airport Way Master Plan	324 acres of industrial, 22 acres of commercial, and 44 acres of open space / drainage <u>Location:</u> Southeast corner of Roth Road and Airport Way in Manteca, California	11/02/2010
5	Manteca	Austin Road Business Park and Residential Community	1,051 acres of primarily agriculture with 14 rural residences and 30 acres of commercial and industrial uses <u>Location:</u> Southeast of Woodward Avenue and Moffat Boulevard in Manteca, California	11/16/2010
6	Manteca	The Trails of Manteca	1,650 dwelling-unit planned residential community. Dwelling units would consist of 1,178 single-family units and 472 multi-family units. The project would incorporate a trail system throughout the site of over 12 miles that will eventually connect to the City facilities. The proposed project also includes over 75 acres of linear parks and a clubhouse to be utilized by the residents. <u>Location:</u> Southeast corner of Woodward Avenue and South Woodward Avenue in Manteca, California	02/15/2011
7	Manteca	Terra Ranch Subdivision	209 single family dwellings, 200 multi-family dwellings, and 2.8 acre park <u>Location:</u> Southeast corner of Woodward Avenue and McKinley Avenue in Manteca, California	06/21/2011
8	Manteca	Yosemite Square Master Plan	137.7 acres of a business park and single/multifamily dwellings (755 units) <u>Location:</u> Northeast corner of SR-120 and SR-99 in Manteca, California	03/20/2012
9	Manteca	South of Woodward Avenue	The approximately 191.3-acre project site consists of six parcels, identified by Assessor's Parcel Numbers (APNs) 224-050-11, 224-050-12, 224-050-13, 226-140-03, 226-140-01, and 226-140-02. The overall project site is made up of three distinct sites referred to as Atherton Homes at Woodward Park I, Atherton Homes at Woodward Park II, and DeJong Property. <u>Location:</u> Southwest corner of Woodward Avenue and Atherton Drive in Manteca, California	05/05/2015
10	Manteca	Great Wolfe Lodge	210.7 acres of baseball and soccer fields, outdoor stadium, 360,000 sq. ft. of retail and restaurants, hotel, convention center, and water park. <u>Location:</u> Northeast corner of SR-120 and McKinley Ave in Manteca, California	09/08/2015
11	Manteca	Oakwood Trails Subdivision	Approximately 207 acres of land with 676 single-family housing units, 15.67 acres of parks/basins, 20.2 acres of commercial, and 11.59 acres of business industrial park. <u>Location:</u> North of Woodward Ave, east of McKinley Ave, and south of SR-120 in Manteca, California	06/21/2016
12	Manteca	Oakwood Landing – Cerri & Denali Subdivision	Up to 290 high density residential units, up to 975 low density residential units, and up to approximately 237,838 square feet of commercial. <u>Location:</u> Southwest of McKinley Ave and Atherton Dr in Manteca, California	06/05/2018
13	San Joaquin County	Love's Travel Stops	16 pumps and 24 fueling stations to serve 16 gasoline and 8 diesel fueling positions, a 7,700 square foot convenience store with an attached 3,000 square-foot fast-food restaurant, and a 1,200 square-foot storage building. <u>Location:</u> East of Thornton Road, North of SR-12 in Lodi, California	12/20/2012

#	Lead Agency	Project Name	Project Description	Date Approved
14	San Joaquin County	Union Pacific Expansion and Modernization Project	40 acre expansion of the existing Union Pacific Intermodal Facility Location: South of Roth Road, East of UPRR, West of Airport Way, North of <u>Lathrop</u> Road in Manteca, California	03/12/2013
15	Stockton	Delta Cove	1,545 residential units on 360 acres, consisting of low density residential lots (833 units), medium density residential lots (372 units), high density residential lots (280 units), 5.73 acres of commercial uses, and live-work residences (100 units) 2.5 acres within the commercial area. <u>Location:</u> Southwest corner of Bear Creek and Future Trinity Parkway in Stockton	10/19/2010
16	Stockton	Archtown Industrial Project	79 acres of industrial. <u>Location:</u> Southwest corner of Arch Road and Newcastle Road in Stockton, California	11/15/2011
17	Stockton	Norcal Logistics Center	Approximately 325 acres of land, separated into two non-adjacent portions, approximately 50 and 275 acre properties. Up to 6,280,480 sq. ft. of light industrial could be constructed. <u>Location:</u> South of Mariposa Road, North of Arch Road, east of Frontier Way, west of Austin Road in Stockton, California	03/26/2015
18	Stockton	Thornton Rd / Eight Mile Rd Arco Station	Three commercial structures: a gasoline station and convenience store approximately 3,799 square feet, a fast-food restaurant approximately 3,462 square feet, and a retail building approximately 4,000 square feet. The gasoline station would have 16 fuel dispensing pumps. <u>Location:</u> Northwest corner of Eight Mile Rd & Thornton Rd in Stockton, California	01/21/2018
19	Stockton	Airport Way/Sperry Road Commercial	The fueling station would provide 16 pumps for dispensing gasoline and diesel fuel to passenger vehicles and light-duty trucks. An adjacent building approximately 3,764 square feet in size would contain a convenience store. <u>Location:</u> Southwest corner of Airport Wy & Sperry Rd in Stockton, California	04/17/2018
20	Tracy	Ellis Specific Plan	321 acres of 2,250 (max) residential dwellings, open pace/parks, swim center, village center, and 180,000 sq. ft. of commercial <u>Location:</u> Northwest corner of Linn Road and Corral Hollow Road in Tracy, California	01/22/2013
21	Tracy	Cordes Ranch Specific Plan	16,105 residential dwellings, 275 acres of commercial, 441 acres of industrial, 759.5 acres of open space, 285 acres of schools, and 499.5 acres of public facilities <u>Location:</u> South of I-205, North of Old Schulte Road, east of I-580, west of Lammers Road in Tracy, California	09/03/2013
22	Tracy	Tracy Hills Specific Plan	2,732 acres of up to 5,499 residential dwellings, schools, parks, commercial, industrial, and other land uses <u>Location:</u> South of I-205, West of Corral Hollow Road, East of Alameda County Line in Tracy, California	03/02/2016
23	Tracy	Tracy Village	An active adult, gated, and age-restricted community consisting of up to 600 single-family detached residential lots that would support single-family dwelling units ranging from 1,350 square feet to 3,000 square feet. <u>Location:</u> West of Corral Hollow Rd & South of Valpico Rd in Tracy, California	04/11/2018