



## SAN JOAQUIN COUNCIL OF GOVERNMENTS

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[www.sjcog.org](http://www.sjcog.org)

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CITIES OF  
ESCALON,  
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RIPON,  
STOCKTON,  
TRACY,  
AND  
THE COUNTY OF  
SAN JOAQUIN

March 29, 2019

Mr. Muhaned Aljabiry

**ATTN: Lima Huy**

California Department of Transportation

Division of Transportation Programming

Office of Federal Transportation Management Program

P.O. Box 942874

Sacramento, CA 64274-0001

**Subject: Submittal of the San Joaquin Council of Governments 2019 FTIP Amendment 4, 2018 RTP Amendment 1, and Final 2015 Ozone Conformity Analysis**

Dear Mr. Aljabiry:

Enclosed for your review and approval is the 2019 FTIP Amendment #4 and Amendment #1 to the SJCOG 2018 Regional Transportation Plan (RTP), and Final 2015 Ozone Conformity Analysis.

The San Joaquin Council of Governments (SJCOG) is proposing a 2019 Federal Transportation Improvement Program Amendment 4 (2019 FTIP Amendment 4) and 2018 Regional Transportation Plan Amendment 1 (2018 RTP Amendment 1) and Final 2015 Ozone Conformity Analysis. Associated documentation is attached as indicated below.

- Attachment 1: 2019 FTIP Amendment 4 Summary of Changes and CTIPS output. 2019 FTIP Amendment 4 is necessary due to changes in project costs and scope.
- Attachment 2: Updated Financial Plan based on the changes made in 2019 FTIP Amendment 4.
- Attachment 3: 2018 RTP Amendment 1, including summary of changes to the RTP project list. 2018 RTP Amendment 1 is necessary due to changes in project schedules and scopes. The amendment does not change the time frame of the transportation plan.

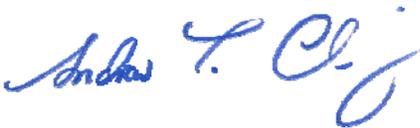
- Attachment 4: Final 2015 Ozone Conformity Analysis, which contains the documentation demonstrating that the criteria specified in the federal transportation conformity rule and the federal ozone implementation rule for the 2015 ozone standard are satisfied by the 2019 FTIP and 2018 RTP, as amended. As required by the federal implementation rule for the 2015 ozone standard published on December 6, 2018, the 2015 Ozone Conformity Analysis addresses a new attainment year of 2037. In addition, the conformity analysis addresses new analysis years 2020, 2023, 2026, and 2029 in line with the recently approved 2008 ozone standard budgets developed as part of the 2018 Updates to the California State Implementation Plan. The 2018 RTP/2019 FTIP and corresponding conformity analysis were approved by FHWA and FTA on December 3, 2018. In addition, the projects and /or project phases contained in the amendments do not interfere with the timely implementation of any approved TCMs.
- Attachment 5: Public notice and adoption resolution.

The public review and comment period was open for 30 days commencing on January 25, 2019 and ending on February 25, 2019. A public meeting was held at 9:00 a.m. on February 14, 2019. The documents are available for review at the SJCOG office, located at 555 E. Weber Avenue, Stockton, CA 95202 and on the SJCOG website at <http://www.sjcog.org>.

The SJCOG Board of Directors adopted the 2019 FTIP Amendment 4, 2018 RTP Amendment 1, and the Final 2015 Ozone Conformity Analysis on March 28, 2019 at its regularly scheduled meeting. The meeting was held at the address noted above.

In conclusion, the 2019 FTIP Amendment 4, 2018 RTP Amendment 1, and Final 2015 Ozone Conformity Analysis meet all applicable transportation planning requirements per 23 CFR Part 450, 40 CFR Part 93, and conform to the applicable SIPs. If you have any questions, please contact Ryan Niblock by phone at (209) 235-0588 or by email at [niblock@sjcog.org](mailto:niblock@sjcog.org).

Sincerely,



ANDREW T. CHESLEY  
Executive Director

cc:

Mr. Scott Carson, Federal Highway Administration  
Ms. Tashia Clemons, Federal Highway Administration  
Mr. Parminder Singh, Caltrans District 10  
Mr. Ken Baxter, Caltrans District 10

Mr. Tom Dumas, Caltrans District 10  
Ms. Alexandra Marcucci, Valley Air Quality Coordinator  
Executive Directors, Valley MPOs

**ATTACHMENT 1**

**PROJECT LIST**

**Summary of Changes**  
**SJCOG Amendment Number 4**

Existing / New	CTIPS ID	PROJECT TITLE	DESCRIPTION OF CHANGE	Phase	CTIPS Fund Type	PRIOR CTIPS Amt.	CURRENT CTIPS Amt.	FFY	Financial Table Fund Source	Net Increase / Decrease	Total Project Cost Change	%	Comments
Existing	112-0000-0421	SR 99 / 120 Connector Project Phase 1A	Project is now split into three phases in the FTIP	PE	SJ County Measure K	\$4,511,234	\$2,400,000	PRIOR	Local Funds	(\$2,111,234)	(\$2,111,234)	-9%	Scope of project within this specific FTIP listing has changed to only include Phase 1A.
New	212-0000-0745	SR 99 / 120 Connector Project Phase 1B	Project is now split into three phases in the FTIP	PE	STP Local	\$0	\$1,800,000	PRIOR	RSTP	\$1,800,000	\$3,411,234	100%	New listing specific to Phase 1B.
				PE	SJ County Measure K	\$0	\$1,500,000	19/20	Local Funds	\$1,500,000			
				ROW	SJ County Measure K	\$0	\$111,234	19/20	Local Funds	\$111,234			
New	212-0000-0746	SR 99 / 120 Connector Project Phase 1C	Project is now split into three phases in the FTIP	PE	STP Local	\$0	\$1,800,000	PRIOR	RSTP	\$1,800,000	\$1,800,000	100%	New listing specific to Phase 1C.

Sum of Net Change by Federal Fiscal Year and Fund Source

	18/19	19/20	20/21	21/22	Totals
Measure K	\$0	\$1,611,234	\$0	\$0	\$1,611,234
RSTP	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$1,611,234</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,611,234</b>

**San Joaquin Council of Governments - Federal Transportation Improvement Program  
(Dollars in Whole)  
State Highway System**

DIST: 10	PPNO: 3162	EA: 1E740	CTIPS ID: 112-0000-0421	TITLE (DESCRIPTION): SR 99/120 Connector Project (Add new auxiliary lanes, upgrade existing bridges, relocate an at-grade railroad crossing, intersections, construct additional connector lanes, ramp upgrades, and new signals/lighting. Due to funding constraints, the Project will be constructed in three phases. The initial phase will construct a second lane on the eastbound SR 120 to southbound SR 99 connector and auxiliary lanes, which will require the partial closure of the Austin Road/SR 99 interchange. The second phase will widen the connector from northbound SR 99 to westbound SR 120 to two lanes and widen SR 120 from four lanes to six between Main Street and SR 99. The third phase will construct braided ramps to the Austin Road interchange to restore full access.)	MPO Aprv: 06/28/2018 State Aprv: 11/02/2018 Federal Aprv: 12/17/2018  EPA TABLE II or III EXEMPT CATEGORY
CT PROJECT ID:			MPO ID.: SJ14-1004		
COUNTY: San Joaquin County San Joaquin County	ROUTE: 99 120		PM: 3.1 / 6.2 5.1 / T7.2		

IMPLEMENTING AGENCY: Caltrans  
PROJECT MANAGER: Jes Padda

PHONE: (209) 942-6065

EMAIL: jes.padda@dot.ca.gov

*PROJECT VERSION HISTORY (Printed Version is Shaded)*

					<i>(Dollars in whole)</i>				
<u>Version</u>	<u>Status</u>	<u>Date</u>	<u>Updated By</u>	<u>Change Reason</u>	<u>Amend No.</u>	<u>Prog Con</u>	<u>Prog RW</u>	<u>PE</u>	
2	Active	01/22/2019	DRIPPERD	Amendment - Cost/Scope/Sch. Change	4	10,142,000	6,816,000	4,200,000	
1	Official	06/28/2018	RNIBLOCK	Adoption - Carry Over	0	10,142,000	6,816,000	6,311,234	

* RIP - Regional Improvement Program		<u>PRIOR</u>	<u>18-19</u>	<u>19-20</u>	<u>20-21</u>	<u>21-22</u>	<u>22-23</u>	<u>23-24</u>	<u>BEYOND</u>	<u>TOTAL</u>
* Fund Source 1 of 4	PE									
	RW		3,408,000							3,408,000
* Fund Type: STIP Advance Construction	CON				10,142,000					10,142,000
* Funding Agency: San Joaquin Council of Governments	Total:		3,408,000		10,142,000					13,550,000

* RSTP - Surface Transportation Program (STP)		<u>PRIOR</u>	<u>18-19</u>	<u>19-20</u>	<u>20-21</u>	<u>21-22</u>	<u>22-23</u>	<u>23-24</u>	<u>BEYOND</u>	<u>TOTAL</u>
* Fund Source 2 of 4	PE	1,800,000								1,800,000
	RW									
* Fund Type: STP Local	CON									
* Funding Agency: San Joaquin Council of Governments	Total:	1,800,000								1,800,000

* Local Funds -		<u>PRIOR</u>	<u>18-19</u>	<u>19-20</u>	<u>20-21</u>	<u>21-22</u>	<u>22-23</u>	<u>23-24</u>	<u>BEYOND</u>	<u>TOTAL</u>
* Fund Source 3 of 4	PE	4,511,234								4,511,234
	RW									
* Fund Type: SJ County Measure K	CON									
* Funding Agency:	Total:	4,511,234								4,511,234

* State SB1 -		<u>PRIOR</u>	<u>18-19</u>	<u>19-20</u>	<u>20-21</u>	<u>21-22</u>	<u>22-23</u>	<u>23-24</u>	<u>BEYOND</u>	<u>TOTAL</u>
* Fund Source 4 of 4	PE									
	RW		3,408,000							3,408,000
* Fund Type: Road Repair and Accountability Act of 2017	CON									
* Funding Agency:	Total:		3,408,000							3,408,000

<b>Project Total:</b>		<u>PRIOR</u>	<u>18-19</u>	<u>19-20</u>	<u>20-21</u>	<u>21-22</u>	<u>22-23</u>	<u>23-24</u>	<u>BEYOND</u>	<u>TOTAL</u>
	PE	6,311,234								6,311,234
	RW		6,816,000							6,816,000
	CON				10,142,000					10,142,000
	Total:	6,311,234	6,816,000		10,142,000					23,269,234

Comments:  
\*\*\*\*\* Version 1 - 06/04/18 \*\*\*\*\*  
Project data transferred from 2018 STIP.  
\*\*\*\*\* VERSION 1 - 04/05/2018 \*\*\*\*\*  
~~~~~ Version 1 - 02/07/2018 ~~~~~  
Adoption new project per PPR 12/15/17. - ad

**PRIOR**

**San Joaquin Council of Governments - Federal Transportation Improvement Program  
(Dollars in Whole)  
State Highway System**

|                                                     |                     |     |                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |
|-----------------------------------------------------|---------------------|-----|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| DIST:<br>10                                         | PPNO:<br>3162       | EA: | CTIPS ID:<br>112-0000-0421     | TITLE (DESCRIPTION):<br>SR 99/120 Connector Project Phase 1A (Widen the eastbound SR 120 to southbound SR 99 connector ramp from one-lane to two lanes; Remove the Austin Road overcrossing and replace with a new 4-lane structure spanning SR 99 and UPRR; add a new connecting road from Austin Road to East Woodward Avenue and Moffat Boulevard and modify the existing UPRR gated crossing at East Woodward Avenue to conform to the new connector road; modify the existing northbound Austin Road exit ramp to conform to the higher overcrossing profile grade; Temporarily close the Austin Road northbound entrance and southbound exit ramps; resulting in a partial interchange.) | MPO Aprv:<br>State Aprv:<br>Federal Aprv: |
| CT PROJECT ID:                                      |                     |     | MPO ID.:<br>SJ14-1004          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | EPA TABLE II or III EXEMPT CATEGORY       |
| COUNTY:<br>San Joaquin County<br>San Joaquin County | ROUTE:<br>99<br>120 |     | PM:<br>3.1 / 6.2<br>5.1 / T7.2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |

IMPLEMENTING AGENCY: Caltrans  
PROJECT MANAGER: Jes Padda

PHONE: (209) 942-6065

EMAIL: jes.padda@dot.ca.gov

*PROJECT VERSION HISTORY (Printed Version is Shaded)*

*(Dollars in whole)*

| Version | Status   | Date       | Updated By | Change Reason                      | Amend No. | Prog Con   | Prog RW   | PE        |
|---------|----------|------------|------------|------------------------------------|-----------|------------|-----------|-----------|
| 2       | Active   | 01/22/2019 | DRIPPERD   | Amendment - Cost/Scope/Sch. Change | 4         | 10,142,000 | 6,816,000 | 4,200,000 |
| 1       | Official | 06/28/2018 | RNIBLOCK   | Adoption - Carry Over              | 0         | 10,142,000 | 6,816,000 | 6,311,234 |

| * RIP - Regional Improvement Program                 |        | PRIOR | 18-19     | 19-20 | 20-21      | 21-22 | 22-23 | 23-24 | BEYOND | TOTAL      |
|------------------------------------------------------|--------|-------|-----------|-------|------------|-------|-------|-------|--------|------------|
| * Fund Source 1 of 4                                 | PE     |       |           |       |            |       |       |       |        |            |
|                                                      | RW     |       | 3,408,000 |       |            |       |       |       |        | 3,408,000  |
| * Fund Type: STIP Advance Construction               | CON    |       |           |       | 10,142,000 |       |       |       |        | 10,142,000 |
| * Funding Agency: San Joaquin Council of Governments | Total: |       | 3,408,000 |       | 10,142,000 |       |       |       |        | 13,550,000 |

| * RSTP - Surface Transportation Program (STP)        |        | PRIOR     | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | BEYOND | TOTAL     |
|------------------------------------------------------|--------|-----------|-------|-------|-------|-------|-------|-------|--------|-----------|
| * Fund Source 2 of 4                                 | PE     | 1,800,000 |       |       |       |       |       |       |        | 1,800,000 |
|                                                      | RW     |           |       |       |       |       |       |       |        |           |
| * Fund Type: STP Local                               | CON    |           |       |       |       |       |       |       |        |           |
| * Funding Agency: San Joaquin Council of Governments | Total: | 1,800,000 |       |       |       |       |       |       |        | 1,800,000 |

| * Local Funds -                  |        | PRIOR     | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | BEYOND | TOTAL     |
|----------------------------------|--------|-----------|-------|-------|-------|-------|-------|-------|--------|-----------|
| * Fund Source 3 of 4             | PE     | 2,400,000 |       |       |       |       |       |       |        | 2,400,000 |
|                                  | RW     |           |       |       |       |       |       |       |        |           |
| * Fund Type: SJ County Measure K | CON    |           |       |       |       |       |       |       |        |           |
| * Funding Agency:                | Total: | 2,400,000 |       |       |       |       |       |       |        | 2,400,000 |

| * State SB1 -                                           |        | PRIOR | 18-19     | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | BEYOND | TOTAL     |
|---------------------------------------------------------|--------|-------|-----------|-------|-------|-------|-------|-------|--------|-----------|
| * Fund Source 4 of 4                                    | PE     |       |           |       |       |       |       |       |        |           |
|                                                         | RW     |       | 3,408,000 |       |       |       |       |       |        | 3,408,000 |
| * Fund Type: Road Repair and Accountability Act of 2017 | CON    |       |           |       |       |       |       |       |        |           |
| * Funding Agency:                                       | Total: |       | 3,408,000 |       |       |       |       |       |        | 3,408,000 |

| Project Total: |        | PRIOR     | 18-19     | 19-20 | 20-21      | 21-22 | 22-23 | 23-24 | BEYOND | TOTAL      |
|----------------|--------|-----------|-----------|-------|------------|-------|-------|-------|--------|------------|
|                | PE     | 4,200,000 |           |       |            |       |       |       |        | 4,200,000  |
|                | RW     |           | 6,816,000 |       |            |       |       |       |        | 6,816,000  |
|                | CON    |           |           |       | 10,142,000 |       |       |       |        | 10,142,000 |
|                | Total: | 4,200,000 | 6,816,000 |       | 10,142,000 |       |       |       |        | 21,158,000 |

Comments:  
\*\*\*\*\* Version 2 - 01/22/2019 \*\*\*\*\*  
Listing split from parent project 10-1E740.

\*\*\*\*\* Version 1 - 06/04/18 \*\*\*\*\*  
Project data transferred from 2018 STIP.  
\*\*\*\*\* VERSION 1 - 04/05/2018 \*\*\*\*\*  
~~~~~ Version 1 - 02/07/2018 ~~~~~  
Adoption new project per PPR 12/15/17. - ad

**AMENDED**

**San Joaquin Council of Governments - Federal Transportation Improvement Program  
(Dollars in Whole)  
State Highway System**

|   |                     |                                |                            |   |   |
|---|---------------------|--------------------------------|----------------------------|---|---|
| DIST:<br>10   | PPNO:               | EA:                            | CTIPS ID:<br>212-0000-0745 | TITLE (DESCRIPTION):<br>SR 99/120 Connector Project Phase 1B (Widen the northbound SR 99 to westbound SR 120 connector ramp from one-lane to two-lanes; add an auxiliary lane in the existing median of westbound SR 120 from SR 99 to Main Street; convert the existing 99/120 separation structure to two lanes and construct a new separation structure to serve the eastbound 120 to northbound 99 connector ramp.) | MPO Aprv:<br>State Aprv:<br>Federal Aprv: |
| CT PROJECT ID:                                      |                     |                                | MPO ID.:<br>SJ18-1002      |   | EPA TABLE II or III EXEMPT CATEGORY       |
| COUNTY:<br>San Joaquin County<br>San Joaquin County | ROUTE:<br>99<br>120 | PM:<br>3.1 / 6.2<br>5.1 / T7.2 |                            |   |   |

IMPLEMENTING AGENCY: Caltrans  
PROJECT MANAGER: Jes Padda

PHONE: (209) 942-6065

EMAIL: jes.padda@dot.ca.gov

*PROJECT VERSION HISTORY (Printed Version is Shaded)*

*(Dollars in whole)*

| Version | Status | Date       | Updated By | Change Reason           | Amend No. | Prog Con   | Prog RW | PE        |
|---------|--------|------------|------------|-------------------------|-----------|------------|---------|-----------|
| 1       | Active | 05/02/2019 | RNIBLOCK   | Amendment - New Project | 4         | 22,347,300 | 111,234 | 3,300,000 |

| * RSTP -               |        | PRIOR     | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | BEYOND | TOTAL     |
|------------------------|--------|-----------|-------|-------|-------|-------|-------|-------|--------|-----------|
| * Fund Source 1 of 2   | PE     | 1,800,000 |       |       |       |       |       |       |        | 1,800,000 |
| * Fund Type: STP Local | RW     |           |       |       |       |       |       |       |        |           |
|                        | CON    |           |       |       |       |       |       |       |        |           |
| * Funding Agency:      | Total: | 1,800,000 |       |       |       |       |       |       |        | 1,800,000 |

| * Local Funds -                  |        | PRIOR | 18-19 | 19-20     | 20-21 | 21-22 | 22-23 | 23-24      | BEYOND | TOTAL      |
|----------------------------------|--------|-------|-------|-----------|-------|-------|-------|------------|--------|------------|
| * Fund Source 2 of 2             | PE     |       |       | 1,500,000 |       |       |       |            |        | 1,500,000  |
| * Fund Type: SJ County Measure K | RW     |       |       | 111,234   |       |       |       |            |        | 111,234    |
|                                  | CON    |       |       |           |       |       |       | 22,347,300 |        | 22,347,300 |
| * Funding Agency:                | Total: |       |       | 1,611,234 |       |       |       | 22,347,300 |        | 23,958,534 |

| <b>Project Total:</b> |        | PRIOR     | 18-19 | 19-20     | 20-21 | 21-22 | 22-23 | 23-24      | BEYOND | TOTAL      |
|-----------------------|--------|-----------|-------|-----------|-------|-------|-------|------------|--------|------------|
|                       | PE     | 1,800,000 |       | 1,500,000 |       |       |       |            |        | 3,300,000  |
|                       | RW     |           |       | 111,234   |       |       |       |            |        | 111,234    |
|                       | CON    |           |       |           |       |       |       | 22,347,300 |        | 22,347,300 |
|                       | Total: | 1,800,000 |       | 1,611,234 |       |       |       | 22,347,300 |        | 25,758,534 |

Comments:  
\*\*\*\*\* Version 1 - 01/22/2019 \*\*\*\*\*  
Listing split from parent project 10-1E740.

**NEW PROJECT**

**San Joaquin Council of Governments - Federal Transportation Improvement Program  
(Dollars in Whole)  
State Highway System**

|   |                     |     |                                |   |  |
|---|---------------------|-----|--------------------------------|---|--|
| DIST:<br>10   | PPNO:               | EA: | CTIPS ID:<br>212-0000-0746     | TITLE (DESCRIPTION):<br>SR 99/120 Connector Project Phase 1C (Add braided off ramps from SR 99 and SR 120 to Austin Road; Convert the entrance ramp from Austin Road to northbound SR 99 and to westbound SR 120 to a loop ramp with separate traffic movements to SR 99 and SR 120; relocate the northbound SR 99 exit ramp to Austin Road to accommodate the loop on ramp; relocate the SR 99 Frontage Road for approximately 0.8 miles to accommodate the loop on ramp; add an auxiliary lane in the existing median of eastbound SR 120 from Main Street to SR 99; add an auxiliary lane in each direction on SR 99 from SR 120 to approximately 1.7 miles south of Austin Road and relocate the frontage road. Project programmed in the FTIP for environmental approval.) | MPO Aprv:<br>State Aprv:<br>Federal Aprv:<br><br>EPA TABLE II or III EXEMPT CATEGORY |
| CT PROJECT ID:                                      |                     |     | MPO ID.:<br>SJ18-1003          |   |  |
| COUNTY:<br>San Joaquin County<br>San Joaquin County | ROUTE:<br>99<br>120 |     | PM:<br>3.1 / 6.2<br>5.1 / T7.2 |   |  |

IMPLEMENTING AGENCY: Caltrans  
PROJECT MANAGER: Jes Padda

PHONE: (209) 942-6065

EMAIL: jes.padda@dot.ca.gov

*PROJECT VERSION HISTORY (Printed Version is Shaded)*

*(Dollars in whole)*

| <u>Version</u> | <u>Status</u> | <u>Date</u> | <u>Updated By</u> | <u>Change Reason</u>    | <u>Amend No.</u> | <u>Prog Con</u> | <u>Prog RW</u> | <u>PE</u> |
|----------------|---------------|-------------|-------------------|-------------------------|------------------|-----------------|----------------|-----------|
| 1              | Active        | 01/22/2019  | DRIPPERD          | Amendment - New Project | 4                |                 |                | 1,800,000 |

| * RSTP -               |        | <u>PRIOR</u> | <u>18-19</u> | <u>19-20</u> | <u>20-21</u> | <u>21-22</u> | <u>22-23</u> | <u>23-24</u> | <u>BEYOND</u> | <u>TOTAL</u> |
|------------------------|--------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|
| * Fund Source 1 of 1   | PE     | 1,800,000    |              |              |              |              |              |              |               | 1,800,000    |
| * Fund Type: STP Local | RW     |              |              |              |              |              |              |              |               |              |
| * Funding Agency:      | CON    |              |              |              |              |              |              |              |               |              |
|                        | Total: | 1,800,000    |              |              |              |              |              |              |               | 1,800,000    |

Comments:

\*\*\*\*\* Version 1 - 01/22/2019 \*\*\*\*\*

Listing split from parent project 10-1E740. Project included in FTIP for environmental clearance only.

**NEW PROJECT**

**ATTACHMENT 2**  
**UPDATED FINANCIAL PLAN**

TABLE 1: REVENUE

San Joaquin Council of Governments  
2019 Federal Transportation Improvement Program  
Amendment 4  
(\$'s in 1,000)

| Funding Source  |   | N<br>O<br>T<br>E<br>S | 4 YEAR (FTIP Period) |                  |                  |                  |                  |                  |                  |                  | TOTAL<br>CURRENT |
|---|---|-----------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|   |   |                       | FY 2019              |                  | FY 2020          |                  | FY 2021          |                  | FY 2022          |                  |                  |
|   |   |                       | Amendment            |                  | Amendment        |                  | Amendment        |                  | Amendment        |                  |                  |
|   |   |                       | Prior<br>No. 2       | Current<br>No. 4 | Prior<br>No. 2   | Current<br>No. 4 | Prior<br>No. 2   | Current<br>No. 4 | Prior<br>No. 2   | Current<br>No. 4 |                  |
| LOCAL   | Sales Tax   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | City  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | County  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Gas Tax   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Gas Tax (Subventions to Cities)   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Gas Tax (Subventions to Counties)   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Other Local Funds   | \$3,129               | \$3,177              | \$2,390          | \$2,342          | \$49,055         | \$49,055         | \$512            | \$401            | \$54,975         |                  |
|   | County General Funds  | \$63                  | \$64                 | \$9              | \$9              | \$292            | \$292            |                  |                  | \$365            |                  |
|   | City General Funds  | \$3,066               | \$3,113              | \$2,381          | \$2,333          | \$30,763         | \$30,763         | \$512            | \$401            | \$36,610         |                  |
|   | Street Taxes and Developer Fees   |                       |                      |                  |                  | \$18,000         | \$18,000         |                  |                  | \$18,000         |                  |
|   | RSTP Exchange funds   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
| Transit   |   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
| Transit Fares   |   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
| Other (See Appendix 1)  | \$11,840  | \$12,636              | \$19,855             | \$20,810         | \$7,330          | \$7,628          | \$6,826          | \$8,488          | \$49,562         |                  |                  |
| <b>Local Total</b>  | <b>\$14,969</b>   | <b>\$15,813</b>       | <b>\$22,245</b>      | <b>\$23,152</b>  | <b>\$56,385</b>  | <b>\$56,683</b>  | <b>\$7,338</b>   | <b>\$8,889</b>   | <b>\$104,537</b> |                  |                  |
| REGIONAL  | Tolls   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Bridge Corridor   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Regional Sales Tax  | \$3,072               | \$7,742              | \$889            | \$2,500          | \$3,000          | \$3,000          | \$400            | \$400            | \$13,642         |                  |
|   | Other (See Appendix 2)  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
| <b>Regional Total</b>   | <b>\$3,072</b>  | <b>\$7,742</b>        | <b>\$889</b>         | <b>\$2,500</b>   | <b>\$3,000</b>   | <b>\$3,000</b>   | <b>\$400</b>     | <b>\$400</b>     | <b>\$13,642</b>  |                  |                  |
| STATE   | State Highway Operations and Protection Program (SHOPP) <sup>1</sup>                                | \$93,018              | \$92,603             | \$115,079        | \$120,050        | \$46,239         | \$48,141         | \$40,366         | \$42,294         | \$303,088        |                  |
|   | SHOPP   | \$93,018              | \$92,603             | \$115,079        | \$120,050        | \$46,239         | \$48,141         | \$40,366         | \$42,294         | \$303,088        |                  |
|   | SHOPP Prior   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | State Minor Program   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | State Transportation Improvement Program (STIP) <sup>1</sup>  | \$6,802               | \$6,802              | \$12,300         | \$12,300         | \$22,843         | \$22,843         | \$342            | \$342            | \$42,287         |                  |
|   | STIP  | \$6,802               | \$6,802              | \$12,300         | \$12,300         | \$22,843         | \$22,843         | \$342            | \$342            | \$42,287         |                  |
|   | STIP Prior  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | State Bond  |                       | \$10,579             |                  |                  |                  |                  |                  |                  | \$10,579         |                  |
|   | Proposition 1A (High Speed Passenger Train Bond Program)  |                       | \$10,579             |                  |                  |                  |                  |                  |                  | \$10,579         |                  |
|   | Proposition 1B (Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2008) |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Active Transportation Program (ATP) <sup>1</sup>  | \$6,810               | \$6,810              | \$1,051          | \$1,051          |                  |                  |                  |                  | \$7,861          |                  |
|   | Highway Maintenance (HM) Program <sup>1</sup>   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Highway Bridge Program (HBP) <sup>1</sup>   | \$2,834               | \$12,700             | \$23,997         | \$12,946         |                  |                  | \$2,676          | \$2,676          | \$28,322         |                  |
| Road Repair and Accountability Act of 2017 (SB1)                        |   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
| Traffic Congestion Relief Program (TCRP)                                |   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
| State Transit Assistance (STA)(e.g., population/revenue based, Prop 42) | \$13  | \$88                  | \$13                 | \$13             | \$14             | \$14             | \$14             | \$14             | \$129            |                  |                  |
| Other (See Appendix 3)  | \$3,408   | \$4,094               | \$1,629              | \$1,629          |                  |                  |                  |                  | \$5,723          |                  |                  |
| <b>State Total</b>  | <b>\$112,885</b>  | <b>\$133,676</b>      | <b>\$154,069</b>     | <b>\$147,989</b> | <b>\$69,096</b>  | <b>\$70,998</b>  | <b>\$43,398</b>  | <b>\$45,326</b>  | <b>\$397,989</b> |                  |                  |
| FEDERAL TRANSIT   | 5307 - Urbanized Area Formula Grants  | \$18,017              | \$19,451             | \$12,075         | \$12,910         | \$14,953         | \$14,953         | \$11,325         | \$11,325         | \$58,639         |                  |
|   | 5309 - Fixed Guideway Capital Investment Grants   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | 5309b - New and Small Starts (Capital Investment Grants)  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | 5309c - Bus and Bus Related Grants  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | 5310 - Enhanced Mobility of Seniors and Individuals with Disabilities                               | \$844                 | \$844                | \$844            | \$844            | \$844            | \$844            | \$844            | \$844            | \$3,376          |                  |
|   | 5311 - Formula Grants for Rural Areas   | \$360                 | \$1,111              | \$360            | \$360            | \$360            | \$360            | \$360            | \$360            | \$2,191          |                  |
|   | 5311f - Intercity Bus   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | 5337 - State of Good Repair Grants  |                       | \$4,336              |                  |                  |                  |                  |                  |                  | \$4,336          |                  |
|   | 5339 - Bus and Bus Facilities Formula Grants  | \$1,860               | \$1,898              | \$657            | \$657            | \$657            | \$657            | \$657            | \$657            | \$3,869          |                  |
|   | FTA Transfer from Prior FTIP  | \$4,581               | \$24,289             | \$7,774          |                  |                  |                  |                  |                  | \$24,289         |                  |
|   | Other (See Appendix 4)  |                       | \$6,917              |                  |                  |                  |                  |                  |                  | \$6,917          |                  |
| <b>Federal Transit Total</b>  | <b>\$25,662</b>   | <b>\$58,846</b>       | <b>\$21,710</b>      | <b>\$14,771</b>  | <b>\$16,814</b>  | <b>\$16,814</b>  | <b>\$13,186</b>  | <b>\$13,186</b>  | <b>\$103,617</b> |                  |                  |
| FEDERAL HIGHWAY   | Congestion Mitigation and Air Quality (CMAQ) Improvement Program                                    | \$9,593               | \$9,593              | \$9,785          | \$9,785          | \$9,782          | \$9,782          | \$9,778          | \$9,778          | \$38,939         |                  |
|   | Construction of Ferry Boats and Ferry Terminal Facilities (Ferry Boat Program)                      |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Coordinated Border Infrastructure Program   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Federal Lands Access Program  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Federal Lands Transportation Program  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | GARVEE Bonds Debt Service Payments  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Highway Infrastructure Program (HIP)  |                       |                      |                  | \$1,792          |                  |                  |                  |                  | \$1,792          |                  |
|   | Highway Infrastructure Program (HIP) - PRIOR  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | High Priority Projects (HPP) and Demo   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Highway Safety Improvement Program (HSIP)   |                       |                      | \$9,776          | \$8,063          | \$1,819          | \$5,865          | \$6,529          | \$4,451          | \$18,379         |                  |
|   | National Highway Freight Program (NHFP)   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Nationally Significant Freight and Highway Projects (FASTLANE/INFRA Grants)                         |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Railway-Highway Crossings Program   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Recreational Trails Program   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
| SAFETEA-LU Safe Routes to School (SRTS)                                 |   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
| Surface Transportation Block Grant Program (STBGP/RSTP)                 | \$9,369   | \$9,369               | \$9,723              | \$9,723          | \$9,719          | \$9,719          | \$9,715          | \$9,715          | \$38,526         |                  |                  |
| Other (see Appendix 5)  |   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
| <b>Federal Highway Total</b>  | <b>\$18,962</b>   | <b>\$18,962</b>       | <b>\$29,284</b>      | <b>\$29,363</b>  | <b>\$21,320</b>  | <b>\$25,366</b>  | <b>\$26,023</b>  | <b>\$23,945</b>  | <b>\$97,636</b>  |                  |                  |
| FEDERAL RAIL  | Other Federal Railroad Administration (see Appendix 6)  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | <b>Federal Railroad Administration Total</b>  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
| <b>Federal Total</b>  |   | <b>\$44,624</b>       | <b>\$77,808</b>      | <b>\$50,994</b>  | <b>\$44,134</b>  | <b>\$38,134</b>  | <b>\$42,180</b>  | <b>\$39,209</b>  | <b>\$37,131</b>  | <b>\$201,253</b> |                  |
| INNOVATIVE FINANCE  | TIFIA (Transportation Infrastructure Finance and Innovation Act)                                    |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
|   | Other (See Appendix 7)  |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
| <b>Innovative Financing Total</b>                                       |   |                       |                      |                  |                  |                  |                  |                  |                  |                  |                  |
| <b>REVENUE TOTAL</b>  |   | <b>\$175,550</b>      | <b>\$235,039</b>     | <b>\$228,197</b> | <b>\$217,775</b> | <b>\$166,615</b> | <b>\$172,861</b> | <b>\$90,345</b>  | <b>\$91,746</b>  | <b>\$717,421</b> |                  |

Financial Summary Notes:  
<sup>1</sup> State Programs that include both state and federal funds

TABLE 1: REVENUE - APPENDICES

San Joaquin Council of Governments  
2019 Federal Transportation Improvement Program  
Amendment 4  
(\$'s in 1,000)

**Appendix 1 - Local Other**

| Local Other               | FY 2019         |                 | FY 2020         |                 | FY 2021        |                | FY 2022        |                | CURRENT TOTAL   |
|---------------------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|----------------|-----------------|
|                           | Prior           | Current         | Prior           | Current         | Prior          | Current        | Prior          | Current        |                 |
| Local Transportation Fund | \$2,618         | \$3,511         | \$13,895        | \$14,850        | \$327          | \$625          | \$704          | \$2,366        | \$21,352        |
| Private Funds             |                 |                 |                 |                 | \$963          | \$963          |                |                | \$963           |
| TDA Funds                 | \$9,222         | \$9,125         | \$5,960         | \$5,960         | \$6,040        | \$6,040        | \$6,122        | \$6,122        | \$27,247        |
|                           |                 |                 |                 |                 |                |                |                |                |                 |
|                           |                 |                 |                 |                 |                |                |                |                |                 |
|                           |                 |                 |                 |                 |                |                |                |                |                 |
|                           |                 |                 |                 |                 |                |                |                |                |                 |
|                           |                 |                 |                 |                 |                |                |                |                |                 |
| <b>Local Other Total</b>  | <b>\$11,840</b> | <b>\$12,636</b> | <b>\$19,855</b> | <b>\$20,810</b> | <b>\$7,330</b> | <b>\$7,628</b> | <b>\$6,826</b> | <b>\$8,488</b> | <b>\$49,562</b> |

**Appendix 2 - Regional Other**

| Regional Other              | FY 2019 |         | FY 2020 |         | FY 2021 |         | FY 2022 |         | CURRENT TOTAL |
|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|
|                             | Prior   | Current | Prior   | Current | Prior   | Current | Prior   | Current |               |
|                             |         |         |         |         |         |         |         |         |               |
|                             |         |         |         |         |         |         |         |         |               |
|                             |         |         |         |         |         |         |         |         |               |
|                             |         |         |         |         |         |         |         |         |               |
|                             |         |         |         |         |         |         |         |         |               |
|                             |         |         |         |         |         |         |         |         |               |
|                             |         |         |         |         |         |         |         |         |               |
|                             |         |         |         |         |         |         |         |         |               |
| <b>Regional Other Total</b> |         |         |         |         |         |         |         |         |               |

**Appendix 3 - State Other**

| State Other                                | FY 2019        |                | FY 2020        |                | FY 2021 |         | FY 2022 |         | CURRENT TOTAL  |
|--|----------------|----------------|----------------|----------------|---------|---------|---------|---------|----------------|
|  | Prior          | Current        | Prior          | Current        | Prior   | Current | Prior   | Current |                |
| Road Repair and Accountability Act of 2017 | \$3,408        | \$3,494        | \$1,629        | \$1,629        |         |         |         |         | \$5,123        |
| California Heavy Duty Voucher Initiative   |                | \$600          |                |                |         |         |         |         | \$600          |
|  |                |                |                |                |         |         |         |         |                |
|  |                |                |                |                |         |         |         |         |                |
|  |                |                |                |                |         |         |         |         |                |
|  |                |                |                |                |         |         |         |         |                |
|  |                |                |                |                |         |         |         |         |                |
| <b>State Other Total</b>                   | <b>\$3,408</b> | <b>\$4,094</b> | <b>\$1,629</b> | <b>\$1,629</b> |         |         |         |         | <b>\$5,723</b> |

**Appendix 4 - Federal Transit Other**

| Federal Transit Other                      | FY 2019 |                | FY 2020 |         | FY 2021 |         | FY 2022 |         | CURRENT TOTAL  |
|--|---------|----------------|---------|---------|---------|---------|---------|---------|----------------|
|  | Prior   | Current        | Prior   | Current | Prior   | Current | Prior   | Current |                |
| Transit and Intercity Rail Capital Program |         | \$37           |         |         |         |         |         |         | \$37           |
| Earmark Repurposing Fund Total             |         | \$6,880        |         |         |         |         |         |         | \$6,880        |
|  |         |                |         |         |         |         |         |         |                |
|  |         |                |         |         |         |         |         |         |                |
|  |         |                |         |         |         |         |         |         |                |
|  |         |                |         |         |         |         |         |         |                |
| <b>Federal Transit Other Total</b>         |         | <b>\$6,917</b> |         |         |         |         |         |         | <b>\$6,917</b> |

**Appendix 5 - Federal Highway Other**

| Federal Highway Other              | FY 2019 |         | FY 2020 |         | FY 2021 |         | FY 2022 |         | CURRENT TOTAL |
|------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|
|                                    | Prior   | Current | Prior   | Current | Prior   | Current | Prior   | Current |               |
|                                    |         |         |         |         |         |         |         |         |               |
|                                    |         |         |         |         |         |         |         |         |               |
|                                    |         |         |         |         |         |         |         |         |               |
|                                    |         |         |         |         |         |         |         |         |               |
|                                    |         |         |         |         |         |         |         |         |               |
|                                    |         |         |         |         |         |         |         |         |               |
| <b>Federal Highway Other Total</b> |         |         |         |         |         |         |         |         |               |

**Appendix 6 - Federal Railroad Administration Other**

| Federal Railroad Administration Other              | FY 2019 |         | FY 2020 |         | FY 2021 |         | FY 2022 |         | CURRENT TOTAL |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------------|
|  | Prior   | Current | Prior   | Current | Prior   | Current | Prior   | Current |               |
|  |         |         |         |         |         |         |         |         |               |
|  |         |         |         |         |         |         |         |         |               |
|  |         |         |         |         |         |         |         |         |               |
|  |         |         |         |         |         |         |         |         |               |
|  |         |         |         |         |         |         |         |         |               |
|  |         |         |         |         |         |         |         |         |               |
| <b>Federal Railroad Administration Other Total</b> |         |         |         |         |         |         |         |         |               |

**Appendix 7 - Innovative Other**

| Innovative Other              | FY 2019 |         | FY 2020 |         | FY 2021 |         | FY 2022 |         | CURRENT TOTAL |
|-------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|
|                               | Prior   | Current | Prior   | Current | Prior   | Current | Prior   | Current |               |
|                               |         |         |         |         |         |         |         |         |               |
|                               |         |         |         |         |         |         |         |         |               |
|                               |         |         |         |         |         |         |         |         |               |
|                               |         |         |         |         |         |         |         |         |               |
|                               |         |         |         |         |         |         |         |         |               |
|                               |         |         |         |         |         |         |         |         |               |
| <b>Innovative Other Total</b> |         |         |         |         |         |         |         |         |               |

TABLE 2: PROGRAMMED

San Joaquin Council of Governments  
 2019 Federal Transportation Improvement Program  
 Amendment 4  
 (\$'s in 1,000)

| FUNDING SOURCES    |  | NOTES | 4 YEAR (FTIP Period) |                  |                   |                  |                   |                  |                   |                 | TOTAL CURRENT    |
|--------------------|--|-------|----------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|-----------------|------------------|
|                    |  |       | FY 2019 Amendment    |                  | FY 2020 Amendment |                  | FY 2021 Amendment |                  | FY 2022 Amendment |                 |                  |
|                    |  |       | Prior                | Current          | Prior             | Current          | Prior             | Current          | Prior             | Current         |                  |
|                    |  |       | No. 2                | No. 4            | No. 2             | No. 4            | No. 2             | No. 4            | No. 2             | No. 4           |                  |
| LOCAL              | Local Total  |       | \$14,969             | \$15,813         | \$22,245          | \$23,152         | \$56,385          | \$56,683         | \$7,338           | \$8,889         | \$104,537        |
| REGIONAL           | Tolls  |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | <i>Bridge Corridor</i>   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Regional Sales Tax   |       | \$3,072              | \$7,742          | \$889             | \$2,500          | \$3,000           | \$3,000          | \$400             | \$400           | \$13,642         |
|                    | Other (See Appendix A)   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | <b>Regional Total</b>  |       | <b>\$3,072</b>       | <b>\$7,742</b>   | <b>\$889</b>      | <b>\$2,500</b>   | <b>\$3,000</b>    | <b>\$3,000</b>   | <b>\$400</b>      | <b>\$400</b>    | <b>\$13,642</b>  |
| STATE              | State Highway Operations and Protection Program (SHOPP) <sup>1</sup>                                       |       | \$93,018             | \$92,603         | \$115,079         | \$120,050        | \$46,239          | \$48,141         | \$40,366          | \$42,294        | \$303,088        |
|                    | <i>SHOPP</i>   |       | \$93,018             | \$92,603         | \$115,079         | \$120,050        | \$46,239          | \$48,141         | \$40,366          | \$42,294        | \$303,088        |
|                    | <i>SHOPP Prior</i>   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | <i>State Minor Program</i>   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | State Transportation Improvement Program (STIP) <sup>1</sup>   |       | \$6,802              | \$6,802          | \$12,300          | \$12,300         | \$22,843          | \$22,843         | \$342             | \$342           | \$42,287         |
|                    | <i>STIP</i>  |       | \$6,802              | \$6,802          | \$12,300          | \$12,300         | \$22,843          | \$22,843         | \$342             | \$342           | \$42,287         |
|                    | <i>STIP Prior</i>  |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | State Bond   |       |                      | \$10,579         |                   |                  |                   |                  |                   |                 | \$10,579         |
|                    | <i>Proposition 1A (High Speed Passenger Train Bond Program)</i>  |       |                      | \$10,579         |                   |                  |                   |                  |                   |                 | \$10,579         |
|                    | <i>Proposition 1B (Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006)</i> |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Active Transportation Program <sup>1</sup>   |       | \$6,810              | \$6,810          | \$1,051           | \$1,051          |                   |                  |                   |                 | \$7,861          |
|                    | Highway Maintenance (HM) Program <sup>1</sup>  |       |                      |                  |                   |                  |                   |                  | \$2,676           | \$2,676         | \$28,322         |
|                    | Highway Bridge Program (HBP) <sup>1</sup>  |       | \$2,834              | \$12,700         | \$23,997          | \$12,946         |                   |                  |                   |                 |                  |
|                    | Road Repair and Accountability Act of 2017 (SB1)   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Traffic Congestion Relief Program (TCRP)   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | State Transit Assistance (STA)(e.g., population/revenue based, Prop 42)                                    |       | \$13                 | \$88             | \$13              | \$13             | \$14              | \$14             | \$14              | \$14            | \$129            |
|                    | Other (See Appendix B)   |       | \$3,408              | \$4,094          | \$1,629           | \$1,629          |                   |                  |                   |                 | \$5,723          |
|                    | <b>State Total</b>   |       | <b>\$112,885</b>     | <b>\$133,676</b> | <b>\$154,069</b>  | <b>\$147,989</b> | <b>\$69,096</b>   | <b>\$70,998</b>  | <b>\$43,398</b>   | <b>\$45,326</b> | <b>\$397,989</b> |
| FEDERAL TRANSIT    | 5307 - Urbanized Area Formula Grants   |       | \$18,017             | \$19,451         | \$12,075          | \$12,910         | \$14,953          | \$14,953         | \$11,325          | \$11,325        | \$58,639         |
|                    | 5309 - Fixed Guideway Capital Investment Grants  |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | 5309b - New and Small Starts (Capital Investment Grants)   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | 5309c - Bus and Bus Related Grants   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | 5310 - Enhanced Mobility of Seniors and Individuals with Disabilities                                      |       | \$844                | \$844            | \$844             | \$844            | \$844             | \$844            | \$844             | \$844           | \$3,376          |
|                    | 5311 - Formula Grants for Rural Areas  |       | \$360                | \$1,111          | \$360             | \$360            | \$360             | \$360            | \$360             | \$360           | \$2,191          |
|                    | 5311f - Intercity Bus  |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | 5337 - State of Good Repair Grants   |       |                      | \$4,336          |                   |                  |                   |                  |                   |                 | \$4,336          |
|                    | 5339 - Bus and Bus Facilities Formula Grants   |       | \$1,860              | \$1,898          | \$657             | \$657            | \$657             | \$657            | \$657             | \$657           | \$3,869          |
|                    | FTA Transfer from Prior FTIP   |       | \$4,581              | \$24,289         | \$7,774           |                  |                   |                  |                   |                 | \$24,289         |
|                    | Other (See Appendix C)   |       |                      | \$6,917          |                   |                  |                   |                  |                   |                 | \$6,917          |
|                    | <b>Federal Transit Total</b>   |       | <b>\$25,662</b>      | <b>\$58,846</b>  | <b>\$21,710</b>   | <b>\$14,771</b>  | <b>\$16,814</b>   | <b>\$16,814</b>  | <b>\$13,186</b>   | <b>\$13,186</b> | <b>\$103,617</b> |
| FEDERAL HIGHWAY    | Congestion Mitigation and Air Quality (CMAQ) Improvement Program   |       | \$9,554              | \$9,359          | \$9,409           | \$9,604          | \$5,789           | \$5,789          |                   |                 | \$24,752         |
|                    | Construction of Ferry Boats and Ferry Terminal Facilities (Ferry Boat Program)                             |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Coordinated Border Infrastructure Program  |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Federal Lands Access Program   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Federal Lands Transportation Program   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | GARVEE Bonds Debt Service Payments   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Highway Infrastructure Program (HIP)   |       |                      |                  |                   | \$1,792          |                   |                  |                   |                 | \$1,792          |
|                    | Highway Infrastructure Program (HIP) - PRIOR   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | High Priority Projects (HPP) and Demo  |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Highway Safety Improvement Program (HSIP)  |       |                      |                  | \$9,776           | \$8,063          | \$1,819           | \$5,865          | \$6,529           | \$4,451         | \$18,379         |
|                    | National Highway Freight Program (NHFP)  |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Nationally Significant Freight and Highway Projects (FASTLANE/INFRA Grants)                                |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Railway-Highway Crossings Program  |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Recreational Trails Program  |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | SAFETEA-LU Safe Routes to School (SRTS)  |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Surface Transportation Block Grant Program (STBGPR/STP)  |       | \$9,074              | \$9,114          | \$9,551           | \$9,586          | \$9,402           | \$9,719          | \$8,005           | \$7,805         | \$36,224         |
|                    | Other (see Appendix D)   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | <b>Federal Highway Total</b>   |       | <b>\$18,628</b>      | <b>\$18,473</b>  | <b>\$28,736</b>   | <b>\$29,045</b>  | <b>\$17,010</b>   | <b>\$21,373</b>  | <b>\$14,534</b>   | <b>\$12,256</b> | <b>\$81,147</b>  |
| FEDERAL RAIL       | Other Federal Railroad Administration (see Appendix E)   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | <b>Federal Railroad Administration Total</b>   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | <b>Federal Total</b>   |       | <b>\$44,290</b>      | <b>\$77,319</b>  | <b>\$50,446</b>   | <b>\$43,816</b>  | <b>\$33,824</b>   | <b>\$38,187</b>  | <b>\$27,720</b>   | <b>\$25,442</b> | <b>\$184,764</b> |
| INNOVATIVE FINANCE | TIFIA (Transportation Infrastructure Finance and Innovation Act)   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | Other (See Appendix F)   |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | <b>Innovative Financing Total</b>  |       |                      |                  |                   |                  |                   |                  |                   |                 |                  |
|                    | <b>PROGRAMMED TOTAL</b>  |       | <b>\$175,216</b>     | <b>\$234,550</b> | <b>\$227,649</b>  | <b>\$217,457</b> | <b>\$162,305</b>  | <b>\$168,868</b> | <b>\$78,856</b>   | <b>\$80,057</b> | <b>\$700,932</b> |

MPO Financial Summary Notes:  
<sup>1</sup> State Programs that include both state and federal funds.



TABLE 3: REVENUE-PROGRAMMED

San Joaquin Council of Governments  
2019 Federal Transportation Improvement Program  
Amendment 4  
(\$'s in 1,000)

| FUNDING SOURCES   |  | 4 YEAR (FTIP Period) |         |           |         |           |         |           |          | TOTAL CURRENT |
|---|--|----------------------|---------|-----------|---------|-----------|---------|-----------|----------|---------------|
|   |  | FY 2019              |         | FY 2020   |         | FY 2021   |         | FY 2022   |          |               |
|   |  | Amendment            |         | Amendment |         | Amendment |         | Amendment |          |               |
|   |  | Prior                | Current | Prior     | Current | Prior     | Current | Prior     | Current  |               |
|   |  | No. 2                | No. 4   | No. 2     | No. 4   | No. 2     | No. 4   | No. 2     | No. 4    |               |
| LOCAL   | Local Total  |                      |         |           |         |           |         |           |          |               |
| REGIONAL  | Tolls  |                      |         |           |         |           |         |           |          |               |
|   | <i>Bridge</i>  |                      |         |           |         |           |         |           |          |               |
|   | <i>Corridor</i>  |                      |         |           |         |           |         |           |          |               |
|   | Regional Sales Tax   |                      |         |           |         |           |         |           |          |               |
|   | Other  |                      |         |           |         |           |         |           |          |               |
|   | Regional Total   |                      |         |           |         |           |         |           |          |               |
| STATE   | State Highway Operations and Protection Program (SHOPP) <sup>1</sup>                                       |                      |         |           |         |           |         |           |          |               |
|   | <i>SHOPP</i>   |                      |         |           |         |           |         |           |          |               |
|   | <i>SHOPP Prior</i>   |                      |         |           |         |           |         |           |          |               |
|   | <i>State Minor Program</i>   |                      |         |           |         |           |         |           |          |               |
|   | State Transportation Improvement Program (STIP) <sup>1</sup>   |                      |         |           |         |           |         |           |          |               |
|   | <i>STIP</i>  |                      |         |           |         |           |         |           |          |               |
|   | <i>STIP Prior</i>  |                      |         |           |         |           |         |           |          |               |
|   | State Bond   |                      |         |           |         |           |         |           |          |               |
|   | <i>Proposition 1A (High Speed Passenger Train Bond Program)</i>  |                      |         |           |         |           |         |           |          |               |
|   | <i>Proposition 1E (Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006)</i> |                      |         |           |         |           |         |           |          |               |
|   | Active Transportation Program <sup>1</sup>   |                      |         |           |         |           |         |           |          |               |
|   | Highway Maintenance (HM) Program <sup>1</sup>  |                      |         |           |         |           |         |           |          |               |
|   | Highway Bridge Program (HBP) <sup>1</sup>  |                      |         |           |         |           |         |           |          |               |
|   | Other  |                      |         |           |         |           |         |           |          |               |
|   | State Total  |                      |         |           |         |           |         |           |          |               |
| FEDERAL TRANSIT   | 5307 - Urbanized Area Formula Grants   |                      |         |           |         |           |         |           |          |               |
|   | 5309 - Fixed Guideway Capital Investment Grants  |                      |         |           |         |           |         |           |          |               |
|   | 5309b - New and Small Starts (Capital Investment Grants)   |                      |         |           |         |           |         |           |          |               |
|   | 5309c - Bus and Bus Related Grants   |                      |         |           |         |           |         |           |          |               |
|   | 5310 - Enhanced Mobility of Seniors and Individuals with Disabilities                                      |                      |         |           |         |           |         |           |          |               |
|   | 5311 - Formula Grants for Rural Areas  |                      |         |           |         |           |         |           |          |               |
|   | 5311f - Intercity Bus  |                      |         |           |         |           |         |           |          |               |
|   | 5337 - State of Good Repair Grants   |                      |         |           |         |           |         |           |          |               |
|   | 5339 - Bus and Bus Facilities Formula Grants   |                      |         |           |         |           |         |           |          |               |
|   | FTA Transfer from Prior FTIP   |                      |         |           |         |           |         |           |          |               |
|   | Other  |                      |         |           |         |           |         |           |          |               |
|   | Federal Transit Total  |                      |         |           |         |           |         |           |          |               |
| FEDERAL HIGHWAY   | Congestion Mitigation and Air Quality (CMAQ) Improvement Program   | \$40                 | \$234   | \$376     | \$181   | \$3,993   | \$3,993 | \$9,778   | \$9,778  | \$14,187      |
|   | Construction of Ferry Boats and Ferry Terminal Facilities (Ferry Boat Program)                             |                      |         |           |         |           |         |           |          |               |
|   | Coordinated Border Infrastructure Program  |                      |         |           |         |           |         |           |          |               |
|   | Federal Lands Access Program   |                      |         |           |         |           |         |           |          |               |
|   | Federal Lands Transportation Program   |                      |         |           |         |           |         |           |          |               |
|   | GARVEE Bonds Debt Service Payments   |                      |         |           |         |           |         |           |          |               |
|   | Highway Infrastructure Program (HIP)   |                      |         |           |         |           |         |           |          |               |
|   | Highway Infrastructure Program (HIP) - PRIOR   |                      |         |           |         |           |         |           |          |               |
|   | High Priority Projects (HPP) and Demo  |                      |         |           |         |           |         |           |          |               |
|   | Highway Safety Improvement Program (HSIP)  |                      |         |           |         |           |         |           |          |               |
|   | National Highway Freight Program (NHFP)  |                      |         |           |         |           |         |           |          |               |
|   | Nationally Significant Freight and Highway Projects (FASTLANE/INFRA Grants)                                |                      |         |           |         |           |         |           |          |               |
|   | Railway-Highway Crossings Program  |                      |         |           |         |           |         |           |          |               |
|   | Recreational Trails Program  |                      |         |           |         |           |         |           |          |               |
| SAFETEA-LU Safe Routes to School (SRTS)                 |  |                      |         |           |         |           |         |           |          |               |
| Surface Transportation Block Grant Program (STBGP/RSTP) | \$295  | \$255                | \$172   | \$137     | \$317   | \$0       | \$1,711 | \$1,910   | \$2,302  |               |
| Other   |  |                      |         |           |         |           |         |           |          |               |
|   | Federal Highway Total  | \$334                | \$489   | \$547     | \$318   | \$4,310   | \$3,993 | \$11,489  | \$11,689 | \$16,489      |
| FEDERAL RAIL  | Other Federal Railroad Administration  |                      |         |           |         |           |         |           |          |               |
|   | Federal Railroad Administration Total  |                      |         |           |         |           |         |           |          |               |
|   | Federal Total  | \$334                | \$489   | \$547     | \$318   | \$4,310   | \$3,993 | \$11,489  | \$11,689 | \$16,489      |
| INNOVATIVE FINANCE                                      | TIFIA (Transportation Infrastructure Finance and Innovation Act)   |                      |         |           |         |           |         |           |          |               |
|   | Other  |                      |         |           |         |           |         |           |          |               |
|   | Innovative Financing Total   |                      |         |           |         |           |         |           |          |               |
| REVENUE - PROGRAM TOTAL                                 |  | \$334                | \$489   | \$547     | \$318   | \$4,310   | \$3,993 | \$11,489  | \$11,689 | \$16,489      |

**ATTACHMENT 3**

**2018 RTP AMENDMENT #1**

**2018 RTP Amendment #1 Summary of Changes**

The RTP as amended conforms to the applicable State Implementation Plans (SIPs), meets all applicable transportation planning requirements per 23 CFR Part 450, and meets the transportation conformity regulations. These changes require a formal RTP amendment (new regional emissions analysis). These changes are necessary to change the schedule for the projects listed below. There is no impact to the 2018 RTP fiscal constraint. Tables 6-1 and 6-2 have been updated accordingly.

2018 RTP Amendment #1 makes the following open-to-traffic date and project cost changes in the 2018 RTP:

| <b>MPO RTP ID</b> | <b>Jurisdiction</b> | <b>Facility Name/Route</b>                                  | <b>Project Description</b>  | <b>Project Limits</b>  | <b>Total Project Cost</b>                               | <b>Open to Traffic</b> |
|-------------------|---------------------|---|---|--|---|------------------------|
| SJ14-1004         | Caltrans            | SR 99/120 Operational Improvements <a href="#">Phase 1A</a> | Widen the eastbound SR 120 to southbound SR 99 connector ramp from one-lane to two-lanes; Remove the Austin Road overcrossing and replace with a new 4 lane structure spanning SR 99 and UPRR; Add a new connecting road from Austin Road to Woodward Ave and Moffat Blvd and modify the existing UPRR gated crossing at Woodward Ave; Temporarily close the Austin Road northbound entrance and southbound exit ramps, resulting in a partial interchange. | On SR-120 from Main Street (P.M. 5.13) to SR-99 and on SR-99 from SR-120 to Olive Avenue (P.M. 6.22) | <del>\$76,711,000</del><br><a href="#">\$52,419,765</a> | 2023                   |
| SJ07-1014         | Caltrans            | SR 120  | Widen the 4 to 6 lanes (inside)   | I-5 to Main Street (PM 5.13)   | <del>\$95,191,000</del><br><a href="#">\$41,175,190</a> | 2030                   |
| SJ18-1002         | Caltrans            | SR 99/120 Operational Improvements <a href="#">Phase 1B</a> | Widen the northbound SR 99 to westbound SR 120 connector ramp from one-lane to two-lanes; Add an auxiliary lane in the existing median of westbound SR 120 from Main Street to SR 99; Convert the existing 99/120 separation structure to two lanes   | On SR-120 from Main Street (P.M. 5.13) to SR-99 and on SR-99 from SR-120 to Olive Avenue (P.M. 6.22) | <a href="#">\$25,758,534</a>                            | <a href="#">2033</a>   |

|                           |                         |  |  |  |                              |                      |
|---------------------------|-------------------------|--|--|--|------------------------------|----------------------|
|                           |                         |  | and construct a new separation structure to serve the eastbound 120 to northbound 99 connector ramp.   |  |                              |                      |
| SJ18-1003                 | Caltrans                | SR 99/120 Operational Improvements <a href="#">Phase 1C</a>            | Add braided off ramps from SR 99 and SR 120 to Austin Road; Add loop on ramp from Austin Road to northbound SR 99 and to westbound SR 120; Add auxiliary lane on eastbound SR 120 from Main Street to SR 99; Add an auxiliary lane in each direction on SR 99 from SR 120 to approximately 1.7 mile south of Austin Road and relocate the frontage road. | On SR-120 from Main Street (P.M. 5.13) to SR-99 and on SR-99 from SR-120 to Olive Avenue (P.M. 6.22) | <a href="#">\$52,548,860</a> | <a href="#">2042</a> |
| <a href="#">SJ14-2004</a> | <a href="#">Lathrop</a> | <a href="#">SR 120 at Yosemite Ave / Guthmiller Road</a>               | <a href="#">Reconstruct interchange</a>  | <a href="#">SR 120 at Yosemite Ave / Guthmiller Road</a>   | <a href="#">\$31,000,000</a> | <a href="#">2022</a> |
| SJ14-2002                 | Tracy                   | I-580 at International Pkwy / Patterson Pass Road                      | Reconstruct Interchange  | I-580 at International Pkwy / Patterson Pass Road  | \$9,000,000                  | <a href="#">2022</a> |
| SJ14-2003                 | Tracy                   | I-205 at Mountain House/International Pkwy                             | Reconstruct Interchange  | I-205 at Mountain House/International Pkwy   | \$4,000,000                  | <a href="#">2022</a> |
| <a href="#">SJ18-3002</a> | <a href="#">Manteca</a> | <a href="#">Main Street and Woodward Avenue Signalization</a>          | <a href="#">Install new traffic signal with indicators, traffic signal control panel and case, and induction loops. Install ADA compliant pedestrian facilities and high visibility crosswalks</a>   | <a href="#">Main Street and Woodward Avenue</a>  | <a href="#">\$3,400,000</a>  | <a href="#">2021</a> |
| <a href="#">SJ18-3003</a> | <a href="#">Manteca</a> | <a href="#">SR 120 / Main Street Interchange ramps right turn lane</a> | <a href="#">Widen eastbound SR 120 off ramp to Main Street to provide 400 foot eastbound right turn lane. Widening Northbound Main Street</a>  | <a href="#">SR 120 / Main Street Interchange</a>   | <a href="#">\$500,000</a>    | <a href="#">2021</a> |

|                           |                         |  |  |   |                          |                      |
|---------------------------|-------------------------|--|--|---|--------------------------|----------------------|
|                           |                         |  | <a href="#">to provide 300 foot right turn lane to eastbound SR 120 on ramp.</a> |   |                          |                      |
| <a href="#">SJ18-3004</a> | <a href="#">Manteca</a> | <a href="#">SR 99 / Yosemite Avenue Ramp Signal Timing</a> | <a href="#">Adjust signal timing</a>   | <a href="#">In the City of Manteca at the SR 99 / Yosemite Avenue ramp intersections.</a> | <a href="#">\$20,000</a> | <a href="#">2021</a> |

**Table 6-1: 2018 Regional Transportation Plan Project List - Mainline Highway Improvements Category**

| Identifiers     |               | Project Information |              | Project Description                  |   | Project Limits   |                        | Cost to Deliver |                  | Milestone Years |                 |                    |              |  |
|-----------------|---------------|---------------------|--------------|--------------------------------------|---|--|------------------------|-----------------|------------------|-----------------|-----------------|--------------------|--------------|--|
| 2018 RTP MPO ID | CTIPS ID #    | PPNO                | Jurisdiction | Facility Name/Route                  | Project Description   | Project Limits   | Total                  | Total           | FTIP Programming | NEPA Approval   | Open to Traffic | MK Renewal Project | RTIF Project |  |
| SJ14-1004       | 112-0000-0421 |                     | Caltrans     | SR 99/120 Connector Project Phase 1A | (Widen the eastbound SR 120 to southbound SR 99 connector ramp from one-lane to two-lanes; Remove the Austin Road overcrossing and replace with a new 4 lane structure spanning SR 99 and UPRR; Add a new connecting road from Austin Road to Woodward Ave and Moffat Blvd and modify the existing UPRR gated crossing at Woodward Ave; Temporarily close the Austin Road northbound entrance and southbound exit ramps, resulting in a partial interchange.) | On SR-120 from Main Street (P.M. 5.13) to SR-99 and on SR-99 from SR-120 to Olive Avenue (P.M. 6.22) | \$52,419,765           |                 | 2015             | 2019            | 2023            | X                  | X            |  |
| SJ07-1003       |               |                     | Caltrans     | I-205 HOV                            | Widen from 6 to 8 lanes (inside/outside)  | Alameda County Line to Eleventh Street   | \$95,874,000           |                 |                  | 2020            | 2026            | X                  |              |  |
| SJ14-1001       |               |                     | Caltrans     | I-205 HOV                            | Widen from 6 to 8 lanes (inside/outside)  | Eleventh Street to MacArthur Drive   | \$102,000,000          |                 |                  | 2020            | 2026            | X                  | X            |  |
| SJ14-1002       |               |                     | Caltrans     | I-205 HOV                            | Widen from 6 to 8 lanes (inside/outside)  | MacArthur Drive to I-5   | \$100,000,000          |                 |                  | 2020            | 2026            | X                  |              |  |
| SJ07-1008       |               |                     | Caltrans     | I-5 HOV Mossdale                     | Widen to add HOV lanes with HOV Connector Ramps to I-205 and SR-120   | I-205 to Louise Avenue (P.M. 12.5/R 16.5)  | \$207,970,000          |                 |                  | 2022            | 2028            | X                  | X            |  |
| SJ07-1014       |               |                     | Caltrans     | SR-120                               | Widen 4 to 6 lanes (inside)   | I-5 to Main Street (P.M. 5.13)   | \$41,175,190           |                 |                  | 2024            | 2030            | X                  |              |  |
| SJ18-1001       |               |                     | Caltrans     | SR-99 HOV                            | Widen 6 to 8 lanes (inside/outside), including reconstruction of SR-99/Main Street and SR-99/Wilma Avenue interchanges and pedestrian overcrossing  | SR-120 to Stanislaus County Line   | \$200,000,000          |                 |                  | 2026            | 2032            |                    |              |  |
| SJ18-1002       | 212-0000-0743 |                     | Caltrans     | SR 99/120 Connector Project Phase 1B | Widen the northbound SR 99 to westbound SR 120 connector ramp from one-lane to two-lanes; Add an auxiliary lane in the existing median of westbound SR 120 from Main Street to SR 99; Convert the existing 99/120 separation structure to two lanes and construct a new separation structure to serve the eastbound 120 to northbound 99 connector ramp.)   | On SR-120 from Main Street (P.M. 5.13) to SR-99 and on SR-99 from SR-120 to Olive Avenue (P.M. 6.22) | \$25,758,534           |                 | 2019             | 2019            | 2033            | X                  | X            |  |
| SJ11-1001       |               |                     | Caltrans     | I-5 HOV                              | Widen from 6 to 8 lanes (inside median) including auxiliary lanes   | Hammer Lane to North of Eight Mile Road  | \$124,620,000          |                 |                  | 2009            | 2036            | X                  |              |  |
| SJ07-1005       |               |                     | Caltrans     | I-5 HOV                              | Widen 6 to 8 lanes (inside)   | French Camp Road to Charter Way  | \$97,880,000           |                 |                  | 2030            | 2038            | X                  |              |  |
| SJ07-1006       |               |                     | Caltrans     | I-5 HOV                              | Widen 6 to 8 lanes (inside)   | Louise Avenue to French Camp Road  | \$193,880,000          |                 |                  | 2032            | 2040            | X                  |              |  |
| SJ18-1003       | 212-0000-0744 |                     | Caltrans     | SR 99/120 Connector Project Phase 1C | Add braided off ramps from SR 99 and SR 120 to Austin Road; Add loop on ramp from Austin Road to northbound SR 99 and to westbound SR 120; Add auxiliary lane on eastbound SR 120 from Main Street to SR 99; Add an auxiliary lane in each direction on SR 99 from SR 120 to approximately 1.7 mile south of Austin Road and relocate the frontage road.  | On SR-120 from Main Street (P.M. 5.13) to SR-99 and on SR-99 from SR-120 to Olive Avenue (P.M. 6.22) | \$52,548,860           |                 | 2019             | 2019            | 2042            | X                  | X            |  |
| SJ14-1003       |               |                     | Caltrans     | SR-99 Widening                       | Widen 4 to 6 lanes (inside) - ENVIRONMENTAL ONLY  | Harney Lane to Turner Road   | \$3,000,000            |                 |                  |                 |                 |                    |              |  |
|                 |               |                     |              |                                      |   |  | <b>\$1,297,126,349</b> |                 |                  |                 |                 |                    |              |  |

**Table 6-2: 2018 Regional Transportation Project List - Interchange Improvements Category**

| Identifiers | 2018 RTP MPO ID | CTIPS ID # | PPNO | Project Information |   |  | Project Description   | Project Limits   | Cost to Deliver      | Total | Milestone Years  |               |                 |                    |              |   |
|-------------|-----------------|------------|------|---------------------|---|--|---|--|----------------------|-------|------------------|---------------|-----------------|--------------------|--------------|---|
|             |                 |            |      | Jurisdiction        | Facility Name/Route                             |  |   |  |                      |       | FTIP Programming | NEPA Approval | Open to Traffic | MK Renewal Project | RTIP Project |   |
| SJ07-2005   |                 |            |      | Lathrop             | I-5 at Louise Avenue                            |  | Reconstruct interchange (PM 16.4-16.8)  | I-5 at Louise Avenue   | \$28,754,000         |       |                  | 2024          | 2030            |                    | X            |   |
| SJ07-2004   |                 |            |      | Lathrop             | I-5 at Lathrop Road                             |  | Reconstruct interchange (P.M. 17.3/17.8)  | I-5 at Lathrop Road  | \$39,146,000         |       |                  | 2029          | 2033            |                    | X            |   |
|             |                 |            |      |                     |   |  | Relocation of intersection at Roth/Harlan Road inclusive of signalization; relocation of intersection at Roth/Manthey Road inclusive of signalization. Widen from 2 to 5 lanes from Roth/Harlan road intersection to Roth/Manthey Road Intersection |  |                      |       |                  |               |                 |                    |              |   |
| SJ11-3066   |                 |            |      | Lathrop             | I-5 at Roth Road                                |  |   | I-5 at Roth Road   | \$16,800,000         |       |                  |               | 2020            |                    |              |   |
| SJ14-2004   |                 |            |      | Lathrop             | SR 120 at Yosemite Ave/Guthmiller Road          |  | Reconstruct interchange   | SR 120 at Yosemite Ave/Guthmiller Road   | \$31,000,000         |       |                  | 2020          | 2022            |                    |              |   |
| SJ11-2015   |                 |            |      | Lodi                | SR-99 at SR-12 West (Kettleman Lane)            |  | Reconstruct interchange and widen to free flowing interchange   | SR-99 at SR-12 West (Kettleman Lane)   | \$50,000,000         |       |                  | 2030          | 2036            |                    | X            |   |
|             |                 |            |      |                     |   |  | Reconstruct interchange to provide 6 through lanes on SR 99, 4 lanes on Harney between Reynolds Ranch Pkwy and SR 99 and modify on-ramps and off-ramps  |  |                      |       |                  |               |                 |                    |              |   |
| SJ07-2006   |                 |            |      | Lodi                | SR-99 at Harney Lane                            |  |   | SR-99 at Harney Lane   | \$35,362,000         |       |                  | 2009          | 2028            | 2033               |              | X |
|             |                 |            |      |                     |   |  | Reconstruct interchange to provide operational and safety improvements on SR 99 at Turner Road (PM 31.3/31.6)   |  |                      |       |                  |               |                 |                    |              |   |
| SJ07-1020   | 112-0000-0347   |            |      | Lodi                | SR-99 at Turner Road                            |  |   | SR-99 at Turner Road   | \$6,142,986          |       |                  | 2019          | 2036            | 2041               |              | X |
| SJ07-2012   |                 |            |      | Manteca             | SR-120 at Union Road                            |  | Reconstruct interchange (P.M. 4.1/4.1)  | SR-120 at Union Road   | \$22,000,000         |       |                  |               |                 | 2021               |              | X |
| SJ07-2009   | 212-0000-0231   |            |      | Manteca             | SR-120 at McKinley Ave                          |  | Construct new interchange   | SR-120 at McKinley Avenue  | \$37,850,000         |       |                  | 2009          | 2014            | 2022               |              | X |
| SJ18-2001   |                 |            |      | Manteca             | SR-120 at Airport Way                           |  | Reconstruct interchange   | SR-120 at Airport Way  | \$36,828,000         |       |                  |               | 2029            | 2031               |              | X |
| SJ18-2002   |                 |            |      | Manteca             | SR-120 at Main Street                           |  | Reconstruct interchange   | SR-120 at Main Street  | \$36,828,000         |       |                  |               | 2031            | 2033               |              | X |
|             |                 |            |      |                     |   |  | Construction of new interchange - ENVIRONMENTAL ONLY  |  |                      |       |                  |               |                 |                    |              |   |
| SJ14-2001   |                 |            |      | Manteca             | SR-99 at Raymus Expressway                      |  |   | SR-99 at Raymus Expressway   | \$3,000,000          |       |                  |               |                 |                    |              | X |
|             |                 |            |      |                     |   |  | Interchange Modification and auxiliary lanes (PM 32.6)  |  |                      |       |                  |               |                 |                    |              |   |
| SJ11-2004   | 212-0000-0309   |            |      | Stockton            | I-5 at Hammer Lane                              |  |   | I-5 at Hammer Lane   | \$47,164,647         |       |                  | 2007          | 2009            | 2036               |              |   |
|             |                 |            |      |                     |   |  | Construction of a new interchange and auxiliary lanes (PM 33.3/34.2)  |  |                      |       |                  |               |                 |                    |              |   |
| SJ11-2006   | 212-0000-0309   |            |      | Stockton            | I-5 at Otto Drive                               |  |   | I-5 at Otto Drive  | \$103,371,218        |       |                  | 2007          | 2009            | 2036               |              |   |
|             |                 |            |      |                     |   |  | Modification of interchange (P.M. 34.7/35.9)  |  |                      |       |                  |               |                 |                    |              |   |
| SJ07-2020   | 212-0000-0309   |            |      | Stockton            | I-5 at Eight Mile Road                          |  |   | I-5 at Eight Mile Road   | \$57,255,179         |       |                  | 2007          | 2009            | 2036               |              |   |
|             |                 |            |      |                     |   |  | Reconstruct Interchange (PM 35.1-35.5)  |  |                      |       |                  |               |                 |                    |              |   |
| SJ11-2002   | 212-0000-0562   |            |      | Stockton            | SR-99 at Eight Mile Road                        |  |   | SR-99 at Eight Mile Road   | \$93,070,215         |       |                  |               | 2030            | 2036               |              | X |
|             |                 |            |      |                     |   |  | Reconstruct interchange (PM 23.5-24.5)  |  |                      |       |                  |               |                 |                    |              |   |
| SJ11-2001   | 212-0000-0561   |            |      | Stockton            | SR-99 at Morada                                 |  |   | SR-99 at Morada  | \$96,474,024         |       |                  |               | 2030            | 2036               |              |   |
|             |                 |            |      |                     |   |  | Construct Interchange I-205 at Eleventh street realign and widen Eleventh Street to 6-lanes north of Grant Line to Byron Road. Construct Aux lane Hansen to Eleventh; in WB I-205 Eleventh Street to Grant Line Road                                |  |                      |       |                  |               |                 |                    |              |   |
| SJ11-2010   | 212-0000-0227   |            |      | Tracy               | I-205/Lammers Rd/Eleventh St                    |  |   | Construct Interchange I-205 at Eleventh street realign and widen Eleventh Street to 6-lanes north of Grant Line to Byron Road. Construct Aux lane Hansen to Eleventh; in WB I-205 Eleventh Street to Grant Line Road | \$51,500,000         |       |                  | 2007          | 2012            | 2022               |              | X |
|             |                 |            |      |                     |   |  | Reconstruct interchange   |  |                      |       |                  |               |                 |                    |              |   |
| SJ14-2002   |                 |            |      | Tracy               | I-580 at International Pkwy/Patterson Pass Road |  |   | I-580 at Mountain House Parkway  | \$9,000,000          |       |                  | 2015          | 2018            | 2022               |              | X |
|             |                 |            |      |                     |   |  | Reconstruct interchange   |  |                      |       |                  |               |                 |                    |              |   |
| SJ14-2003   |                 |            |      | Tracy               | I-205 at Mountain House/International Pkwy      |  |   | I-205 at Mountain House Parkway  | \$4,000,000          |       |                  | 2015          | 2018            | 2022               |              | X |
|             |                 |            |      |                     |   |  | Modification of existing interchange  |  |                      |       |                  |               |                 |                    |              |   |
| SJ11-2011   |                 |            |      | Tracy               | I-205 at Grant Line Road                        |  |   | I-205 at Grant Line Road   | \$32,574,820         |       |                  |               | 2018            | 2024               |              |   |
|             |                 |            |      |                     |   |  | Phase 1: Construct new interchange east-west ramps  |  |                      |       |                  |               |                 |                    |              |   |
| SJ11-2012   | 212-0000-0228   |            |      | Tracy               | I-205 at Chrisman Rd                            |  |   | I-205 at Chrisman Rd   | \$36,056,267         |       |                  | 2009          | 2020            | 2026               |              |   |
|             |                 |            |      |                     |   |  | Modification of existing interchange - ENVIRONMENTAL ONLY   |  |                      |       |                  |               |                 |                    |              |   |
| SJ18-2003   |                 |            |      | Tracy               | I-205 / MacArthur Interchange modification      |  |   | At MacArthur (PM 7.8 -PM 8.5)  | \$9,670,000          |       |                  |               |                 |                    |              |   |
|             |                 |            |      |                     |   |  | Modification of existing interchange - ENVIRONMENTAL ONLY   |  |                      |       |                  |               |                 |                    |              |   |
| SJ11-2031   |                 |            |      | Tracy               | I-580 at Corral Hollow Road                     |  |   | I-580 at Coral Hollow Road   | \$5,500,000          |       |                  |               | 2018            |                    |              |   |
|             |                 |            |      |                     |   |  | Construction of new interchange - ENVIRONMENTAL ONLY  |  |                      |       |                  |               |                 |                    |              |   |
| SJ11-2032   |                 |            |      | Tracy               | I-580 at Lammers Road                           |  |   | I-580 at Lammers Road  | \$5,500,000          |       |                  |               | 2018            |                    |              |   |
|             |                 |            |      |                     |   |  |   |  | <b>\$894,847,355</b> |       |                  |               |                 |                    |              |   |

**Table 6-10: 2018 Regional Transportation Plan Project List - Operations and Maintenance Category**

| Identifiers | 2018 RTP MPO ID                 | CTIPS ID # | PPNO | Project Information |   | Facility Name/Route  | Project Description  | Project Limits | Cost to Deliver |  | Milestone Years | FTIP Programming | NEPA Approval | Open to Traffic |
|-------------|---------------------------------|------------|------|---------------------|---|--|--|----------------|-----------------|--|-----------------|------------------|---------------|-----------------|
|             |                                 |            |      | Jurisdiction        |   |  |  |                | Total           |  |                 |                  |               |                 |
| SJ07-1019   | 212-0000-0313                   |            |      | Caltrans            | Various locations   | SHOPP - Collision Reduction Grouped Projects   | Various  |                | \$282,542,602   |  | various         | various          | 2042          |                 |
| SJ07-1020   | 212-0000-0314                   |            |      | Caltrans            | Various locations   | SHOPP - Mobility Grouped Projects  | Various  |                | \$92,928,777    |  | various         | various          | 2042          |                 |
| SJ07-1021   | 212-0000-0315                   |            |      | Caltrans            | Various locations   | SHOPP Roadway Preservation Grouped Projects  | Various  |                | \$194,525,465   |  | various         | various          | 2042          |                 |
| SJ07-1022   | 212-0000-0392                   |            |      | Caltrans            | Various locations   | SHOPP-Other (Emergency Response, Mandates, Bridge Preservation, Roadside Preservation Etc.)  | Various  |                | \$136,747,973   |  | various         | various          | 2042          |                 |
| SJ07-3002   | 212-0000-0272                   |            |      | Caltrans            | Various locations   | Caltrans Highway Bridge Program Lump Sum projects (Safety)   | Various  |                | \$116,490,513   |  | various         | various          | 2042          |                 |
| SJ07-3003   | various                         |            |      | Caltrans            | Various locations   | Caltrans Highway Bridge Program Line Item projects (Safety)  | Various  |                | \$197,179,445   |  | various         | various          | 2042          |                 |
| SJ07-3004   | 212-0000-0307                   |            |      | Caltrans            | Various locations   | Lump sum for Emergency Repair Program (Safety)   | Various  |                | \$3,750,000     |  | various         | various          | 2042          |                 |
| SJ07-3005   | 212-0000-0353/<br>212-0000-0567 |            |      | Caltrans            | Various locations   | Caltrans Minor Program (Safety)  | Various  |                | \$12,115,575    |  | various         | various          | 2042          |                 |
|             |                                 |            |      | Caltrans            | SR-120 TMS Upgrade/Repairs  | Upgrade existing communication infrastructure between field elements and District 10 TMC   | On Route 5, 120, and 99 at various locations in San Joaquin County                     |                | \$6,970,000     |  |                 |                  | 2022          |                 |
|             |                                 |            |      | Caltrans            | SR 120  | Contingency Project: Install Ramp Meters   | In San Joaquin County on State Route 120   |                | \$22,740,000    |  |                 |                  | 2023          |                 |
|             |                                 |            |      | Caltrans            | Various routes Phase 1  | Repair, update, and install ITS elements, including installation of MVPs, and filling in the gaps  | In San Joaquin County on Various Routes  |                | \$5,500,000     |  |                 |                  | 2024          |                 |
|             |                                 |            |      | Caltrans            | Various routes Phase 2  | Repair, update, and install ITS elements, including installation of MVPs, and filling in the gaps  | In San Joaquin County on Various Routes  |                | \$4,250,000     |  |                 |                  | 2025          |                 |
|             |                                 |            |      | Caltrans            | SR 4 various locations  | Installing ramp meters   | SR-4 Ramp metering system Installation   |                | \$56,503,000    |  |                 |                  | 2024          |                 |
|             |                                 |            |      | Caltrans            | I-5 various locations I 205 to Mathews Rd                                     | Install ramp meters and ITS elements   | In San Joaquin County on I-5 from I-205 to Mathew Road                                 |                | \$32,175,000    |  |                 |                  | 2026          |                 |
|             |                                 |            |      | Caltrans            | I-5 various locations from Mathews to Dr. Martin Luther King Jr. Blvd         | Install ramp meters and ITS elements   | In San Joaquin County on I-5 from Mathew Road to Dr. Martin Luther King Jr. Blvd       |                | \$29,250,000    |  |                 |                  | 2027          |                 |
|             |                                 |            |      | Caltrans            | I-5 various locations from Dr. Martin Luther King Jr. Blvd to Calaveras River | Install ramp meters and ITS elements   | In San Joaquin County on I-5 from Dr. Martin Luther King Jr. Blvd. to Calaveras River  |                | \$23,400,000    |  |                 |                  | 2030          |                 |
|             |                                 |            |      | Caltrans            | I-5 various locations from Calaveras River to Eight Mile Rd.                  | Install ramp meters and ITS elements   | In San Joaquin County on I-5 from Calaveras River to Eight Mile Road                   |                | \$37,050,000    |  |                 |                  | 2030          |                 |
|             |                                 |            |      | Caltrans            | SR 99 various locations from Hammer Lane to Armstong Rd                       | Install ramp meters and ITS elements   | In San Joaquin County on SR-99 from Hammer Lane Road to Armstrong Road                 |                | \$21,450,000    |  |                 |                  | 2029          |                 |
|             |                                 |            |      | Caltrans            | SR 99 various locations from Armstong to                                      | Install ramp meters and ITS elements   | In San Joaquin County on SR-99 from Armstrong Road to River North of Turner Road       |                | \$33,150,000    |  |                 |                  | 2030          |                 |
|             |                                 |            |      | Caltrans            | SR 99 various locations   | Install ramp meters and ITS elements   | In San Joaquin County on SR-99 from River North of Turner Road to North of Acampo Road |                | \$23,400,000    |  |                 |                  | 2031          |                 |
| SJ11-3046   | 212-0000-0001                   |            |      | Escalon             | Various Street Rehabilitation   | Rehabilitation of various streets and roads  | City streets, various locations  |                | \$20,736,003    |  | various         |                  | 2042          |                 |
| SJ11-3047   | 212-0000-0001                   |            |      | Lathrop             | Various Street Rehabilitation   | Rehabilitation of various streets and roads  | City streets, various locations  |                | \$48,882,059    |  | various         |                  | 2042          |                 |
| SJ14-CM17   | 212-0000-0644                   |            |      | Lathrop             | Louise Avenue and McKinley Avenue Intersection Improvements                   | Costs associated with the improvement of the Louise Avenue and McKinley Avenue intersection including installation of left turn lanes and modified traffic signal equipment. | City of Lathrop  |                | \$450,000       |  | 2017            |                  | 2020          |                 |

Table 6-10: 2018 Regional Transportation Plan Project List - Operations and Maintenance Category

| Identifiers |               | 2018 RTP MPO ID |            | CTIP5 ID #         |  | PNMO   |   | Project Information |                 | Facility Name/Route |                 | Project Description |               | Project Limits  |  | Cost to Deliver |  | Milestone Years |  | FTIP Programming |  | NEPA Approval |  | Open to Traffic |  |
|-------------|---------------|-----------------|------------|--------------------|--|--|---|---------------------|-----------------|---------------------|-----------------|---------------------|---------------|-----------------|--|-----------------|--|-----------------|--|------------------|--|---------------|--|-----------------|--|
| SJ          | Year          | 2018 RTP MPO ID | CTIP5 ID # | PNMO               | Jurisdiction   | Facility Name/Route  | Project Description   | Project Limits      | Cost to Deliver | Total               | Milestone Years | FTIP Programming    | NEPA Approval | Open to Traffic |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ14-9001   | 212-0000-0699 |                 |            | Lathrop            | Golden Valley Parkway & Lathrop Road Intersection Improvements | Replace all-way stop intersection at Golden Valley Parkway with new traffic signal with detection system, slurry seal, install signage and striping, and interconnect four signals on Lathrop Road between Golden Valley Parkway and Harlan Road. Install approximately 750 feet of sidewalk on south side of Spartan Way west of Golden Valley Parkway intersection   | City of Lathrop   |                     | \$450,000       |                     | 2017            |                     |               | 2020            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ11-3048   | 212-0000-0001 |                 |            | Lodi               | Various Street Rehabilitation                                  | Rehabilitation of various streets and roads  | City streets, various locations   |                     | \$179,583,369   |                     | various         |                     |               | 2042            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ11-3190   | 212-0000-0552 |                 |            | Lodi               | Lockeford Street Improvements                                  | From the UPRR to Cherokee Lane. Construct two left lane, parking on both sides, Class II bikes lanes, install storm drain system, curb gutter and sidewalks, landscaping and street lights. Upgrade existing lighted crosswalk. Install new signal at Lockeford St. and Stockton St. including installation of EVP, ADA ramps, signage and striping. Modify traffic signal and striping at Cherokee Lane and Lockeford St. to accommodate travel lanes.) | City of Lodi  |                     | \$5,420,000     |                     | 2017            |                     |               | 2020            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ11-3049   | 212-0000-0001 |                 |            | Manteca            | Various Street Rehabilitation                                  | Rehabilitation of various streets and roads  | City streets, various locations   |                     | \$143,941,870   |                     | various         |                     |               | 2042            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ18-3002   |               |                 |            | Manteca            | Main Street and Woodward Avenue Signalization Project          | Install new traffic signal with indicators, traffic signal control panel and case, and induction loops. Install ADA compliant pedestrian facilities and high visibility crosswalks   | In the City of Manteca at the intersection of Main Street and Woodward Avenue             |                     | \$3,400,000     |                     |                 |                     |               | 2021            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ18-3003   |               |                 |            | Manteca            | SR 120 / Main Street Interchange Ramps Right Turn Lane         | Widen eastbound SR 120 off ramp to Main Street to provide 400 foot eastbound right turn lane. Widening Northbound Main Street to provide 300 foot right turn lane to eastbound SR 120 on ramp.   | In the City of Manteca at the SR 120 Main Street Interchange eastbound ramp intersection. |                     | \$500,000       |                     |                 |                     |               | 2021            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ18-3004   |               |                 |            | Manteca            | SR 99 / Yosemite Avenue Ramp Signal Timing                     | Adjust signal timing   | In the City of Manteca at the SR 99 / Yosemite Avenue ramp intersections.                 |                     | \$20,000        |                     |                 |                     |               | 2021            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ18-3001   |               |                 |            | Port of Stockton   | Rough & Ready Island Rail Bridge                               | Construct new rail bridge (double-track) to replace existing deficient structure   | City of Stockton  |                     | \$18,000,000    |                     |                 |                     |               | 2040            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ14-9001   | 212-0000-0700 |                 |            | Ripon              | Colony/Hoff Traffic Signal                                     | Install traffic signal   | At intersection of Colony Rd/Hoff Drive/SR 99 Ramps                                       |                     | \$660,000       |                     | 2017            | 2018                |               | 2019            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ14-8004   | 212-0000-0658 |                 |            | Ripon              | River Road Sidewalk and Intersection Improvements              | In Ripon, install traffic signal and crosswalks at River Road/Fulton Avenue intersection and install sidewalk  | City of Ripon   |                     | \$550,000       |                     | 2017            | 2018                |               | 2019            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ11-3020   | 212-0000-0695 |                 |            | Ripon              | River Road Phase I   | Widen River Road from 2 to 6 lanes between Fulton Avenue intersection and North Ripon Road   | City of Ripon   |                     | \$932,000       |                     | 2017            | 2018                |               | 2019            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ11-3050   | 212-0000-0001 |                 |            | Ripon              | Various Street Rehabilitation                                  | Rehabilitation of various streets and roads  | City streets, various locations   |                     | \$42,047,006    |                     | various         |                     |               | 2042            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ11-3051   | 212-0000-0001 |                 |            | San Joaquin County | Various Roadway Rehabilitation                                 | Rehabilitation to include: driveways, wheelchair ramps, median islands, pedestrian improvements, and class II bicycle lanes.   | Rehabilitate roadway and surrounding streets  |                     | \$1,303,907,722 |                     | various         |                     |               | 2042            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ14-9003   | 212-0000-0701 |                 |            | San Joaquin County | SR 26 and Jack Tone Road Roundabout                            | Install roundabout   | At intersection of Jack Tone Road and SR 26   |                     | \$1,525,000     |                     | 2017            | 2018                |               | 2020            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ14-9004   | 212-0000-0702 |                 |            | San Joaquin County | SR 4 and Jack Tone Road Roundabout                             | Install roundabout   | At intersection of Jack Tone Road and SR 4  |                     | \$1,659,000     |                     | 2017            | 2018                |               | 2020            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ07-3116   | 212-0000-0403 |                 |            | San Joaquin County | Byron Road and Grant Line Road Roundabout                      | Install roundabout   | At intersection of Byron Road and Grant Line Road near Tracy                              |                     | \$1,367,300     |                     | 2017            | 2018                |               | 2020            |  |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ07-3116   | 212-0000-0403 |                 |            | San Joaquin County | Duncan Road and Comstock Road Roundabout                       | Install roundabout   | At intersection of Duncan Road and Comstock Road near Linden                              |                     | \$1,213,900     |                     | 2017            | 2018                |               | 2020            |  |                 |  |                 |  |                  |  |               |  |                 |  |

**Table 6-10: 2018 Regional Transportation Plan Project List - Operations and Maintenance Category**

| Identifiers     |               | Project Information |                    | Project Description   |   | Project Limits  |               | Cost to Deliver |      | Milestone Years |      |      |
|-----------------|---------------|---------------------|--------------------|---|---|---|---------------|-----------------|------|-----------------|------|------|
| 2018 RTP MPO ID | CTIPs ID #    | PPNO                | Jurisdiction       | Facility Name/Route   | Project Description   | Project Limits  | Total         | 2017            | 2018 | 2019            | 2020 | 2022 |
| SJ07-3116       | 212-0000-0403 |                     | San Joaquin County | Liberty Road and Dustin Road Roundabout                                 | Install roundabout  | At intersection of Liberty Road and Dustin Road in northern San Joaquin County  | \$1,279,500   | 2017            | 2018 | 2020            |      |      |
| SJ11-3042       | 212-0000-0001 |                     | SJCOG              | Regional Surface Transportation Program (STP) Lump Sum Projects         | Various state highway and transit capital projects  | San Joaquin County  | \$3,038,998   | various         |      |                 |      | 2042 |
| SJ07-3116       | 212-0000-0403 |                     | Stockton           | Dr. Martin Luther King Jr. Blvd Signal Modifications                    | Convert signals from pedestal-mounted to mast arms and provide protected left-turns   | Dr. Martin Luther King Jr. Blvd between N. Eldorado Street and S. Aurora Street at intersections of S. San Joaquin Street, California Street, and S. Grant Street | \$1,163,500   | 2017            | 2018 | 2020            |      |      |
| SJ07-3116       | 212-0000-0403 |                     | Stockton           | Dr. Martin Luther King Jr. Blvd Median                                  | Install raised median   | Dr. Martin Luther King Jr. Blvd between Bieghle Alley and Mariposa Road   | \$370,710     | 2017            | 2018 | 2020            |      |      |
| SJ07-3116       | 212-0000-0403 |                     | Stockton           | Guardrail Upgrades  | Upgrade existing guardrails with new guardrails, transition rails, and end treatments   | 16 locations throughout Stockton  | \$1,180,900   | 2017            | 2018 | 2020            |      |      |
| SJ07-3116       | 212-0000-0403 |                     | Stockton           | Pacific Avenue Median   | Install raised median curb between the existing median limits at various locations  | Pacific Avenue between the Calaveras River Trail and W. Hammer Lane   | \$969,750     | 2017            | 2018 | 2020            |      |      |
| SJ14-9005       | 212-0000-0707 |                     | Stockton           | Real-time Traffic Flow Monitoring                                       | Implement real-time traffic flow monitoring using Bluetooth/Wifi vehicle probe technology   | Various intersections along arterials throughout Stockton   | \$595,000     | 2017            | 2018 | 2019            |      |      |
| SJ14-9006       | 212-0000-0708 |                     | Stockton           | Pacific Avenue and March Lane Intersection Modification                 | Install southbound right turn lane and retime traffic signal  | At intersection of Pacific Avenue and March Lane  | \$649,000     | 2017            | 2018 | 2019            |      |      |
| SJ14-9007       | 212-0000-0709 |                     | Stockton           | Left-Turn Lanes Additions at Various Intersections                      | Install left turn lanes   | At intersections of March Lane and Feather River Drive, West Lane and Bianchi Road, and Airport Way and Arch-Airport Road.  | \$2,125,000   | 2017            | 2018 | 2019            |      |      |
| SJ14-9008       | 212-0000-0710 |                     | Stockton           | Tam O'Shanter Drive and Knickerbocker Drive Roundabout and Bicycle Lane | Install roundabout and Class II Bicycle Lanes   | At intersection of Tam O'Shanter Drive and Knickerbocker Drive, and on Tam O'Shanter Drive between Knickerbocker Drive and Hammer Lane                            | \$966,112     | 2017            | 2018 | 2019            |      |      |
| SJ14-9009       | 212-0000-0711 |                     | Stockton           | Montauban Ave and Hammertown Drive Roundabout and Bicycle Lane          | Install roundabout and Class II Bicycle Lanes   | At intersection of Montauban Avenue and Hammertown Drive and on Montauban Avenue between Hammertown Drive and Swain Road  | \$1,078,227   | 2017            | 2018 | 2019            |      |      |
| SJ14-9010       | 212-0000-0712 |                     | Stockton           | Lincoln Street and Eighth Street Roundabout and Bicycle Lane            | Install roundabout and Class II Bicycle Lanes   | At intersection of Lincoln Street and Eighth Street, and on Eighth Street between Lincoln Street and El Dorado Street   | \$1,183,302   | 2017            | 2018 | 2019            |      |      |
| SJ11-3043       | 212-0000-0001 |                     | Stockton           | Regional Surface Transportation Program (STP) Lump Sum Projects         | Rehabilitation to include: driveways, wheelchair ramps, median islands, pedestrian improvements, and class II bicycle lanes.  | City streets, various locations   | \$5,931,260   | various         |      |                 |      | 2042 |
| SJ11-3044       | 212-0000-0001 |                     | Stockton           | Regional Surface Transportation Program (STP) Lump Sum Projects         | Operations and Maintenance  | City streets, various locations   | \$1,930,715   | various         |      |                 |      | 2042 |
| SJ11-3052       | 212-0000-0001 |                     | Stockton           | Various Street Rehabilitation   | Rehabilitation of various streets and roads   | City streets, various locations   | \$822,879,679 | various         |      |                 |      | 2042 |
| SJ11-CM16       | 212-0000-0589 |                     | Stockton           | March Lane Adaptive Traffic Control                                     | Install adaptive traffic control system along March Lane between Feather River drive and Montauban Ave to improve safety and traffic operations                                   | City of Stockton  | \$1,322,000   | 2018            |      |                 |      | 2022 |
| SJ11-CM21       | 212-0000-0601 |                     | Stockton           | Miner Ave and Filbert St. Signal  | Install new traffic signal at the Miner Ave and Filbert St. intersection including EVP, ADA ramps, signs and striping   | City of Stockton  | \$686,000     | 2018            |      |                 |      | 2022 |
| SJ11-CM24       | 212-0000-0604 |                     | Stockton           | Swain Rd. and Montauban Roundabout Installation                         | Construct roundabout at Swain Road and Montauban Ave. including PTZ cameras, ADA ramp, signs, striping, and street lights   | City of Stockton  | \$837,000     | 2018            |      |                 |      | 2022 |
| SJ14-CM05       | 212-0000-0632 |                     | Stockton           | Thorton Rd at Hammer Ln. and Lower Sac Left Turn Lanes                  | Add SBL on Thorton(at Hammer), add WBL on Lower Sac(Thorton/Pacific). Retime both signals, as well as adjacent signal (Hammer/Lower Sac). EVP at Pacific/Lower Sac to be upgrade. | City of Stockton  | \$918,000     | 2018            |      |                 |      | 2022 |

**Table 6-10: 2018 Regional Transportation Plan Project List - Operations and Maintenance Category**

| Identifiers |                 | 2018 RTP MPO ID |      | CTIP's ID #  |  | Project Information   |                                     | Project Description |               | Project Limits  |                  | Cost to Deliver |                 | Milestone Years |  | FTIP Programming |  | NEPA Approval |  | Open to Traffic |  |
|-------------|-----------------|-----------------|------|--------------|--|---|-------------------------------------|---------------------|---------------|-----------------|------------------|-----------------|-----------------|-----------------|--|------------------|--|---------------|--|-----------------|--|
| Identifiers | 2018 RTP MPO ID | CTIP's ID #     | PMNO | Jurisdiction | Facility Name/Route                                    | Project Description   | Project Limits                      | Cost to Deliver     | Total         | Milestone Years | FTIP Programming | NEPA Approval   | Open to Traffic |                 |  |                  |  |               |  |                 |  |
| SJ14-CM08   | 212-0000-0635   |                 |      | Stockton     | Tam O'Shanter Drive and Castle Oaks Drive Roundabout   | Install roundabout at intersection of Tam O'Shanter Drive and Castle Oaks Drive   | City of Stockton                    |                     | \$603,000     | 2018            |                  |                 | 2022            |                 |  |                  |  |               |  |                 |  |
| SJ14-CM10   | 212-0000-0641   |                 |      | Stockton     | BRT Phase V  | Costs associated with installation of signal prioritization equipment for BRT Phase 5 operations on Weber Ave, Miner Ave, Wilson Way, Fremont St., Filbert St and Main St.  | Stockton Metropolitan Area          |                     | \$2,099,000   | 2018            |                  |                 | 2022            |                 |  |                  |  |               |  |                 |  |
| SJ14-CM15   | 212-0000-0642   |                 |      | Stockton     | West Lane Traffic Responsiveness Signal Control System | Install new traffic responsiveness signal control system on West Lane between Harding Way and Enterprise Street.  | City of Stockton                    |                     | \$754,000     | 2018            |                  |                 | 2022            |                 |  |                  |  |               |  |                 |  |
| SJ14-CM16   | 212-0000-0643   |                 |      | Stockton     | BRT Phase 1-B  | Costs associated with installation of signal prioritization equipment for BRT operations on Pacific Avenue and Madison Street. Replace signalized intersection at Miner Avenue and San Joaquin Street with a roundabout | Stockton Metropolitan Area          |                     | \$1,599,000   | 2018            |                  |                 | 2022            |                 |  |                  |  |               |  |                 |  |
| SJ11-CM26   | 212-0000-0606   |                 |      | Tracy        | Corral Hollow Road and Valpico Road Traffic Signal     | Intersection Signalization  | Corral Hollow Road and Valpico Road |                     | \$751,000     | 2011            |                  |                 | 2022            |                 |  |                  |  |               |  |                 |  |
| SJ11-3053   | 212-0000-0001   |                 |      | Tracy        | Various Street Rehabilitation                          | Rehabilitation of various streets and roads   | City streets, various locations     |                     | \$228,998,217 | various         |                  |                 | 2042            |                 |  |                  |  |               |  |                 |  |
| SJ11-CM18   | 212-0000-0616   |                 |      | Tracy        | Corral Hollow Road Adaptive Traffic Signal             | Traffic Signal Coordination   | West Valley Mall to Schulte Road    |                     | \$1,121,625   | 2011            |                  |                 | 2020            |                 |  |                  |  |               |  |                 |  |
| SJ11-CM17   | 212-0000-0597   |                 |      | Tracy        | 11th Street Adaptive Traffic Signal                    | Install adaptive traffic signal system on 11th St. between Corral Hollow Road to Mac Arthur Dr.   | City of Tracy                       |                     | \$909,000     | 2017            |                  |                 | 2020            |                 |  |                  |  |               |  |                 |  |
| SJ11-CM12   | 212-0000-0542   |                 |      | Tracy        | Eleventh St and MacArthur Dr Geometric Improvements    | Construct westbound left turn lane and eastbound right turn lane and related signal modifications and UPRR railroad grade crossing modifications at the intersection of Eleventh Street and MacArthur Drive             | City of Tracy                       |                     | \$1,875,000   | 2017            |                  |                 | 2020            |                 |  |                  |  |               |  |                 |  |
| SJ07-9001   | 112-0000-0025   |                 |      | Various      | Ridesharing and Vanpool Programs                       | Trip Reduction Coordination, Guaranteed Ride Home, Vanpool Enhancement, Match lists, TDM marketing, etc.  | San Joaquin County                  |                     | \$18,000,000  | various         |                  |                 | 2042            |                 |  |                  |  |               |  |                 |  |
| SJ07-9002   |                 |                 |      | Various      | Park and Ride Lots                                     | Various Locations   | San Joaquin County                  |                     | \$2,000,000   | various         |                  |                 | 2042            |                 |  |                  |  |               |  |                 |  |
| SJ07-9003   |                 |                 |      | Various      | Traffic Flow Improvements and Systems Managements      | Signal System Improvements, Operational and Intersection Improvements to Smooth Traffic Flow, Closed Circuit TV, Freeway Service Patrols  | San Joaquin County                  |                     | \$5,000,000   | various         |                  |                 | 2042            |                 |  |                  |  |               |  |                 |  |

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**FINAL 2015 OZONE CONFORMITY ANALYSIS  
FOR THE 2019 FEDERAL TRANSPORTATION IMPROVEMENT  
PROGRAM AMENDMENT #4 AND THE 2018 REGIONAL  
TRANSPORTATION PLAN AMENDMENT #1**

MARCH, 2019

SAN JOAQUIN COUNCIL OF GOVERNMENTS

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Final 2015 Ozone Conformity Analysis for 2019 FTIP Amendment #4  
and 2018 RTP Amendment #1*

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**APPENDICES**

Appendix A: Conformity Checklist

Appendix B: Transportation Project Listing

Appendix C: Conformity Analysis Documentation

Appendix D: Timely Implementation Documentation for Transportation Control Measures

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## EXECUTIVE SUMMARY

This report presents the Conformity Analysis for the 2019 Federal Transportation Improvement Program Amendment #4 (2019 FTIP Amendment #4) and the 2018 Regional Transportation Plan Amendment #1 (2018 RTP Amendment #1) addressing the 2015 8-Hour Ozone Standards. The San Joaquin Council of Governments (SJCOG) is the designated Metropolitan Planning Organization (MPO) in San Joaquin County, California, and is responsible for regional transportation planning.

On October 26, 2015, EPA published a final rule strengthening the 8-hour primary and secondary ozone standards to 0.070 ppm. Then on June 4, 2018 EPA issued final designations classifying the San Joaquin Valley as “extreme” nonattainment for the 2015 ozone standard with an attainment deadline of 2038. Conformity for a given pollutant and standard applies one year after the effective date or August 3, 2019. It is important to note that the 2015 ozone standard nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 2008 ozone standard.

In accordance with Section 93.109(c)(2) of the conformity rule and the 2015 Ozone Transportation Conformity Guidance, if an ozone nonattainment area has adequate or approved SIP budgets that address 2008 ozone standard, it must use the budget test until new 2015 ozone standard budgets are found adequate or approved. The 2015 Ozone Implementation Rule did not revoke 2008 standard requirements, therefore this conformity analysis addresses both 2015 and 2008 ozone standards.

The 2015 Ozone Conformity Analysis includes new analysis years 2020, 2023, 2026, and 2029 in line with the recently approved 2008 standard ozone budgets developed as part of the *2018 Updates to the California State Implementation Plan* (2018 SIP Update). In addition, this conformity analysis addresses the 2015 ozone standard attainment year 2037.

This analysis demonstrates that the criteria specified in the transportation conformity regulations for a conformity determination are satisfied by the 2019 FTIP Amendment #4 and the 2018 RTP Amendment #1; a finding of conformity is therefore supported. The 2019 FTIP Amendment #4, 2018 RTP Amendment #1, and the 2015 Ozone Conformity Analysis were approved by the SJCOG Policy Board on March 28, 2019. Federal approval is anticipated on or before April 30, 2019. FHWA/FTA last issued a finding of conformity for the 2019 FTIP and the 2018 RTP on December 3, 2018.

The 2019 FTIP Amendment #4 and the 2018 RTP Amendment #1 have been financially constrained in accordance with the requirements of 40 CFR 93.108 and consistent with the U.S. DOT metropolitan planning regulations (23 CFR Part 450). A discussion of financial constraint and funding sources is included in the appropriate documents.

The applicable federal criteria or requirements for conformity determinations, the conformity tests applied, the results of the conformity assessment, and an overview of the organization of this report are summarized below.

## **CONFORMITY REQUIREMENTS**

The federal transportation conformity regulations (40 Code of Federal Regulations Parts 51 and 93) specify criteria and procedures for conformity determinations for transportation plans, programs, and projects and their respective amendments. The Federal transportation conformity regulation was first promulgated in 1993 by the U.S. EPA, following the passage of amendments to the Federal Clean Air Act in 1990. The Federal transportation conformity regulation has been revised several times since its initial release to reflect both EPA rule changes and court opinions. The transportation conformity regulation is summarized in Chapter 1.

The conformity regulation applies nationwide to “all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan” (40 CFR 93.102). Currently, the San Joaquin Valley (or portions thereof) is designated as nonattainment with respect to Federal air quality standards for ozone, and particulate matter under 2.5 microns in diameter (PM<sub>2.5</sub>); and has a maintenance plan for particulate matter under 10 microns in diameter (PM-10). Therefore, transportation plans and programs for the nonattainment areas for the San Joaquin County area must satisfy the requirements of the Federal transportation conformity regulation. Note that the urbanized/metropolitan areas of Kern, Fresno, Stanislaus and San Joaquin Counties have attained the CO standard and maintained attainment for 20 years. In accordance with Section 93.102(b)(4), conformity requirements for the CO standard stop applying 20 years after EPA approves an attainment redesignation request or as of June 1, 2018. Therefore, future conformity analyses for the TIP and RTP no longer include a CO conformity demonstration.

Under the transportation conformity regulation, the principal criteria for a determination of conformity for transportation plans and programs are:

- (1) the TIP and RTP must pass an emissions budget test using a budget that has been found to be adequate by EPA for transportation conformity purposes, or an interim emission test;
- (2) the latest planning assumptions and emission models specified for use in conformity determinations must be employed;
- (3) the TIP and RTP must provide for the timely implementation of transportation control measures (TCMs) specified in the applicable air quality implementation plans; and
- (4) interagency and public consultation.

On-going interagency consultation is conducted through the San Joaquin Valley Interagency Consultation Group to ensure Valley-wide coordination, communication and compliance with Federal and California Clean Air Act requirements. Each of the eight Valley MPOs and the San Joaquin Valley Unified Air Pollution Control District (Air District) are represented. The Federal Highway Administration (FHWA), Federal Transit Administration (FTA), the U.S. EPA, the California Air Resources Board (CARB) and Caltrans are also represented on the committee. The

final determination of conformity for the TIP and RTP is the responsibility of FHWA, and FTA within the U.S. DOT.

FHWA has developed a Conformity Checklist (included in Appendix A) that contains the required items to complete a conformity determination. Appropriate references to these items are noted on the checklist.

## CONFORMITY TESTS

The conformity tests specified in the Federal transportation conformity regulation are: (1) the emissions budget test, and (2) the interim emission test. For the emissions budget test, predicted emissions for the TIP/RTP must be less than or equal to the motor vehicle emissions budget specified in the approved air quality implementation plan or the emissions budget found to be adequate for transportation conformity purposes. If there is no approved air quality plan for a pollutant for which the region is in nonattainment or no emission budget has been found to be adequate for transportation conformity purposes, the interim emission test applies. Chapter 1 summarizes the applicable air quality implementation plans and conformity tests for ozone, PM-10, and PM2.5.

## RESULTS OF THE CONFORMITY ANALYSIS

A regional emissions analysis was conducted for the years 2019, 2020, 2021, 2023, 2026, 2029, 2031, 2037 and 2042 for each applicable pollutant. All analyses were conducted using the latest planning assumptions and emissions models. The major conclusions of SJCOG's 2015 Ozone Conformity Analysis are:

- For 2008 and 2015 8-hour ozone, the total regional on-road vehicle-related emissions (ROG and NO<sub>x</sub>) associated with implementation of the 2019 FTIP Amendment #4 and the 2018 RTP Amendment #1 for all years tested are projected to be less than the approved emissions budgets specified in the *2018 Updates to the California State Implementation Plan* for the San Joaquin Valley (2018 SIP Update). The conformity tests for ozone are therefore satisfied.
- For PM-10, the total regional vehicle-related emissions (PM-10 and NO<sub>x</sub>) associated with implementation of the 2019 FTIP Amendment #4 and the 2018 RTP Amendment #1 for all years tested are either (1) projected to be less than the approved emissions budgets, or (2) less than the emission budgets using the approved PM-10 and NO<sub>x</sub> trading mechanism for transportation conformity purposes from the *2007 PM-10 Maintenance Plan (as revised in 2015)*. The conformity tests for PM-10 are therefore satisfied.
- For the 1997 annual and 24-hour and 2012 annual PM2.5 standards, the total regional on-road vehicle-related emissions associated with implementation of the 2019 FTIP Amendment #4 and the 2018 RTP Amendment #1 for the analysis years are either (1) projected to be less than the approved emission budgets, or (2) less than the emission budgets using the approved PM2.5

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and NO<sub>x</sub> trading mechanism for transportation conformity purposes from the *2008 PM<sub>2.5</sub> Plan (as revised in 2011)*. The conformity tests for PM<sub>2.5</sub> for the 1997 and 2012 standards are therefore satisfied.

- For the 2006 24-hour PM<sub>2.5</sub> standard, the total regional on-road vehicle-related emissions associated with implementation of the 2019 FTIP Amendment #4 and the 2018 RTP Amendment #1 for the analysis years are either (1) projected to be less than the approved emission budgets, or (2) less than the emission budgets using the approved PM<sub>2.5</sub> and NO<sub>x</sub> trading mechanism for transportation conformity purposes from the *2012 PM<sub>2.5</sub> Plan (as revised in 2015)*. The conformity tests for PM<sub>2.5</sub> for the 2006 standard are therefore satisfied.
- The 2019 FTIP Amendment #4 and the 2018 RTP Amendment #1 will not impede and will support timely implementation of the TCMs that have been adopted as part of applicable air quality implementation plans. The current status of TCM implementation is documented in Chapter 4 of this report. Since the local SJV procedures (e.g., Air District Rule 9120 Transportation Conformity) have not been approved by EPA, consultation has been conducted in accordance with Federal requirements.

## **REPORT ORGANIZATION**

The report is organized into six chapters. Chapter 1 provides an overview of the applicable Federal and State conformity regulations and requirements, air quality implementation plans, and conformity test requirements. Chapter 2 contains a discussion of the latest planning assumptions and transportation modeling. Chapter 3 describes the air quality modeling used to estimate emission factors and mobile source emissions. Chapter 4 contains the documentation required under the Federal transportation conformity regulation for transportation control measures. Chapter 5 provides an overview of the interagency requirements and the general approach to compliance used by the San Joaquin Valley MPOs. The results of the conformity analysis for the TIP/RTP are provided in Chapter 6.

Appendix E includes public hearing documentation conducted on the 2019 FTIP Amendment #4, 2018 RTP Amendment #1 and the 2015 Ozone Conformity Analysis on February 14, 2019. Comments received on the conformity analysis and responses made as part of the public involvement process are included in Appendix F.

## **CHAPTER 1: FEDERAL AND STATE REGULATORY REQUIREMENTS**

The criteria for determining conformity of transportation programs and plans under the Federal transportation conformity regulation (40 CFR Parts 51 and 93) and the applicable conformity tests for the San Joaquin Valley nonattainment areas are summarized in this section. The 2015 Ozone Conformity Analysis for and the 2019 FTIP Amendment #4 and 2018 RTP Amendment #1 was prepared based on these criteria and tests. Presented first is a review of the development of the applicable conformity regulation and guidance procedures, followed by summaries of conformity regulation requirements, air quality designation status, conformity test requirements, and analysis years for the Conformity Analysis.

SJCOG is the designated Metropolitan Planning Organization (MPO) for San Joaquin County in the San Joaquin Valley. As a result of this designation, SJCOG prepares the TIP, RTP, and associated conformity analyses. The TIP serves as a detailed four year (FY 2018/19 – 2021/22) programming document for the preservation, expansion, and management of the transportation system. The 2018 RTP has a 2042 horizon that provides the long term direction for the continued implementation of the freeway/expressway plan, as well as improvements to arterial streets, transit, and travel demand management programs. The TIP and RTP include capacity enhancements to the freeway/expressway system commensurate with available funding.

### **A. FEDERAL AND STATE CONFORMITY REGULATIONS**

#### **CLEAN AIR ACT AMENDMENTS**

Section 176(c) of the Clean Air Act (CAA, 1990) requires that Federal agencies and MPOs not approve any transportation plan, program, or project that does not conform to the approved State Implementation Plan (SIP). The 1990 amendments to the Clean Air Act expanded Section 176(c) to more explicitly define conformity to an implementation plan to mean:

“Conformity to the plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and that such activities will not (i) cause or contribute to any new violation of any standard in any area; (ii) increase the frequency or severity of any existing violation of any standard in any area; or (iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.”

Section 176(c) also provides conditions for the approval of transportation plans, programs, and projects, and requirements that the Environmental Protection Agency (EPA) promulgate conformity determination criteria and procedures no later than November 15, 1991.

## **FEDERAL RULE**

The initial November 15, 1991 deadline for conformity criteria and procedures was partially completed through the issuance of supplemental interim conformity guidance issued on June 7, 1991 for carbon monoxide, ozone, and particulate matter ten microns or less in diameter (PM-10). EPA subsequently promulgated the Conformity Final Rule in the November 24, 1993 *Federal Register* (EPA, 1993). The 1993 Rule became effective on December 27, 1993. The Federal Transportation Conformity Final Rule has been amended several times from 1993 to present. These amendments have addressed a number of items related to conformity lapses, grace periods, and other related issues to streamline the conformity process.

EPA published the Transportation Conformity Rule PM2.5 and PM10 Amendments on March 24, 2010; the rule became effective on April 23, 2010 (EPA, 2010a). This PM amendments final rule amends the conformity regulation to address the 2006 PM2.5 national ambient air quality standard (NAAQS). The final PM amendments rule also addresses hot-spot analyses in PM2.5 and PM10 and carbon monoxide nonattainment and maintenance areas.

On March 14, 2012, EPA published the *Transportation Conformity Rule Restructuring Amendments*, effective April 13, 2012 (EPA, 2012a). The amendments restructure several sections of the rule so that they apply to any new or revised NAAQS. In addition, several clarifications to improve implementation of the rule were finalized.

On March 6, 2015, EPA published *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements* final rule (effective April 6, 2015), which shifted the San Joaquin Valley 2008 Ozone Standard attainment date from December 31, 2032 to July 20, 2032 (EPA, 2015). EPA's March 2015 ozone implementation rule also revoked the 1997 Ozone Standard for transportation conformity purposes. On February 16, 2018, the U.S. Court of Appeals ruled against parts of the EPA's 2015 Ozone Implementation Rule related to the revocation of the 1997 ozone standard and the relevant "anti-backsliding" requirements. However, according to *Transportation Conformity Guidance for the South Coast II Court Decision*, nonattainment areas with existing 2008 ozone conformity budgets are not required to address the 1997 ozone standards for conformity purposes.

On December 6, 2018, EPA published the *Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area State Implementation Plan Requirements* final rule, effective February 4, 2019 (EPA, 2018). The rule clarified that nonattainment areas must continue to demonstrate conformity to the 2008 ozone standards.

On August 24, 2016, EPA published its Final Rule titled *Implementing National Ambient Air Quality Standards for Fine Particles: State Implementation Plan Requirements*. According to the implementation rule, areas designated as nonattainment for the 1997 PM2.5 standards, must continue to demonstrate conformity to these standards until attainment (EPA, 2016).

## **MULTI-JURISDICTIONAL GUIDANCE**

EPA reissued Guidance for Transportation Conformity Implementation in Multi-Jurisdictional Nonattainment and Maintenance Areas in July 2012 (EPA, 2012c). This guidance updates and supersedes the July 2004 “multi-jurisdictional” guidance (EPA, 2004a), but does not change the substance of the guidance on how nonattainment areas with multiple agencies should conduct conformity determinations. This guidance applies to the San Joaquin Valley since there are multiple MPOs within a single nonattainment area. The main principle of the guidance is that one regional emissions analysis is required for the entire nonattainment area. However, separate modeling and conformity documents may be developed by each MPO. The Transportation Conformity Guidance for 2015 Ozone NAAQS Nonattainment Areas released in June, 2018 incorporates the 2012 Multi-Jurisdictional Guidance by reference.

Part 3 of the guidance applies to nonattainment areas that have adequate or approved conformity budgets addressing a particular air quality standard. This Part currently applies to the San Joaquin Valley for ozone and PM-10. The guidance allows MPOs to make independent conformity determinations for their plans and TIPs as long as all of the other subareas in the nonattainment area have conforming transportation plans and TIPs in place at the time of each MPO and the Department of Transportation (DOT) conformity determination.

With respect to PM2.5, the Transportation Conformity Rule PM2.5 and PM10 Amendments published on March 24, 2010 effectively incorporates the “multi-jurisdictional” guidance directly into the rule. The Rule allows MPOs to make independent conformity determinations for their plans and TIPs as long as all of the other subareas in the nonattainment area have conforming transportation plans and TIPs in place at the time of each MPO and DOT conformity determination.

## **DISTRICT RULE**

The San Joaquin Valley Unified Air Pollution Control District (Air District) adopted Rule 9120 Transportation Conformity on January 19, 1995 in response to requirements in Section 176(c)(4)(c) of the 1990 Clean Air Act Amendments. In May 2015, the San Joaquin Valley Unified Air Pollution Control District requested ARB to withdraw Rule 9120 from California State Implementation Plan consideration.

In July of 2015, ARB sent a letter to EPA withdrawing Rule 9120 from the California State Implementation Plan. Therefore EPA can no longer act on the Rule. It should also be noted that EPA has changed 40 CFR 51.390 to streamline the requirements for State conformity SIPs. Since a transportation conformity SIP cannot be approved for the San Joaquin Valley, the Federal transportation conformity rule governs.

## **B. CONFORMITY REGULATION REQUIREMENTS**

The Federal regulations identify general criteria and procedures that apply to all transportation conformity determinations, regardless of pollutant and implementation plan status. These include:

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- 1) *Conformity Tests* — Sections 93.118 and 93.119 specify emissions tests (budget and interim emissions) that the TIP/RTP must satisfy in order for a determination of conformity to be found. The final transportation conformity regulation issued on July 1, 2004 requires a submitted SIP motor vehicle emissions budget to be found adequate or approved by EPA prior to use for making conformity determinations. The budget must be used on or after the effective date of EPA’s adequacy finding or approval.
- 2) *Methods / Modeling:*

*Latest Planning Assumptions* — Section 93.110 specifies that conformity determinations must be based upon the most recent planning assumptions in force at the time the conformity analysis begins. This is defined as “the point at which the MPO begins to model the impact of the proposed transportation plan or TIP on travel and/or emissions. New data that becomes available after an analysis begins is required to be used in the conformity determination only if a significant delay in the analysis has occurred, as determined through interagency consultation” (EPA, 2010b). All analyses for the Conformity Analysis were conducted using the latest planning assumptions and emissions models in force at the time the conformity analysis started in November 2018 (see Chapter 2).

*Latest Emissions Models* — Section 93.111 requires that the latest emission estimation models specified for use in SIPs must be used for the conformity analysis. Since EPA has not yet approved EMFAC2017 for conformity use, EMFAC2014 was used in the 2015 Ozone Conformity Analysis as documented in Chapter 3. EPA issued a federal register notice on December 14, 2015 formally approving EMFAC2014 for use in conformity determinations.
- 3) *Timely Implementation of TCMs* — Section 93.113 provides a detailed description of the steps necessary to demonstrate that the TIP/RTP are providing for the timely implementation of TCMs, as well as demonstrate that the plan and/or program is not interfering with this implementation. TCM documentation is included in Chapter 4 of the Conformity Analysis.
- 4) *Consultation* — Section 93.105 requires that the conformity determination be made in accordance with the consultation procedures outlined in the Federal regulations. These include:
  - MPOs are required to provide reasonable opportunity for consultation with State air agencies, local air quality and transportation agencies, the USDOT and EPA (Section 93.105(a)(1)).
  - MPOs are required to establish a proactive public involvement process, which provides opportunity for public review and comment prior to taking formal action on a conformity determination (Section 93.105(e)).

The TIP, RTP, and corresponding conformity determinations are prepared by each MPO. Copies of the Draft documents are provided to member agencies and others, including FHWA, Federal Transit Administration (FTA), EPA, Caltrans, CARB, and the Air District for review. The conformity analysis is required to be publicly available and an opportunity for public review and comment is provided. SJCOG adopted consultation process and policy for conformity analysis includes a 30-day comment period followed by a public meeting.

### **C. AIR QUALITY DESIGNATIONS APPLICABLE TO THE SAN JOAQUIN VALLEY**

The conformity regulation (section 93.102) requires documentation of the applicable pollutants and precursors for which EPA has designated the area nonattainment or maintenance. In addition, the nonattainment or maintenance area and its boundaries should be described.

SJCOG is located in the federally designated San Joaquin Valley Air Basin. The borders of the basin are defined by mountain and foothill ranges to the east and west. The northern border is consistent with the county line between San Joaquin and Sacramento Counties. The southern border is less defined, but is roughly bounded by the Tehachapi Mountains and, to some extent, the Sierra Nevada range. The 2015 ozone conformity analysis for the 2019 FTIP Amendment #4 and 2018 RTP Amendment #1 includes analyses of existing and future air quality impacts for each applicable pollutant.

The San Joaquin Valley is currently designated as nonattainment for the National Ambient Air Quality Standard (NAAQS) for 8-hour ozone (revoked 1997, 2008 and 2015 standards), particulate matter under 2.5 microns in diameter (PM<sub>2.5</sub>) (1997, 2006 and 2012 standards); and has a maintenance plan for particulate matter under 10 microns in diameter (PM-10). Note that the urbanized/metropolitan areas of Kern, Fresno, Stanislaus and San Joaquin Counties have attained the CO standard and maintained attainment for 20 years. In accordance with Section 93.102(b)(4), conformity requirements for the CO standard stop applying 20 years after EPA approves an attainment redesignation request or as of June 1, 2018. Therefore, future conformity analyses no longer include a CO conformity demonstration.

State Implementation Plans have been prepared to address ozone, PM-10 and PM<sub>2.5</sub>:

- The 2016 Ozone Plan (2008 standard) was adopted by the Air District on June 16, 2016 and subsequently adopted by ARB on July 21, 2016. EPA found the new ozone budgets adequate on June 29, 2017 (effective July 14, 2017). In response to recent court decisions regarding the baseline RFP year, ARB adopted the revised 2008 ozone conformity budgets as part of the *2018 Updates to the California State Implementation Plan* (2018 SIP Update) on October 25, 2018. EPA found the budgets adequate on March 25, 2019.
- The 2007 PM-10 Maintenance Plan (as revised in 2015) was approved by EPA on July 8, 2016 (effective September 30, 2016).
- The 2008 PM<sub>2.5</sub> Plan (1997 Standard), as revised in 2011, was approved by EPA on November 9, 2011 (effective January 9, 2012).
- The 2012 PM<sub>2.5</sub> Plan (as revised in 2015) was approved by EPA on August 16, 2016 (effective September 30, 2016).

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EPA's March 2015 final rule implementing the 2008 Ozone Standard also revoked the 1997 Ozone Standard for transportation conformity purposes. This revocation became effective April 6, 2015. On February 16, 2018, the U.S. Court of Appeals ruled against parts of the EPA's 2015 Ozone Implementation Rule related to the revocation of the 1997 ozone standard and the relevant "anti-backsliding" requirements. However, according to the *Transportation Conformity Guidance for the South Coast II Court Decision*, nonattainment areas with existing 2008 ozone conformity budgets are not required to address the 1997 ozone standards for conformity purposes.

EPA designated the San Joaquin Valley nonattainment area for the 2008 Ozone Standard, effective July 20, 2012. Transportation conformity applies one year after the effective date (July 20, 2013). Federal approval for the eight SJV MPO's 2008 Ozone standard conformity demonstrations was received on July 8, 2013.

On June 4, 2018 EPA published final designations classifying the San Joaquin Valley as "extreme" nonattainment for 2015 ozone with an attainment deadline of 2038, effective August 3, 2018. Transportation conformity applies one year after the effective date or August 3, 2019. It is important to note that the 2015 ozone standard nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 2008 ozone standard.

On November 13, 2009, EPA published Air Quality Designations for the 2006 24-hour PM<sub>2.5</sub> standard, effective December 14, 2009. Nonattainment areas are required to meet the standard by 2014; transportation conformity began to apply on December 14, 2010. On January 20, 2016 EPA published *Designation of Areas for Air Quality Planning Purposes; California; San Joaquin Valley; Reclassification as Serious Nonattainment for the 2006 PM<sub>2.5</sub> NAAQS* finalizing SJV reclassification to Serious nonattainment effective February 19, 2016. Nonattainment areas are required to meet the standard as expeditiously as practicable, but no later than December 31, 2019. It is important to note that the 2006 24-hour PM<sub>2.5</sub> nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 1997 annual PM<sub>2.5</sub> standard.

EPA's nonattainment area designations for the new 2012 PM<sub>2.5</sub> standards became effective on April 15, 2015. Conformity for a given pollutant and standard applies one year after the effective date (April 15, 2016). It is important to note that the 2012 PM<sub>2.5</sub> standards nonattainment area boundary for the San Joaquin Valley are exactly the same as the nonattainment area boundary for the 1997 annual PM<sub>2.5</sub> standard.

On July 29, 2016, EPA released its *Final Rule for Implementing National Ambient Air Quality Standards for Fine Particles*. According to the implementation rule, areas designated as nonattainment for the 1997 PM 2.5 standards, must continue to demonstrate conformity to these standards until attainment. In the San Joaquin Valley, the 1997 standards (both 24-hour and annual) continue to apply.

#### **D. CONFORMITY TEST REQUIREMENTS**

The conformity (Section 93.109(c)-(k)) rule requires that either a table or text description be provided that details, for each pollutant and precursor, whether the interim emissions tests and/or

the budget test apply for conformity. In addition, documentation regarding which emissions budgets have been found adequate by EPA, and which budgets are currently applicable for what analysis years is required.

Specific conformity test requirements established for the San Joaquin Valley nonattainment areas for ozone, and particulate matter are summarized below.

Section 93.124(d) of the 1997 Final Transportation Conformity regulation allows for conformity determinations for sub-regional emission budgets by MPOs if the applicable implementation plans (or implementation plan submission) explicitly indicates an intent to create such sub-regional budgets for the purpose of conformity. In addition, Section 93.124(e) of the 1997 rules states: "...if a nonattainment area includes more than one MPO, the implementation plan may establish motor vehicle emission budgets for each MPO, or else the MPOs must collectively make a conformity determination for the entire nonattainment area." Each applicable implementation plan and estimate of baseline emissions in the San Joaquin Valley provides motor vehicle emission budgets by county, to facilitate county-level conformity findings.

#### **OZONE (2008 AND 2015 STANDARDS)**

The San Joaquin Valley currently violates both the 2008 and 2015 ozone standards; thus the conformity determination includes all corresponding analyses (see discussion under Air Quality Designations Applicable to the San Joaquin Valley above). Under the existing conformity regulations, regional emissions analyses for ozone areas must address nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) precursors. It is important to note that in California, reactive organic gases (ROG) are considered equivalent to and are used in place of volatile organic compounds (VOC).

EPA's final rule implementing the 2008 ozone standard also revoked the 1997 ozone standard for transportation conformity purposes. This revocation became effective April 6, 2015. Current federal guidance does not require 2008 ozone nonattainment areas to address the 1997 ozone standard for conformity purposes.

On March 25, 2019, EPA published a final rule finding the 2008 ozone conformity budgets adequate as contained in the *2018 Updates to the California State Implementation Plan*. The EPA final rule identified both reactive organic gases (ROG) and nitrogen oxides (NO<sub>x</sub>) subarea budgets in tons per average summer day for each MPO in the nonattainment area.

In accordance with Section 93.109(c)(2) of the conformity rule and the 2015 Ozone Transportation Conformity Guidance, if a 2015 ozone nonattainment area has adequate or approved SIP budgets that address the 2008 ozone standard, it must use the budget test until new 2015 ozone standard budgets are found adequate or approved. It is important to note that the boundaries for the 2015 ozone standard and 2008 ozone standard are identical. In addition, The 2015 Ozone Implementation Rule did not revoke 2008 standard requirements. Consequently, for this conformity analysis, the SJV MPOs will conduct demonstrations for both 2008 and 2015 ozone standards using

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subarea emissions budgets as established in the 2018 Updates to the California State Implementation Plan.

The conformity budgets from Table 1 of the March 25, 2019 Federal Register are provided in Table 1-1 below. These budgets will be used to compare to emissions resulting from the 2019 FTIP Amendment #4 and the 2018 RTP Amendment #1.

**Table 1-1:  
 On-Road Motor Vehicle 2008 and 2015 Ozone Standard Emissions Budgets**  
 (summer tons/day)

| County      | 2020 |      | 2023 |      | 2026 |      | 2029 |      | 2031 |      |
|-------------|------|------|------|------|------|------|------|------|------|------|
|             | ROG  | NOx  |
| Fresno      | 6.7  | 23.9 | 5.5  | 14.1 | 4.9  | 13.2 | 4.5  | 12.4 | 4.2  | 12.1 |
| Kern (SJV)  | 5.4  | 20.9 | 4.5  | 14.5 | 4.2  | 14.4 | 4.0  | 14.3 | 3.9  | 14.3 |
| Kings       | 1.2  | 4.5  | 1.0  | 2.7  | 0.9  | 2.6  | 0.8  | 2.6  | 0.8  | 2.6  |
| Madera      | 1.5  | 4.3  | 1.1  | 2.7  | 1.0  | 2.5  | 0.9  | 2.4  | 0.8  | 2.3  |
| Merced      | 2.2  | 8.8  | 1.7  | 6.0  | 1.5  | 5.9  | 1.3  | 5.6  | 1.2  | 5.4  |
| San Joaquin | 4.7  | 11.2 | 3.9  | 7.4  | 3.5  | 7.0  | 3.1  | 6.6  | 2.8  | 6.3  |
| Stanislaus  | 3.1  | 8.8  | 2.6  | 5.6  | 2.2  | 4.9  | 2.0  | 4.5  | 1.8  | 4.3  |
| Tulare      | 3.0  | 7.6  | 2.4  | 4.6  | 2.1  | 4.0  | 1.8  | 3.7  | 1.7  | 3.5  |

<sup>(4)</sup>Note that 2008 ozone budgets were established by rounding up each county's emissions totals to the nearest tenth of a ton.

### PM-10

The 2007 PM-10 Maintenance Plan (as revised in 2015) was approved by EPA on July 8, 2016 (effective September 30, 2016), which contains motor vehicle emission budgets for PM-10 and NOx, as well as a trading mechanism. Motor vehicle emission budgets are established based on average annual daily emissions. The motor vehicle emissions budget for PM-10 includes regional re-entrained dust from travel on paved roads, vehicular exhaust, travel on unpaved roads, and road construction. The conformity budgets from Table 2 of the August 12, 2016 Federal Register are provided below and will be used to compare emissions for each analysis year.

The PM-10 SIP allows trading from the motor vehicle emissions budget for the PM-10 precursor NOx to the motor vehicle emissions budget for primary PM-10 using a 1.5 to 1 ratio. The trading mechanism allows the agencies responsible for demonstrating transportation conformity in the San Joaquin Valley to supplement the 2005 budget for PM-10 with a portion of the 2005 budget for NOx, and use these adjusted motor vehicle emissions budgets for PM-10 and NOx to demonstrate transportation conformity with the PM-10 SIP for analysis years after 2005. As noted above, EPA approved the 2007 PM-10 Maintenance Plan (with minor technical corrections to the conformity budgets) on July 8, 2016, which includes continued approval of the trading mechanism.

The trading mechanism will be used only for conformity analyses for analysis years after 2005. To ensure that the trading mechanism does not impact the ability to meet the NOx budget, the NOx emission reductions available to supplement the PM-10 budget shall only be those remaining after the NOx budget has been met.

**Table 1-2:**  
**On-Road Motor Vehicle PM-10 Emissions Budgets**  
 (tons per average annual day)

| County              | 2020 <sup>(b)</sup> |      |
|---------------------|---------------------|------|
|                     | PM-10               | NOx  |
| Fresno              | 7.0                 | 25.4 |
| Kern <sup>(a)</sup> | 7.4                 | 23.3 |
| Kings               | 1.8                 | 4.8  |
| Madera              | 2.5                 | 4.7  |
| Merced              | 3.8                 | 8.9  |
| San Joaquin         | 4.6                 | 11.9 |
| Stanislaus          | 3.7                 | 9.6  |
| Tulare              | 3.4                 | 8.4  |

<sup>(a)</sup>Kern County subarea includes only the portion of Kern County within the San Joaquin Valley Air Basin.

<sup>(b)</sup>Note that EPA did not take action on the 2005 budgets of the 2007 PM10 Maintenance Plan (as revised in 2015). These budgets are not in the timeframe of this conformity analysis.

## PM2.5

EPA and FHWA have indicated that areas violating both the annual and 24-hour standards for PM2.5 must address all standards in the conformity determination. The San Joaquin Valley currently violates both the 1997 annual and 24-hour and 2012 annual PM2.5 standards and the 2006 24-hour PM2.5 standards; thus the conformity determination includes all corresponding analyses (see discussion under Air Quality Designations Applicable to the San Joaquin Valley above).

The 2018 PM2.5 Plan addressing 1997, 2006 and 2012 PM2.5 standards is anticipated to be submitted to EPA in the winter of 2019. Since no new PM2.5 budgets are available at this time, existing budgets in the approved PM2.5 plans will continue to be used as described below.

### *1997 (24-hour and annual) and 2012 (annual) PM2.5 Standards*

The 2008 PM2.5 Plan for the 1997 PM2.5 standard (as revised in 2011) was approved by EPA on November 9, 2011, which contains motor vehicle emission budgets for PM2.5 and NOx established based on average annual daily emissions, as well as a trading mechanism. The motor vehicle emissions budget for PM2.5 includes directly emitted PM2.5 motor vehicle emissions from tailpipe,

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brake wear and tire wear. VOC, SO<sub>x</sub>, ammonia, and dust (from paved roads, unpaved roads, and road construction) were found to be insignificant and not included in the motor vehicle emission budgets for conformity purposes. The conformity budgets from Table 5 of the November 9, 2011 Federal Register are provided in Table 1-3 below and will be used to compare emissions resulting from the 2019 FTIP Amendment #4 and the 2018 RTP Amendment #1.

In accordance with Section 93.109(i)(3) of the conformity rule, if a 2012 PM<sub>2.5</sub> nonattainment area has adequate or approved SIP budgets that address the annual 1997 PM<sub>2.5</sub> standards, it must use the budget test until new 2012 PM<sub>2.5</sub> standard budgets are found adequate or approved. The attainment year of 2021 will be modeled. For this Conformity Analysis, the SJV will conduct determinations for subarea emission budgets as established in the 2008 PM<sub>2.5</sub> (1997 Standard) Plan.

In addition, the final PM<sub>2.5</sub> Implementation Rule requires areas designated as nonattainment for the 1997 PM<sub>2.5</sub> standards to continue demonstrate conformity to these standards until attainment. In the San Joaquin Valley, the 1997 standards (both 24-hour and annual) continue to apply.

**Table 1-3:  
On-Road Motor Vehicle 1997 (24-hour and annual) and  
2012 (annual) PM<sub>2.5</sub> Standard Emissions Budgets**  
(tons per average annual day)

| County      | 2012 <sup>(a)</sup> |                 | 2014              |                 |
|-------------|---------------------|-----------------|-------------------|-----------------|
|             | PM <sub>2.5</sub>   | NO <sub>x</sub> | PM <sub>2.5</sub> | NO <sub>x</sub> |
| Fresno      | 1.5                 | 35.7            | 1.1               | 31.4            |
| Kern (SJV)  | 1.9                 | 48.9            | 1.2               | 43.8            |
| Kings       | 0.4                 | 10.5            | 0.3               | 9.3             |
| Madera      | 0.4                 | 9.2             | 0.3               | 8.1             |
| Merced      | 0.8                 | 19.7            | 0.6               | 17.4            |
| San Joaquin | 1.1                 | 24.5            | 0.9               | 21.6            |
| Stanislaus  | 0.7                 | 16.7            | 0.6               | 14.6            |
| Tulare      | 0.7                 | 15.7            | 0.5               | 13.8            |

<sup>(a)</sup> 2012 budgets are not in the timeframe of this conformity analysis.

The 2008 PM<sub>2.5</sub> SIP includes a trading mechanism that allows trading from the motor vehicle emissions budget for the PM-2.5 precursor NO<sub>x</sub> to the motor vehicle emissions budget for primary PM-2.5 using a 9 to 1 ratio. The trading mechanism allows the agencies responsible for demonstrating transportation conformity in the San Joaquin Valley to supplement the applicable budget for PM-2.5 with a portion of the applicable corresponding budget for NO<sub>x</sub>, and use these adjusted motor vehicle emissions budgets for PM-2.5 and NO<sub>x</sub> to demonstrate transportation conformity with the PM-2.5 SIP for analysis years after 2014. As noted above, EPA approved the 2008 PM<sub>2.5</sub> Plan (as revised in 2011) on November 9, 2011, which includes approval of the trading mechanism.

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The trading mechanism will be used only for conformity analyses for analysis years after 2014. To ensure that the trading mechanism does not impact the ability to meet the NOx budget, the NOx emission reductions available to supplement the PM-2.5 budget shall only be those remaining after the NOx budget has been met.

As noted above, in accordance with the EPA Transportation Conformity Rule Restructuring Amendments Nonattainment areas allows 2012 PM2.5 areas with adequate or approved 1997 PM2.5 budgets to determine conformity for both NAAQS at the same time, using the budget test.

*2006 24-Hour PM2.5 Standard*

The 2012 (2006 Standard) PM2.5 Plan was first approved by ARB on January 24, 2013 and the Plan Supplement requesting reclassification to Serious and including revised budgets was approved by ARB on October 24, 2014. EPA proposed approval of the plan on January 13, 2015.

On January 20, 2016, EPA finalized reclassification of the San Joaquin Valley to Serious nonattainment for the 2006 24-hour PM2.5 Standard. On May 18, 2016 EPA published proposed approval of the revised 2012 Plan PM2.5 budgets. Then on August 16, 2016, the 2012 PM2.5 Plan was approved by EPA including the revised conformity budgets and a trading mechanism (effective September 30, 2016).

The 2012 PM2.5 Plan for the 2006 PM2.5 standard (as revised in 2015) contains motor vehicle emission budgets for PM2.5 and NOx established based on average winter daily emissions, as well as a trading mechanism. The motor vehicle emissions budget for PM2.5 includes directly emitted PM2.5 motor vehicle emissions from tailpipe, brake wear and tire wear. VOC, SOx, ammonia, and dust (from paved roads, unpaved roads, and road construction) were found to be insignificant and not included in the motor vehicle emission budgets for conformity purposes. The conformity budgets from the 2012 PM2.5 Plan (as revised in 2015) are provided in Table 1-4 below and will be used to compare emissions resulting from the 2019 FTIP Amendment #4 and the 2018 RTP Amendment #1.

**Table 1-4:**  
**On-Road Motor Vehicle 2006 24-Hour PM<sub>2.5</sub> Standard Emissions Budgets**  
 (tons per average winter day)

| County      | 2017              |                 |
|-------------|-------------------|-----------------|
|             | PM <sub>2.5</sub> | NO <sub>x</sub> |
| Fresno      | 1.0               | 32.1            |
| Kern (SJV)  | 0.8               | 28.8            |
| Kings       | 0.2               | 5.9             |
| Madera      | 0.2               | 6.0             |
| Merced      | 0.3               | 11.0            |
| San Joaquin | 0.6               | 15.5            |
| Stanislaus  | 0.4               | 12.3            |
| Tulare      | 0.4               | 11.2            |

<sup>(a)</sup> Note that EPA did not take action on the 2014 budgets of the 2012 PM<sub>2.5</sub> Plan (as revised in 2015). These budgets are not in the timeframe of this conformity analysis.

The 2012 PM<sub>2.5</sub> SIP includes a trading mechanism that allows trading from the motor vehicle emissions budget for the PM<sub>2.5</sub> precursor NO<sub>x</sub> to the motor vehicle emissions budget for primary PM-2.5 using an 8 to 1 ratio. The trading mechanism allows the agencies responsible for demonstrating transportation conformity in the San Joaquin Valley to supplement the applicable budget for PM-2.5 with a portion of the applicable corresponding budget for NO<sub>x</sub>, and use these adjusted motor vehicle emissions budgets for PM<sub>2.5</sub> and NO<sub>x</sub> to demonstrate transportation conformity with the PM<sub>2.5</sub> SIP for analysis years after 2014. As noted above, EPA approved the 2012 PM<sub>2.5</sub> Plan budgets (as revised in 2015) on August 16, 2016 (effective September 30, 2016) and the trading mechanism.

## E. ANALYSIS YEARS

The conformity regulation (Section 93.118[b] and [d]) requires documentation of the years for which consistency with motor vehicle emission budgets must be shown. In addition, any interpolation performed to meet tests for years in which specific analysis is not required need to be documented.

For the selection of the horizon years, the conformity regulation requires: (1) that if the attainment year is in the time span of the transportation plan, it must be modeled; (2) the last year forecast in the transportation plan must be a horizon year; and (3) horizon years may not be more than ten years apart. In addition, the conformity regulation requires that conformity must be demonstrated for each year for which the applicable implementation plan specifically establishes motor vehicle emission budgets.

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Section 93.118(b)(2) clarifies that when a maintenance plan has been submitted, conformity must be demonstrated for the last year of the maintenance plan and any other years for which the maintenance plan establishes budgets in the time frame of the transportation plan. Section 93.118(d)(2) indicates that a regional emissions analysis may be performed for any years, the attainment year, and the last year of the plan’s forecast. Other years may be determined by interpolating between the years for which the regional emissions analysis is performed.

Section 93.118(d)(2) indicates that the regional emissions analysis may be performed for any years in the time frame of the transportation plan provided they are not more than ten years apart and provided the analysis is performed for the attainment year (if it is in the time frame of the transportation plan) and the last year of the plan’s forecast period. Emissions in years for which consistency with motor vehicle emissions budgets must be demonstrated, as required in paragraph (b) of this section (i.e., each budget year), may be determined by interpolating between the years for which the regional emissions analysis is performed. Table 1-5 below provides a summary of conformity analysis years that apply to this conformity analysis.

**Table 1-5:  
San Joaquin Valley Conformity Analysis Years**

| <b>Pollutant</b>       | <b>Budget Years<sup>1</sup></b>   | <b>Attainment/<br/>Maintenance<br/>Year</b> | <b>Intermediate<br/>Years</b> | <b>RTP<br/>Horizon<br/>Year</b> |
|------------------------|-----------------------------------|---|-------------------------------|---------------------------------|
| 2008 and 2015<br>Ozone | 2011/2017/2020/2023/2026<br>/2029 | 2031/2037 <sup>2</sup>                      | NA                            | 2042                            |
| PM-10                  | NA                                | 2020  | 2029/2037                     | 2042                            |
| 1997 and 2012<br>PM2.5 | NA                                | 2014/2021 <sup>3</sup>                      | 2029/2037                     | 2042                            |
| 2006 24-hour<br>PM2.5  | 2014/2017                         | 2019 <sup>4</sup>                           | 2029/2037                     | 2042                            |

<sup>1</sup>Budget years that are not in the time frame of the transportation plan/conformity analysis are not included as analysis years (e.g., 2011, 2014, 2017), although they may be used to demonstrate conformity.

<sup>2</sup>2031 is the attainment year for the 2008 ozone standard. 2037 is the attainment year for the 2015 ozone standard.

<sup>3</sup> 2014 is the attainment year for the 1997 PM2.5 standards. 2021 is the attainment year for the 2012 PM2.5 standards.

<sup>4</sup>The 2006 PM2.5 standard must be met as expeditiously as practicable, but no later than December 31, 2019.

For the 2008 ozone standard, the San Joaquin Valley has been classified as an extreme nonattainment area with an attainment date of July 20, 2032. In accordance with the March 2015 *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements* final rule, the attainment year of 2031 must be modeled. When using the budget test, the attainment year of the 2008 ozone standard must be analyzed (i.e. 2031).

For the 2015 ozone standard, the San Joaquin Valley has been classified as an extreme nonattainment area with an attainment date of August 3, 2038. In accordance with the December 2018 final rule, *Implementation of the 2015 National Ambient Air Quality Standards for Ozone:*

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*Nonattainment Area State Implementation Plan Requirements*, the attainment year of 2037 must be modeled. When using the budget test, the attainment year of the 2015 ozone standard must be analyzed (i.e. 2037).

The Clean Air Act requires all states to attain the 1997 PM<sub>2.5</sub> standards as expeditiously as practicable beginning in 2010, but by no later than April 5, 2010 unless EPA approves an attainment date extension. States must identify their attainment dates based on the rate of reductions from their control strategies and the severity of the PM<sub>2.5</sub> problem. On February 9, 2016 EPA released its proposed *Approval and Disapproval of California Air Plan; San Joaquin Valley Serious Area Plan and Attainment Date Extension for the 1997 PM<sub>2.5</sub> NAAQS*. No final EPA action has been taken on the plan. As a result, the proposed SIP budgets are assumed to be unavailable for use and the 2008 PM<sub>2.5</sub> Plan conformity budgets are the only budgets applicable at this time for the 1997 PM<sub>2.5</sub> standard.

On January 20, 2016, EPA finalized reclassification of the San Joaquin Valley to Serious nonattainment for the 2006 24-hour PM<sub>2.5</sub> Standard. On May 18, 2016 EPA published proposed approval of the revised 2012 Plan PM<sub>2.5</sub> budgets. Then on August 16, 2016, the 2012 PM<sub>2.5</sub> Plan was approved by EPA, effective September 30, 2016, inclusive of the revised conformity budgets and trading mechanism for the 2006 24-hour PM<sub>2.5</sub> standard. The attainment year of 2019 must be modeled.

On April 15, 2015, EPA classified the San Joaquin Valley as Moderate nonattainment for the 2012 PM<sub>2.5</sub> Standards. In accordance with Section 93.109(i)(3) of the conformity rule, if a 2012 PM<sub>2.5</sub> nonattainment area has adequate or approved SIP budgets that address the annual 1997 PM<sub>2.5</sub> standards, it must use the budget test until new 2012 PM<sub>2.5</sub> standard budgets are found adequate or approved. When using the budget test, the attainment year must be analyzed (e.g. 2021). In addition, in areas that have approved or adequate budgets for the 1997 annual PM<sub>2.5</sub> standards, consistency with those budgets must also be determined. The attainment year of 2021 must be modeled.

## **CHAPTER 2: LATEST PLANNING ASSUMPTIONS AND TRANSPORTATION MODELING**

The Clean Air Act states that “the determination of conformity shall be based on the most recent estimates of emissions, and such estimates shall be determined from the most recent population, employment, travel, and congestion estimates as determined by the MPO or other agency authorized to make such estimates.” On January 18, 2001, the USDOT issued guidance developed jointly with EPA to provide additional clarification concerning the use of latest planning assumptions in conformity determinations (USDOT, 2001).

According to the conformity regulation, the time the conformity analysis begins is “the point at which the MPO or other designated agency begins to model the impact of the proposed transportation plan or TIP on travel and/or emissions.” The conformity analysis and initial modeling began in November 2018.

Key elements of the latest planning assumption guidance include:

- Areas are strongly encouraged to review and strive towards regular five-year updates of planning assumptions, especially population, employment and vehicle registration assumptions.
- The latest planning assumptions must be derived from the population, employment, travel and congestion estimates that have been most recently developed by the MPO (or other agency authorized to make such estimates) and approved by the MPO.
- Conformity determinations that are based on information that is older than five years should include written justification for not using more recent information. For areas where updates are appropriate, the conformity determination should include an anticipated schedule for updating assumptions.
- The conformity determination must use the latest existing information regarding the effectiveness of the transportation control measures (TCMs) and other implementation plan measures that have already been implemented.

SJCOG uses the TP+/ CUBE transportation model. The model was validated in 2018 for the 2015 base year. The latest planning assumptions used in the transportation model validation and Conformity Analysis is summarized in Table 2-1.

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**Table 2-1:  
Summary of Latest Planning Assumptions for the SJCOG Conformity Analysis**

| <b>Assumption</b>       | <b>Year and Source of Data (MPO action)</b>   | <b>Modeling</b>   | <b>Next Scheduled Update</b>  |
|-------------------------|---|---|---|
| Population              | Base Year: 2015<br><br>Projections: The SJCOG policy board accepted population projections from University of Pacific – Research Center for Business and Policy, 2016.  | This data is disaggregated to the TAZ level for input into TP+/CUBE for the base year validation.   | New data from the University of Pacific – Research Center for Business and Policy is expected to be adopted by SJCOG in 2022.                 |
| Employment              | Base Year: 2015<br><br>Projections: SJCOG does not develop or adopt employment projections. However, employment data is based on projections from University of Pacific – Research Center for Business and Policy, 2016.  | This data is disaggregated to the TAZ level for input into TP+/CUBE for the base year validation.   | New data from the University of Pacific – Research Center for Business and Policy is expected to be adopted by SJCOG in 2022.                 |
| Traffic Counts          | The transportation model was validated in 2017 to the 2015 base year using daily and peak hour traffic counts.  | TP+/CUBE was validated using these traffic counts.  | Traffic counts are updated every five years, if funds are available.  |
| Vehicle Miles of Travel | The SJCOG policy Board accepted the 2017 transportation model validation for the 2015 base year in March 2018.  | TP+/CUBE is the transportation model used to estimate VMT in San Joaquin County.  | VMT is an output of the transportation model. VMT is affected by the TIP/RTP project updates and is included in each new conformity analysis. |
| Speeds                  | The 2017 transportation model validation was based on survey data on peak and off-peak highway speeds collected in 2017 year.<br><br>Speed distributions were updated in EMFAC2014, using methodology approved by ARB and with information from the transportation model. | TP+/CUBE. The transportation model includes a feedback loop that assures congested speeds are consistent with travel speeds.<br><br>EMFAC2014 | A speed study will be conducted every five years, if adequate funds are available.  |

## A. SOCIOECONOMIC DATA

### POPULATION, EMPLOYMENT AND LAND USE

The conformity regulation requires documentation of base case and projected population, employment, and land use used in the transportation modeling. USDOT/EPA guidance indicates that if the data is more than five years old, written justification for the use of older data must be provided. In addition, documentation is required for how land use development scenarios are consistent with future transportation system alternatives, and the reasonable distribution of employment and residences for each alternative.

#### *Supporting Documentation:*

In March 2018, the SJCOG policy board adopted employment projections to the year 2040 for San Joaquin County. SJCOG hired the University of the Pacific Research and Forecasting Center which developed employment projections based on IHS-Global Insight regional forecasting models and prepared using IHS-Global Insight's Aremos forecasting software. San Joaquin County's forecast is based on its own unique econometric model, but has drivers linked to state and national forecasts to account for macro trends. UOP used judgment to adjust the econometric forecasts to account for local knowledge and foreseeable short and medium-term developments, such as the opening and closing of large facilities, local real estate market trends or major infrastructure projects.

In March 2018, the SJCOG policy board adopted population forecasts to the year 2050 for San Joaquin County. The forecasts are from the *San Joaquin Valley Demographic Forecasts: 2010 to 2050* prepared by The Planning Center, 2016. The forecast was part of a San Joaquin Valley demographic study commissioned by the eight metropolitan planning organizations of the valley, in an effort to obtain recently-prepared projections.

This study includes three primary forecasts of population, households and housing units. Other projections developed by The Planning Center, e.g., age distribution, average household size, household income, household type, race/ethnicity, are derived from the three primary forecasts. The Planning Center forecasts are based on several different projections including household trend, total housing unit trend, housing construction trend, employment trend, cohort-component model, population trend, average household size trend, and household income trend. The least-squares linear curve forms the basis for all projections because the forecasts are long-term and curve-fitting techniques (e.g., parabolic curve, logistic curve) do not provide reasonable long-term results. Three measures evaluate the adequacy of each projection: mean absolute percentage error (MAPE), F-test, and t-test.

Land use and socioeconomic data at the Traffic Analysis Zone level are used for determining trip generation in the traffic model. Population and employment projections at the countywide, jurisdictional, and TAZ level were developed based on historical growth rates, and a consensus process utilizing input from the SJCOG Technical Advisory Committee.

$$HH_{2008}(HHsize_N - HHsize_{2008})$$

## **B. TRANSPORTATION MODELING**

The San Joaquin Valley Metropolitan Planning Organizations (MPOs) utilize the TP+/CUBE traffic modeling software. The Valley MPO regional traffic models consist of traditional four-step traffic forecasting models. They use land use, socioeconomic, and road network data to estimate facility-specific roadway traffic volumes. Each MPO model covers the appropriate county area, which is then divided into hundreds or thousands of individual traffic analysis zones (TAZs). In addition the model roadway networks include thousands of nodes and links. Link types include freeway, freeway ramp, other State route, expressway, arterial, collector, and local collector. Current and future-year road networks were developed considering local agency circulation elements of their general plans, traffic impact studies, capital improvement programs, and the State Transportation Improvement Program. The models use equilibrium, a capacity sensitive assignment methodology, and the data from the model for the emission estimates differentiates between peak and off-peak volumes and speeds. In addition, the model is reasonably sensitive to changes in time and other factors affecting travel choices. The results from model validation/calibration were analyzed for reasonableness and compared to historical trends.

Specific transportation modeling requirements in the conformity regulation are summarized below, followed by a description of how the SJCOG transportation modeling methodology meets those requirements.

SJCOG completed the update of its traffic model to Citilabs Cube modeling software and validation to a new base year of 2015. The SJCOG regional traffic model is a four-step mode choice traffic model. It uses land use, socioeconomic, and road network data to estimate facility-specific roadway traffic volumes. The study area for the SJCOG model covers all of San Joaquin, Stanislaus, and Merced Counties. The model region is divided up into approximately 6540 traffic analysis zones. Link types include freeway, freeway ramp, other state route, expressway, arterial, collector, and local collector. Current and future-year road networks were developed considering local agency circulation elements of their general plans, traffic impact studies, capital improvement programs, and the State Transportation Improvement Program.

The travel demand model estimates travel demand and traffic volumes for the A.M. three-hour peak period, P.M. three-hour peak period, and mid-day, and evening. Daily forecasts are calculated by summing the A.M. and P.M. three-hour peak periods with the mid-day and evening period. The model also generates traffic forecasts for the A.M. peak hour and the P.M. peak hour.

Land use and socioeconomic data at the Traffic Analysis Zone level are used for determining trip generation in the traffic model. Population and employment projections at the countywide, jurisdictional, and TAZ level were developed based on historical growth rates, and a consensus process utilizing input from each of the SJCOG local jurisdictions.

### **TRAFFIC COUNTS**

The conformity regulation requires documentation that a network-based travel model is in use that is validated against observed counts for a base year no more than 10 years before the date of the

conformity determination. Document that the model results have been analyzed for reasonableness and compared to historical trends and explain any significant differences between past trends and forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.).

*Supporting Documentation:*

The San Joaquin County portion of Three County Model was validated to 2015 using available 2014-2017 counts and counts from the SJCOG Congestion Management Program. Over 1100 counts were used.

Data from the 2001 California Household Travel Study (CHTS) were also used to validate the Three County Model.

The Estimated Vehicle Miles Traveled in the 2015 validated base year calibrated to within 3 percent of the estimate in the Highway Performance Monitoring System report for San Joaquin County.

## **SPEEDS**

The conformity regulation requires documentation of the use of capacity sensitive assignment methodology and emissions estimates based on a methodology that differentiates between peak and off-peak volumes and speeds, and bases speeds on final assigned volumes. In addition, documentation of the use of zone-to-zone travel impedances to distribute trips in reasonable agreement with the travel times estimated from final assigned traffic volumes. Where transit is a significant factor, document that zone-to-zone travel impedances used to distribute trips are used to model mode split. Finally, document that reasonable methods were used to estimate traffic speeds and delays in a manner sensitive to the estimated volume of travel on each roadway segment represented in the travel model.

*Supporting Documentation:*

The valley traffic models include a feedback loop that uses congested travel times as an input to the trip distribution step. The feedback loop ensures that the congested travel speeds used as input to the air pollution emission models are consistent with the travel speeds used throughout the traffic model process.

The SJCOG traffic model includes a feedback loop that uses congested travel times as an input to the trip distribution step. The feedback loop ensures that the congested travel speeds used as input to the air pollution emission models are consistent with the peak hour and off peak travel speeds used throughout the traffic model process.

## **TRANSIT**

The conformity regulation requires documentation of any changes in transit operating policies and assumed ridership levels since the previous conformity determination. Document the use of the latest transit fares and road and bridge tolls.

*Supporting Documentation:*

The SJCOG Model is based on the latest available assumptions on transit fares for all transit operators in the model region and auto ownership costs.

Please see chapter 4, appendix F, and appendix L of the 2014 RTP for each local transit operator's accomplishments and proposed actions.

The mode choice model uses a multinomial logit formulation, which assigns the probability of using a particular travel mode based on attractiveness measure for that mode in relation to the sum of the attractiveness of the other mode. The model predicts the following seven modes:

1. Drive Alone
2. 2-Person vehicle
3. 3+-Person vehicle
4. Walk to Transit
5. Drive to Transit
6. Walk
7. Bike

Daily transit trips are assigned to the transit network. Transit trips are assigned to the single best path based on in-vehicle time plus weighted out-of- vehicle times. The transit trips are assigned in four groups:

1. Peak period (A.M. plus P.M.), walk access
2. Peak period (A.M. plus P.M.), drive access
3. Off-peak, walk access
4. Off-peak, drive access

The peak period transit trips represent trips occurring during the A.M. three- hour peak period plus the P.M. three-hour peak period. Peak period transit trips are assigned to the peak transit service (peak period headways) with travel times based on the congested speeds from the A.M. peak period traffic assignment. Off-peak transit trips represent trips during the remaining 18 hours and are assigned to the off-peak transit service (off-peak headways) with travel times based on the congested road speeds from the off-peak traffic assignment.

## **VALIDATION/CALIBRATION**

The conformity regulation requires documentation that the model results have been analyzed for reasonableness and compared to historical trends and explain any significant differences between past trends and forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.). In addition, documentation of how travel models are reasonably sensitive to changes in time, cost, and other factors affecting travel choices is required. The use of HPMS, or a locally developed count-based program or procedures that have been chosen to reconcile and calibrate the network-based travel model estimates of VMT must be documented.

### *Supporting Documentation:*

For Serious and above nonattainment areas, transportation conformity guidance, Section 93.122(b)(3) of the conformity regulation states:

*Highway Performance Monitoring System (HPMS) estimates of vehicle miles traveled (VMT) shall be considered the primary measure of VMT within the portion of the nonattainment or maintenance area and for the functional classes of roadways included in HPMS, for urban areas which are sampled on a separate urban area basis. For areas with network-based travel models, a factor (or factors) may be developed to reconcile and calibrate the network-based travel model estimates of VMT in the base year of its validation to the HPMS estimates for the same period. These factors may then be applied to model estimates of future VMT. In this factoring process, consideration will be given to differences between HPMS and network-based travel models, such as differences in the facility coverage of the HPMS and the modeling network description. Locally developed count-based programs and other departures from these procedures are permitted subject to the interagency consultation procedures.*

The SJCOG Model was validated by comparing its estimates of base year traffic conditions with base year traffic counts. The base year validations meet standard criteria for replicating total traffic volumes on various road types and for percent error on links. The base year validation also meets standard criteria for percent error relative to traffic counts on groups of roads (screen-lines) throughout each county. The validated 2015 SJCOG Model estimate of total Vehicle Miles Traveled (VMT) was within 3 percent of the estimate of the VMT from the 2015 Highway Performance Monitoring System.

## **FUTURE NETWORKS**

The conformity regulation requires that a listing of regionally significant projects and federally-funded non-regionally significant projects assumed in the regional emissions analysis be provided in the conformity documentation. In addition, all projects that are exempt must also be documented.

§93.106(a)(2)ii and §93.122(a)(1) requires that regionally significant additions or modifications to the existing transportation network that are expected to be open to traffic in each analysis year be documented for both Federally funded and non-federally funded projects (see Appendix B).

§93.122(a)(1) requires that VMT for non-regionally significant Federal projects is accounted for in the regional emissions analysis. It is assumed that all SJV MPOs include these projects in the transportation network (see Appendix B).

§93.126, §93.127, §93.128 require that all projects in the TIP/RTP that are exempt from conformity requirements or exempt from the regional emissions analysis be documented. In addition, the reason for the exemption (Table 2, Table 3, traffic signal synchronization) must also be documented (see Appendix B). It is important to note that the CTIPs exemption code is provided in response to FHWA direction.

### *Supporting Documentation:*

The build highway networks include qualifying projects based on the 2019 FTIP and the 2018 RTP. Not all of the street and freeway projects included in the TIP/RTP qualify for inclusion in the highway network. Projects that call for study, design, or non-capacity improvements are not

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included in the networks. When these projects result in actual facility construction projects, the associated capacity changes are coded into the network as appropriate. Since the networks define capacity in terms of number of through traffic lanes, only construction projects that increase the lane-miles of through traffic are included.

Generally, Valley MPO highway networks include all roadways included in the county or cities classified system. These links typically include all freeways plus expressways, arterials, collectors and local collectors. Highway networks also include regionally significant planned local improvements from Transportation Impact Fee Programs and developer funded improvements required to mitigate the impact of a new development.

Small-scale local street improvements contained in the TIP/RTP are not coded on the highway network. Although not explicitly coded, traffic on collector and local streets is simulated in the models by use of abstract links called “centroid connectors”. These represent local streets and driveways which connect a neighborhood to a regionally-significant roadway. Model estimates of centroid connector travel are reconciled against HPMS estimates of collector and local street travel.

### C. TRAFFIC ESTIMATES

A summary of the population, employment, and travel characteristics for the SJCOG transportation modeling area for each scenario in the Conformity Analysis is presented in Table 2-2.

**Table 2-2:  
Traffic Network Comparison for Horizon Years Evaluated in Conformity Analysis**

| <b>Horizon Year</b> | <b>Total Population</b> | <b>Employment</b> | <b>Average Weekday VMT</b> | <b>Total Lane Miles</b> |
|---------------------|-------------------------|-------------------|----------------------------|-------------------------|
| 2019                | 765.9                   | 251.8             | 18.9                       | N/A                     |
| 2020                | 775.8                   | 256.0             | 19.0                       | 4,947                   |
| 2021                | 786.5                   | 258.9             | 19.3                       | N/A                     |
| 2023                | 808.0                   | 264.6             | 19.4                       | N/A                     |
| 2026                | 841.2                   | 273.4             | 20.0                       | N/A                     |
| 2029                | 874.3                   | 282.2             | 20.6                       | 5,094                   |
| 2031                | 896.4                   | 288.0             | 21.0                       | N/A                     |
| 2037                | 977.0                   | 305.8             | 22.2                       | 5,376                   |
| 2042                | 1,050.2                 | 319.9             | 23.1                       | 5,408                   |

## D. VEHICLE REGISTRATIONS

SJCOG does not estimate vehicle registrations, age distributions or fleet mix. Rather, current forecasted estimates for these data are developed by CARB and included in the EMFAC2014 model ([http://www.arb.ca.gov/msei/onroad/latest\\_version.htm](http://www.arb.ca.gov/msei/onroad/latest_version.htm)). EMFAC2014 is the most recent model for use in California conformity analyses. Vehicle registrations, age distribution and fleet mix are developed and included in the model by CARB and cannot be updated by the user. EPA issued a federal register notice on December 14, 2015 formally approving EMFAC2014 for conformity.

## E. STATE IMPLEMENTATION PLAN MEASURES

The air quality modeling procedures and associated spreadsheets contained in Chapter 3 Air Quality Modeling assume emission reductions consistent with the applicable air quality plans. The emission reductions assumed for these committed measures reflect the latest implementation status of these measures. Committed control measures in the applicable air quality plans that reduce mobile source emissions and are used in conformity, are summarized below.

### OZONE

No committed control measures are included in the 2008 ozone standard conformity demonstration as part of the 2016 Ozone Plan.

### PM-10

Committed control measures in the EPA approved 2007 PM-10 Maintenance Plan that reduce mobile source emissions are shown in Table 2-3. However, reductions from these control measures were not applied to this conformity analysis because they were not needed to demonstrate conformity.

**Table 2-3:  
2007 PM-10 Maintenance Plan Measures Assumed in the Conformity Analysis**

| Measure Description   | Pollutants                                       |
|---|--|
| ARB existing Reflash, Idling, and Moyer   | PM-10 annual exhaust<br>NOx annual exhaust       |
| District Rule 8061: Paved and Unpaved Roads   | PM-10 paved road dust<br>PM-10 unpaved road dust |
| District Rule 8021 Controls: Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities | PM-10 road construction dust                     |

NOTE: State reductions from the Carl Moyer, Reflash and Idling have been included in EMFAC2014.

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**PM2.5**

Committed control measures in the 2008 PM2.5 Plan (as revised) and 2012 PM2.5 Plan (as revised in 2015) that reduce mobile source emissions are shown in Table 2-4 and 2-5, respectively. However, reductions from these control measures were not applied to this conformity analysis because they were not needed to demonstrate conformity.

**Table 2-4:  
2008 PM2.5 (1997 Standard) Plan Measures Assumed in the Conformity Analysis**

| Measure Description   | Pollutants                 |
|---|----------------------------|
| Existing Local Reductions: District Rule 9310 (School Bus Fleets)                 | Annual PM2.5<br>Annual NOx |
| Existing State Reductions: Carl Moyer Program & AB 1493 GHG Standards             | Annual PM2.5<br>Annual NOx |
| New/Proposed Local Reductions: District Rule 9410 (Employer Based Trip Reduction) | Annual PM2.5<br>Annual NOx |
| New/Proposed State Reductions: Smog Check   | Annual PM2.5<br>Annual NOx |

NOTE: This table is consistent with the 2008 PM2.5 Plan (as revised in 2011) as approved by EPA on November 9, 2011 (effective January 9, 2012). State reductions from the Carl Moyer, AB1493, and Smog Check have been included in EMFAC2014.

**Table 2-5:  
2012 PM2.5 (2006 Standard) Plan Measures Assumed in the Conformity Analysis**

| Measure Description   | Pollutants                 |
|---|----------------------------|
| Existing Local Reductions: District Rule 9310 (School Bus Fleets)                 | Annual PM2.5<br>Annual NOx |
| Existing State Reductions: Carl Moyer Program & AB 1493 GHG Standards             | Annual PM2.5<br>Annual NOx |
| New/Proposed Local Reductions: District Rule 9410 (Employer Based Trip Reduction) | Annual PM2.5<br>Annual NOx |
| New/Proposed State Reductions: Smog Check   | Annual PM2.5<br>Annual NOx |

NOTE: This table is consistent with the 2012 PM2.5 Plan (as revised in 2015) approved by EPA on August 16, 2016 (effective September 30, 2016). State reductions from the Carl Moyer, AB1493 and Smog Check have been included in EMFAC2014.

## **CHAPTER 3: AIR QUALITY MODELING**

The model used to estimate vehicle exhaust emissions for ozone precursors and particulate matter is EMFAC2014. CARB emission factors for PM10 have been used to calculate re-entrained paved and unpaved road dust, and fugitive dust associated with road construction. For this conformity analysis, model inputs not dependent on the TIP or RTP are consistent with the applicable SIPs, which include:

- The 2016 Ozone Plan (2008 standard) was adopted by the Air District on June 16, 2016 and subsequently adopted by the ARB on July 21, 2016. EPA found the new ozone budgets adequate on June 29, 2017 (effective July 14, 2017). In response to recent court decisions regarding the baseline RFP year, ARB adopted the revised 2008 ozone conformity budgets as part of the *2018 Updates to the California State Implementation Plan* on October 25, 2018. EPA found the budgets adequate on March 25, 2019.
- The 2007 PM-10 Maintenance Plan (as revised in 2015) was approved by EPA on July 8, 2016 (effective September 30, 2016).
- The 2008 PM2.5 Plan (1997 Standards), as revised in 2011, was approved by EPA on November 9, 2011 (effective January 9, 2012).
- The 2012 PM2.5 Plan was approved by EPA on August 16, 2016 (effective September 30, 2016) inclusive of the revised conformity budgets and PM2.5 trading mechanism.

The conformity regulation requirements for the selection of the horizon years are summarized in Chapter 1; regional emissions have been estimated for the horizon years summarized in Table 1-7.

### **A. EMFAC2014**

The EMFAC model (short for EMISSION FACTOR) is a computer emissions modeling software that estimates emission rates for motor vehicles for calendar years from 2000 to 2050 operating in California. Pollutant emissions for hydrocarbons, carbon monoxide, nitrogen oxides, particulate matter, lead, sulfur oxides, and carbon dioxide are output from the model. Emissions are calculated for passenger cars, light, heavy, and medium-duty trucks, motorcycles, buses and motor homes.

EMFAC is used to calculate current and future inventories of motor vehicle emissions at the state, county, air district, air basin, or MPO level. EMFAC contains default vehicle activity data that can

be used to estimate a motor vehicle emissions inventory in tons/day for a specific year and season, and as a function of ambient temperature, relative humidity, vehicle population, mileage accrual, miles of travel, and vehicle speeds.

Section 93.111 of the conformity regulation requires the use of the latest emission estimation model in the development of conformity determinations. On December 30, 2014, ARB released EMFAC2014, which is the latest update to the EMFAC model for use by California State and local governments to meet Clean Air Act (CAA, 1990) requirements. Nearly a year later, on December 14, 2015, EPA announced the availability of this latest version of the California EMFAC model for use in SIP development in California. EMFAC2014 was required for conformity analysis on or after December 14, 2017.

On March 1, 2018 ARB released the latest update to the EMFAC model – EMFAC2017v1.0.2. The model was submitted for EPA review in the fall of 2018 and has not yet been approved by EPA for conformity use, therefore this analysis uses EMFAC2014 for all conformity tests.

A transportation data template has been prepared to summarize the transportation model output for use in EMFAC 2014. The template includes allocating VMT by speed bin by hour of the day. EMFAC2014 was used to estimate exhaust emissions for CO, ozone, PM-10, and PM2.5 conformity demonstrations consistent with the applicable air quality plan. Note that the statewide SIP measures documented in Chapter 2 are already incorporated in the EMFAC2014 model as appropriate.

## **B. ADDITIONAL PM-10 ESTIMATES**

PM-10 emissions for re-entrained dust from travel on paved and unpaved roads will be calculated separately from roadway construction emissions. It is important to note that with the final approval of the 2007 PM-10 Maintenance Plan, EPA approved a methodology to calculate PM-10 emissions from paved and unpaved roads in future San Joaquin Valley conformity determinations. The Conformity Analysis uses these methodologies and estimates construction-related PM-10 emissions consistent with the 2007 PM-10 Maintenance Plan. The National Ambient Air Quality Standards for PM-10 consists of a 24-hour standard, which is represented by the motor vehicle emissions budgets established in the 2007 PM-10 Maintenance Plan. It is important to note that EPA revoked the annual PM-10 Standard on October 17, 2006. The PM-10 emissions calculated for the conformity analysis represent emissions on an annual average day and are used to satisfy the budget test.

### **CALCULATION OF REENTRAINED DUST FROM PAVED ROAD TRAVEL**

On January 13, 2011 EPA released a new method for estimating re-entrained road dust emissions from cars, trucks, buses, and motorcycles on paved roads. On February 4, 2011, EPA published the *Official Release of the January 2011 AP-42 Method for Estimating Re-Entrained Road Dust from Paved Roads* approving the January 2011 method for use in regional emissions analysis and beginning a two year conformity grace period, after which use of the January 2011 AP-42 method is required (e.g. February 4, 2013) in regional conformity analyses.

The road dust calculations have been updated to reflect this new methodology. More specifically, the emission factor equation and k value (particle size multiplier) have been updated accordingly. CARB default assumptions for roadway silt loading by roadway class, average vehicle weight, and rainfall correction factor remain unchanged. Emissions are estimated for five roadway classes including freeways, arterials, collectors, local roads, and rural roads. Countywide VMT information is used for each road class to prepare the emission estimates.

#### **CALCULATION OF REENTRAINED DUST FROM UNPAVED ROAD TRAVEL**

The base methodology for estimating unpaved road dust emissions is based on a CARB methodology in which the miles of unpaved road are multiplied by the assumed VMT and an emission factor. In the 2007 PM-10 Maintenance Plan, it is assumed that all non-agricultural unpaved roads within the San Joaquin Valley receive 10 vehicle passes per day. An emission factor of 2.0 lbs PM-10/VMT is used for the unpaved road dust emission estimates. Emissions are estimated for city/county maintained roads.

#### **CALCULATION OF PM-10 FROM ROADWAY CONSTRUCTION**

Section 93.122(e) of the Transportation Conformity regulation requires that PM-10 from construction-related fugitive dust be included in the regional PM-10 emissions analysis, if it is identified as a contributor to the nonattainment problem in the PM-10 implementation plan. The emission estimates are based on a CARB methodology in which the miles of new road built are converted to acres disturbed, which is then multiplied by a generic project duration (i.e., 18 months) and an emission rate. Emission factors are unchanged from the previous estimates at 0.11 tons PM-10/acre-month of activity. The emission factor includes the effects of typical control measures, such as watering, which is assumed to reduce emissions by about 50%. Updated activity data (i.e., new lane miles of roadway built) is estimated based on the highway and transit construction projects in the TIP/RTP.

#### **PM-10 TRADING MECHANISM**

The PM-10 SIP allows trading from the motor vehicle emissions budget for the PM-10 precursor NO<sub>x</sub> to the motor vehicle emissions budget for primary PM-10 using a 1.5 to 1 ratio. The trading mechanism will be used only for conformity analyses for analysis years after 2005.

### **C. PM<sub>2.5</sub> APPROACH**

EPA and FHWA have indicated that areas violating both the annual and 24-hour standards for PM<sub>2.5</sub> must address all standards in the conformity determination. The San Joaquin Valley currently violates both the 1997 and 2012 annual PM<sub>2.5</sub> standards, and the 1997 and 2006 24-hour PM<sub>2.5</sub> standards; thus the conformity determination includes analyses to all PM<sub>2.5</sub> standards.

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The following PM<sub>2.5</sub> approach addresses the 1997 (annual and 24-hour), the 2012 (annual), and the 2006 24-hour standards:

EMFAC2014 incorporates data for temperature and relative humidity that vary by geographic area, calendar year and season. The annual average represents an average of all the monthly inventories. A winter average represents an average of the California winter season (October through February). EMFAC will be run to estimate direct PM<sub>2.5</sub> and NO<sub>x</sub> emissions from motor vehicles for an annual or winter average day as described below.

EPA guidance indicates that State and local agencies need to consider whether VMT varies during the year enough to affect PM<sub>2.5</sub> annual emission estimates. The availability of seasonal or monthly VMT data and the corresponding variability of that data need to be evaluated.

PM<sub>2.5</sub> areas that are currently using network based travel models must continue to use them when calculating annual emission inventories. The guidance indicates that the interagency consultation process should be used to determine the appropriate approach to produce accurate annual inventories for a given nonattainment area. Whichever approach is chosen, that approach should be used consistently throughout the analysis for a given pollutant or precursor. The interagency consultation process should also be used to determine whether significant seasonal variations in the output of network based travel models are expected and whether these variations would have a significant impact on PM<sub>2.5</sub> emission estimates.

The SJV MPOs all use network based travel models. However, the models only estimate average weekday VMT. The SJV MPOs do not have the data or ability to estimate seasonal variation at this time. Data collection and analysis for some studies are in the preliminary phases and cannot be relied upon for other analyses. Some statewide data for the seasonal variation of VMT on freeways does exist. However, traffic patterns on freeways do not necessarily represent the typical traffic pattern for local streets and arterials.

In many cases, traffic counts are sponsored by the MPOs and conducted by local jurisdictions. While some local jurisdictions may collect weekend or seasonal data, typical urban traffic counts occur on weekdays (Tuesday through Thursday). Data collection must be more consistent in order to begin estimation of daily or seasonal variation.

The SJV MPOs believe that the average annual day calculated from the current traffic models and EMFAC2014 represent the most accurate VMT data available. The MPOs will continue to discuss and research options that look at how VMT varies by month and season according to the local traffic models.

It is important to note that the guidance indicates that EPA expects the most thorough analysis for developing annual inventories will occur during the development of the SIP, taking into account the needs and capabilities of air quality modeling tools and the limitations of available data. Prior to the development of the SIP, State and local air quality and transportation agencies may decide to use simplified methods for regional conformity analyses.

The regional emissions analyses in PM<sub>2.5</sub> nonattainment areas must consider directly emitted PM<sub>2.5</sub> motor vehicle emissions from tailpipe, brake wear, and tire wear. In California, areas will

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use EMFAC2014. As indicated under the Conformity Test Requirements, re-entrained road dust and construction-related fugitive dust from highway or transit projects is not included at this time. In addition, NO<sub>x</sub> emissions are included; however, VOC, SO<sub>x</sub>, and ammonia emissions are not.

*1997 Standard* – Since EPA did not take action on the 2018 PM<sub>2.5</sub> Plan, the 2008 PM<sub>2.5</sub> Plan budgets will continue to be used in this conformity analysis. The 2008 PM<sub>2.5</sub> Plan (as revised in 2011) was approved by EPA on November 9, 2011 (effective January 9, 2012) and contains motor vehicle emission budgets for PM<sub>2.5</sub> and NO<sub>x</sub> established based on average annual daily emissions. The annual inventory methodology contained in the 2008 PM<sub>2.5</sub> Plan (as revised in 2011) and used to establish emissions budgets is consistent with the methodology used herein. The motor vehicle emissions budget for PM<sub>2.5</sub> includes directly emitted PM<sub>2.5</sub> motor vehicle emissions from tailpipe, brake wear and tire wear. VOC, SO<sub>x</sub>, ammonia, and dust (from paved roads, unpaved roads, and road construction) were found to be insignificant and not included in the motor vehicle emission budgets for conformity purposes.

*2006 Standard* – Since EPA did not take action on the 2018 PM<sub>2.5</sub> Plan, the 2012 PM<sub>2.5</sub> Plan (as revised in 2015) budgets will continue to be used in this conformity analysis. On January 20, 2016, EPA finalized reclassification of the San Joaquin Valley to Serious nonattainment for the 2006 24-hour PM<sub>2.5</sub> Standard. On August 16, 2016, the 2012 PM<sub>2.5</sub> Plan was approved by EPA including the revised conformity budgets and a trading mechanism (effective September 30, 2016). The 2012 PM<sub>2.5</sub> Plan (as revised in 2015) contains motor vehicle emission budgets for PM<sub>2.5</sub> and NO<sub>x</sub> established based on average winter daily emissions. The winter inventory methodology contained in the 2012 Plan and used to establish emissions budgets is consistent with the methodology used herein. The motor vehicle emissions budget for PM<sub>2.5</sub> include directly emitted PM<sub>2.5</sub> motor vehicle emissions from tailpipe, brake wear and tire wear. VOC, SO<sub>x</sub>, ammonia, and dust (from paved roads, unpaved roads, and road construction) were found to be insignificant and not included in the motor vehicle emission budgets for conformity purposes. It is important to note that the 2006 24-hour PM<sub>2.5</sub> nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 1997 PM<sub>2.5</sub> standards.

*2012 Standard* – EPA’s nonattainment area designations for the 2012 PM<sub>2.5</sub> standard became effective on April 15, 2015. Conformity applies one year after the effective date (April 15, 2016). In accordance with Section 93.109(i)(3) of the federal transportation conformity rule, if a 2012 PM<sub>2.5</sub> area has adequate or approved SIP budgets that address the annual 1997 standards, it must use the budget test until new 2012 PM<sub>2.5</sub> standard budgets are found adequate or approved. It is important to note that the 2012 annual PM<sub>2.5</sub> nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 1997 and 2006 PM<sub>2.5</sub> standards. Since EPA has not did not take action on the 2018 PM<sub>2.5</sub> Plan, the 2008 PM<sub>2.5</sub> Plan (as revised in 2011) budgets will continue to be used in this conformity analysis.

### **1997 and 2012 PM<sub>2.5</sub> TRADING MECHANISM**

Since EPA did not take action on the 2018 PM<sub>2.5</sub> Plan, consistent with the PM<sub>2.5</sub> implementation rule, the 2008 PM<sub>2.5</sub> Plan budgets and trading mechanism will continue to be used in this conformity analysis.

The 2008 PM<sub>2.5</sub> SIP (as revised in 2011) allows trading from the motor vehicle emissions budget for the PM<sub>2.5</sub> precursor NO<sub>x</sub> to the motor vehicle emissions budget for primary PM<sub>2.5</sub> using a 1 to 9 ratio. This trading mechanism will be used for the 1997 annual and 24-hour hour and 2012 PM<sub>2.5</sub> standard conformity analyses for analysis years after 2014.

#### **2006 PM<sub>2.5</sub> TRADING MECHANISM**

Since EPA did not take action on the 2018 PM<sub>2.5</sub> Plan, consistent with the PM<sub>2.5</sub> implementation rule, the 2012 PM<sub>2.5</sub> Plan budgets and trading mechanism will continue to be used in this conformity analysis.

On August 16, 2016 EPA approved the 2012 PM<sub>2.5</sub> SIP including the PM<sub>2.5</sub> trading mechanism that allows trading from the motor vehicle emissions budget for the PM<sub>2.5</sub> precursor NO<sub>x</sub> to the motor vehicle emissions budget for primary PM-2.5 using an 8 to 1 ratio. This trading mechanism will be used for the 2006 24-hour PM<sub>2.5</sub> standard conformity analysis for analysis years after 2014.

#### **D. SUMMARY OF PROCEDURES FOR REGIONAL EMISSIONS ESTIMATES**

New step-by-step air quality modeling instructions were developed for SJV MPO use with EMFAC2014. These instructions were originally provided for interagency consultation in May 2016. EPA, FHWA, and ARB concurred.

Documentation of the conformity analysis for the 2019 FTIP Amendment #4 and 2018 RTP Amendment #1 is provided in Appendix C, including:

- 2015 Ozone Conformity EMFAC Spreadsheet
- 2015 Ozone Conformity Paved Road Spreadsheet
- 2015 Ozone Conformity Unpaved Road Dust Spreadsheet
- 2015 Ozone Conformity Construction Spreadsheet
- 2015 Ozone Conformity Totals Spreadsheet
- 2015 Ozone Conformity PM<sub>10</sub> Trading Spreadsheet

## **CHAPTER 4: TRANSPORTATION CONTROL MEASURES**

This chapter provides an update of the current status of transportation control measures identified in applicable implementation plans. Requirements of the Transportation Conformity regulation relating to transportation control measures (TCMs) are presented first, followed by a review of the applicable air quality implementation plans and TCM findings for the TIP/RTP.

### **A. TRANSPORTATION CONFORMITY REGULATION REQUIREMENTS FOR TCMs**

The Transportation Conformity regulation requires that the TIP/RTP “must provide for the timely implementation of TCMs in the applicable implementation plan.” The Federal definition for the term “transportation control measure” is provided in 40 CFR 93.101:

“any measure that is specifically identified and committed to in the applicable implementation plan that is either one of the types listed in Section 108 of the CAA [Clean Air Act], or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. Notwithstanding the first sentence of this definition, vehicle technology based, fuel-based, and maintenance-based measures which control the emissions from vehicles under fixed traffic conditions are not TCMs for the purposes of this subpart.”

In the Transportation Conformity regulation, the definition provided for the term “applicable implementation plan” is:

“Applicable implementation plan is defined in section 302(q) of the CAA and means the portion (or portions) of the implementation plan, or most recent revision thereof, which has been approved under section 110, or promulgated under section 110(c), or promulgated or approved pursuant to regulations promulgated under section 301(d) and which implements the relevant requirements of the CAA.”

Section 108(f)(1) of the Clean Air Act as amended in 1990 lists the following transportation control measures and technology-based measures:

- (i) programs for improved public transit;
- (ii) restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles;
- (iii) employer-based transportation management plans, including incentives;
- (iv) trip-reduction ordinances;

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- (v) traffic flow improvement programs that achieve emission reductions;
- (vi) fringe and transportation corridor parking facilities serving multiple occupancy vehicle programs or transit service;
- (vii) programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration particularly during periods of peak use;
- (viii) programs for the provision of all forms of high-occupancy, shared-ride services;
- (ix) programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place;
- (x) programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas;
- (xi) programs to control extended idling of vehicles;
- (xii) programs to reduce motor vehicle emissions, consistent with title II, which are caused by extreme cold start conditions;
- (xiii) employer-sponsored programs to permit flexible work schedules;
- (xiv) programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for single occupant vehicle travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity;
- (xv) programs for new construction and major reconstructions of paths, tracks or areas solely for the use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest. For purposes of this clause, the Administrator shall also consult with the Secretary of the Interior; and
- (xvi) program to encourage the voluntary removal from use and the marketplace of pre-1980 model year light duty vehicles and pre-1980 model light duty trucks.

### **TCM REQUIREMENTS FOR A TRANSPORTATION PLAN**

The EPA regulations in 40 CFR 93.113(b) indicate that transportation control measure requirements for transportation plans are satisfied if two criteria are met:

“(1) The transportation plan, in describing the envisioned future transportation system, provides for the timely completion or implementation of all TCMs in the applicable implementation plan which are eligible for funding under Title 23 U.S.C. or the Federal Transit Laws, consistent with schedules included in the applicable implementation plan.

(2) Nothing in the transportation plan interferes with the implementation of any TCM in the applicable implementation plan.”

## **TCM REQUIREMENTS FOR A TRANSPORTATION IMPROVEMENT PROGRAM**

Similarly, in 40 CFR Section 93.113(c), EPA specifies three TCM criteria applicable to a transportation improvement program:

“(1) An examination of the specific steps and funding source(s) needed to fully implement each TCM indicates that TCMs which are eligible for funding under title 23 U.S.C. or the Federal Transit Laws are on or ahead of the schedule established in the applicable implementation plan, or, if such TCMs are behind the schedule established in the applicable implementation plan, the MPO and DOT have determined that past obstacles to implementation of the TCMs have been identified and have been or are being overcome, and that all State and local agencies with influence over approvals or funding for TCMs are giving maximum priority to approval or funding of TCMs over other projects within their control, including projects in locations outside the nonattainment or maintenance area;

(2) If TCMs in the applicable implementation plan have previously been programmed for Federal funding but the funds have not been obligated and the TCMs are behind the schedule in the implementation plan, then the TIP cannot be found to conform:

- if the funds intended for those TCMs are reallocated to projects in the TIP other than TCMs, or
- if there are no other TCMs in the TIP, if the funds are reallocated to projects in the TIP other than projects which are eligible for Federal funding intended for air quality improvement projects, e.g., the Congestion Mitigation and Air Quality Improvement Program;

(3) Nothing in the TIP may interfere with the implementation of any TCM in the applicable implementation plan.”

## **B. APPLICABLE AIR QUALITY IMPLEMENTATION PLANS**

Only transportation control measures from applicable implementation plans for the San Joaquin Valley region are required to be updated for this analysis. For this conformity analysis, the applicable implementation plans, according to the definition provided at the start of this chapter, are summarized below.

### **APPLICABLE IMPLEMENTATION PLAN FOR OZONE**

The 2016 Ozone Plan does not include new TCMs for the San Joaquin Valley.

### **APPLICABLE IMPLEMENTATION PLAN FOR PM-10**

The 2007 PM-10 Maintenance Plan (as revised in 2015) was approved by EPA on July 8, 2016 (effective September 30, 2016). No new local agency control measures were included in the Plan.

The Amended 2003 PM-10 Plan was approved by EPA on May 26, 2004 (effective June 25, 2004). A local government control measure assessment was completed for this plan. The analysis focused on transportation-related fugitive dust emissions, which are not TCMs by definition. The local government commitments are included in the *Regional Transportation Planning Agency Commitments for Implementation Document, April 2003*.

However, the *Amended 2002 and 2005 Ozone Rate of Progress Plan* contains commitments that reduce ozone related emissions; these measures are documented in the *Regional Transportation Planning Agency Commitments for Implementation Document, April 2002*. These commitments are included by reference in the Amended 2003 PM-10 Plan to provide emission reductions for precursor gases and help to address the secondary particulate problem. Since these commitments are included in the Plan by reference, the commitments were approved by EPA as TCMs.

#### **APPLICABLE IMPLEMENTATION PLAN FOR PM2.5**

The 2012 PM2.5 Plan was approved by EPA on August 16, 2016 (effective September 30, 2016). The 2008 PM2.5 Plan (as revised in 2011) was approved by EPA on November 9, 2011 (effective January 9, 2012). However, the Plans do not include any additional TCMs for the San Joaquin Valley.

#### **C. IDENTIFICATION OF 2002 RACM THAT REQUIRE TIMELY IMPLEMENTATION DOCUMENTATION**

As part of the 2004 Conformity Determination, FHWA requested that each SIP (Reasonably Available Control Measure - RACM) commitment containing federal transportation funding and a transportation project and schedule be addressed more specifically. FHWA verbally requested documentation that the funds were obligated and the project was implemented as committed to in the SIP.

The RTPA Commitment Documents, Volumes One and Two, dated April 2002 (Ozone RACM) were reviewed, using a “Summary of Commitments” table. Commitments that contain specific Federal funding/transportation projects/schedules were identified for further documentation. In some cases, local jurisdictions used the same Federal funding/transportation projects/schedules for various measures; these were identified as combined with (“comb w/”) reference as appropriate. A not applicable (“NA”) was noted where federally-funded project is vehicle technology based, fuel based, and maintenance based measures (e.g., LEV program, retrofit programs, clean fuels - CNG buses, etc.).

In addition, the RTPA Commitment Document, Volume Three, dated April 2003 (PM-10 BACM) was reviewed, using the Summary of Commitments table. Commitments that contain specific Congestion Mitigation and Air Quality (CMAQ) funding for the purchase and/or operation of street

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sweeping equipment have been identified. Only one commitment (Fresno - City of Reedley) was identified.

The Project TID Table was developed to provide implementation documentation necessary for the measures identified. Detailed information is summarized in the first five columns, including the commitment number, agency, description, funding and schedule (if applicable).

For each project listed, the TIP in which the project was programmed, as well as the project ID and description have been provided. In addition, the current implementation status of the project has been included (e.g., complete, under construction, etc). MPO staff determined this information in consultation with the appropriate local jurisdiction. Any projects not implemented according to schedule or project changes are explained in the project status column. These explanations are consistent with the guidance and regulations provided in the Transportation Conformity regulation.

Supplemental documentation was provided to FHWA in August and September 2004 in response to requests for information on timely implementation of TCMs in the San Joaquin Valley. The supplemental documentation included the approach, summary of interagency consultation correspondence, and three tables completed by each of the eight MPOs. The Supplemental Documentation was subsequently approved by FHWA as part of the 2004 Conformity Determination.

The Project TID table that was prepared at the request of FHWA for the 2004 Conformity Analysis, has been updated in each subsequent conformity analysis. This documentation has been updated as part of this Conformity Analysis. A summary of this information is provided in Appendix D.

In March 2005, the SJV MPOs began interagency consultation with FHWA and EPA to address outstanding RACM/TCM issues. In general, criteria were developed to identify commitments that require timely implementation documentation. The criteria were applied to the 2002 RACM Commitments approved by reference as part of the Amended 2003 PM-10 Plan. In April 2006, EPA transmitted final tables that identified the approved RACM commitments that require timely implementation documentation for the Conformity Analysis. Subsequently, an approach to provide timely implementation documentation was developed in consultation with FHWA.

A new 2002 RACM TID Table was prepared in 2006 to address the more general RACM commitments that require additional timely implementation documentation per EPA. A brief summary of the commitment, including finite end dates if applicable, is included for each measure. The MPOs provided a status update regarding implementation in consultation with their member jurisdictions. If a specific project has been implemented, it is included in the Project TID Table under "Additional Projects Identified". This documentation was included in the Conformity Analysis for the 2007 TIP and 2004 RTP (as amended) that was approved by FHWA in October 2006. The 2002 RACM TID Table has been updated as part of this Conformity Analysis. A summary of this information is provided in Appendix D.

#### **D. TCM FINDINGS FOR THE TIP AND REGIONAL TRANSPORTATION PLAN**

Based on a review of the transportation control measures contained in the applicable air quality plans, as documented in the two tables contained in Appendix D, the required TCM conformity findings are made below:

The TIP/RTP provide for the timely completion or implementation of the TCMs in the applicable air quality plans. In addition, nothing in the TIP or RTP interferes with the implementation of any TCM in the applicable implementation plan, and priority is given to TCMs.

#### **E. RTP CONTROL MEASURE ANALYSIS IN SUPPORT OF 2003 PM-10 PLAN**

In May 2003, the San Joaquin Valley MPO Executive Directors committed to conduct feasibility analyses as part of each new RTP in support of the 2003 PM-10 Plan. This commitment was retained in the 2007 PM-10 Maintenance Plan. In accordance with this commitment, SJCOG undertook a process to identify and evaluate potential control measures that could be included in the 2018 RTP. The analysis of additional measures included verification of the feasibility of the measures in the PM-10 Plan BACM analysis, as well as an analysis of new PM-10 commitments from other PM-10 nonattainment areas.

A summary of the process to identify potential long-range control measures analysis and results to be evaluated as part of the RTP development was transmitted to the Interagency Consultation (IAC) partners for review. FHWA and EPA concurred with the summary of the long-range control measure approach in September 2009.

The Local Government Control Measures considered in the PM-10 Plan BACM analysis that were considered for inclusion in the 2018 RTP included:

- Paving or Stabilizing Unpaved Roads and Alleys
- Curbing, Paving, or Stabilizing Shoulders on Paved Roads
- Frequent Routine Sweeping or Cleaning of Paved Roads (i.e., funding allocation for the purchase of PM-10 efficient street sweepers for member jurisdictions)
- Repave or Overlay Paved Roads with Rubberized Asphalt

It is important to note that the first three measures considered in the PM-10 Plan BACM analysis (i.e., access points, street cleaning requirements, and erosion clean up) are not applicable for inclusion in the RTP.

With the adoption of each new RTP, the MPOs will consider the feasibility of these measures, as well as identify any other new PM-10 measures that would be relevant to the San Joaquin Valley. SJCOG also considered PM-10 commitments from other PM-10 nonattainment areas that had been developed since the previous RTP was approved. Federal websites were reviewed for any PM-10 plans that have been approved since 2012. New PM-10 plans that have been reviewed include:

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- A. West Pinal County, AZ Moderate PM-10 Nonattainment Area SIP, submitted December 21, 2015 (EPA approval effective May 31, 2017). Contingency measures include paving or chemically stabilizing unpaved roads.
- B. Owens Valley, CA Serious PM-10 Nonattainment Area SIP, submitted June 9, 2016 (EPA approval effective April 12, 2017). Road dust was determined to be below de minimis thresholds and no mobile source control measures were adopted.
- C. Mammoth Lake, CA PM-10 Redesignation Request and Maintenance Plan, submitted October 21, 2014 (EPA approval effective November 4, 2015). The Mammoth Lake general plan places a cap on the growth of VMT. Contingency measures include improved street sweeping procedures and reduced use of volcanic cinders on roadways.
- D. Las Vegas, NV Serious PM-10 Redesignation Request and Maintenance Plan, submitted September 7, 2012 (EPA approval effective November 5, 2014). Most stringent measures were introduced in 2001. Stabilization of unpaved roads including paving roads with volumes over 150 vehicles per day. Paved road sweeping and mitigation measures.
- E. Payson, AZ PM-10 Limited Maintenance Plan submitted January 23, 2012 (EPA approval effective May 19, 2014). Contingency measures include paving or chemically stabilizing unpaved roads.
- F. South Coast, CA PM-10 Redesignation Request and Maintenance Plan submitted April 28, 2010 (EPA approval effective July 26, 2013). No PM-10 specific dust control measures cited for mobile sources.
- G. Juneau's Mendenhall Valley, AK PM-10 Limited Maintenance Plan submitted February 20, 2009 (EPA approval effective July 8, 2013). The attainment plan control measures included optimizing sanding and de-icing materials to minimize entrainment, spring street sweeping, and paving of dirt roads. No additional measures were identified for the LMP to continue attainment of the NAAQS. Contingency measures include paving of dirt roads and stabilization of unpaved shoulders.
- H. Eugene-Springfield, OR PM-10 Redesignation Request and Limited Maintenance Plan submitted January 13, 2012 (EPA approval effective June 10, 2013). Motor vehicles were not identified as a significant source and no control measures were included for onroad mobile sources.
- I. Sandpoint, ID PM-10 Limited Maintenance Plan submitted December 12, 2011 (EPA approval effective May 23, 2013). Ordinances require the application of certain types of sand in the winter along with increased street sweeping.

Based on review of commitments from other PM-10 nonattainment areas that have been developed since the previous RTP, no additional on-road fugitive dust controls measures are available for consideration.

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Based on consultation with CARB and the Air District, SJCOG considered priority funding allocations in the 2018 RTP for PM-10 and NOx emission reduction projects in the post-attainment year timeframe that go beyond the emission reduction commitments made for the attainment year 2010 for the following four measures:

- (1) Paving or Stabilizing Unpaved Roads and Alleys
- (2) Curbing, Paving, or Stabilizing Shoulders on Paved Roads
- (3) Frequent Routine Sweeping or Cleaning of Paved Roads (i.e., funding allocation for the purchase of PM-10 efficient street sweepers for member jurisdictions); and
- (4) Repave or Overlay Paved Roads with Rubberized Asphalt

SJCOG continues to actively include the reduction of PM10 emissions (typical projects above list #1 through #3) in the Congestion Mitigation and Air Quality (CMAQ) Improvement Program. PM10 is included in the “Project Category Goals”. PM10 is evaluated and prioritized in the CMAQ Scoring Criteria under the “Air Pollutant Emission Reduction” Category (30 points possible out of 100) as well as receiving consideration in the “Subjective Evaluation” (30 points possible out of 100). PM10 projects also are given priority if they meet the criteria of being cost-effective (30 points out of 100) Information regarding San Joaquin COG’s CMAQ Program can be found at: <http://www.sjcog.org>.

San Joaquin COG has explored the feasibility of incorporating the use of rubberized asphalt in repave or overlay projects. Currently, California Department of Transportation (Caltrans) incorporates rubberized asphalt as general policy to meet recycled content requirements on high volume state highway facilities. Caltrans is required by AB 338 (Levine) to incrementally phase in increased use of rubberized-asphalt concrete (RAC) not less than 25% by ton after January 1, 2010 and not less than 35% by ton after January 1, 2013. Caltrans (District 6) found that rubberized asphalt is problematic when used where traffic stops and starts (i.e., signalized local streets). The material has been found to break down prematurely and tends to “shove and tear” in stop-and-go traffic applications. Rubberized asphalt has been found to have useful application for noise reduction purposes. There is work currently in process to develop commercial viability of low-greenhouse gas Portland Cement Concrete which may be preferable to rubberized asphalt for greenhouse gas reduction.

The application of rubberized asphalt technology can reduce tire wear dust (PM10). The cost effectiveness for roads with annual daily traffic of 2,500 vehicles per lane mile per day is estimated at \$4,290,000 per ton. (*Analysis of Particulate Control Measures Effectiveness Interim Report #2, Sierra Research, February 15, 2007; Maricopa, Arizona, Association of Governments*). The limitations imposed by the high cost and limited applicability to free-flowing high volume highway use prove to make this of limited application on local streets in the San Joaquin region.

Rubberized asphalt is incorporated in transportation projects where it is feasible. San Joaquin COG will continue to explore the feasibility of new technology in the reduction of transportation sources of air pollutant emissions.

## **CHAPTER 5: INTERAGENCY CONSULTATION**

The requirements for consultation procedures are listed in the Transportation Conformity Regulations under section 93.105. Consultation is necessary to ensure communication and coordination among air and transportation agencies at the local, State and Federal levels on issues that would affect the conformity analysis such as the underlying assumptions and methodologies used to prepare the analysis. Section 93.105 of the conformity regulation notes that there is a requirement to develop a conformity SIP that includes procedures for interagency consultation, resolution of conflicts, and public consultation as described in paragraphs (a) through (e). Section 93.105(a)(2) states that prior to EPA approval of the conformity SIP, “MPOs and State departments of transportation must provide reasonable opportunity for consultation with State air agencies, local air quality and transportation agencies, DOT and EPA, including consultation on the issues described in paragraph (c)(1) of this section, before making conformity determinations.” The Air District adopted Rule 9120 Transportation Conformity on January 19, 1995 in response to requirements in Section 176(c)(4)(c) of the Clean Air Act as amended in 1990. Since EPA has not approved Rule 9120 (the conformity SIP), the conformity regulation requires compliance with 40 CFR 93.105 (a)(2) and (e) and 23 CFR 450.

Section 93.112 of the conformity regulation requires documentation of the interagency and public consultation requirements according to Section 93.105. A summary of the interagency consultation and public consultation conducted to comply with these requirements is provided below. Appendix E includes the public meeting process documentation. The responses to comments received as part of the public comment process are included in Appendix F.

### **A. INTERAGENCY CONSULTATION**

Consultation is generally conducted through the San Joaquin Valley Interagency Consultation Group (combination of previous Model Coordinating Committee and Programming Coordinating Group). The San Joaquin Valley Interagency Consultation (IAC) Group has been established by the Valley Transportation Planning Agency's Director's Association to provide a coordinated approach to valley transportation planning and programming (Transportation Improvement Program, Regional Transportation Plan, and Amendments), transportation conformity, climate change, and air quality (State Implementation Plan and Rules). The purpose of the group is to ensure Valley wide coordination, communication and compliance with Federal and California Transportation Planning and Clean Air Act requirements. Each of the eight Valley MPOs and the Air District are represented. In addition, the Federal Highway Administration, Federal Transit Administration, the Environmental Protection Agency, the California Air Resources Board and Caltrans (Headquarters, District 6, and District 10) are all represented. The IAC Group meets approximately quarterly.

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The draft boilerplate conformity document was distributed for interagency consultation on December 6, 2018. Comments received have been addressed and incorporated into this version of the analysis.

The 2015 Ozone Conformity Analysis was developed in consultation with SJCOG local partner agencies, including member jurisdictions, Caltrans, and local transit agencies.

The 2015 Ozone Conformity Analysis for the 2019 FTIP Amendment #4 and 2018 RTP Amendment #1 was released on January 25, 2019 for a 30-day public comment period, followed by Board adoption on March 28, 2019. Federal approval is anticipated on or before April 30, 2019.

## **B. PUBLIC CONSULTATION**

In general, agencies making conformity determinations shall establish a proactive public involvement process that provides opportunity for public review and comment on a conformity determination for FTIPs/RTPs. In addition, all public comments must be addressed in writing.

All MPOs in the San Joaquin Valley have standard public involvement procedures. SJCOG has an adopted consultation process and policy for conformity analysis which includes a 30-day public notice and comment period followed by a public hearing. A public meeting is also conducted prior to adoption and all public comments are responded to in writing. The Appendices contain corresponding documentation supporting the public involvement procedures.

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## **CHAPTER 6: TIP AND RTP CONFORMITY**

The principal requirements of the transportation conformity regulation for TIP/RTP assessments are: (1) the TIP and RTP must pass an emissions budget test with a budget that has been found to be adequate by EPA for transportation conformity purposes, or an interim emission test; (2) the latest planning assumptions and emission models must be employed; (3) the TIP and RTP must provide for the timely implementation of transportation control measures (TCMs) specified in the applicable air quality implementation plans; and (4) consultation. The final determination of conformity for the TIP/RTP is the responsibility of the Federal Highway Administration and the Federal Transit Administration.

The previous chapters and the appendices present the documentation for all of the requirements listed above for conformity determinations except for the conformity test results. Prior chapters have also addressed the updated documentation required under the transportation conformity regulation for the latest planning assumptions and the implementation of transportation control measures specified in the applicable air quality implementation plans.

This chapter presents the results of the conformity tests, satisfying the remaining requirement of the transportation conformity regulation. Separate tests were conducted for ozone, PM-10 and PM2.5 (1997 and 2012 PM2.5 standards, and 2006 24-hour PM2.5 standards). The applicable conformity tests were reviewed in Chapter 1. For each test, the required emissions estimates were developed using the transportation and emission modeling approaches required under the transportation conformity regulation and summarized in Chapters 2 and 3. The results are summarized below, followed by a more detailed discussion of the findings for each pollutant. Table 6-1 presents results for ozone (ROG/NO<sub>x</sub>), PM-10 (PM-10/NO<sub>x</sub>), and PM2.5 (PM2.5/NO<sub>x</sub>) respectively, in tons per day for each of the horizon years tested.

### Ozone:

For 2008 and 2015 8-hour ozone, the applicable conformity test is the emissions budget test, using the *2018 Updates to the California State Implementation Plan* budgets for the San Joaquin Valley established for ROG and NO<sub>x</sub> for an average summer (ozone) season day. EPA found the budgets adequate on March 25, 2019. The modeling results for all analysis years indicate that the on-road vehicle ROG and NO<sub>x</sub> emissions predicted for each of the “Build” scenarios are less than the emissions budgets. The TIP/RTP therefore satisfy the conformity emissions test for volatile organic compounds and nitrogen oxides.

### PM-10:

For PM-10, the applicable conformity test is the emissions budget test, using the 2007 PM-10 Maintenance Plan budgets for PM-10 and NO<sub>x</sub>. This Plan revisions including conformity budgets was approved by EPA on July 8, 2016 (effective September 30, 2016). The modeling results for

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all analysis years indicate that the PM-10 emissions predicted for the “Build” scenarios are less than the emissions budget for 2020. The TIP/RTP therefore satisfy the conformity emissions tests for PM-10.

1997 PM2.5 Standards:

Since EPA did not take action on the 2018 PM2.5 Plan, the 2008 PM2.5 Plan budgets will continue to be used in this conformity analysis. For 1997 PM2.5 Standards, the applicable conformity test is the emission budget test, using budgets established in the 2008 PM2.5 Plan. EPA approved the 2008 PM2.5 Plan (as revised in 2011) November 9, 2011 (effective January 9, 2012). The modeling results for all analysis years indicate that the on-road vehicle PM2.5 and NOx emissions predicted for the “Build” scenarios are less than the emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for PM2.5 and nitrogen oxides.

2006 PM2.5 Standard:

Since EPA did not take action on the 2018 PM2.5 Plan, the 2012 PM2.5 Plan (as revised in 2015) budgets will continue to be used in this conformity analysis. For the 2006 PM2.5 standard, the applicable conformity test is the emission budget test, using adequate budgets established in the 2012 PM2.5 Plan (as revised in 2015). The modeling results for all analysis years indicate that the on-road vehicle PM2.5 and NOx emissions predicted for the “Build” scenarios are less than the emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for PM2.5 and nitrogen oxides.

2012 PM2.5 Standard:

In accordance with Section 93.109(c)(2), areas designated nonattainment for the 2012 PM2.5 standards are required to use existing adequate or approved SIP motor vehicle emissions budgets for a prior annual PM2.5 standard until budgets for the 2012 PM2.5 standards are either found adequate or approved. Since EPA has not did not take action on the 2018 PM2.5 Plan, the 2008 PM2.5 Plan (as revised in 2011) budgets will continue to be used in this conformity analysis. For the 2012 PM2.5 standards, the applicable conformity test is the emissions budget test, using the 2008 PM2.5 Plan (1997 standard) budgets. EPA approved the 2008 PM2.5 Plan (as revised in 2011) November 9, 2011, effective January 9, 2012. The modeling results for all analysis years indicate that the on-road vehicle PM2.5 and NOx emissions predicted for the “Build” scenarios are less than the emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for PM2.5 and nitrogen oxides.

As all requirements of the Transportation Conformity Regulation have been satisfied, a finding of conformity for the 2015 Ozone Conformity Analysis for the 2019 FTIP Amendment #4 and the 2018 RTP Amendment #1 is supported.

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**Table 6-1:  
Conformity Results Summary**

| Standard               | Analysis Year        | Emissions Total  |                | DID YOU PASS? |     |
|------------------------|----------------------|------------------|----------------|---------------|-----|
|                        |                      | ROG (tons/day)   | NOx (tons/day) | ROG           | NOx |
| 2008 and 2015<br>Ozone | 2020 Budget          | 4.7              | 11.2           |               |     |
|                        | 2020                 | 4.7              | 10.3           | YES           | YES |
|                        |                      |                  |                |               |     |
|                        | 2023 Budget          | 3.9              | 7.4            |               |     |
|                        | 2023                 | 3.8              | 6.4            | YES           | YES |
|                        |                      |                  |                |               |     |
|                        | 2026 Budget          | 3.5              | 7.0            |               |     |
|                        | 2026                 | 3.4              | 5.5            | YES           | YES |
|                        |                      |                  |                |               |     |
|                        | 2029 Budget          | 3.1              | 6.6            |               |     |
|                        | 2029                 | 3.0              | 4.9            | YES           | YES |
|                        |                      |                  |                |               |     |
|                        | 2031 Budget          | 2.8              | 6.3            |               |     |
|                        | 2031                 | 2.8              | 4.6            | YES           | YES |
|                        |                      |                  |                |               |     |
| 2037                   | 2.3                  | 4.1              | YES            | YES           |     |
|                        |                      |                  |                |               |     |
| 2042                   | 2.1                  | 4.0              | YES            | YES           |     |
|                        |                      |                  |                |               |     |
| Standard               | Analysis Year        | Emissions Total  |                | DID YOU PASS? |     |
|                        |                      | PM-10 (tons/day) | NOx (tons/day) | PM-10         | NOx |
| PM-10                  | 2020 Budget          | 4.6              | 11.9           |               |     |
|                        | 2020                 | 3.8              | 10.8           | YES           | YES |
|                        |                      |                  |                |               |     |
|                        | 2020 Budget          | 4.6              | 11.9           |               |     |
|                        | 2029                 | 4.1              | 5.1            | YES           | YES |
|                        |                      |                  |                |               |     |
|                        | Adjusted 2020 Budget | 4.7              | 11.8           |               |     |
|                        | 2037                 | 4.7              | 4.3            | YES           | YES |
|                        |                      |                  |                |               |     |
|                        | 2020 Budget          | 4.6              | 11.9           |               |     |
| 2042                   | 4.4                  | 4.1              | YES            | YES           |     |

| PM-10 | Total On-Road Exhaust |        | Paved Road Dust |     | Unpaved Road Dust |     | Road Construction Dust |     | Total |      |
|-------|-----------------------|--------|-----------------|-----|-------------------|-----|------------------------|-----|-------|------|
|       | PM-10                 | Nox    | PM-10           | Nox | PM-10             | Nox | PM-10                  | Nox | PM-10 | Nox  |
| 2020  | 1.188                 | 10.806 | 2.323           |     | 0.113             |     | 0.152                  |     | 3.8   | 10.8 |
| 2029  | 1.213                 | 5.123  | 2.566           |     | 0.113             |     | 0.244                  |     | 4.1   | 5.1  |
| 2037  | 1.275                 | 4.264  | 2.772           |     | 0.113             |     | 0.527                  |     | 4.7   | 4.3  |
| 2042  | 1.317                 | 4.114  | 2.892           |     | 0.113             |     | 0.096                  |     | 4.4   | 4.1  |

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| Standard  | Analysis Year | Emissions Total  |                | DID YOU PASS? |     |
|---|---------------|------------------|----------------|---------------|-----|
|   |               | PM2.5 (tons/day) | NOx (tons/day) | PM2.5         | NOx |
| 1997 24-Hour and 1997 & 2012 Annual PM2.5 Standards |               |                  |                |               |     |
|   | 2014 Budget   | 0.9              | 21.6           |               |     |
|   | 2021          | 0.5              | 9.8            | YES           | YES |
|   | 2014 Budget   | 0.9              | 21.6           |               |     |
|   | 2029          | 0.5              | 5.1            | YES           | YES |
|   | 2014 Budget   | 0.9              | 21.6           |               |     |
|   | 2037          | 0.5              | 4.3            | YES           | YES |
|   | 2014 Budget   | 0.9              | 21.6           |               |     |
|   | 2042          | 0.5              | 4.1            | YES           | YES |
|   |               |                  |                |               |     |
| Standard  | Analysis Year | Emissions Total  |                | DID YOU PASS? |     |
|   |               | PM2.5 (tons/day) | NOx (tons/day) | PM2.5         | NOx |
| 2006 PM2.5 Winter 24-Hour Standard                  |               |                  |                |               |     |
|   | 2017 Budget   | 0.6              | 15.5           |               |     |
|   | 2019          | 0.5              | 12.3           | YES           | YES |
|   | 2017 Budget   | 0.6              | 15.5           |               |     |
|   | 2029          | 0.5              | 5.3            | YES           | YES |
|   | 2017 Budget   | 0.6              | 15.5           |               |     |
|   | 2037          | 0.5              | 4.4            | YES           | YES |
|   | 2017 Budget   | 0.6              | 15.5           |               |     |
|   | 2042          | 0.5              | 4.2            | YES           | YES |

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**APPENDIX A**  
**CONFORMITY CHECKLIST**

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## CONFORMITY ANALYSIS DOCUMENTATION

### Checklist for MPO TIPs/RTPs January 2018

| <b>40 CFR</b>       | <b>Criteria</b>  | <b>Page</b>                 | <b>Comments</b> |
|---------------------|--|-----------------------------|-----------------|
| §93.102             | Document the applicable pollutants and precursors for which EPA designates the area as nonattainment or maintenance. Describe the nonattainment or maintenance area and its boundaries.  | Ch. 1 p. 6                  |                 |
| §93.102 (b)(2)(iii) | PM10 areas: document whether EPA or state has found VOC and/or NOx to be a significant contributor or if the SIP establishes a budget  | Ch. 1 p. 11                 |                 |
| §93.102 (b)(2)(iv)  | PM2.5 areas: document if both EPA and the state have found that NOx is <b>not</b> a significant contributor or that the SIP does <b>not</b> establish a budget (otherwise, conformity applies for NOx)   | Ch. 1 p. 12                 |                 |
| §93.102 (b)(2)(v)   | PM2.5 areas: document whether EPA or state has found VOC, SO2, and/or NH3 to be a significant contributor or if the SIP establishes a budget   | Ch. 1 p. 12                 |                 |
| §93.104 (b, c)      | Document the date that the MPO officially adopted, accepted or approved the TIP/RTP and made a conformity determination. Include a copy of the MPO resolution. Include the date of the last prior conformity finding made by DOT.  | E.S. p. 1                   |                 |
| §93.104 (e)         | If the conformity determination is being made to meet the timelines included in this section, document when the new motor vehicle emissions budget was approved or found adequate.   | N/A                         |                 |
| §93.106             | Document that horizon years are no more than 10 years apart ((a)(1)(i)).<br>Document that the first horizon year is no more than 10 years from the based year used to validate the transportation demand planning model ((a)(1)(ii)).<br>Document that the attainment year is a horizon year, if in the timeframe of the plan ((a)(1)(iii)).<br>Describe the regionally significant additions or modifications to the existing transportation network that are expected to be open to traffic in each analysis year ((a)(2)(ii)).<br>Document that the design concept and scope of projects allows adequate model representation to determine intersections with regionally significant facilities, route options, travel times, transit ridership and land use. | Ch. 2, p. 28;<br>Appendix B |                 |

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| <b>40 CFR</b>        | <b>Criteria</b>  | <b>Page</b>   | <b>Comments</b> |
|----------------------|--|---|-----------------|
| §93.108              | Document that the TIP/RTP is fiscally constrained (23 CFR 450).  | E.S. p. 1   |                 |
| §93.109<br>(a, b)    | Document that the TIP/RTP complies with any applicable conformity requirements of air quality implementation plans (SIPs) and court orders.  | E.S. p.4<br>Ch. 1, 2, 3, 4,<br>5, 6,<br>6-12, 20-27,<br>30-33, 34, 36 |                 |
| §93.109<br>(c.)      | Provide either a table or text description that details, for each pollutant, precursor and applicable standard, whether the interim emissions test(s) and/or the budget test apply for conformity. Indicate which emissions budgets have been found adequate by EPA, and which budgets are currently applicable for what analysis years.   | Ch. 1<br>16-36  |                 |
| §93.109(e)           | CO or PM10: Document if the area has a limited maintenance plan and from where that information comes  | Ch. 1 p. 11   |                 |
| §93.109(f)           | Document if motor vehicle emissions are an insignificant contributor and in what SIP that determination is found   | Ch. 1 p. 12,<br>14  |                 |
| §93.110<br>(a, b)    | Document the use of latest planning assumptions (source and year) at the “time the conformity analysis begins,” including current and future population, employment, travel and congestion. Document the use of the most recent available vehicle registration data. Document the date upon which the conformity analysis was begun.   | Ch. 2, p. 20-<br>32   |                 |
| EPA-DOT<br>guidance  | Document the use of planning assumptions less than five years old. If unable, include written justification for the use of older data. (December 2008 guidance,)   | Ch. 2<br>21-32  |                 |
| §93.110<br>(c,d,e,f) | Document any changes in transit operating policies and assumed ridership levels since the previous conformity determination (c).<br>Document the assumptions about transit service, use of the latest transit fares, and road and bridge tolls (d).<br>Document the use of the latest information on the effectiveness of TCMs and other SIP measures that have been implemented (e).<br>Document the key assumptions and show that they were agreed to through Interagency and public consultation (f). | Ch. 2<br>23   |                 |
| §93.111              | Document the use of the latest emissions model approved by EPA. If the previous model was used and the grace period has ended, document that the analysis began before the end of the grace period.  | Ch. 3<br>30   |                 |
| §93.112              | Document fulfillment of the interagency and public consultation requirements outlined in a specific  | Ch. 5<br>44-45  |                 |

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| <b>40 CFR</b>                             | <b>Criteria</b>  | <b>Page</b>                       | <b>Comments</b> |
|---|--|-----------------------------------|-----------------|
|   | implementation plan according to §51.390 or, if a SIP revision has not been completed, according to §93.105 and 23 CFR 450. Include documentation of consultation on conformity tests and methodologies as well as responses to written comments.  |                                   |                 |
| §93.113                                   | Document timely implementation of all TCMs in approved SIPs. Document that implementation is consistent with schedules in the applicable SIP and document whether anything interferes with timely implementation. Document any delayed TCMs in the applicable SIP and describe the measures being taken to overcome obstacles to implementation.   | Ch. 4, App. E 40-41               |                 |
| §93.114                                   | Document that the conformity analyses performed for the TIP is consistent with the analysis performed for the Plan, in accordance with 23 CFR 450.324(f)(2).   | Analysis addresses both documents |                 |
| For Areas with SIP Budgets:               |  |                                   |                 |
| §93.118, §93.124                          | Document what the applicable budgets are, and for what years.<br>Document if there are subarea budgets established, and for which areas (93.124(c)).<br>Document if there is a safety margin established, and what are the budgets with the safety margin included. (93.124(a)).<br>Document if there has been any trading among budgets, and if so, which SIP establishes the trading mechanism, and how it is used in the conformity analysis (93.124(b)).<br>If there is more than one MPO in the area, document whether separate budgets are established for each MPO (93.124(d)). | Ch. 2, p. 20-30                   |                 |
| §93.118 (a, c, e)                         | Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in any associated donut area that are in the TIP and regionally significant non-Federal projects, are consistent with any adequate or approved motor vehicle emissions budget for all pollutants and precursors in applicable SIPs.  | Ch. 6 45-46                       |                 |
| §93.118 (b)                               | Document for which years consistency with motor vehicle emissions budgets must be shown.   | Ch. 1 18                          |                 |
| §93.118 (d)                               | Document the use of the appropriate analysis years in the regional emissions analysis for areas with SIP budgets, and the analysis results for these years.<br>Document any interpolation performed to meet tests for years in which specific analysis is not required.  | Ch. 6 45-46                       |                 |
| For Areas without Applicable SIP Budgets: |  |                                   |                 |

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| 40 CFR  | Criteria  | Page                  | Comments |
|---|---|-----------------------|----------|
| §93.119   | <u>Document whether the area must meet just one or both interim emissions tests. If both, document that it is the “less than” form of these tests (i.e., §93.119(b)(1) and (c)(1) vs. (b)(2), (c)(2), and (d)).</u>   | Ch. 6                 |          |
| §93.119 <sup>i</sup><br>(a, b, c, d)                        | Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in any associated donut area that are in the TIP and regionally significant non-Federal projects, are consistent with the requirements of the “Action/Baseline” or “Action/Baseline Year” emissions tests as applicable.  | Ch. 6                 |          |
| §93.119<br>(e)  | Document the appropriate baseline year.   | Ch. 6                 |          |
| §93.119<br>(f)  | Document the use of appropriate pollutants and if EPA or the state has made a finding that a particular precursor or component of PM10 is significant or insignificant.   | Ch. 6                 |          |
| §93.119<br>(g)  | Document the use of the appropriate analysis years in the regional emissions analysis for areas without applicable SIP budgets.   | Ch. 1<br>7            |          |
| §93.119<br>(h, i)   | Document how the baseline and action scenarios are defined for each analysis year.  | Ch. 3                 |          |
| For All Areas Where a Regional Emissions Analysis Is Needed |   |                       |          |
| §93.122<br>(a)(1)   | Document that all regionally significant federal and non-Federal projects in the nonattainment/maintenance area are explicitly modeled in the regional emissions analysis. For each project, identify by which analysis year it will be open to traffic. Document that VMT for non-regionally significant Federal projects is accounted for in the regional emissions analysis  | Ch. 2, App B<br>25-26 |          |
| §93.122<br>(a)(2, 3)  | Document that only emission reduction credits from TCMs on schedule have been included, or that partial credit has been taken for partially implemented TCMs (a)(2).<br><br>Document that the regional emissions analysis only includes emissions credit for projects, programs, or activities that require regulatory action if: the regulatory action has been adopted; the project, program, activity or a written commitment is included in the SIP; EPA has approved an opt-in to the program, EPA has promulgated the program, or the Clean Air Act requires the program (indicate applicable date). Discuss the implementation status of these programs and the associated emissions credit for each analysis year (a)(3). | Ch. 2<br>28           |          |

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| <b>40 CFR</b>                        | <b>Criteria</b>   | <b>Page</b> | <b>Comments</b> |
|--------------------------------------|---|-------------|-----------------|
| §93.122<br>(a)(4,5,6,7)              | For nonregulatory measures that are not included in the transportation plan and TIP, include written commitments from appropriate agencies (a)(4). Document that assumptions for measures outside the transportation system (e.g. fuels measures) are the same for baseline and action scenarios (a)(5). Document that factors such as ambient temperature are consistent with those used in the SIP unless modified through interagency consultation (a)(6). Document the method(s) used to estimate VMT on off-network roadways in the analysis (a)(7). | N/A         |                 |
| §93.122<br>(b)(1)(i) <sup>ii</sup>   | Document that a network-based travel model is in use that is validated against observed counts for a base year no more than 10 years before the date of the conformity determination. Document that the model results have been analyzed for reasonableness and compared to historical trends and explain any significant differences between past trends and forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.).   | Ch. 2<br>24 |                 |
| §93.122<br>(b)(1)(ii) <sup>ii</sup>  | Document the land use, population, employment, and other network-based travel model assumptions.  | Ch. 2<br>24 |                 |
| §93.122<br>(b)(1)(iii) <sup>ii</sup> | Document how land use development scenarios are consistent with future transportation system alternatives, and the reasonable distribution of employment and residences for each alternative.   | Ch. 2<br>24 |                 |
| §93.122<br>(b)(1)(iv) <sup>ii</sup>  | Document use of capacity sensitive assignment methodology and emissions estimates based on a methodology that differentiates between peak and off-peak volumes and speeds, and bases speeds on final assigned volumes.  | Ch. 2<br>25 |                 |
| §93.122<br>(b)(1)(v) <sup>ii</sup>   | Document the use of zone-to-zone travel impedances to distribute trips in reasonable agreement with the travel times estimated from final assigned traffic volumes. Where transit is a significant factor, document that zone-to-zone travel impedances used to distribute trips are used to model mode split.  | Ch. 2<br>25 |                 |
| §93.122<br>(b)(1)(vi) <sup>ii</sup>  | Document how travel models are reasonably sensitive to changes in time, cost, and other factors affecting travel choices.   | Ch. 2<br>24 |                 |
| §93.122<br>(b)(2) <sup>ii</sup>      | Document that reasonable methods were used to estimate traffic speeds and delays in a manner sensitive to the estimated volume of travel on each roadway segment represented in the travel model.   | Ch. 2<br>24 |                 |
| §93.122<br>(b)(3) <sup>ii</sup>      | Document the use of HPMS, or a locally developed count-based program or procedures that have been chosen through the consultation process, to reconcile   | Ch. 2<br>24 |                 |

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| <b>40 CFR</b>             | <b>Criteria</b>   | <b>Page</b>           | <b>Comments</b> |
|---------------------------|---|-----------------------|-----------------|
|                           | and calibrate the network-based travel model estimates of VMT.  |                       |                 |
| §93.122 (d)               | In areas not subject to §93.122(b), document the continued use of modeling techniques or the use of appropriate alternative techniques to estimate vehicle miles traveled   | Ch. 2<br>24           |                 |
| §93.122 (e, f)            | Document, in areas where a SIP identifies construction-related PM10 or PM2.5 as significant pollutants, the inclusion of PM10 and/or PM2.5 construction emissions in the conformity analysis.   | Ch. 3<br>32           |                 |
| §93.122 (g)               | If appropriate, document that the conformity determination relies on a previous regional emissions analysis and is consistent with that analysis, i.e. that:  |                       |                 |
|                           | (g)(1)(i): the new plan and TIP contain all the projects that must be started to achieve the highway and transit system envisioned by the plan  | Appendix B            |                 |
|                           | (g)(1)(ii): all plan and TIP projects are included in the transportation plan with design concept and scope adequate to determine their contribution to emissions in the previous determination;  | Appendix B            |                 |
|                           | (g)(1)(iii): the design concept and scope of each regionally significant project in the new plan/TIP are not significantly different from that described in the previous;   | Appendix B            |                 |
|                           | (g)(1)(iv): the previous regional emissions analysis meets 93.118 or 93.119 as applicable   | Appendix B            |                 |
| §93.126, §93.127, §93.128 | Document all projects in the TIP/RTP that are exempt from conformity requirements or exempt from the regional emissions analysis. Indicate the reason for the exemption (Table 2, Table 3, traffic signal synchronization) and that the interagency consultation process found these projects to have no potentially adverse emissions impacts. | Ch. 2, App B<br>26-27 |                 |

<sup>i</sup> Note that some areas are required to complete both Interim emissions tests.

<sup>ii</sup> 40 CFR 93.122(b) refers only to serious, severe and extreme ozone areas and serious CO areas above 200,000 population. Also note these procedures apply in any areas where the use of these procedures has been the previous practice of the MPO (40 CFR 93.122(d)).

Disclaimers

This checklist is intended solely as an informational guideline to be used in reviewing Transportation Plans and Transportation Improvement Programs for adequacy of their conformity documentation. It is in no way intended to replace or supersede the Transportation Conformity regulations of 40 CFR Parts 51 and 93, the Statewide and Metropolitan Planning Regulations of 23 CFR Part 450 or any other EPA, FHWA or FTA guidance pertaining to transportation conformity or statewide and metropolitan planning. This checklist is not intended for use in documenting transportation conformity for individual transportation projects in nonattainment or maintenance areas. 40 CFR Parts 51 and 93 contain additional criteria for project-level conformity determinations.

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**APPENDIX B**

**TRANSPORTATION PROJECT LISTING**

**Table 6-1: 2018 Regional Transportation Plan Project List - Mainline Highway Improvements Category**

| Identifiers     |               | Project Information |              | Project Description                  |   | Project Limits   |                        | Cost to Deliver |                  | Milestone Years |                 |                    |              |  |
|-----------------|---------------|---------------------|--------------|--------------------------------------|---|--|------------------------|-----------------|------------------|-----------------|-----------------|--------------------|--------------|--|
| 2018 RTP MPO ID | CTIPS ID #    | PPNO                | Jurisdiction | Facility Name/Route                  | Project Description   | Project Limits   | Total                  | Total           | FTIP Programming | NEPA Approval   | Open to Traffic | MK Renewal Project | RTIF Project |  |
| SJ14-1004       | 112-0000-0421 |                     | Caltrans     | SR 99/120 Connector Project Phase 1A | (Widen the eastbound SR 120 to southbound SR 99 connector ramp from one-lane to two-lanes; Remove the Austin Road overcrossing and replace with a new 4 lane structure spanning SR 99 and UPRR; Add a new connecting road from Austin Road to Woodward Ave and Moffat Blvd and modify the existing UPRR gated crossing at Woodward Ave; Temporarily close the Austin Road northbound entrance and southbound exit ramps, resulting in a partial interchange.) | On SR-120 from Main Street (P.M. 5.13) to SR-99 and on SR-99 from SR-120 to Olive Avenue (P.M. 6.22) | \$52,419,765           |                 | 2015             | 2019            | 2023            | X                  | X            |  |
| SJ07-1003       |               |                     | Caltrans     | I-205 HOV                            | Widen from 6 to 8 lanes (inside/outside)  | Alameda County Line to Eleventh Street   | \$95,874,000           |                 |                  | 2020            | 2026            | X                  |              |  |
| SJ14-1001       |               |                     | Caltrans     | I-205 HOV                            | Widen from 6 to 8 lanes (inside/outside)  | Eleventh Street to MacArthur Drive   | \$102,000,000          |                 |                  | 2020            | 2026            | X                  | X            |  |
| SJ14-1002       |               |                     | Caltrans     | I-205 HOV                            | Widen from 6 to 8 lanes (inside/outside)  | MacArthur Drive to I-5   | \$100,000,000          |                 |                  | 2020            | 2026            | X                  |              |  |
| SJ07-1008       |               |                     | Caltrans     | I-5 HOV Mossdale                     | Widen to add HOV lanes with HOV Connector Ramps to I-205 and SR-120   | I-205 to Louise Avenue (P.M. 12.5/R 16.5)  | \$207,970,000          |                 |                  | 2022            | 2028            | X                  | X            |  |
| SJ07-1014       |               |                     | Caltrans     | SR-120                               | Widen 4 to 6 lanes (inside)   | I-5 to Main Street (P.M. 5.13)   | \$41,175,190           |                 |                  | 2024            | 2030            | X                  |              |  |
| SJ18-1001       |               |                     | Caltrans     | SR-99 HOV                            | Widen 6 to 8 lanes (inside/outside), including reconstruction of SR-99/Main Street and SR-99/Wilma Avenue interchanges and pedestrian overcrossing  | SR-120 to Stanislaus County Line   | \$200,000,000          |                 |                  | 2026            | 2032            |                    |              |  |
| SJ18-1002       | 212-0000-0743 |                     | Caltrans     | SR 99/120 Connector Project Phase 1B | Widen the northbound SR 99 to westbound SR 120 connector ramp from one-lane to two-lanes; Add an auxiliary lane in the existing median of westbound SR 120 from Main Street to SR 99; Convert the existing 99/120 separation structure to two lanes and construct a new separation structure to serve the eastbound 120 to northbound 99 connector ramp.)   | On SR-120 from Main Street (P.M. 5.13) to SR-99 and on SR-99 from SR-120 to Olive Avenue (P.M. 6.22) | \$25,758,534           |                 | 2019             | 2019            | 2033            | X                  | X            |  |
| SJ11-1001       |               |                     | Caltrans     | I-5 HOV                              | Widen from 6 to 8 lanes (inside median) including auxiliary lanes   | Hammer Lane to North of Eight Mile Road  | \$124,620,000          |                 |                  | 2009            | 2036            | X                  |              |  |
| SJ07-1005       |               |                     | Caltrans     | I-5 HOV                              | Widen 6 to 8 lanes (inside)   | French Camp Road to Charter Way  | \$97,880,000           |                 |                  | 2030            | 2038            | X                  |              |  |
| SJ07-1006       |               |                     | Caltrans     | I-5 HOV                              | Widen 6 to 8 lanes (inside)   | Louise Avenue to French Camp Road  | \$193,880,000          |                 |                  | 2032            | 2040            | X                  |              |  |
| SJ18-1003       | 212-0000-0744 |                     | Caltrans     | SR 99/120 Connector Project Phase 1C | Add braided off ramps from SR 99 and SR 120 to Austin Road; Add loop on ramp from Austin Road to northbound SR 99 and to westbound SR 120; Add auxiliary lane on eastbound SR 120 from Main Street to SR 99; Add an auxiliary lane in each direction on SR 99 from SR 120 to approximately 1.7 mile south of Austin Road and relocate the frontage road.  | On SR-120 from Main Street (P.M. 5.13) to SR-99 and on SR-99 from SR-120 to Olive Avenue (P.M. 6.22) | \$52,548,860           |                 | 2019             | 2019            | 2042            | X                  | X            |  |
| SJ14-1003       |               |                     | Caltrans     | SR-99 Widening                       | Widen 4 to 6 lanes (inside) - ENVIRONMENTAL ONLY  | Harney Lane to Turner Road   | \$3,000,000            |                 |                  |                 |                 |                    |              |  |
|                 |               |                     |              |                                      |   |  | <b>\$1,297,126,349</b> |                 |                  |                 |                 |                    |              |  |

**Table 6-2: 2018 Regional Transportation Project List - Interchange Improvements Category**

| Identifiers | 2018 RTP MPO ID | CTIPS ID # | PPNO | Project Information |   |   | Project Description  | Project Limits | Cost to Deliver | Total | Milestone Years  |               |                 |                    |              |
|-------------|-----------------|------------|------|---------------------|---|---|--|----------------|-----------------|-------|------------------|---------------|-----------------|--------------------|--------------|
|             |                 |            |      | Jurisdiction        | Facility Name/Route                             |   |  |                |                 |       | FTIP Programming | NEPA Approval | Open to Traffic | MK Renewal Project | RTIP Project |
| SJ07-2005   |                 |            |      | Lathrop             | I-5 at Louise Avenue                            | Reconstruct interchange (PM 16.4-16.8)  | I-5 at Louise Avenue   |                | \$28,754,000    |       | 2024             | 2030          | X               |                    |              |
| SJ07-2004   |                 |            |      | Lathrop             | I-5 at Lathrop Road                             | Reconstruct interchange (P.M. 17.3/17.8)  | I-5 at Lathrop Road  |                | \$39,146,000    |       | 2029             | 2033          | X               |                    |              |
|             |                 |            |      |                     |   | Relocation of intersection at Roth/Harlan Road inclusive of signalization; relocation of intersection at Roth/Manthey Road inclusive of signalization. Widen from 2 to 5 lanes from Roth/Harlan road intersection to Roth/Manthey Road Intersection |  |                |                 |       |                  |               |                 |                    |              |
| SJ11-3066   |                 |            |      | Lathrop             | I-5 at Roth Road                                |   | I-5 at Roth Road   |                | \$16,800,000    |       |                  | 2020          |                 |                    |              |
| SJ14-2004   |                 |            |      | Lathrop             | SR 120 at Yosemite Ave/Guthmiller Road          | Reconstruct interchange   | SR 120 at Yosemite Ave/Guthmiller Road   |                | \$31,000,000    |       | 2020             | 2022          |                 |                    |              |
| SJ11-2015   |                 |            |      | Lodi                | SR-99 at SR-12 West (Kettleman Lane)            | Reconstruct interchange and widen to free flowing interchange   | SR-99 at SR-12 West (Kettleman Lane)   |                | \$50,000,000    |       | 2030             | 2036          | X               |                    |              |
|             |                 |            |      |                     |   | Reconstruct interchange to provide 6 through lanes on SR 99, 4 lanes on Harney between Reynolds Ranch Pkwy and SR 99 and modify on-ramps and off-ramps  |  |                |                 |       |                  |               |                 |                    |              |
| SJ07-2006   |                 |            |      | Lodi                | SR-99 at Harney Lane                            |   | SR-99 at Harney Lane   |                | \$35,362,000    | 2009  | 2028             | 2033          | X               |                    |              |
|             |                 |            |      |                     |   | Reconstruct interchange to provide operational and safety improvements on SR 99 at Turner Road (PM 31.3/31.6)   |  |                |                 |       |                  |               |                 |                    |              |
| SJ07-1020   | 112-0000-0347   |            |      | Lodi                | SR-99 at Turner Road                            |   | SR-99 at Turner Road   |                | \$6,142,986     | 2019  | 2036             | 2041          | X               |                    |              |
| SJ07-2012   |                 |            |      | Manteca             | SR-120 at Union Road                            | Reconstruct interchange (P.M. 4.1/4.1)  | SR-120 at Union Road   |                | \$22,000,000    |       |                  | 2021          | X               |                    |              |
| SJ07-2009   | 212-0000-0231   |            |      | Manteca             | SR-120 at McKinley Ave                          | Construct new interchange   | SR-120 at McKinley Avenue  |                | \$37,850,000    | 2009  | 2014             | 2022          | X               | X                  |              |
| SJ18-2001   |                 |            |      | Manteca             | SR-120 at Airport Way                           | Reconstruct interchange   | SR-120 at Airport Way  |                | \$36,828,000    |       | 2029             | 2031          | X               |                    |              |
| SJ18-2002   |                 |            |      | Manteca             | SR-120 at Main Street                           | Reconstruct interchange   | SR-120 at Main Street  |                | \$36,828,000    |       | 2031             | 2033          | X               |                    |              |
| SJ14-2001   |                 |            |      | Manteca             | SR-99 at Raymus Expressway                      | Construction of new interchange - ENVIRONMENTAL ONLY  | SR-99 at Raymus Expressway   |                | \$3,000,000     |       |                  |               | X               | X                  |              |
|             |                 |            |      |                     |   | Interchange Modification and auxiliary lanes (PM 32.6)  |  |                |                 |       |                  |               |                 |                    |              |
| SJ11-2004   | 212-0000-0309   |            |      | Stockton            | I-5 at Hammer Lane                              |   | I-5 at Hammer Lane   |                | \$47,164,647    | 2007  | 2009             | 2036          |                 |                    |              |
|             |                 |            |      |                     |   | Construction of a new interchange and auxiliary lanes (PM 33.3/34.2)  |  |                |                 |       |                  |               |                 |                    |              |
| SJ11-2006   | 212-0000-0309   |            |      | Stockton            | I-5 at Otto Drive                               |   | I-5 at Otto Drive  |                | \$103,371,218   | 2007  | 2009             | 2036          |                 |                    |              |
|             |                 |            |      |                     |   | Modification of interchange (P.M. 34.7/35.9)  |  |                |                 |       |                  |               |                 |                    |              |
| SJ07-2020   | 212-0000-0309   |            |      | Stockton            | I-5 at Eight Mile Road                          |   | I-5 at Eight Mile Road   |                | \$57,255,179    | 2007  | 2009             | 2036          |                 |                    |              |
|             |                 |            |      |                     |   | Reconstruct Interchange (PM 35.1-35.5)  |  |                |                 |       |                  |               |                 |                    |              |
| SJ11-2002   | 212-0000-0562   |            |      | Stockton            | SR-99 at Eight Mile Road                        |   | SR-99 at Eight Mile Road   |                | \$93,070,215    |       | 2030             | 2036          | X               |                    |              |
|             |                 |            |      |                     |   | Reconstruct interchange (PM 23.5-24.5)  |  |                |                 |       |                  |               |                 |                    |              |
| SJ11-2001   | 212-0000-0561   |            |      | Stockton            | SR-99 at Morada                                 |   | SR-99 at Morada  |                | \$96,474,024    |       | 2030             | 2036          |                 |                    |              |
|             |                 |            |      |                     |   | Construct Interchange I-205 at Eleventh street realign and widen Eleventh Street to 6-lanes north of Grant Line to Byron Road. Construct Aux lane Hansen to Eleventh; in WB I-205 Eleventh Street to Grant Line Road                                |  |                |                 |       |                  |               |                 |                    |              |
| SJ11-2010   | 212-0000-0227   |            |      | Tracy               | I-205/Lammers Rd/Eleventh St                    |   | Construct Interchange I-205 at Eleventh street realign and widen Eleventh Street to 6-lanes north of Grant Line to Byron Road. Construct Aux lane Hansen to Eleventh; in WB I-205 Eleventh Street to Grant Line Road |                | \$51,500,000    | 2007  | 2012             | 2022          | X               |                    |              |
|             |                 |            |      |                     |   | Reconstruct interchange   |  |                |                 |       |                  |               |                 |                    |              |
| SJ14-2002   |                 |            |      | Tracy               | I-580 at International Pkwy/Patterson Pass Road |   | I-580 at Mountain House Parkway  |                | \$9,000,000     | 2015  | 2018             | 2022          | X               |                    |              |
|             |                 |            |      |                     |   | Reconstruct interchange   |  |                |                 |       |                  |               |                 |                    |              |
| SJ14-2003   |                 |            |      | Tracy               | I-205 at Mountain House/International Pkwy      |   | I-205 at Mountain House Parkway  |                | \$4,000,000     | 2015  | 2018             | 2022          | X               | X                  |              |
|             |                 |            |      |                     |   | Modification of existing interchange  |  |                |                 |       |                  |               |                 |                    |              |
| SJ11-2011   |                 |            |      | Tracy               | I-205 at Grant Line Road                        |   | I-205 at Grant Line Road   |                | \$32,574,820    |       | 2018             | 2024          |                 |                    |              |
|             |                 |            |      |                     |   | Phase 1: Construct new interchange east-west ramps  |  |                |                 |       |                  |               |                 |                    |              |
| SJ11-2012   | 212-0000-0228   |            |      | Tracy               | I-205 at Chrisman Rd                            |   | I-205 at Chrisman Rd   |                | \$36,056,267    | 2009  | 2020             | 2026          |                 |                    |              |
|             |                 |            |      |                     |   | Modification of existing interchange - ENVIRONMENTAL ONLY   |  |                |                 |       |                  |               |                 |                    |              |
| SJ18-2003   |                 |            |      | Tracy               | I-205 / MacArthur Interchange modification      |   | At MacArthur (PM 7.8 -PM 8.5)  |                | \$9,670,000     |       |                  |               |                 |                    |              |
|             |                 |            |      |                     |   | Modification of existing interchange - ENVIRONMENTAL ONLY   |  |                |                 |       |                  |               |                 |                    |              |
| SJ11-2031   |                 |            |      | Tracy               | I-580 at Corral Hollow Road                     |   | I-580 at Coral Hollow Road   |                | \$5,500,000     |       | 2018             |               |                 |                    |              |
|             |                 |            |      |                     |   | Construction of new interchange - ENVIRONMENTAL ONLY  |  |                |                 |       |                  |               |                 |                    |              |
| SJ11-2032   |                 |            |      | Tracy               | I-580 at Lammers Road                           |   | I-580 at Lammers Road  |                | \$5,500,000     |       | 2018             |               |                 |                    |              |
|             |                 |            |      |                     |   |   |  |                | \$894,847,355   |       |                  |               |                 |                    |              |

**Table 6-10: 2018 Regional Transportation Plan Project List - Operations and Maintenance Category**

| Identifiers | 2018 RTP MPO ID                 | CTIPS ID # | PPNO | Project Information |   | Facility Name/Route  | Project Description  | Project Limits | Cost to Deliver |  | Milestone Years | FTIP Programming | NEPA Approval | Open to Traffic |
|-------------|---------------------------------|------------|------|---------------------|---|--|--|----------------|-----------------|--|-----------------|------------------|---------------|-----------------|
|             |                                 |            |      | Jurisdiction        |   |  |  |                | Total           |  |                 |                  |               |                 |
| SJ07-1019   | 212-0000-0313                   |            |      | Caltrans            | Various locations   | SHOPP - Collision Reduction Grouped Projects   | Various  |                | \$282,542,602   |  | various         | various          | 2042          |                 |
| SJ07-1020   | 212-0000-0314                   |            |      | Caltrans            | Various locations   | SHOPP - Mobility Grouped Projects  | Various  |                | \$92,928,777    |  | various         | various          | 2042          |                 |
| SJ07-1021   | 212-0000-0315                   |            |      | Caltrans            | Various locations   | SHOPP Roadway Preservation Grouped Projects  | Various  |                | \$194,525,465   |  | various         | various          | 2042          |                 |
| SJ07-1022   | 212-0000-0392                   |            |      | Caltrans            | Various locations   | SHOPP-Other (Emergency Response, Mandates, Bridge Preservation, Roadside Preservation Etc.)  | Various  |                | \$136,747,973   |  | various         | various          | 2042          |                 |
| SJ07-3002   | 212-0000-0272                   |            |      | Caltrans            | Various locations   | Caltrans Highway Bridge Program Lump Sum projects (Safety)   | Various  |                | \$116,490,513   |  | various         | various          | 2042          |                 |
| SJ07-3003   | various                         |            |      | Caltrans            | Various locations   | Caltrans Highway Bridge Program Line Item projects (Safety)  | Various  |                | \$197,179,445   |  | various         | various          | 2042          |                 |
| SJ07-3004   | 212-0000-0307                   |            |      | Caltrans            | Various locations   | Lump sum for Emergency Repair Program (Safety)   | Various  |                | \$3,750,000     |  | various         | various          | 2042          |                 |
| SJ07-3005   | 212-0000-0353/<br>212-0000-0567 |            |      | Caltrans            | Various locations   | Caltrans Minor Program (Safety)  | Various  |                | \$12,115,575    |  | various         | various          | 2042          |                 |
|             |                                 |            |      | Caltrans            | SR-120 TMS Upgrade/Repairs  | Upgrade existing communication infrastructure between field elements and District 10 TMC   | On Route 5, 120, and 99 at various locations in San Joaquin County                     |                | \$6,970,000     |  |                 |                  | 2022          |                 |
|             |                                 |            |      | Caltrans            | SR 120  | Contingency Project: Install Ramp Meters   | In San Joaquin County on State Route 120   |                | \$22,740,000    |  |                 |                  | 2023          |                 |
|             |                                 |            |      | Caltrans            | Various routes Phase 1  | Repair, update, and install ITS elements, including installation of MVPs, and filling in the gaps  | In San Joaquin County on Various Routes  |                | \$5,500,000     |  |                 |                  | 2024          |                 |
|             |                                 |            |      | Caltrans            | Various routes Phase 2  | Repair, update, and install ITS elements, including installation of MVPs, and filling in the gaps  | In San Joaquin County on Various Routes  |                | \$4,250,000     |  |                 |                  | 2025          |                 |
|             |                                 |            |      | Caltrans            | SR 4 various locations  | Installing ramp meters   | SR-4 Ramp metering system Installation   |                | \$56,503,000    |  |                 |                  | 2024          |                 |
|             |                                 |            |      | Caltrans            | I-5 various locations I 205 to Mathews Rd                                     | Install ramp meters and ITS elements   | In San Joaquin County on I-5 from I-205 to Mathew Road                                 |                | \$32,175,000    |  |                 |                  | 2026          |                 |
|             |                                 |            |      | Caltrans            | I-5 various locations from Mathews to Dr. Martin Luther King Jr. Blvd         | Install ramp meters and ITS elements   | In San Joaquin County on I-5 from Mathew Road to Dr. Martin Luther King Jr. Blvd       |                | \$29,250,000    |  |                 |                  | 2027          |                 |
|             |                                 |            |      | Caltrans            | I-5 various locations from Dr. Martin Luther King Jr. Blvd to Calaveras River | Install ramp meters and ITS elements   | In San Joaquin County on I-5 from Dr. Martin Luther King Jr. Blvd. to Calaveras River  |                | \$23,400,000    |  |                 |                  | 2030          |                 |
|             |                                 |            |      | Caltrans            | I-5 various locations from Calaveras River to Eight Mile Rd.                  | Install ramp meters and ITS elements   | In San Joaquin County on I-5 from Calaveras River to Eight Mile Road                   |                | \$37,050,000    |  |                 |                  | 2030          |                 |
|             |                                 |            |      | Caltrans            | SR 99 various locations from Hammer Lane to Armstong Rd                       | Install ramp meters and ITS elements   | In San Joaquin County on SR-99 from Hammer Lane Road to Armstrong Road                 |                | \$21,450,000    |  |                 |                  | 2029          |                 |
|             |                                 |            |      | Caltrans            | SR 99 various locations from Armstong to                                      | Install ramp meters and ITS elements   | In San Joaquin County on SR-99 from Armstrong Road to River North of Turner Road       |                | \$33,150,000    |  |                 |                  | 2030          |                 |
|             |                                 |            |      | Caltrans            | SR 99 various locations   | Install ramp meters and ITS elements   | In San Joaquin County on SR-99 from River North of Turner Road to North of Acampo Road |                | \$23,400,000    |  |                 |                  | 2031          |                 |
| SJ11-3046   | 212-0000-0001                   |            |      | Escalon             | Various Street Rehabilitation   | Rehabilitation of various streets and roads  | City streets, various locations  |                | \$20,736,003    |  | various         |                  | 2042          |                 |
| SJ11-3047   | 212-0000-0001                   |            |      | Lathrop             | Various Street Rehabilitation   | Rehabilitation of various streets and roads  | City streets, various locations  |                | \$48,882,059    |  | various         |                  | 2042          |                 |
| SJ14-CM17   | 212-0000-0644                   |            |      | Lathrop             | Louise Avenue and McKinley Avenue Intersection Improvements                   | Costs associated with the improvement of the Louise Avenue and McKinley Avenue intersection including installation of left turn lanes and modified traffic signal equipment. | City of Lathrop  |                | \$450,000       |  | 2017            |                  | 2020          |                 |

Table 6-10: 2018 Regional Transportation Plan Project List - Operations and Maintenance Category

| Identifiers |               | 2018 RTP MPO ID |          | CTIP5 ID # |                    | PNMO   |  | Project Information   |                 | Facility Name/Route |      | Project Description |      | Project Limits |      | Cost to Deliver |  | Milestone Years |  | FTIP Programming |  | NEPA Approval |  | Open to Traffic |  |
|-------------|---------------|-----------------|----------|------------|--------------------|--|--|---|-----------------|---------------------|------|---------------------|------|----------------|------|-----------------|--|-----------------|--|------------------|--|---------------|--|-----------------|--|
| SJ ID       | CTIP5 ID      | MPO             | CTIP5 ID | PNMO       | Jurisdiction       | Facility Name/Route  | Project Description  | Project Limits  | Total           | 2017                | 2018 | 2019                | 2020 | 2021           | 2022 |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ14-9001   | 212-0000-0699 |                 |          |            | Lathrop            | Golden Valley Parkway & Lathrop Road Intersection Improvements | Replace all-way stop intersection at Golden Valley Parkway with new traffic signal with detection system, slurry seal, install signage and striping, and interconnect four signals on Lathrop Road between Golden Valley Parkway and Harlan Road. Install approximately 750 feet of sidewalk on south side of Spartan Way west of Golden Valley Parkway intersection   | City of Lathrop   | \$450,000       |                     |      |                     |      |                | 2020 |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ11-3048   | 212-0000-0001 |                 |          |            | Lodi               | Various Street Rehabilitation                                  | Rehabilitation of various streets and roads  | City streets, various locations   | \$179,583,369   |                     |      |                     |      |                | 2042 |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ11-3190   | 212-0000-0552 |                 |          |            | Lodi               | Lockeford Street Improvements                                  | From the UPRR to Cherokee Lane. Construct two left lane, parking on both sides, Class II bikes lanes, install storm drain system, curb gutter and sidewalks, landscaping and street lights. Upgrade existing lighted crosswalk. Install new signal at Lockeford St. and Stockton St. including installation of EVP, ADA ramps, signage and striping. Modify traffic signal and striping at Cherokee Lane and Lockeford St. to accommodate travel lanes.) | City of Lodi  | \$5,420,000     |                     |      |                     | 2017 |                | 2020 |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ11-3049   | 212-0000-0001 |                 |          |            | Manteca            | Various Street Rehabilitation                                  | Rehabilitation of various streets and roads  | City streets, various locations   | \$143,941,870   |                     |      |                     |      |                | 2042 |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ18-3002   |               |                 |          |            | Manteca            | Main Street and Woodward Avenue Signalization Project          | Install new traffic signal with indicators, traffic signal control panel and case, and induction loops. Install ADA compliant pedestrian facilities and high visibility crosswalks   | In the City of Manteca at the intersection of Main Street and Woodward Avenue             | \$3,400,000     |                     |      |                     |      |                | 2021 |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ18-3003   |               |                 |          |            | Manteca            | SR 120 / Main Street Interchange Ramps Right Turn Lane         | Widen eastbound SR 120 off ramp to Main Street to provide 400 foot eastbound right turn lane. Widening Northbound Main Street to provide 300 foot right turn lane to eastbound SR 120 on ramp.   | In the City of Manteca at the SR 120 Main Street Interchange eastbound ramp intersection. | \$500,000       |                     |      |                     |      |                | 2021 |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ18-3004   |               |                 |          |            | Manteca            | SR 99 / Yosemite Avenue Ramp Signal Timing                     | Adjust signal timing   | In the City of Manteca at the SR 99 / Yosemite Avenue ramp intersections.                 | \$20,000        |                     |      |                     |      |                | 2021 |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ18-3001   |               |                 |          |            | Port of Stockton   | Rough & Ready Island Rail Bridge                               | Construct new rail bridge (double-track) to replace existing deficient structure   | City of Stockton  | \$18,000,000    |                     |      |                     |      |                | 2040 |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ14-9001   | 212-0000-0700 |                 |          |            | Ripon              | Colony/Hoff Traffic Signal                                     | Install traffic signal   | At intersection of Colony Rd/Hoff Drive/SR 99 Ramps                                       | \$660,000       |                     |      | 2017                | 2018 | 2019           |      |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ14-8004   | 212-0000-0658 |                 |          |            | Ripon              | River Road Sidewalk and Intersection Improvements              | In Ripon, install traffic signal and crosswalks at River Road/Fulton Avenue intersection and install sidewalk  | City of Ripon   | \$550,000       |                     |      | 2017                | 2018 | 2019           |      |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ11-3020   | 212-0000-0695 |                 |          |            | Ripon              | River Road Phase I   | Widen River Road from 2 to 6 lanes between Fulton Avenue intersection and North Ripon Road   | City of Ripon   | \$932,000       |                     |      | 2017                | 2018 | 2019           |      |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ11-3050   | 212-0000-0001 |                 |          |            | Ripon              | Various Street Rehabilitation                                  | Rehabilitation of various streets and roads  | City streets, various locations   | \$42,047,006    |                     |      |                     |      | 2042           |      |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ11-3051   | 212-0000-0001 |                 |          |            | San Joaquin County | Various Roadway Rehabilitation                                 | Rehabilitation to include: driveways, wheelchair ramps, median islands, pedestrian improvements, and class II bicycle lanes.   | Rehabilitate roadway and surrounding streets  | \$1,303,907,722 |                     |      |                     |      |                | 2042 |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ14-9003   | 212-0000-0701 |                 |          |            | San Joaquin County | SR 26 and Jack Tone Road Roundabout                            | Install roundabout   | At intersection of Jack Tone Road and SR 26   | \$1,525,000     |                     |      | 2017                | 2018 | 2020           |      |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ14-9004   | 212-0000-0702 |                 |          |            | San Joaquin County | SR 4 and Jack Tone Road Roundabout                             | Install roundabout   | At intersection of Jack Tone Road and SR 4  | \$1,659,000     |                     |      | 2017                | 2018 | 2020           |      |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ07-3116   | 212-0000-0403 |                 |          |            | San Joaquin County | Byron Road and Grant Line Road Roundabout                      | Install roundabout   | At intersection of Byron Road and Grant Line Road near Tracy                              | \$1,367,300     |                     |      | 2017                | 2018 | 2020           |      |                 |  |                 |  |                  |  |               |  |                 |  |
| SJ07-3116   | 212-0000-0403 |                 |          |            | San Joaquin County | Duncan Road and Comstock Road Roundabout                       | Install roundabout   | At intersection of Duncan Road and Comstock Road near Linden                              | \$1,213,900     |                     |      | 2017                | 2018 | 2020           |      |                 |  |                 |  |                  |  |               |  |                 |  |

**Table 6-10: 2018 Regional Transportation Plan Project List - Operations and Maintenance Category**

| Identifiers     |               | Project Information |                    | Project Description   |   | Project Limits  |               | Cost to Deliver  |               | Milestone Years |         |      |      |
|-----------------|---------------|---------------------|--------------------|---|---|---|---------------|------------------|---------------|-----------------|---------|------|------|
| 2018 RTP MPO ID | CTIPs ID #    | PNNO                | Jurisdiction       | Facility Name/Route   | Project Description   | Project Limits  | Total         | FTIP Programming | NEPA Approval | Open to Traffic |         |      |      |
| SJ07-3116       | 212-0000-0403 |                     | San Joaquin County | Liberty Road and Dustin Road Roundabout                                 | Install roundabout  | At intersection of Liberty Road and Dustin Road in northern San Joaquin County  | \$1,279,500   |                  |               |                 | 2017    | 2018 | 2020 |
| SJ11-3042       | 212-0000-0001 |                     | SJCOG              | Regional Surface Transportation Program (STP) Lump Sum Projects         | Various state highway and transit capital projects  | San Joaquin County  | \$3,038,998   |                  |               |                 | various |      | 2042 |
| SJ07-3116       | 212-0000-0403 |                     | Stockton           | Dr. Martin Luther King Jr. Blvd Signal Modifications                    | Convert signals from pedestal-mounted to mast arms and provide protected left-turns   | Dr. Martin Luther King Jr. Blvd between N. Eldorado Street and S. Aurora Street at intersections of S. San Joaquin Street, California Street, and S. Grant Street | \$1,163,500   |                  |               |                 | 2017    | 2018 | 2020 |
| SJ07-3116       | 212-0000-0403 |                     | Stockton           | Dr. Martin Luther King Jr. Blvd Median                                  | Install raised median   | Dr. Martin Luther King Jr. Blvd between Biegle Alley and Mariposa Road  | \$370,710     |                  |               |                 | 2017    | 2018 | 2020 |
| SJ07-3116       | 212-0000-0403 |                     | Stockton           | Guardrail Upgrades  | Upgrade existing guardrails with new guardrails, transition rails, and end treatments   | 16 locations throughout Stockton  | \$1,180,900   |                  |               |                 | 2017    | 2018 | 2020 |
| SJ07-3116       | 212-0000-0403 |                     | Stockton           | Pacific Avenue Median   | Install raised median curb between the existing median limits at various locations  | Pacific Avenue between the Calaveras River Trail and W. Hammer Lane   | \$969,750     |                  |               |                 | 2017    | 2018 | 2020 |
| SJ14-9005       | 212-0000-0707 |                     | Stockton           | Real-time Traffic Flow Monitoring                                       | Implement real-time traffic flow monitoring using Bluetooth/Wifi vehicle probe technology   | Various intersections along arterials throughout Stockton   | \$595,000     |                  |               |                 | 2017    | 2018 | 2019 |
| SJ14-9006       | 212-0000-0708 |                     | Stockton           | Pacific Avenue and March Lane Intersection Modification                 | Install southbound right turn lane and retime traffic signal  | At intersection of Pacific Avenue and March Lane  | \$649,000     |                  |               |                 | 2017    | 2018 | 2019 |
| SJ14-9007       | 212-0000-0709 |                     | Stockton           | Left-Turn Lanes Additions at Various Intersections                      | Install left turn lanes   | At intersections of March Lane and Feather River Drive, West Lane and Bianchi Road, and Airport Way and Arch-Airport Road.  | \$2,125,000   |                  |               |                 | 2017    | 2018 | 2019 |
| SJ14-9008       | 212-0000-0710 |                     | Stockton           | Tam O'Shanter Drive and Knickerbocker Drive Roundabout and Bicycle Lane | Install roundabout and Class II Bicycle Lanes   | At intersection of Tam O'Shanter Drive and Knickerbocker Drive, and on Tam O'Shanter Drive between Knickerbocker Drive and Hammer Lane                            | \$966,112     |                  |               |                 | 2017    | 2018 | 2019 |
| SJ14-9009       | 212-0000-0711 |                     | Stockton           | Montauban Ave and Hammertown Drive Roundabout and Bicycle Lane          | Install roundabout and Class II Bicycle Lanes   | At intersection of Montauban Avenue and Hammertown Drive and on Montauban Avenue between Hammertown Drive and Swain Road  | \$1,078,227   |                  |               |                 | 2017    | 2018 | 2019 |
| SJ14-9010       | 212-0000-0712 |                     | Stockton           | Lincoln Street and Eighth Street Roundabout and Bicycle Lane            | Install roundabout and Class II Bicycle Lanes   | At intersection of Lincoln Street and Eighth Street, and on Eighth Street between Lincoln Street and El Dorado Street   | \$1,183,302   |                  |               |                 | 2017    | 2018 | 2019 |
| SJ11-3043       | 212-0000-0001 |                     | Stockton           | Regional Surface Transportation Program (STP) Lump Sum Projects         | Rehabilitation to include: driveways, wheelchair ramps, median islands, pedestrian improvements, and class II bicycle lanes.  | City streets, various locations   | \$5,931,260   |                  |               |                 | various |      | 2042 |
| SJ11-3044       | 212-0000-0001 |                     | Stockton           | Regional Surface Transportation Program (STP) Lump Sum Projects         | Operations and Maintenance  | City streets, various locations   | \$1,930,715   |                  |               |                 | various |      | 2042 |
| SJ11-3052       | 212-0000-0001 |                     | Stockton           | Various Street Rehabilitation   | Rehabilitation of various streets and roads   | City streets, various locations   | \$822,879,679 |                  |               |                 | various |      | 2042 |
| SJ11-CM16       | 212-0000-0589 |                     | Stockton           | March Lane Adaptive Traffic Control                                     | Install adaptive traffic control system along March Lane between Feather River drive and Montauban Ave to improve safety and traffic operations                                   | City of Stockton  | \$1,322,000   |                  |               |                 | 2018    |      | 2022 |
| SJ11-CM21       | 212-0000-0601 |                     | Stockton           | Miner Ave and Filbert St. Signal  | Install new traffic signal at the Miner Ave and Filbert St. intersection including EVP, ADA ramps, signs and striping   | City of Stockton  | \$686,000     |                  |               |                 | 2018    |      | 2022 |
| SJ11-CM24       | 212-0000-0604 |                     | Stockton           | Swain Rd. and Montauban Roundabout Installation                         | Construct roundabout at Swain Road and Montauban Ave. including PTZ cameras, ADA ramp, signs, striping, and street lights   | City of Stockton  | \$837,000     |                  |               |                 | 2018    |      | 2022 |
| SJ14-CM05       | 212-0000-0632 |                     | Stockton           | Thorton Rd at Hammer Ln. and Lower Sac Left Turn Lanes                  | Add SBL on Thorton(at Hammer), add WBL on Lower Sac(Thorton/Pacific). Retime both signals, as well as adjacent signal (Hammer/Lower Sac). EVP at Pacific/Lower Sac to be upgrade. | City of Stockton  | \$918,000     |                  |               |                 | 2018    |      | 2022 |

**Table 6-10: 2018 Regional Transportation Plan Project List - Operations and Maintenance Category**

| Identifiers |                 | 2018 RTP MPO ID |      | CTIP's ID #  |  | Project Information   |                                     | Project Description |               | Project Limits  |                  | Cost to Deliver |                 | Milestone Years |  | FTIP Programming |  | NEPA Approval |  | Open to Traffic |  |
|-------------|-----------------|-----------------|------|--------------|--|---|-------------------------------------|---------------------|---------------|-----------------|------------------|-----------------|-----------------|-----------------|--|------------------|--|---------------|--|-----------------|--|
| Identifiers | 2018 RTP MPO ID | CTIP's ID #     | PMNO | Jurisdiction | Facility Name/Route                                    | Project Description   | Project Limits                      | Cost to Deliver     | Total         | Milestone Years | FTIP Programming | NEPA Approval   | Open to Traffic |                 |  |                  |  |               |  |                 |  |
| SJ14-CM08   | 212-0000-0635   |                 |      | Stockton     | Tam O'Shanter Drive and Castle Oaks Drive Roundabout   | Install roundabout at intersection of Tam O'Shanter Drive and Castle Oaks Drive   | City of Stockton                    |                     | \$603,000     | 2018            |                  |                 | 2022            |                 |  |                  |  |               |  |                 |  |
| SJ14-CM10   | 212-0000-0641   |                 |      | Stockton     | BRT Phase V  | Costs associated with installation of signal prioritization equipment for BRT Phase 5 operations on Weber Ave, Miner Ave, Wilson Way, Fremont St., Filbert St and Main St.  | Stockton Metropolitan Area          |                     | \$2,099,000   | 2018            |                  |                 | 2022            |                 |  |                  |  |               |  |                 |  |
| SJ14-CM15   | 212-0000-0642   |                 |      | Stockton     | West Lane Traffic Responsiveness Signal Control System | Install new traffic responsiveness signal control system on West Lane between Harding Way and Enterprise Street.  | City of Stockton                    |                     | \$754,000     | 2018            |                  |                 | 2022            |                 |  |                  |  |               |  |                 |  |
| SJ14-CM16   | 212-0000-0643   |                 |      | Stockton     | BRT Phase 1-B  | Costs associated with installation of signal prioritization equipment for BRT operations on Pacific Avenue and Madison Street. Replace signalized intersection at Miner Avenue and San Joaquin Street with a roundabout | Stockton Metropolitan Area          |                     | \$1,599,000   | 2018            |                  |                 | 2022            |                 |  |                  |  |               |  |                 |  |
| SJ11-CM26   | 212-0000-0606   |                 |      | Tracy        | Corral Hollow Road and Valpico Road Traffic Signal     | Intersection Signalization  | Corral Hollow Road and Valpico Road |                     | \$751,000     | 2011            |                  |                 | 2022            |                 |  |                  |  |               |  |                 |  |
| SJ11-3053   | 212-0000-0001   |                 |      | Tracy        | Various Street Rehabilitation                          | Rehabilitation of various streets and roads   | City streets, various locations     |                     | \$228,998,217 | various         |                  |                 | 2042            |                 |  |                  |  |               |  |                 |  |
| SJ11-CM18   | 212-0000-0616   |                 |      | Tracy        | Corral Hollow Road Adaptive Traffic Signal             | Traffic Signal Coordination   | West Valley Mall to Schulte Road    |                     | \$1,121,625   | 2011            |                  |                 | 2020            |                 |  |                  |  |               |  |                 |  |
| SJ11-CM17   | 212-0000-0597   |                 |      | Tracy        | 11th Street Adaptive Traffic Signal                    | Install adaptive traffic signal system on 11th St. between Corral Hollow Road to Mac Arthur Dr.   | City of Tracy                       |                     | \$909,000     | 2017            |                  |                 | 2020            |                 |  |                  |  |               |  |                 |  |
| SJ11-CM12   | 212-0000-0542   |                 |      | Tracy        | Eleventh St and MacArthur Dr Geometric Improvements    | Construct westbound left turn lane and eastbound right turn lane and related signal modifications and UPRR railroad grade crossing modifications at the intersection of Eleventh Street and MacArthur Drive             | City of Tracy                       |                     | \$1,875,000   | 2017            |                  |                 | 2020            |                 |  |                  |  |               |  |                 |  |
| SJ07-9001   | 112-0000-0025   |                 |      | Various      | Ridesharing and Vanpool Programs                       | Trip Reduction Coordination, Guaranteed Ride Home, Vanpool Enhancement, Match lists, TDM marketing, etc.  | San Joaquin County                  |                     | \$18,000,000  | various         |                  |                 | 2042            |                 |  |                  |  |               |  |                 |  |
| SJ07-9002   |                 |                 |      | Various      | Park and Ride Lots                                     | Various Locations   | San Joaquin County                  |                     | \$2,000,000   | various         |                  |                 | 2042            |                 |  |                  |  |               |  |                 |  |
| SJ07-9003   |                 |                 |      | Various      | Traffic Flow Improvements and Systems Managements      | Signal System Improvements, Operational and Intersection Improvements to Smooth Traffic Flow, Closed Circuit TV, Freeway Service Patrols  | San Joaquin County                  |                     | \$5,000,000   | various         |                  |                 | 2042            |                 |  |                  |  |               |  |                 |  |

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**APPENDIX C**

**CONFORMITY ANALYSIS DOCUMENTATION**

**EMFAC Emissions (tons/day)**

**SAN JOAQUIN**

| <u>Pollutant</u>                             | <u>Source</u>           | <u>Description</u>   |       |      |      |      |      |      |      |
|--|-------------------------|--|-------|------|------|------|------|------|------|
|  |                         |  | 2020  | 2023 | 2026 | 2029 | 2031 | 2037 | 2042 |
| 2008 and 2015 Ozo                            | EMFAC 2014 (Summer Run) | ROG Total Exhaust (All Vehicles Total)                                   | 4.67  | 3.79 | 3.33 | 2.99 | 2.76 | 2.24 | 2.02 |
|  |                         | <b>Conformity Total</b>  | 4.70  | 3.80 | 3.40 | 3.00 | 2.80 | 2.30 | 2.10 |
| 2008 and 2015 Ozo                            | EMFAC 2014 (Summer Run) | NOx Total Exhaust (All Vehicles Total)                                   | 10.22 | 6.31 | 5.46 | 4.87 | 4.58 | 4.08 | 3.94 |
|  |                         | <b>Conformity Total</b>  | 10.30 | 6.40 | 5.50 | 4.90 | 4.60 | 4.10 | 4.00 |
|  |                         |  | 2020  |      | 2029 |      | 2037 | 2042 |      |
| PM-10  | EMFAC 2014 (Annual Run) | PM-10 Total (All Vehicles Total)<br>* includes tire & brake wear         | 1.19  |      | 1.21 |      | 1.28 | 1.32 |      |
|  |                         | <b>Conformity Total</b>  | 1.19  |      | 1.21 |      | 1.28 | 1.32 |      |
| PM-10  | EMFAC 2014 (Annual Run) | NOx Total Exhaust (All Vehicles Total)                                   | 10.81 |      | 5.12 |      | 4.26 | 4.11 |      |
|  |                         | <b>Conformity Total</b>  | 10.81 |      | 5.12 |      | 4.26 | 4.11 |      |
|  |                         |  | 2021  |      | 2029 |      | 2037 | 2042 |      |
| PM2.5 Annual<br>(1997 and 2012<br>standards) | EMFAC 2014 (Annual Run) | PM2.5 Total Exhaust (All Vehicles Total)<br>* includes tire & brake wear | 0.52  |      | 0.51 |      | 0.52 | 0.54 |      |
|  |                         | <b>Conformity Total</b>  | 0.50  |      | 0.50 |      | 0.50 | 0.50 |      |
| PM2.5 Annual<br>(1997 and 2012<br>standards) | EMFAC 2014 (Annual Run) | NOx Total Exhaust (All Vehicles Total)                                   | 9.81  |      | 5.12 |      | 4.26 | 4.11 |      |
|  |                         | <b>Conformity Total</b>  | 9.80  |      | 5.10 |      | 4.30 | 4.10 |      |
|  |                         |  | 2019  |      | 2029 |      | 2037 | 2042 |      |
| PM2.5 24-hour<br>(2006 standard)             | EMFAC 2014 (Winter Run) | PM2.5 Total Exhaust (All Vehicles Total)<br>* includes tire & brake wear | 0.54  |      | 0.51 |      | 0.52 | 0.54 |      |
|  |                         | <b>Conformity Total</b>  | 0.50  |      | 0.50 |      | 0.50 | 0.50 |      |
| PM2.5 24-hour<br>(2006 standard)             | EMFAC 2014 (Winter Run) | NOx Total Exhaust (All Vehicles Total)                                   | 12.33 |      | 5.29 |      | 4.38 | 4.21 |      |
|  |                         | <b>Conformity Total</b>  | 12.30 |      | 5.30 |      | 4.40 | 4.20 |      |

**Paved Road Dust Emissions (tons/day)**

**San Joaquin 2020**

|  | VMT Daily      | VMT<br>(million/year) | Base<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10 tons/day) | District Rule<br>8061/ISR Control<br>Rates | Control-<br>Adjusted<br>Emissions |
|--|----------------|-----------------------|---------------------------------|--------------------------------------|---|--|-----------------------------------|
| Enter Freeway VMT ==>                            | Freeway        | 10,473,800            | 3,823                           | 292.107                              | 281.071                                   | 0.770                                      | 0.712                             |
| Enter Arterial VMT ==>                           | Arterial       | 6,457,726             | 2,357                           | 299.697                              | 288.374                                   | 0.790                                      | 0.567                             |
| Enter Collector VMT ==>                          | Collector      | 1,534,032             | 560                             | 71.193                               | 68.503                                    | 0.188                                      | 0.111                             |
| Enter Total of Urban and Rural Local VMT Here => | Urban          | 311,106               | 114                             | 108.167                              | 104.081                                   | 0.285                                      | 0.193                             |
|  | Rural          | 204,824               | 75                              | 308.057                              | 296.419                                   | 0.812                                      | 0.739                             |
|  | <b>515,930</b> |                       |                                 |                                      |   |  |                                   |
| Totals   | 18,981,488     | 6,928                 | 1079.222                        | 1038.448                             | 2.845                                     |  | <b>2.323</b>                      |

**San Joaquin 2029**

|  | VMT Daily      | VMT<br>(million/year) | Base<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10 tons/day) | District Rule<br>8061/ISR Control<br>Rates | Control-<br>Adjusted<br>Emissions |
|--|----------------|-----------------------|---------------------------------|--------------------------------------|---|--|-----------------------------------|
| Enter Freeway VMT ==>                            | Freeway        | 11,143,418            | 4,067                           | 310.783                              | 299.041                                   | 0.819                                      | 0.758                             |
| Enter Arterial VMT ==>                           | Arterial       | 7,178,599             | 2,620                           | 333.150                              | 320.564                                   | 0.878                                      | 0.631                             |
| Enter Collector VMT ==>                          | Collector      | 1,733,076             | 633                             | 80.430                               | 77.392                                    | 0.212                                      | 0.126                             |
| Enter Total of Urban and Rural Local VMT Here => | Urban          | 351,337               | 128                             | 122.155                              | 117.540                                   | 0.322                                      | 0.218                             |
|  | Rural          | 231,312               | 84                              | 347.895                              | 334.751                                   | 0.917                                      | 0.835                             |
|  | <b>582,649</b> |                       |                                 |                                      |   |  |                                   |
| Totals   | 20,637,702     | 7,533                 | 1194.413                        | 1149.287                             | 3.149                                     |  | <b>2.566</b>                      |

**San Joaquin 2037**

|  | VMT Daily      | VMT<br>(million/year) | Base<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10 tons/day) | District Rule<br>8061/ISR Control<br>Rates | Control-<br>Adjusted<br>Emissions |
|--|----------------|-----------------------|---------------------------------|--------------------------------------|---|--|-----------------------------------|
| Enter Freeway VMT ==>                            | Freeway        | 11,753,571            | 4,290                           | 327.799                              | 315.415                                   | 0.864                                      | 0.799                             |
| Enter Arterial VMT ==>                           | Arterial       | 7,857,344             | 2,868                           | 364.652                              | 350.875                                   | 0.961                                      | 0.690                             |
| Enter Collector VMT ==>                          | Collector      | 1,948,560             | 711                             | 90.431                               | 87.014                                    | 0.238                                      | 0.141                             |
| Enter Total of Urban and Rural Local VMT Here => | Urban          | 381,108               | 139                             | 132.506                              | 127.500                                   | 0.349                                      | 0.236                             |
|  | Rural          | 250,912               | 92                              | 377.374                              | 363.116                                   | 0.995                                      | 0.905                             |
|  | <b>632,020</b> |                       |                                 |                                      |   |  |                                   |
| Totals   | 22,191,495     | 8,100                 | 1292.762                        | 1243.920                             | 3.408                                     |  | <b>2.772</b>                      |

**San Joaquin 2042**

|  | VMT Daily      | VMT<br>(million/year) | Base<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10 tons/day) | District Rule<br>8061/ISR Control<br>Rates | Control-<br>Adjusted<br>Emissions |
|--|----------------|-----------------------|---------------------------------|--------------------------------------|---|--|-----------------------------------|
| Enter Freeway VMT ==>                            | Freeway        | 12,193,723            | 4,451                           | 340.075                              | 327.227                                   | 0.897                                      | 0.829                             |
| Enter Arterial VMT ==>                           | Arterial       | 8,224,923             | 3,002                           | 381.711                              | 367.290                                   | 1.006                                      | 0.723                             |
| Enter Collector VMT ==>                          | Collector      | 2,014,494             | 735                             | 93.491                               | 89.959                                    | 0.246                                      | 0.146                             |
| Enter Total of Urban and Rural Local VMT Here => | Urban          | 398,638               | 146                             | 138.601                              | 133.364                                   | 0.365                                      | 0.247                             |
|  | Rural          | 262,453               | 96                              | 394.732                              | 379.818                                   | 1.041                                      | 0.947                             |
|  | <b>661,091</b> |                       |                                 |                                      |   |  |                                   |
| Totals   | 23,094,231     | 8,429                 | 1348.609                        | 1297.658                             | 3.555                                     |  | <b>2.892</b>                      |

DO NOT CHANGE ANY ITEMS BELOW THIS LINE

**SAN JOAQUIN**

|  |
|--|
| HPMS Local Urban/Rural Percent<br>From 1998 Assembly of Statistical Reports - Caltrans |
| 60.3% Urban  |
| 39.7% Rural  |
| 100.0% Total   |

| Road Type | Base EF (lb<br>PM10/ VMT) |
|-----------|---------------------------|
| Freeway   | 0.000152818               |
| Arterial  | 0.000254298               |
| Collector | 0.000254298               |
| Local     | 0.00190513                |
| Rural     | 0.008241141               |

**SAN JOAQUIN**

|                       | January | February | March | April | May  | June | July | August | September | October | November | December | Total/Average |
|-----------------------|---------|----------|-------|-------|------|------|------|--------|-----------|---------|----------|----------|---------------|
| Rain Days             | 10.5    | 9.5      | 8.0   | 5.3   | 2.8  | 1.0  | 0    | 0      | 1.0       | 2.8     | 6.3      | 7.8      | 54.8          |
| Total Days            | 31      | 28       | 31    | 30    | 31   | 30   | 31   | 31     | 30        | 31      | 30       | 31       | 365           |
| Rain Reduction Factor | 0.92    | 0.92     | 0.94  | 0.96  | 0.98 | 0.99 | 1.00 | 1.00   | 0.99      | 0.98    | 0.95     | 0.94     | 0.96          |

**Unpaved Road Dust Emissions (tons/day)**

**SAN JOAQUIN 2020**

|             | Miles | Vehicle Passes per Day | VMT (1000/year) | Base Emissions (PM10 tpy) | Rain Adj. Emissions (PM10 tpy) | Rain Adj. Emissions (PM10 tons/day) | District Rule 8061/ISR Control Rates | Control-Adjusted Emissions |
|-------------|-------|------------------------|-----------------|---------------------------|--------------------------------|-------------------------------------|--------------------------------------|----------------------------|
| City/County | 20.0  | 10                     | 73.0            | 73.000                    | 61.968                         | 0.170                               | 0.333                                | 0.113                      |

**SAN JOAQUIN 2029**

|             | Miles | Vehicle Passes per Day | VMT (1000/year) | Base Emissions (PM10 tpy) | Rain Adj. Emissions (PM10 tpy) | Rain Adj. Emissions (PM10 tons/day) | District Rule 8061/ISR Control Rates | Control-Adjusted Emissions |
|-------------|-------|------------------------|-----------------|---------------------------|--------------------------------|-------------------------------------|--------------------------------------|----------------------------|
| City/County | 20.0  | 10                     | 73.0            | 73.000                    | 61.968                         | 0.170                               | 0.333                                | 0.113                      |

**SAN JOAQUIN 2037**

|             | Miles | Vehicle Passes per Day | VMT (1000/year) | Base Emissions (PM10 tpy) | Rain Adj. Emissions (PM10 tpy) | Rain Adj. Emissions (PM10 tons/day) | District Rule 8061/ISR Control Rates | Control-Adjusted Emissions |
|-------------|-------|------------------------|-----------------|---------------------------|--------------------------------|-------------------------------------|--------------------------------------|----------------------------|
| City/County | 20.0  | 10                     | 73.0            | 73.000                    | 61.968                         | 0.170                               | 0.333                                | 0.113                      |

**SAN JOAQUIN 2042**

|             | Miles | Vehicle Passes per Day | VMT (1000/year) | Base Emissions (PM10 tpy) | Rain Adj. Emissions (PM10 tpy) | Rain Adj. Emissions (PM10 tons/day) | District Rule 8061/ISR Control Rates | Control-Adjusted Emissions |
|-------------|-------|------------------------|-----------------|---------------------------|--------------------------------|-------------------------------------|--------------------------------------|----------------------------|
| City/County | 20.0  | 10                     | 73.0            | 73.000                    | 61.968                         | 0.170                               | 0.333                                | 0.113                      |

DO NOT CHANGE ANY ITEMS BELOW THIS LINE

| SAN JOAQUIN           |         |          |       |       |      |      |      |        |           |         |          |          |               |
|-----------------------|---------|----------|-------|-------|------|------|------|--------|-----------|---------|----------|----------|---------------|
|                       | January | February | March | April | May  | June | July | August | September | October | November | December | Total/Average |
| Rain Days             | 10.5    | 9.5      | 8.0   | 5.3   | 2.8  | 1.0  | 0    | 0      | 1.0       | 2.8     | 6.3      | 7.8      | 54.8          |
| Total Days            | 31      | 28       | 31    | 30    | 31   | 30   | 31   | 31     | 30        | 31      | 30       | 31       | 365           |
| Rain Reduction Factor | 0.66    | 0.66     | 0.74  | 0.83  | 0.91 | 0.97 | 1.00 | 1.00   | 0.97      | 0.91    | 0.79     | 0.75     | 0.85          |

**Road Construction Dust**

**SAN JOAQUIN**

| Description                           | 2020     |              | 2029 |              | 2037  |              | 2042  |              |
|---------------------------------------|----------|--------------|------|--------------|-------|--------------|-------|--------------|
|                                       | Year     | Lane Miles   | Year | Lane Miles   | Year  | Lane Miles   | Year  | Lane Miles   |
|                                       | Baseline | 2005         | 5171 | 2020         | 5,324 | 2029         | 5,471 | 2037         |
| Horizon                               | 2020     | 5,324        | 2029 | 5,471        | 2037  | 5,753        | 2042  | 5,785        |
| Difference                            | 15       | 153          | 9    | 147          | 8     | 282          | 5     | 32           |
| Lane Miles per Year                   |          | 10           |      | 16           |       | 35           |       | 6            |
| Acres Disturbed                       |          | 40           |      | 63           |       | 137          |       | 25           |
| Acre-Months                           |          | 712          |      | 1140         |       | 2461         |       | 447          |
| Emissions (tons/year)                 |          | 78.336       |      | 125.440      |       | 270.720      |       | 49.152       |
| Annual Average Day Emissions (tons)   |          | 0.215        |      | 0.344        |       | 0.742        |       | 0.135        |
| District Rule 8021 Control Rates      |          | 0.290        |      | 0.290        |       | 0.290        |       | 0.290        |
| <b>Total Emissions (tons per day)</b> |          | <b>0.152</b> |      | <b>0.244</b> |       | <b>0.527</b> |       | <b>0.096</b> |

**ONLY FOR SJCOG**

Because the MIP lane miles are calculated differently for the 2005 than the old model, an adjustment process is necessary.

Insert the lane miles in the table below for 2020, 2025, and 2035. Formulas in cells C7, D7, and E7 automatically calculate the change in lane miles between the the MIP years and adds this difference to the old model 2005 lane miles.

\*\*\*DO NOT ENTER LANE MILES FOR 2005.\*\*\*

|                                |      |
|--------------------------------|------|
| Old Model Lane Miles 2005 =    | 5171 |
| MIP Scenario Lane Miles 2042 = | 5408 |
| MIP Scenario Lane Miles 2037 = | 5376 |
| MIP Scenario Lane Miles 2029 = | 5094 |
| MIP Scenario Lane Miles 2020 = | 4947 |
| MIP Scenario Lane Miles 2005 = | 4794 |

**2015 Ozone Conformity Analysis Results Summary -- SJCOG**

| Standard               | Analysis Year | Emissions Total |                |
|------------------------|---------------|-----------------|----------------|
|                        |               | ROG (tons/day)  | NOx (tons/day) |
| 2008 and 2015<br>Ozone | 2020 Budget   | 4.7             | 11.2           |
|                        | 2020          | 4.7             | 10.3           |
|                        | 2023 Budget   | 3.9             | 7.4            |
|                        | 2023          | 3.8             | 6.4            |
|                        | 2026 Budget   | 3.5             | 7.0            |
|                        | 2026          | 3.4             | 5.5            |
|                        | 2029 Budget   | 3.1             | 6.6            |
|                        | 2029          | 3.0             | 4.9            |
|                        | 2031 Budget   | 2.8             | 6.3            |
|                        | 2031          | 2.8             | 4.6            |
|                        | 2037          | 2.3             | 4.1            |
|                        | 2042          | 2.1             | 4.0            |

| DID YOU PASS? |     |
|---------------|-----|
| ROG           | NOx |
| YES           | YES |

| Standard | Analysis Year        | Emissions Total  |                |
|----------|----------------------|------------------|----------------|
|          |                      | PM-10 (tons/day) | NOx (tons/day) |
| PM-10    | 2020 Budget          | 4.6              | 11.9           |
|          | 2020                 | 3.8              | 10.8           |
|          | 2020 Budget          | 4.6              | 11.9           |
|          | 2029                 | 4.1              | 5.1            |
|          | Adjusted 2020 Budget | 4.7              | 11.8           |
|          | 2037                 | 4.7              | 4.3            |
|          | 2020 Budget          | 4.6              | 11.9           |
|          | 2042                 | 4.4              | 4.1            |

| DID YOU PASS? |     |
|---------------|-----|
| PM-10         | NOx |
| YES           | YES |

| PM-10 | Total On-Road Exhaust |        | Paved Road Dust |     | Unpaved Road Dust |     | Road Construction Dust |     | Total |      |
|-------|-----------------------|--------|-----------------|-----|-------------------|-----|------------------------|-----|-------|------|
|       | PM-10                 | Nox    | PM-10           | Nox | PM-10             | Nox | PM-10                  | Nox | PM-10 | Nox  |
| 2020  | 1.188                 | 10.806 | 2.323           |     | 0.113             |     | 0.152                  |     | 3.8   | 10.8 |
| 2029  | 1.213                 | 5.123  | 2.566           |     | 0.113             |     | 0.244                  |     | 4.1   | 5.1  |
| 2037  | 1.275                 | 4.264  | 2.772           |     | 0.113             |     | 0.527                  |     | 4.7   | 4.3  |
| 2042  | 1.317                 | 4.114  | 2.892           |     | 0.113             |     | 0.096                  |     | 4.4   | 4.1  |

| Standard  | Analysis Year | Emissions Total  |                |
|---|---------------|------------------|----------------|
|   |               | PM2.5 (tons/day) | NOx (tons/day) |
| 1997 24-Hour and 1997 & 2012 Annual PM2.5 Standards |               |                  |                |
|   | 2014 Budget   | 0.9              | 21.6           |
|   | 2021          | 0.5              | 9.8            |
|   |               |                  |                |
|   | 2014 Budget   | 0.9              | 21.6           |
|   | 2029          | 0.5              | 5.1            |
|   |               |                  |                |
|   | 2014 Budget   | 0.9              | 21.6           |
|   | 2037          | 0.5              | 4.3            |
|   |               |                  |                |
| 2014 Budget   | 0.9           | 21.6             |                |
| 2042  | 0.5           | 4.1              |                |

| DID YOU PASS? |     |
|---------------|-----|
| PM2.5         | NOx |
|               |     |
|               |     |
| YES           | YES |
|               |     |
|               |     |
| YES           | YES |
|               |     |
|               |     |
| YES           | YES |
|               |     |
|               |     |
| YES           | YES |

| Standard                           | Analysis Year | Emissions Total  |                |
|------------------------------------|---------------|------------------|----------------|
|                                    |               | PM2.5 (tons/day) | NOx (tons/day) |
| 2006 PM2.5 Winter 24-Hour Standard |               |                  |                |
|                                    | 2017 Budget   | 0.6              | 15.5           |
|                                    | 2019          | 0.5              | 12.3           |
|                                    |               |                  |                |
|                                    | 2017 Budget   | 0.6              | 15.5           |
|                                    | 2029          | 0.5              | 5.3            |
|                                    |               |                  |                |
|                                    | 2017 Budget   | 0.6              | 15.5           |
|                                    | 2037          | 0.5              | 4.4            |
|                                    |               |                  |                |
| 2017 Budget                        | 0.6           | 15.5             |                |
| 2042                               | 0.5           | 4.2              |                |

| DID YOU PASS? |     |
|---------------|-----|
| PM2.5         | NOx |
|               |     |
|               |     |
| YES           | YES |
|               |     |
|               |     |
| YES           | YES |
|               |     |
|               |     |
| YES           | YES |
|               |     |
|               |     |
| YES           | YES |

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*SAN JOAQUIN COUNCIL OF GOVERNMENTS  
Final 2015 Ozone Conformity Analysis for 2019 FTIP Amendment #4  
and 2018 RTP Amendment #1*

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**APPENDIX D**

**TIMELY IMPLEMENTATION DOCUMENTATION FOR  
TRANSPORTATION CONTROL MEASURES**

San Joaquin COG  
Timely Implementation Documentation

|    | A                      | B             | C  | D                          | E                         | F                | G                          | H  | J   | K  |
|----|------------------------|---------------|--|----------------------------|---------------------------|------------------|----------------------------|--|---|--|
|    | <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>  | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u>       | <u>TIP Project ID</u>      | <u>Project Description</u>   | <u>2019 FTIP, 2018 RTP, Conformity Analysis</u> | <u>2019 FTIP Amendment 4, 2018 RTP Amendment #1, Conformity Analysis</u> |
| 1  |                        |               |  |                            |                           |                  |                            |  | (as of 3/18)                                    | (as of 2/19)   |
| 2  |                        |               |  |                            |                           |                  |                            |  |   |  |
| 3  |                        |               |  |                            |                           |                  |                            |  |   |  |
| 4  | SJC TCM 3              | SJCOG         | Rideshare Program  | On going                   | STIP                      | 2002, 2004, 2006 | 1120000025                 | Stockton, Regional Rideshare Program   | On going  | On going   |
| 5  |                        |               |  |                            |                           |                  |                            |  |   |  |
| 6  | SJC5.17                | SJCOG         | Freeway bottleneck improvements (add lanes, construct shoulders, etc.) |                            | Measure K                 | 2002             | 11200000039                | SR 99 Widening   | Complete  | Complete   |
| 7  |                        |               |  |                            |                           | 2002<br>2004     | 11200000054<br>11200000102 | Hammer Ln and SR120 Interchange improvement projects   | Complete  | Complete   |
| 8  |                        |               |  |                            |                           | 2004             | 11200000040                | I-205 Widening project   | Complete  | Complete   |
| 9  |                        |               |  |                            |                           |                  |                            |  |   |  |
| 10 | SJC6.1                 | SJCOG         | Park and Ride Lots   |                            | Measure K                 | N/A              | N/A                        | Master Park and Ride Lot Plan  | Complete  | Complete   |
| 11 |                        |               |  |                            |                           |                  |                            |  |   |  |
| 12 | SJC6.2                 | SJCOG         | Park and Ride Lots   |                            | Measure K                 | N/A              | N/A                        | Master Park and Ride Lot Plan  | Complete  | Complete   |
| 13 |                        |               |  |                            |                           |                  |                            |  |   |  |
| 14 | TCM4                   | SJCOG         | Bicycle Programs   |                            | Measure K; STIP TE        | 2006             | 21200000339                | Jack Tone Class I bikeway in Ripon   | Complete  | Complete   |
| 15 |                        |               |  |                            |                           |                  |                            |  |   |  |
| 16 | SJC 9.3                | Escalon       | Bicycle and Pedestrian Program   | Complete                   | TCSP, Local               |                  |                            | State Route 120, McHenry Ave, and Main St pedestrian features; High School Linkage Program; sidewalk on First St | Complete  | Complete   |
| 17 |                        |               |  |                            |                           |                  |                            |  |   |  |
| 18 | TCM4                   | Escalon       | Construct bicycle lane along McHenry Avenue                            | FY02/03                    | STIP TE \$221,000         | 2002, 2004,2006  | 21200000146                | Construct Escalon Gateway  | Complete  | Complete   |
| 19 |                        |               |  | 2002-2003                  | TEA and CMAQ              | 2004             | 11200000154                | Class I bike lane along McHenry Ave  | Complete  | Complete   |
| 20 |                        |               |  |                            |                           |                  |                            |  |   |  |
| 21 | SJC5.2                 | Escalon       | Coordinate Traffic Signal Systems                                      |                            | Local                     | 2000             | 21200000126                | synchronized traffic signal system at McHenry/SR120 Intersection   | Complete  | Complete   |
| 22 |                        |               |  |                            |                           |                  |                            |  |   |  |
| 23 | SJC5.3                 | Escalon       | Reduce Traffic Congestion at Major Intersections                       |                            | Local                     | 2000             | 21200000126                | synchronized traffic signal system at McHenry/SR120 Intersection   | Complete  | Complete   |
| 24 |                        |               |  |                            |                           |                  |                            |  |   |  |
| 25 | SJC 5.2                | Lathrop       | Coordinate Traffic Signal Systems                                      | starting in 2004           | Not specified             |                  |                            | Coordinate traffic signals along Louise Avenue/Gold Rush Blvd.   | Complete  | Complete   |
| 26 |                        |               |  |                            |                           |                  |                            |  |   |  |

San Joaquin COG  
Timely Implementation Documentation

|    | A                      | B             | C   | D                          | E                         | F          | G                     | H  | J   | K  |
|----|------------------------|---------------|---|----------------------------|---------------------------|------------|-----------------------|--|---|--|
|    | <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>                           | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>   | <u>2019 FTIP, 2018 RTP, Conformity Analysis</u> | <u>2019 FTIP Amendment #1, Conformity Analysis</u> |
| 1  |                        |               |   |                            |                           |            |                       |  |   |  |
| 2  |                        |               |   |                            |                           |            |                       |  | (as of 3/18)                                    | (as of 2/19)                                       |
| 27 | SJC 5.3                | Lathrop       | Reduce Traffic Congestion at Major Intersections        | next 5 to 10 years         | STIP and Local            | 2006       | 11200000155           | Two grades separations on major arterial at railroad; reconstruct one intersection; require developers to signalize major arterial intersections | Complete  | Complete   |
| 28 |                        |               |   |                            |                           |            |                       |  |   |  |
| 29 | SJC 10.4               | Lathrop       | Development of Bicycle Travel Facilities                | ongoing                    | Not specified             |            |                       | Construct Class 1 and Class 2 bike lanes on all new arterial and collector streets   | Complete  | Complete   |
| 30 |                        |               |   |                            |                           |            |                       |  |   |  |
| 31 | SJC 15.2               | Lathrop       | Pedestrian and Bicycle Overpasses where Safety Dictates | 2003                       | Not specified             | 2006       | 11200000155           | Lathrop Road/UPRR grade separation to include a sidewalk and Class 2 bike lane   | Complete  | Complete   |
| 32 |                        |               |   |                            |                           |            |                       |  |   |  |
| 33 | TCM 4                  | Lathrop       | Bicycle Programs  |                            | CMAQ and TEA              |            |                       | bike lanes on Fifth Street   | Complete  | Complete   |
| 34 |                        |               |   |                            |                           |            |                       |  |   |  |
| 35 | SJC 5.2                | Lodi          | Design Lodi Avenue Signal Interconnect Project          | complete in 2006           | CMAQ                      | 2002       | 21200000143           | Lodi Ave. signal installation and interconnect from Cherokee Ln to Lower Sacramento  | Complete  | Complete   |
| 36 |                        |               |   |                            |                           |            |                       |  |   |  |
| 37 | SJC5.3                 | Lodi          | Reduce Traffic Congestion at Intersections              |                            | STIP, Measure K           | 2002       | 11200000159           | Improve congestion at Kettleman Lane Gap Closure, Hwy 12/Mills Avenue, and Hwy 12/Tienda Drive   | Complete  | Complete   |
| 38 |                        |               |   |                            |                           |            |                       |  |   |  |
| 39 | SJC5.16                | Lodi          | Adaptive traffic signals and signal timing              |                            | CMAQ                      | 2002       | 21200000143           | Lodi Avenue Signal Interconnect Project  | Complete  | Complete   |
| 40 |                        |               |   |                            |                           |            |                       |  |   |  |
| 41 | TCM1                   | Lodi          | Traffic Flow Improvements                               |                            | Local                     | 2002       | 21200000143           | Lodi Avenue Signal Interconnect Project  | Complete  | Complete   |
| 42 |                        |               |   |                            |                           |            |                       |  |   |  |
| 43 | SJC5.3                 | Manteca       | Reduce Traffic Congestion at Intersections              |                            | Local, Measure K          | 2004       | 11200000102           | SR99/120 Improvements  | Complete  | Complete   |
| 44 |                        |               |   |                            |                           | 2004       | 21200000271           | South Union Widening   |   |  |
| 45 |                        |               |   |                            |                           | 2004       | 21200000214           | Industrial Park Drive Improvements   | Complete  | Complete   |
| 46 |                        |               |   |                            |                           |            |                       |  |   |  |

San Joaquin COG  
Timely Implementation Documentation

|    | A                      | B             | C   | D                          | E                         | F          | G                     | H   | J   | K  |
|----|------------------------|---------------|---|----------------------------|---------------------------|------------|-----------------------|---|---|--|
|    | <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>                           | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>  | <u>2019 FTIP, 2018 RTP, Conformity Analysis</u> | <u>2019 FTIP Amendment #1, Conformity Analysis</u> |
| 1  |                        |               |   |                            |                           |            |                       |   |   |  |
| 2  |                        |               |   |                            |                           |            |                       |   | (as of 3/18)                                    | (as of 2/19)                                       |
| 47 | SJC15.2                | Manteca       | Pedestrian and Bicycle Overpasses Where Safety Dictates |                            | Local, Measure K          | 2004       | 11200000102           | SR99/120 improvements   | Complete  | Complete   |
| 48 |                        |               |   |                            |                           |            |                       |   |   |  |
| 49 | TCM1                   | Manteca       | Traffic Flow Improvements                               |                            | Local, Measure K          | 2004       | 21200000271           | South Union Road Widening   | Complete  | Complete   |
| 50 |                        |               |   |                            |                           | 2004       | 21200000214           | Industrial Park Drive   | Complete  | Complete   |
| 51 |                        |               |   |                            |                           |            |                       |   |   |  |
| 52 | TCM4                   | Manteca       | Bicycle Programs  |                            | Local, Measure K          | N/A        | N/A                   | Tidewater Bikeways project  | Complete  | Complete   |
| 53 |                        |               |   |                            |                           |            |                       |   |   |  |
| 54 | TCM 1                  | Ripon         | Traffic Flow Improvements                               | within 1-2 years           | CMAQ                      |            |                       | South Frontage Road   | Complete  | Complete   |
| 55 |                        |               |   |                            |                           |            |                       |   |   |  |
| 56 | SJC5.2                 | Ripon         | Coordinate Traffic Signal Systems                       |                            | Not specified             | N/A        | N/A                   | Install synchronized traffic signal systems on 4 locations  | Complete  | Complete   |
| 57 |                        |               |   |                            |                           |            |                       |   |   |  |
| 58 | SJC5.3                 | Ripon         | Reduce Traffic Congestion at Intersections              |                            | Local                     | N/A        | N/A                   | South Frontage Road project between Wilma & Fulton. Left turn pockets at Frontage and Pine Street.                        | Complete  | Complete   |
| 59 |                        |               |   |                            |                           |            |                       |   |   |  |
| 60 | SJC5.4                 | Ripon         | Site Specific Transportation Control Measures           |                            | STIP/Measure K            | 2006       | 11200000162           | Main and Stockton Street project. Signal synchronization along Main Street.   | Project complete.                               | Project complete.                                  |
| 61 |                        |               |   |                            |                           |            |                       |   |   |  |
| 62 | SJC5.9                 | Ripon         | Bus Pullouts in Curbs for Passenger Loading             |                            | Not specified             | N/A        | N/A                   | The City will provide bus pullouts in curbs as part of Jack Tone Road Improvements Projects between Main and 4th Streets. | Complete  | Complete   |
| 63 |                        |               |   |                            |                           |            |                       |   |   |  |
| 64 | SJC9.3                 | Ripon         | Bicycle/Pedestrian Program                              |                            | STIP                      | 2004       | 21200000298           | 1.5 mile Class 1 bikeway between Doak Blvd and Canal Blvd.  | Complete  | Complete   |
| 65 |                        |               |   |                            |                           |            |                       |   |   |  |
| 66 | SJC15.2                | Ripon         | Pedestrian and Bicycle Overpasses Where Safety Dictates |                            | Local                     | N/A        | N/A                   | Construct ADA accessible sidewalk over the Main Street Overpass   | Complete  | Complete   |
| 67 |                        |               |   |                            |                           |            |                       |   |   |  |
| 68 | SJC5.3                 | Stockton      | Reduce Traffic Congestion at Intersections              |                            | Local                     | N/A        | N/A                   | Hammer Lane Phase II and West Lane widening project. Added duel left turn lane pockets.                                   | Complete  | Complete   |
| 69 |                        |               |   |                            | HES/Local                 |            |                       | Pershing Ave widening project. Adding a left turn pocket at Harding.  | Complete  | Complete   |
| 70 |                        |               |   |                            |                           |            |                       |   |   |  |

San Joaquin COG  
Timely Implementation Documentation

|    | A                      | B             | C   | D                          | E                         | F              | G                     | H   | J   | K  |
|----|------------------------|---------------|---|----------------------------|---------------------------|----------------|-----------------------|---|---|--|
| 1  | <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>                           | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u>     | <u>TIP Project ID</u> | <u>Project Description</u>  | <u>2019 FTIP, 2018 RTP, Conformity Analysis</u> | <u>2019 FTIP Amendment 4, 2018 RTP Amendment #1, Conformity Analysis</u> |
| 2  |                        |               |   |                            |                           |                |                       |   | (as of 3/18)                                    | (as of 2/19)   |
| 71 | SJC5.4                 | Stockton      | Site Specific Transportation Control Measures           |                            | Local                     | N/A            | N/A                   | New traffic signal installed at Rosemarie/Precissi  | Complete  | Complete   |
| 72 |                        |               |   |                            |                           |                |                       | New traffic signal installed and Montauban/Lorraine Streets                               | Complete  | Complete   |
| 73 |                        |               |   |                            |                           |                |                       |   |   |  |
| 74 | SJC9.2                 | Stockton      | Encouragement of Pedestrian Travel                      |                            | Local                     | N/A            | N/A                   | Traffic calming treatments along Pacific Avenue in Miracle Mile commercial area           | Complete  | Complete   |
| 75 |                        |               |   |                            |                           |                |                       |   |   |  |
| 76 | SJC9.3                 | Stockton      | Bicycle/Pedestrian Program                              |                            | Local                     | N/A            | N/A                   | Hammer Lane/March Lane Class 2 Bike Lane project  | Complete  | Complete   |
| 77 |                        |               |   |                            |                           |                |                       |   |   |  |
| 78 | SJC10.4                | Stockton      | Development of Bicycle Travel Facilities                |                            | Local                     | N/A            | N/A                   | Bear Creek Bike Path  | Complete  | Complete   |
| 79 |                        |               |   |                            |                           |                |                       | Weston Ranch Bike Path  | Complete  | Complete   |
| 80 |                        |               |   |                            |                           |                |                       |   |   |  |
| 81 | SJC TCM 4              | Stockton      | Bicycle Program   |                            | Local                     | N/A            | N/A                   | Class 1 Bike paths at Pixley Slough Bike Path   | Complete  | Complete   |
| 82 |                        |               |   |                            |                           |                |                       |   |   |  |
| 83 | SJC15.2                | Stockton      | Pedestrian and Bicycle Overpasses Where Safety Dictates |                            | Local, Measure K          | N/A            | N/A                   | Bicycle/pedestrian facilities included on grade separation project on march Lane and UPRR | Complete  | Complete   |
| 84 |                        |               |   |                            |                           |                |                       |   |   |  |
| 85 | TCM1                   | Stockton      | Traffic Flow Improvements                               |                            | Local, Measure K          | N/A            | N/A                   | traffic flow improvements on Hammer Lane and El Dorado Street                             | Complete  | Complete   |
| 86 |                        |               |   |                            |                           |                |                       |   |   |  |
| 87 | SJC 1.5                | Tracy         | Expansion of current fixed route to Wal-Mart            | 2002                       | Federal and State Transit | 2002           | 21200000149           | Operations assistance   | Complete  | Complete   |
| 88 |                        |               |   |                            |                           |                |                       |   |   |  |
| 89 | SJC 1.6                | Tracy         | Multi-Modal station                                     | 2004                       | STIP                      | 2000/2002/2006 | 11200000104           | Construct multi-modal station   | Complete  | Complete   |
| 90 |                        |               |   |                            |                           |                |                       |   |   |  |

San Joaquin COG  
Timely Implementation Documentation

|     | A                      | B             | C  | D                          | E                         | F          | G                        | H   | J   | K  |
|-----|------------------------|---------------|--|----------------------------|---------------------------|------------|--------------------------|---|---|--|
|     | <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>                                  | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u>    | <u>Project Description</u>  | <u>2019 FTIP, 2018 RTP, Conformity Analysis</u> | <u>2019 FTIP Amendment 4, 2018 RTP Amendment #1, Conformity Analysis</u> |
| 1   |                        |               |  |                            |                           |            |                          |   |   |  |
| 2   |                        |               |  |                            |                           |            |                          |   | (as of 3/18)                                    | (as of 2/19)   |
| 91  | SJC 5.2                | Tracy         | Interconnect existing traffic signals on major corridors       | on-going                   | partially CMAQ            | 2002       | 21200000114, 21200000145 | 11th St and MacArthur Dr traffic signal installation and interconnect project, Tracy Blvd traffic signal coordination project | Complete  | Complete   |
| 92  |                        |               |  |                            |                           |            |                          |   |   |  |
| 93  | SJC5.3                 | Tracy         | Reduce Traffic Congestion at Major Intersections               |                            | Not specified             | N/A        | N/A                      | 11th St/MacArthur improvements  | Complete  | Complete   |
| 94  |                        |               |  |                            |                           |            |                          | Tracy Blvd between Central Ave and Clover Street  | Complete  | Complete   |
| 95  |                        |               |  |                            |                           |            |                          |   |   |  |
| 96  | SJC5.4                 | Tracy         | Site-Specific Transportation Control Measures                  |                            | Not specified             | N/A        | N/A                      | Implement traffic control improvements on Byron/Corral Hollow Roads   | Complete  | Complete   |
| 97  |                        |               |  |                            |                           |            |                          | Implement traffic control improvements on Grant Line/Corral Hollow Roads  | Complete  | Complete   |
| 98  |                        |               |  |                            |                           |            |                          |   |   |  |
| 99  | SJC5.9                 | Tracy         | Bus Pullouts in Curbs for Passenger Loading                    |                            | TDA, FTA                  | N/A        | N/A                      | Bus Pullouts in curbs for passenger loading on East St N/E of 10th Street   | Complete  | Complete   |
| 100 |                        |               |  |                            |                           |            |                          | Bus Pullouts in curbs for passenger loading on Tracy Blvd N/O Beverly Street  | Complete  | Complete   |
| 101 |                        |               |  |                            |                           |            |                          |   |   |  |
| 102 | SJC 7.3                | Tracy         | Involve school districts to encourage walking/biking to school |                            | Not specified             |            |                          | print and distribute bike maps to schools   | Complete  | Complete   |
| 103 |                        |               |  |                            |                           |            |                          |   |   |  |
| 104 | SJC9.3                 | Tracy         | Bicycle/Pedestrian Program                                     |                            | Local, Measure K          | N/A        | N/A                      | bike lane project on 11th Street west of Corral Hollow Road.  | Complete  | Complete   |
| 105 |                        |               |  |                            |                           |            |                          |   |   |  |
| 106 | SJC 10.2               | Tracy         | Bike Racks on Buses  | 2002                       | Not specified             |            |                          | Install bike racks on all city-owned buses  | Complete  | Complete   |
| 107 |                        |               |  |                            |                           |            |                          |   |   |  |
| 108 | SJC 10.4               | Tracy         | Development of Bicycle Travel Facilities                       | ongoing                    | Not specified             |            |                          | bike lockers at various locations and multi-modal station   | Complete  | Complete   |
| 109 |                        |               |  |                            |                           |            |                          |   |   |  |
| 110 | TCM 2                  | Tracy         | Public Transit   | ongoing                    | CMAQ, FTA, TDA            |            |                          | Transit improvements: purchase CNG buses; expanding transit service to Wal-Mart; printing material in Spanish                 | Complete  | Complete   |
| 111 |                        |               |  |                            |                           |            |                          |   |   |  |
| 112 | TCM 4                  | Tracy         | Bicycle Programs   | ongoing                    | CMAQ and TEA              |            |                          | bike route signage; updated bicycle map for Tracy; bike racks on all TRACER buses   | Complete  | Complete   |

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|     | A                      | B                  | C  | D                             | E                         | F          | G                     | H  | J   | K  |
|-----|------------------------|--------------------|--|-------------------------------|---------------------------|------------|-----------------------|--|---|--|
|     | <u>RACM Commitment</u> | <u>Agency</u>      | <u>Commitment Description</u>                    | <u>Commitment Schedule</u>    | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>                                   | <u>2019 FTIP, 2018 RTP, Conformity Analysis</u> | <u>2019 FTIP Amendment #1, Conformity Analysis</u> |
| 1   |                        |                    |  |                               |                           |            |                       |  |   |  |
| 2   |                        |                    |  |                               |                           |            |                       |  | (as of 3/18)                                    | (as of 2/19)                                       |
| 113 |                        |                    |  |                               |                           |            |                       |  |   |  |
| 114 | SJC5.2                 | San Joaquin County | Coordinate Traffic Signal Systems                |                               | Local, Measure K          | N/A        | N/A                   | Benjamin Holt Dr/Harrisburg Place                            | Complete  | Complete   |
| 115 |                        |                    |  |                               |                           |            |                       | Pershing Ave/Thornton Road                                   | Complete  | Complete   |
| 116 |                        |                    |  |                               |                           |            |                       | Wilson Way/Alpine Avenue                                     | Complete  | Complete   |
| 117 |                        |                    |  |                               |                           |            |                       |  |   |  |
| 118 | SJC5.3                 | San Joaquin County | Reduce Traffic Congestion at Major Intersections |                               | Local, Measure K          | N/A        | N/A                   | SR88 and Elliott Road  | Complete  | Complete   |
| 119 |                        |                    |  |                               |                           |            |                       | SR12 and Victor Road   | Complete  | Complete   |
| 120 |                        |                    |  |                               |                           |            |                       |  |   |  |
| 121 | SJC5.4                 | San Joaquin County | Site-Specific Transportation Control Measures    |                               | Local                     | N/A        | N/A                   | Benjamin Holt Dr/Harrisburg Place                            | Complete  | Complete   |
| 122 |                        |                    |  |                               |                           |            |                       | Pershing Ave/Thornton Road                                   | Complete  | Complete   |
| 123 |                        |                    |  |                               |                           |            |                       | Wilson Way/Alpine Avenue                                     | Complete  | Complete   |
| 124 |                        |                    |  |                               |                           |            |                       |  |   |  |
| 125 | SJC9.2                 | San Joaquin County | Encouragement of Pedestrian Travel               |                               | Local                     | N/A        | N/A                   | Woodbridge Main Street Sidewalk Improvements                 | Complete  | Complete   |
| 126 |                        |                    |  |                               |                           |            |                       |  |   |  |
| 127 | SJC9.3                 | San Joaquin County | Bicycle/Pedestrian Program                       |                               | Local                     | N/A        | N/A                   | Class III Bike Route on Armstrong Road                       | Complete  | Complete   |
| 128 |                        |                    |  |                               |                           |            |                       |  |   |  |
| 129 | TCM1                   | San Joaquin County | Traffic Flow Improvements                        |                               | Local, Measure K          | N/A        | N/A                   | Lower Sacramento Road  | Complete  | Complete   |
| 130 |                        |                    |  |                               |                           |            |                       | Hammer Lane  | Complete  | Complete   |
| 131 |                        |                    |  |                               |                           |            |                       | SR88 Improvements PSR  | Complete  | Complete   |
| 132 |                        |                    |  |                               |                           |            |                       | Traffic Signal at Ham Lane and West Lane                     | Complete  | Complete   |
| 133 |                        |                    |  |                               |                           |            |                       |  |   |  |
| 134 | SJC 1.1                | SJRTD              | Regional Express Bus Program                     |                               | Federal and Measure K     |            |                       | purchase vehicles and operate interregional commuter service | Complete  | Complete   |
| 135 |                        |                    |  |                               |                           |            |                       |  |   |  |
| 136 | SJC 1.9                | SJRTD              | Downtown Stockton Transit Center                 | 2 years after ground-breaking | Federal funds             | 2004       | 21200000236           | Construct Downtown Transit Center                            | Complete  | Complete   |
| 137 |                        |                    |  |                               |                           |            |                       |  |   |  |
| 138 |                        |                    |  |                               |                           |            |                       |  |   |  |

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| 1   |                        |                    |  |                            |                           |            |                       |  |   |  |
| 2   |                        |                    |  |                            |                           |            |                       |  | (as of 3/18)                                    | (as of 2/19)   |
| 139 | TCM4                   | SJCOG              | Bicycle Programs                                 |                            | Measure K                 | N/A        | N/A                   | Duck Creek Class I bicycle path gap closure  | Project complete.                               | Project complete.  |
| 140 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 141 | TCM4                   | SJCOG              | Bicycle Programs                                 |                            | Measure K                 | N/A        | N/A                   | Corral Hollow Rd/Lowell Ave Class I bikeway in Tracy                                       | Complete  | Complete   |
| 142 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 143 | TCM4                   | San Joaquin County | Bicycle Programs                                 |                            | Measure K                 | N/A        | N/A                   | Lower Sacramento Rd Class III Bikeway in SJ County   | On going  | On going   |
| 144 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 145 | TCM4                   | Escalon            | Bicycle Programs                                 |                            | Measure K                 | N/A        | N/A                   | Install bike racks on buses in Escalon   | Complete  | Complete   |
| 146 |                        | Escalon            |  |                            |                           |            |                       | Improvements to McHenry Ave. corridor which included Class 2 Bicycle lanes NB and SB       |   |  |
| 147 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 148 | SJC 5.3                | Escalon            | Reduce Traffic Congestion at Major Intersections |                            | Local                     | N/A        | N/A                   | City implemented new turn lane and median divider at St. John and BNSF rail road crossing. | Complete  | Complete   |
| 149 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 150 | SJC5.2                 | Lodi               | Coordinate Traffic Signal Systems                |                            | Local                     | N/A        | N/A                   |  | No further updates are required.                | No further updates are required.   |
| 151 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 152 | SJC5.3                 | Ripon              | Reduce Traffic Congestion at Intersections       |                            | Local                     | N/A        | N/A                   | South Frontage Road project between Maple Ave & Garrison Way.                              | Complete  | Complete   |
| 153 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 154 | SJC 9.3                | Ripon              | Bicycle/Pedestrian Program                       |                            | Local                     | N/A        | N/A                   | Jack Tone Class I Bike Path  | Complete  | Complete   |
| 155 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 156 | SJC5.2                 | Stockton           | Coordinate Traffic Signal Systems                |                            | CMAQ/Local                | 2007       | 212-0000-03101        | Traffic Signal Controller Upgrade/Retiming March Lane, Wilson Way, and Harding Way         | Complete  | Complete   |
| 157 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 158 | SJC5.3                 | Stockton           | Reduce Traffic Congestion at Intersections       |                            | Local                     | N/A        | N/A                   | Hammer Lane Phase III.   | Project complete.                               | Project complete.  |
| 159 |                        |                    |  |                            | CMAQ/Local                | 2007       | 212-0000-0376         | Installation of traffic signal at Tam O'Shanter Drive                                      | Complete  | Complete   |
| 160 |                        |                    |  |                            |                           |            |                       |  |   |  |

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|     | <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>                    | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>   | <u>2019 FTIP, 2018 RTP, Conformity Analysis</u> | <u>2019 FTIP Amendment #1, Conformity Analysis</u> |
| 1   |                        |               |  |                            |                           |            |                       |  |   |  |
| 2   |                        |               |  |                            |                           |            |                       |  | (as of 3/18)                                    | (as of 2/19)                                       |
| 161 | SJC5.4                 | Stockton      | Site Specific Transportation Control Measures    |                            | Local                     | N/A        | N/A                   | New traffic signals to be installed (2): Turnpike @ Lincoln, Filbert @ Myrtle  | Complete  | Complete   |
| 162 |                        |               |  |                            | Local                     | N/A        | N/A                   | Upgrade left turn lanes to include protected left turn signals at three locations: Wilson @ Fremont, Pacific @ Alpine, and Pacific @ Bianchi         | Complete  | Complete   |
| 163 |                        |               |  |                            |                           |            |                       |  |   |  |
| 164 | SJC9.2                 | Stockton      | Encouragement of Pedestrian Travel               |                            | CMAQ/Local                | 2007       | 212-0000-0373         | Installation of sidewalks on streets in unincorporated south Stockton  | Complete  | Complete   |
| 165 |                        |               |  |                            |                           |            |                       |  |   |  |
| 166 | SJC9.3                 | Stockton      | Bicycle Pedestrian Program                       |                            | CMAQ/Local                | 2007       | 212-0000-3099         | Class II Bike Lane on Tam O'Shanter Drive  | Complete  | Complete   |
| 167 |                        |               |  |                            |                           |            |                       |  |   |  |
| 168 | SJC5.2                 | Tracy         | Coordinate Traffic Signal Systems                |                            | Local                     | N/A        | N/A                   | Coordinate/synchronize traffic signals along Coral Hollow Rd and 11th Street   | Complete  | Complete   |
| 169 |                        |               |  |                            |                           |            |                       |  |   |  |
| 170 | SJC5.2                 | Tracy         | Coordinate Traffic Signal Systems                |                            | CMAQ/Local                | 2007       | 212-0000-0365         | Coordinate/synchronize traffic signals along Grant Line Road   | Complete  | Complete   |
| 171 |                        |               |  |                            |                           |            |                       |  |   |  |
| 172 | SJC5.3                 | Tracy         | Reduce Traffic Congestion at Major Intersections |                            | CMAQ/Local                | 2007       | 212-0000-0377         | Installation of traffic signal at Byron Road and Lammers Road  | Complete  | Complete   |
| 173 |                        |               |  |                            |                           |            |                       |  |   |  |
| 174 | SJC 5.8                | Tracy         | On Street Parking Restrictions                   |                            | Local                     | N/A        | N/A                   | Parking restrictions on North side of Eaton Avenue East of Tracy Boulevard.  | Complete  | Complete   |
| 175 |                        |               |  |                            |                           |            |                       | Parking restrictions on South side of Grant Line Road West of Tracy Boulevard.   | Complete  | Complete   |
| 176 |                        |               |  |                            |                           |            |                       |  |   |  |
| 177 | SJC9.3                 | Tracy         | Bicycle/Pedestrian Program                       |                            | Measure K                 | N/A        | N/A                   | Gap closure projects to upgrade to Class I at two locations: Lowell Ave between Coral Hollow & Valley View; Corral Hollow between 11th St & Byron Rd | Complete  | Complete   |
| 178 |                        |               |  |                            |                           |            |                       |  |   |  |
| 179 | SJC 9.5                | Tracy         | Encouragement of Bicycle Travel                  |                            | Local                     | N/A        | N/A                   | The City of Tracy Activity Guide advertised local bicycle routes in 2007.  | Complete  | Complete   |

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|     | A                      | B                  | C  | D                          | E                         | F          | G                     | H  | J   | K  |
|-----|------------------------|--------------------|--|----------------------------|---------------------------|------------|-----------------------|--|---|--|
| 1   | <u>RACM Commitment</u> | <u>Agency</u>      | <u>Commitment Description</u>                    | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>   | <u>2019 FTIP, 2018 RTP, Conformity Analysis</u> | <u>2019 FTIP Amendment 4, 2018 RTP Amendment #1, Conformity Analysis</u> |
| 2   |                        |                    |  |                            |                           |            |                       |  | (as of 3/18)                                    | (as of 2/19)   |
| 180 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 181 | SJC 15.1               | Tracy              | Encouragement of Pedestrian Travel               |                            | Local                     | N/A        | N/A                   | The City of Tracy Activity Guide advertised local walking routes in 2007 | Complete  | Complete   |
| 182 |                        | Tracy              | Encouragement of Pedestrian Travel               |                            | Local                     | N/A        | N/A                   | The City of Tracy Activity Guide advertised local walking routes in 2008 | Complete  | Complete   |
| 183 |                        | Tracy              | Encouragement of Pedestrian Travel               |                            | Local                     | N/A        | N/A                   | The City of Tracy Activity Guide advertised local walking routes in 2010 | Complete  | Complete   |
| 184 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 185 | SJC5.3                 | San Joaquin County | Reduce Traffic Congestion at Major Intersections |                            | Local                     | N/A        | N/A                   | SR-12 and Davis Road.  | Complete  | Complete   |
| 186 |                        |                    |  |                            | CMAQ/Local                | 2007       | 212-0000-0368         | New traffic signals at LinneRoad at Chrisman Drive                       | Complete  | Complete   |
| 187 |                        |                    |  |                            | CMAQ/Local                | 2007       | 212-0000-0369         | New traffic signal at Howard Road at Tracy Boulevard                     | Complete  | Complete   |
| 188 |                        |                    |  |                            | CMAQ/Local                | 2007       | 212-0000-0370         | New traffic signal at Byron Road at Grant Line Road.                     | Complete  | Complete   |
| 189 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 190 | SJC9.3                 | San Joaquin County | Bicycle/Pedestrian Program                       |                            | Local                     | N/A        | N/A                   | Class III Bikeway on Austin Road from Louise Ave to French Camp Rd.      | Complete  | Complete   |
| 191 |                        |                    |  |                            | CMAQ/Local                | 2007       | 212-0000-0371         | Class III Bikelane on Armstrong Road                                     | Complete  | Complete   |
| 192 |                        |                    |  |                            | CMAQ                      |            |                       | South Stockton Sidewalks Phase I   | Complete  | Complete   |
| 193 |                        |                    |  |                            |                           |            |                       |  |   |  |
| 194 | SJC1.5                 | SJRTD              | Expansion of Public Transportation System        |                            | CMAQ/Local                | 2007       | 212-0000-0360         | Purchase vehicles and operate intercity bus service                      | Complete  | Complete   |
| 195 |                        |                    |  |                            | CMAQ/Local                | 2007       | 212-0000-0362<br>0364 | Purchase vehicles and expansion of BRT service.                          | Complete  | Complete   |
| 196 |                        |                    |  |                            |                           |            |                       |  |   |  |

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|     | A                              | B             | C  | D                          | E                         | F          | G                     | H   | J   | K  |
|-----|--------------------------------|---------------|--|----------------------------|---------------------------|------------|-----------------------|---|---|--|
| 1   | <u>RACM Commitment</u>         | <u>Agency</u> | <u>Commitment Description</u>              | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>  | <u>2019 FTIP, 2018 RTP, Conformity Analysis</u> | <u>2019 FTIP Amendment #1, RTP Amendment #1, Conformity Analysis</u> |
| 2   |                                |               |  |                            |                           |            |                       |   | (as of 3/18)                                    | (as of 2/19)   |
| 197 | ADDITIONAL PROJECTS IDENTIFIED |               |  |                            |                           |            |                       |   |   |  |
| 198 |                                |               |  |                            |                           |            |                       |   |   |  |
| 199 | SJC 9.2                        | Manteca       | Encouragement of Pedestrian Travel         |                            | Local                     | N/A        | N/A                   | Pedestrian crossing/crosswalk on Woodward Avenue  | Complete  | Complete   |
| 200 | SJC5.3                         | Stockton      | Reduce Traffic Congestion at Intersections |                            | CMAQ                      | 2015       | 212-0000-0632         | Install left turn lane on Thornton Rd at Hammer Lane  | On going  | On going   |
| 201 | SJC5.3                         | Stockton      | Reduce Traffic Congestion at Intersections |                            | CMAQ                      | 2015       | 212-0000-0635         | Tam O'Shanter Drive and Castle Oaks Drive Roundabout  | On going  | On going   |
| 202 | SJC5.16                        | Stockton      | Adaptive traffic signals and signal timing |                            | CMAQ                      | 2015       | 212-0000-0641         | BRT Phase 5: Adaptive Signal on Weber Avenue, Miner Avenue, Wilson Way, Fremont St, Filbert Street, and Main St Corridors | On going  | On going   |
| 203 | SJC5.16                        | Stockton      | Adaptive traffic signals and signal timing |                            | CMAQ                      | 2015       | 212-0000-0642         | West Lane Traffic Responsiveness Signal Control System  | On going  | On going   |
| 204 | SJC5.16                        | Stockton      | Adaptive traffic signals and signal timing |                            | CMAQ                      | 2015       | 212-0000-0643         | BRT Phase 1B on Pacific Avenue and Madison Street Corners.  | On going  | On going   |

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**APPENDIX E**

**PUBLIC MEETING PROCESS DOCUMENTATION**

**NOTICE OF PUBLIC MEETING ON THE  
DRAFT 2019 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM  
AMENDMENT #4,  
THE DRAFT 2018 REGIONAL TRANSPORTATION PLAN AMENDMENT #1,  
AND DRAFT 2015 OZONE CONFORMITY ANALYSIS**

NOTICE IS HEREBY GIVEN that the San Joaquin Council of Governments (SJCOG) will hold a public meeting on February 14, 2019 at 9:00am at the SJCOG office (555 e. Weber Avenue, Stockton, CA 95202) regarding the Draft 2019 Federal Transportation Improvement Program Amendment #4 (2019 FTIP Amendment #4), the Draft 2018 Regional Transportation Plan Amendment #1 (2018 RTP Amendment #1), and the Draft 2015 Ozone Conformity Analysis. The purpose of this public meeting is to receive public comments on these documents.

- The 2019 FTIP is a near-term listing of capital improvement and operational expenditures utilizing federal and state monies for transportation projects in San Joaquin County during the next four years. Amendment #4 includes modifications to the schedules of specific regionally significant projects.
- The 2018 RTP is a long-term strategy to meet San Joaquin County transportation needs out to the year 2042. Amendment #1 modifies the schedules of specific regionally significant projects. Changes proposed in 2018 RTP Amendment #1 continue to adhere to Conformity budgets, and therefore do not require a supplemental Environmental Impact Report (EIR).
- The 2015 Ozone Conformity Analysis contains the documentation to support a finding that the 2019 FTIP Amendment #4 and 2018 RTP Amendment #1 meet the air quality conformity requirements for ozone and particulate matter.

Individuals with disabilities may call SJCOG (with 3-working-day advance notice) to request auxiliary aids necessary to participate in the public hearing. Translation services are available (with 3-working-day advance notice) to participants speaking any language with available professional translation services.

A 30-day public review and comment period will commence on January 25, 2019 and conclude on February 25, 2019. The draft documents are available for review at the SJCOG office, located at 555 e. Weber Avenue, Stockton, CA 95202 and on the SJCOG website at <http://www.sjcog.org/110/Federal-Transportation-Improvement-Progra>.

Public comments are welcomed at the meeting, or may be submitted in writing by February 25, 2019 to Ryan Niblock at the address below.

After considering the comments, the documents will be considered for adoption, by resolution, by the SJCOG Board at a regularly scheduled meeting to be held on February 28, 2019 at 4:00pm. The documents will then be submitted to state and federal agencies for approval.

Contact Person: Ryan Niblock Senior Regional Planner  
555 e. Weber Avenue, Stockton, CA 95202  
209.235.0588 / [niblock@sjcog.org](mailto:niblock@sjcog.org)



**RESOLUTION**  
**SAN JOAQUIN COUNCIL OF GOVERNMENTS**

**R-19-20**

**RESOLUTION ADOPTING THE**  
**SAN JOAQUIN COUNCIL OF GOVERNMENTS**  
**2019 FTIP AMENDMENT #4, RTP AMENDMENT #1**  
**AND 2015 OZONE CONFORMITY ANALYSIS**

WHEREAS, the San Joaquin Council of Governments is a Regional Transportation Planning Agency and a Metropolitan Planning Organization, pursuant to State and Federal designation; and

WHEREAS, federal planning regulations require Metropolitan Planning Organizations to prepare and adopt a long range Regional Transportation Plan (RTP) for their region; and

WHEREAS, a 2018 Regional Transportation Plan Amendment 1 (2018 RTP Amendment 1) has been prepared in full compliance with federal guidance; and

WHEREAS, a 2018 Regional Transportation Plan Amendment 1 has been prepared in accordance with state guidelines adopted by the California Transportation Commission; and

WHEREAS, federal planning regulations require that Metropolitan Planning Organizations prepare and adopt a short range Federal Transportation Improvement Program (FTIP) for their region; and

WHEREAS, the 2019 Federal Transportation Improvement Program Amendment 4 (2019 FTIP Amendment 4) has been prepared to comply with Federal and State requirements for local projects and through a cooperative process between the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the State Department of Transportation (Caltrans), principal elected officials of general purpose local governments and their staffs, and public owner operators of mass transportation services acting through the San Joaquin Council of Governments forum and general public involvement; and

WHEREAS, the 2019 FTIP Amendment 4 program listing is consistent with: 1) the 2018 Regional Transportation Plan Amendment 1; 2) the 2018 State Transportation Improvement Program; and 3) the 2015 Ozone Conformity Analysis; and

WHEREAS, the 2019 FTIP Amendment 4 contains the MPO's certification of the transportation planning process assuring that all federal requirements have been fulfilled; and

WHEREAS, the 2019 FTIP Amendment 4 and 2018 RTP Amendment 1 meets all applicable transportation planning requirements per 23 CFR Part 450; and

WHEREAS, San Joaquin Council of Governments has integrated into its metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other State transportation plans and transportation processes, as well as any plans developed under 49 U.S.C. Chapter 53 by providers of public transportation, required as part of a performance-based program; and

WHEREAS, projects submitted in the 2019 FTIP Amendment 4 and 2018 RTP Amendment 1 must be financially constrained and the financial plan affirms that funding is available; and

WHEREAS, the MPO must demonstrate conformity per 40 CFR Part 93 for the RTP and FTIP; and

WHEREAS, the 2015 Ozone Conformity Analysis is a new conformity analysis for the 2019 FTIP Amendment 4 and 2018 RTP Amendment 1 prepared in compliance with the requirements of the federal implementation rule for the 2015 ozone standard; and

WHEREAS, the 2015 Ozone Conformity Analysis supports a finding that the 2019 FTIP Amendment 4 and 2018 RTP Amendment 1 meet the air quality conformity requirements for ozone and particulate matter; and

WHEREAS, the 2018 RTP Amendment 1 and 2019 FTIP Amendment 4 do not interfere with the timely implementation of the Transportation Control Measures; and

WHEREAS, the 2018 RTP Amendment 1 and 2019 FTIP Amendment 4 conform to the applicable SIPs; and

WHEREAS, the documents have been widely circulated and reviewed by San Joaquin Council of Governments advisory committees representing the technical and management staffs of the member agencies; representatives of other governmental agencies, including State and Federal; representatives of special interest groups; representatives of the private business sector; and residents of San Joaquin County consistent with public participation process adopted by San Joaquin Council of Governments; and

WHEREAS, a public hearing was conducted on February 14, 2019 to hear and consider comments on the 2019 FTIP Amendment 4, 2018 RTP Amendment 1, and 2015 Ozone Conformity Analysis;

NOW, THEREFORE, BE IT RESOLVED, that San Joaquin Council of Governments adopts the 2019 FTIP Amendment 4, 2018 RTP Amendment 1, and 2015 Ozone Conformity Analysis.

BE IT FURTHER RESOLVED that the San Joaquin Council of Governments finds that 2019 FTIP Amendment 4 and 2018 RTP Amendment 1 are in conformity with the requirements of the Federal Clean Air Act Amendments and applicable State Implementation Plans for air quality.

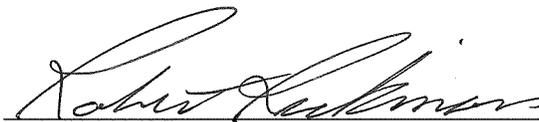
BE IT FURTHER RESOLVED that this Resolution will become effective on the publication date of the United States Environmental Protection Agency's (EPA) final approval of the revised transportation conformity budgets for the 2008 ozone standard.

THE FOREGOING RESOLUTION was passed and adopted by San Joaquin Council of Governments this 28<sup>th</sup> day of March 2019.

AYES: **Councilmember Andrade, Stockton; Mayor Dhaliwal, Lathrop; Supervisor Elliot, SJC; Mayor Pro Tem Kuehne, Lodi; Councilmember Murken, Escalon; Mayor Rickman, Tracy; Councilmember Singh, Manteca; Supervisor Winn, SJC; Vice Mayor Wright, Stockton; Councilmember Jobrack, Stockton; Mayor Zuber, Ripon.**

NOES:

ABSENT: **Supervisor Miller, SJC.**



ROBERT RICKMAN  
Chair

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*SAN JOAQUIN COUNCIL OF GOVERNMENTS  
Final 2015 Ozone Conformity Analysis for 2019 FTIP Amendment #4  
and 2018 RTP Amendment #1*

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**APPENDIX F**

**RESPONSE TO PUBLIC COMMENTS**

No comments were received during the public comment period.