

## **PM Conformity Hot Spot Analysis Project Summary Form for Interagency Consultation**

The purpose of this form is to provide sufficient information to allow the Transportation Conformity Working Group (TCWG) to determine if a project requires a project-level PM hot spot analysis pursuant to Federal Conformity Regulations.

The form is not required under the following circumstances:

1. The project sponsor determines that a project-level PM hot spot analysis is required or otherwise elects to perform the analysis; or
2. The project does not require a project-level PM hot spot analysis since it:
  - a. Is exempt pursuant to 40 CFR 93.126; or
  - b. Is a traffic signal synchronization project under 40 CFR 93.128; or
  - c. Uses no Federal funds AND requires no Federal approval; or
  - d. Is located in a Federal PM attainment area (note: PM10 and PM2.5 areas differ).

Projects other than those listed above may or may not need a project-level PM hot spot analysis depending on whether it is considered a "Project of Air Quality Concern" (POAQC), and should be brought before the TCWG for a determination.

It is the responsibility of the project sponsor to ensure that the form is filled out completely and provides a sufficient level of detail for the TCWG to make an informed decision on whether or not a project requires a project-level PM hot spot analysis. For example, the TCWG will be reviewing the effects of the project, and thus part of the required information includes build/no build traffic data. It is also the responsibility of the project sponsor to ensure a representative is available to discuss the project at the TCWG meeting if necessary.

### **Instructions:**

- 1) Fill out form in its entirety. Enter information in gray input fields.**
- 2) Be sure to include FTIP ID#. See <http://www.scag.ca.gov/ftip/index.htm> if necessary.**
- 3) Submit completed form to your local Transportation Commission who will submit it to the MPO. Caltrans projects can be submitted by Caltrans District representatives.**

The TCWG meets the fourth Tuesday of each month at SCAG Headquarters, 818 W. 7<sup>th</sup> Street, 12<sup>th</sup> Floor, Los Angeles, CA 90017. Participation is also available via teleconference. Call (213) 236-1800 prior to meeting to get the call-in number and pass-code.

Forms must be submitted by the second Tuesday of the month to be considered at that month's TCWG meeting.

## REFERENCE

### Criteria for Projects of Air Quality Concern (40 CFR 93.123(b)) – PM<sub>10</sub> and PM<sub>2.5</sub> Hot Spots

- (i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles;
- (ii) Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- (iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
- (iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- (v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM<sub>10</sub> or PM<sub>2.5</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

#### Links to more information:

<http://www.fhwa.dot.gov/environment/conform.htm>

<http://www.epa.gov/otaq/stateresources/transconf/index.htm>

**TABLE 1**  
**Type of Project**

- New state highway
- Change to existing state highway
- New regionally significant street
- Change to existing regionally significant street
- **New interchange**
- Reconfigure existing interchange
- Intersection channelization
- Intersection signalization
- Roadway realignment
- Bus, rail, or inter-modal facility/terminal/transfer point
- Truck weight/inspection station
- At or affects location identified in the SIP as a site of actual or possible violation of NAAQS

<b>RTIP ID#</b> <i>(required)</i> 3M10WT03									
<b>TCWG Consideration Date:</b> June 25, 2024									
<p><b>Project Description</b> <i>(clearly describe project)</i></p> <p>The City of Murrieta in cooperation with the California Department of Transportation (Caltrans) District 8, proposes to construct improvements for a new interchange on Interstate (I) 215 at the existing Keller Road undercrossing located in the City of Murrieta (City), Riverside County (County), California (see attached Figures 1 – 4). The project’s primary improvements consist of the following:</p> <ul style="list-style-type: none"> <li>• Construction northbound (NB) and southbound (SB) on and off-ramps for accessing I-215 from the existing Keller Road undercrossing.</li> <li>• Construct auxiliary lanes in the NB and SB direction of I-215, from the Scott Road interchange (IC) to the proposed Keller Road IC.</li> <li>• Remove Antelope Road from Brians Way to Mapleton Avenue and circulate traffic onto an improved Brians Way and Warner Place. North (N) of Keller Road, Antelope Road is realigned to join Mapleton Avenue.</li> <li>• Remove Scenic View Drive on the west side of the future IC, due to a conflict with the SB on-ramp. Scenic View Drive will not be replaced.</li> </ul> <p>Four alternatives, including the “No-Build” scenario, have been identified for further study and final approval prior to the Plans, Specifications and Estimate phase of the project. The build alternatives are included as attachments to this memorandum.</p> <p><u>Alternative 1 No-Build</u></p> <p>Alternative 1 proposes that the I-215 connection to Keller Road not be constructed. Traffic conditions are expected to worsen as a result of increased demand created by new development in the vicinity of the project. Despite the completion of planned improvements to the City arterial street system and the I-215/Scott Road IC, I-215 in the project vicinity would operate at a Caltrans non-compliant Level of Service (LOS) D or worse during peak hours. Nine of 13 local street intersections within the project vicinity would operate at LOS E or worse during peak hours with five non-compliant with Riverside County Congestion Management Plan minimum standards.</p> <p><u>Alternatives 2, 3 and 5 Build</u></p> <p>Proposed build alternatives include Alternative 2, a spread diamond interchange (Type L-2), Alternative 3, a partial cloverleaf interchange (Type L-9), and Alternative 5, a compact diamond interchange (Type L-1). Proposed Alternative 4, a modified partial cloverleaf (Type L-9) was eliminated from further consideration. Proposed design elements for Alternatives 2 – 5 are below.</p> <table border="1"> <thead> <tr> <th>Planned Improvement</th> <th>Alternative(s)</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>• Antelope Road, adjacent to I-215 would be closed south of Mapleton Ave./ Antelope Road and turned into a cul-de-sac south of Brians Way/ Antelope Road to accommodate the proposed Keller Rd. NB off- and on-ramps.</li> </ul> </td> <td>2, 3, 5</td> </tr> <tr> <td> <ul style="list-style-type: none"> <li>• Construct new retaining walls to accommodate widening below the I-215 bridge structure and at the northbound off-ramp to Keller Road.</li> </ul> </td> <td>2, 3, 5</td> </tr> <tr> <td> <ul style="list-style-type: none"> <li>• Access to several properties along Antelope Road between Keller Rd and Brians Way will be removed due to construction of the NB off- and on-ramps. Access to these properties will be reestablished via construction of a new 1,600-foot cul-de-sac. Entrance to the new access road would be across from the Mapleton Ave/Keller Rd intersection.</li> </ul> </td> <td>2, 3, 5</td> </tr> </tbody> </table>		Planned Improvement	Alternative(s)	<ul style="list-style-type: none"> <li>• Antelope Road, adjacent to I-215 would be closed south of Mapleton Ave./ Antelope Road and turned into a cul-de-sac south of Brians Way/ Antelope Road to accommodate the proposed Keller Rd. NB off- and on-ramps.</li> </ul>	2, 3, 5	<ul style="list-style-type: none"> <li>• Construct new retaining walls to accommodate widening below the I-215 bridge structure and at the northbound off-ramp to Keller Road.</li> </ul>	2, 3, 5	<ul style="list-style-type: none"> <li>• Access to several properties along Antelope Road between Keller Rd and Brians Way will be removed due to construction of the NB off- and on-ramps. Access to these properties will be reestablished via construction of a new 1,600-foot cul-de-sac. Entrance to the new access road would be across from the Mapleton Ave/Keller Rd intersection.</li> </ul>	2, 3, 5
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PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

Planned Improvement		Alternative(s)		
<ul style="list-style-type: none"> <li>Widening and/or striping of the existing Keller Road from two to four lanes (two in each direction) east of I-215, including median and dedicated right turn lanes. Widening and/or striping of the existing Keller Road west of I-215 from two to four lanes (two in each direction), before transitioning to 2 lanes at Zeiders Road.</li> </ul>		2, 3, 5		
<ul style="list-style-type: none"> <li>NB and SB on/off-ramps to and from the I-215 mainline.</li> </ul>		2, 3		
<ul style="list-style-type: none"> <li>300-foot NB auxiliary lane from the Keller Road NB on-ramp to the Scott Road NB off-ramp.</li> </ul>		2, 3, 5		
<ul style="list-style-type: none"> <li>1,300-foot SB auxiliary lane from the Scott Road SB on-ramp to the Keller Road SB off-ramp.</li> </ul>		2, 3, 5		
<ul style="list-style-type: none"> <li>300-foot SB auxiliary lane from the Keller Road SB on-ramp.</li> </ul>		2, 3		
<ul style="list-style-type: none"> <li>SB loop on-ramp at the I-215/Keller Road northwest quadrant.</li> </ul>		3		
<ul style="list-style-type: none"> <li>NB loop on-ramp at the I-215/Keller Road southeast quadrant.</li> </ul>		3		
<ul style="list-style-type: none"> <li>Widening existing I-215 bridge to accommodate loop on-ramps.</li> </ul>		3		
<ul style="list-style-type: none"> <li>Construct new SB and NB on- and off-ramps at Keller Road in a double roundabout configuration</li> </ul>		5		
<ul style="list-style-type: none"> <li>Widening existing I-215 bridge to accommodate loop off-ramps.</li> </ul>		5		
<b>Type of Project</b> (use Table 1 on instruction sheet) Reconstruct existing underpass as an interchange.				
<b>County</b> Riverside		<b>Narrative Location/Route &amp; Postmiles:</b> Interstate 215/Keller Road, Riverside County – Post Miles R14.1 to R15.26  <b>Caltrans Projects – EA#</b> 0Q220		
<b>Lead Agency:</b> CALTRANS				
<b>Contact Person</b> Joe D'Onofrio		<b>Phone#</b> 602-650-4916	<b>Fax#</b> 602-253-1202	<b>Email</b> Joe.D'Onofri
<b>Hot Spot Pollutant of Concern</b> (check one or both) <b>PM2.5</b> <input checked="" type="checkbox"/> <b>PM10</b> <input checked="" type="checkbox"/>				
<b>Federal Action for which Project-Level PM Conformity is Needed</b> (check appropriate box)				
<b>Categorical Exclusion (NEPA)</b>	<input checked="" type="checkbox"/> <b>EA or Draft EIS</b>	<input type="checkbox"/> <b>FONSI or Final EIS</b>	<input type="checkbox"/> <b>PS&amp;E or Construction</b>	<input checked="" type="checkbox"/> <b>Other</b>
<b>Scheduled Date of Federal Action:</b> 11/2024				
<b>NEPA Assignment – Project Type</b> (check appropriate box)				
<input type="checkbox"/> <b>Exempt</b>		<input type="checkbox"/> <b>Section 326 –Categorical Exemption</b>	<input checked="" type="checkbox"/> <b>Section 327 – Non-Categorical Exemption</b>	
<b>Current Programming Dates</b> (as appropriate)				
	<b>PE/Environmental</b>	<b>ENG</b>	<b>ROW</b>	<b>CON</b>
<b>Start</b>	1/2018	10/2024	11/2024	4/2026
<b>End</b>	11/2024	10/2025	12/2025	12/2027

**Project Purpose and Need (Summary):** *(attach additional sheets as necessary)*

The purpose of the new I-215/Keller Road interchange is as follows:

- Provide improved connectivity to the regional transportation system and for future economic development.
- Improve mobility and accessibility for all users between I-215, the Cities of Murrieta and Menifee, and unincorporated Riverside County.
- Improve both goods movement along Keller Road and I-215 and emergency response times to the medical hospital, east of the interchange, by reducing delays at intersections.
- Improve local road access to I-215 in the project area, enhancing climate resiliency for the community.
- Promote equitable, accessible, and sustainable travel options by providing multimodal facilities traversing the project area, such as continuous facilities for pedestrian and bicycle traffic, including new sidewalks and Class II bike lanes.
- Enhance safety by providing safety improvements to the new interchange and along Keller Road, such as new lighting, curb and gutter, sidewalks, and standard vertical clearance under the Keller Road undercrossing.
- Provide interregional continuity and consistency with Caltrans Active Transportation Plan, SCAG's RTP/SCS, and the County integrated project plans for the Cities of Murrieta and Menifee and the County.

The I-215/Keller Road interchange is needed due to the following key factors:

- Forecast population growth and future economic development in the project area, such as The North Murrieta Business Corridor Focus Area, will result in operational challenges at existing adjacent interchanges.
- Consistent with the adopted land use plans for the Cities of Murrieta and Menifee, and the County, planned development in the project area is anticipated to require infrastructure improvements to accommodate future growth (for example, development of the Kaiser campus and Murrieta Hills Community). Operational challenges at Keller Road, I-215/Clinton Keith, and I-215/Scott Road interchanges are anticipated due to forecast population growth and planned development.
- Pedestrian and multimodal accessibility and connectivity are limited in the project area. There are locations without sidewalks, and where existing sidewalks and bike lanes are discontinuous. Such limitations could increase both community reliance on vehicular travel to access goods and services, and traffic delays in the future.

As discussed in the City of Murrieta's current general plan, "Murrieta 2035 General Plan" (adopted July 19, 2011), the City's population has grown from 24,334 in 1992, to 110,949 in 2020, approximately quadrupling in size. The area south of Keller Road is identified as The North Murrieta Business Corridor Focus Area. It is anticipated that the corridor will add an additional 1.7 million square feet of commercial uses and 7.7 million square feet of office and research uses to create a medical corridor and a high technology/office/research employment center, along with commercial uses that support business and employment needs, such as restaurants or hotels.

It is forecasted that there will be a traffic demand of over 195,000 vehicles per day in year 2040 along the I-215 corridor within the project limits.

**Surrounding Land Use/Traffic Generators** *(especially effect on diesel traffic)*

Land uses in the immediate vicinity of the I-215/Keller Road interchange include a mix of commercial properties, residential uses and undeveloped land. The closest residential use is a mobile home park located approximately 490 feet east of I-215 on the south side of Keller Road. Single-family residential developments are located north of Keller Road, 525 feet west of I-215 and 500 – 1,310 feet east of I-215. Additionally, there is a new medical facility (Kaiser Permanente) approximately 250 feet east of I-215.

**Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility**

<b>Table 1. Opening Year (2027) I-215 Level of Service (AM/PM)</b>				
Location	Alt 1	Alt 2	Alt 3	Alt 5
<b>I-215 Southbound</b>				
Freeway Mainline N of Scott Rd	C/B	C/B	C/B	C/B
Freeway Mainline between Scott Rd and Keller Road	C/B	B/B	B/B	B/B
Freeway Mainline between Keller Rd and Clinton Keith Road	C/B	C/B	C/B	C/B
Freeway Mainline S of Clinton Keith Rd	D/B	C/B	C/B	C/B
<b>I-215 Northbound</b>				
Freeway Mainline N of Scott Rd	B/C	B/C	B/C	B/C
Freeway Mainline between Scott Rd and Keller Road	C/C	B/B	B/B	B/B
Freeway Mainline between Keller Rd and Clinton Keith Road	C/C	B/C	B/C	B/C
Freeway Mainline S of Clinton Keith Rd	B/C	B/C	B/C	B/C

As reported in the I-215/Keller Road Interchange PA-ED Traffic Operations Report (traffic report), the projected Level of Service (LOS) on I-215 for the opening year under No-Build and Build conditions (Table 1) indicates that the freeway will continue to operate at free flow or better conditions during the AM and PM peak hours in the 2027 opening year. Slight improvements are anticipated in both the NB and SB directions between Clinton Keith Road and Scott Road.

Location	Alt 1	Alt 2	Alt 3	Alt 5
Freeway Mainline S of Clinton Keith Rd	105,400	103,500	103,500	103,500
Freeway Mainline between Clinton Keith Rd and Scott Rd	95,000	96,000	96,000	96,000
Freeway Mainline N of Scott Rd	85,200	87,700	87,700	87,700

1. AADT estimated from Caltrans 2014 AADT counts multiplied by ratio of Caltrans 2014 peak hour counts to I-215/Keller Road Interchange PA-ED Traffic Operations Analysis (PN#: 8000020339, EA 0Q220) Values are rounded to the nearest 100.

As shown in Table 2, the 2027 opening year traffic will remain below the 125,000 AADT threshold established in Environmental Protection Agency (EPA) guidance (EPA420-B-06-902) for a POAQC, with a slight shift in volumes north of Scott Road under the Build Alternatives.

Location	Alt 1	Alt 2	Alt 3	Alt 5
<b>Freeway Mainline S of Clinton Keith Rd</b>				
Truck % <sup>2</sup>	7.25	7.25	7.25	7.25
AADT	7,642	7,504	7,504	7,504
Truck Increase above No-Build	--	83	83	83
<b>Freeway Mainline between Clinton Keith Rd and Scott Rd</b>				
Truck % <sup>2</sup>	7.25	7.25	7.25	7.25
AADT	6,888	6,960	6,960	6,960
Truck Increase above No-Build	--	83	83	83
<b>Freeway Mainline N of Scott Rd</b>				
Truck % <sup>2</sup>	7.2	7.2	7.2	7.2
AADT	6,134	6,314	6,314	6,314
Truck Increase above No-Build	--	61	61	61

1. AADT estimated from Caltrans 2016 AADT counts multiplied by ratio of Caltrans 2016 peak hour counts to I-215/Keller Road Interchange PA-ED Traffic Operations Analysis (PN#: 8000020339, EA 0Q220) peak hour projections.  
 2. As reported by Caltrans 2014 AADT Truck Traffic counts.

As shown in Table 3, the 2027 opening year truck traffic was calculated from total AADT and Caltrans 2014 peak hour traffic counts, which estimate volumes for 2 to 5-axle trucks between 7.2 to 7.25-percent of total traffic, below the 8-percent threshold for a POAQC per EPA guidelines.

**FTIP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility**

<b>Table 4. FTIP Horizon Year (2047) I-215 Level of Service (AM/PM)</b>				
Location	Alt 1	Alt 2	Alt 3	Alt 5
<b>I-215 Southbound</b>				
Freeway Mainline N of Scott Rd	C/B	C/B	C/B	C/B
Freeway Mainline between Scott Rd and Keller Road	D/B	C/B	C/B	C/B
Freeway Mainline between Keller Rd and Clinton Keith Road	D/B	C/B	C/B	C/B
Freeway Mainline S of Clinton Keith Rd	C/B	C/B	C/B	C/B
<b>I-215 Northbound</b>				
Freeway Mainline N of Scott Rd	B/C	B/C	B/C	B/C
Freeway Mainline between Scott Rd and Keller Road	B/C	B/B	B/B	B/B
Freeway Mainline between Keller Rd and Clinton Keith Road	B/C	C/D	C/D	C/D
Freeway Mainline S of Clinton Keith Rd	B/C	B/C	B/C	B/C

As presented in the traffic report, Level of Service (LOS) on I-215 for the Final 2017 Federal Transportation Improvement Program (FTIP) horizon year (2047) under No-Build and Build conditions (Table 4) indicates that the freeway will continue to operate at free flow or better conditions during the AM and PM peak hour, with the exception of the NB direction between Keller Road and Clinton Keith Road. Slight improvements are anticipated in both the NB and SB directions between Keller Road and Scott Road.

<b>Table 5. FTIP Horizon Year (2047) I-215 Annual Average Daily Traffic (AADT) <sup>1</sup></b>				
Location	Alt 1	Alt 2	Alt 3	Alt 5
Freeway Mainline S of Clinton Keith Rd	121,900	125,200	125,200	125,200
Freeway Mainline between Clinton Keith Rd and Scott Rd	117,000	122,600	122,600	122,600
Freeway Mainline N of Scott Rd	104,000	111,400	111,400	111,400

1. AADT estimated from Caltrans 2016 AADT counts multiplied by ratio of Caltrans 2016 peak hour counts to I-215/Keller Road Interchange PA-ED Traffic Operations Analysis (PN#: 8000020339, EA 0Q220)

As shown in Table 5, the horizon year (2047) projections indicate that AADT will remain below the 125,000 POAQC threshold for all project alternatives; however, mainline freeway segments S of Clinton Keith Road may slightly exceed the threshold under the Build Alternatives.



**Table 6. Horizon Year (2047) I-215 Percent Trucks, Truck Increase and AADT <sup>1</sup>**

Location	Alt 1	Alt 2	Alt 3	Alt 5
<b>Freeway Mainline S of Clinton Keith Rd</b>				
Truck % <sup>2</sup>	7.25	7.25	7.25	7.25
AADT	8,838	9,077	9,077	9,077
Truck Increase above No-Build	--	340	340	340
<b>Freeway Mainline between Clinton Keith Rd and Scott Rd</b>				
Truck % <sup>2</sup>	7.25	7.25	7.25	7.25
AADT	8,483	8,889	8,889	8,889
Truck Increase above No-Build	--	340	340	340
<b>Freeway Mainline N of Scott Rd</b>				
Truck % <sup>2</sup>	7.2	7.2	7.2	7.2
AADT	7,488	8,021	8,021	8,021
Truck Increase above No-Build	--	532	532	532
1. AADT estimated from Caltrans 2016 AADT counts multiplied by ratio of Caltrans 2016 peak hour counts to I-215/Keller Road Interchange PA-ED Traffic Operations Analysis (PN#: 8000020339, EA 0Q220) peak hour projections. 2. As reported by Caltrans 2014 AADT Truck traffic counts.				

The horizon year (2047) truck traffic was calculated from total AADT and Caltrans 2014 peak hour traffic counts, which estimate volumes for 2 to 5-axle trucks between 7.2 to 7.25-percent of total traffic. Despite the exceedance of the AADT total traffic threshold for a POAQC, truck volumes are anticipated to remain below the 10,000 vehicles per day.

**Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street LOS, AADT, % and # trucks, truck AADT**

**Table 7. Opening Year (2027) Keller Road Level of Service (AM/PM)**

Location	Alt 1	Alt 2	Alt 3	Alt 5
Zeiders Road/Keller Road	A/A	D/D	D/D	D/D
Scenic View Drive/Keller Road	A/A	Removed		
Antelope Road/Keller Road	B/A	Intersection Relocated		
Mapleton Avenue/Keller Road	B/B	C/C	C/C	C/C
Whitewood Road/Keller Road	D/D	D/D	D/D	D/D
n/a – data not available				

Per the traffic report, LOS at existing (2014) intersections of Keller Road with cross-streets (Zeiders Road, Scenic View Drive, Mapleton Avenue, Whitewood Road) are operating at free flow or better (LOS A – C) conditions, with the exception of the signalized intersection at Antelope Road during the AM peak period. FTIP opening year (2027) traffic on Keller Road for the No-Build scenario assumes a planned realignment of Antelope Road would occur without the project. As shown in Table 7, LOS for 2027 is predicted to degrade from A/D (AM and PM peak) under the No-Build to C/D (AM and PM peak) for the Build alternatives on Keller Road. However, the I-215/Keller Road interchange ramp terminus intersections (not listed) are forecast in the traffic report to operate at an acceptable LOS (B/C) for all alternatives in opening year 2027.

**Table 8. Opening Year (2027) Keller Road Percent Trucks, Truck Increase and AADT <sup>1</sup>**

Location	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
<b>Keller Road W of I-215</b>					
AADT	3,298	17,752	17,752	17,752	17,752
Truck % <sup>2</sup>	5.0	5.0	5.0	5.0	5.0
Truck AADT	165	888	888	888	888
Truck Increase above No-Build	--	723	723	723	723

<b>Table 8 cont'd. Opening Year (2027) Keller Road Percent Trucks, Truck Increase and AADT <sup>1</sup></b>						
Keller Road under I-215						
AADT	3,612	10,993	10,993	10,993	10,993	10,993
Truck % <sup>2</sup>	5.0	5.0	5.0	5.0	5.0	5.0
Truck AADT	181	550	550	550	550	550
Truck Increase above No-Build	--	369	369	369	369	369
Keller Road E of I-215						
AADT	10,262	24,987	24,987	24,987	24,987	24,987
Truck % <sup>2</sup>	5.0	5.0	5.0	5.0	5.0	5.0
Truck AADT	513	1,249	1,249	1,249	1,249	1,249
Truck Increase above No-Build	--	736	736	736	736	736
1. AADT estimated from Caltrans 2016 AADT counts multiplied by ratio of Caltrans 2016 peak hour counts to I-215/Keller Road Interchange PA-ED Traffic Operations Analysis (PN#: 8000020339, EA 0Q220) peak hour projections. 2. Typical truck percentage for an arterial street.						

Opening year (2027) traffic at the I-215/Keller Road interchange (Table 8) for the No-Build scenario was extrapolated from total 2014 AADT reported in the traffic report using a 3.2-percent annual growth rate. For the Build Alternatives, opening year volumes are based on a 25 – 26% reduction factor from FTIP horizon year (2047) volumes. Truck percentages for all alternatives were assumed to be 5-percent for a typical arterial street and truck AADT was derived by taking this percentage of the extrapolated total AADT. Although LOS on Keller Road during AM peak hours is predicted to remain acceptable at Mapleton Avenue (Table 7), LOS will operate at less than acceptable levels at the remaining intersections; however, a significant number of diesel fueled vehicles including trucks, would not affect these intersections.

**RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street LOS, AADT, % and # trucks, truck AADT**

<b>Table 9. Horizon Year (2047) Keller Road Level of Service (AM/PM)</b>				
Location	Alt 1	Alt 2	Alt 3	Alt 5
Zeiders Road/Keller Road	E/F	C/D	C/D	C/D
Scenic View Drive/Keller Road	B/A	Removed		
Antelope Road/Keller Road	Intersection Relocated			
Mapleton Avenue/Keller Road	D/E	D/D	D/D	D/D
Whitewood Road/Keller Road	D/D	D/D	D/D	D/D
n/a – data not available				

Horizon year (2047) traffic on Keller Road for the No-Build scenario assumes a planned realignment of Antelope Road would occur without the project. For the Build alternatives, the Antelope realignment and new I-215/Keller Road interchange were assumed. As shown in Table 9, LOS in 2047 is predicted to improve from B/E (AM peak) and A/F (PM peak) under the No-Build to C/D (AM peak) and D/D (PM peak) for the Build alternatives on Keller Road. Additionally, the I-215/Keller Road interchange ramp terminus intersections (not listed) are forecast in the traffic report to operate at an acceptable LOS for all alternatives in the horizon year 2047, with the exception of the NB on ramp during the PM peak hour. However, for the Build alternatives, the storage space provided at the off-ramps and along the Keller Road segment between the roundabout intersections is forecast to adequately accommodate the 95th percentile peak hour queue lengths.

<b>Table 10. Horizon Year (2047) Keller Road Percent Trucks, Truck Increase and AADT <sup>1</sup></b>					
Location	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
<b>Keller Road W of I-215</b>					
Truck % <sup>2</sup>	5.0	5.0	5.0	5.0	5.0
AADT	799	1189	1189	1189	1189
Truck Increase above No-Build	--	390	390	390	390
<b>Keller Road @ I-215</b>					
Truck % <sup>2</sup>	5.0	5.0	5.0	5.0	5.0
AADT	828	736	736	736	736
Truck Increase above No-Build	--	-92	-92	-92	-92
<b>Keller Road E of I-215</b>					
Truck % <sup>2</sup>	5.0	5.0	5.0	5.0	5.0
AADT	1,020	1,673	1,673	1,673	1,673
Truck Increase above No-Build	--	653	653	653	653
<ol style="list-style-type: none"> <li>1. AADT estimated from Caltrans 2016 AADT counts multiplied by ratio of Caltrans 2016 peak hour counts to I-215/Keller Road Interchange PA-ED Traffic Operations Analysis (PN#: 8000020339, EA 0Q220) peak hour projections.</li> <li>2. Typical truck percentage for an arterial street.</li> </ol>					

Truck percentages were assumed to be 5-percent for a typical arterial street and truck AADT was derived by taking this percentage of the total AADT for all horizon year (2047) scenarios. All intersections on Keller Road are projected to operate at less than acceptable levels (Table 9); however, as shown in the Table 10, a significant number of diesel fueled vehicles including trucks, would not affect these intersections.

**Describe potential traffic redistribution effects of congestion relief (impact on other facilities)**

As discussed above, the purpose of the project is to accommodate forecasted intraregional traffic demand at the I-215/Clinton Keith and I-215/Scott Road interchanges and the I-215/Keller Road undercrossing. The project will provide improved connectivity to the regional transportation system for the existing Loma Linda University Medical Center-Murrieta and planned Kaiser-Permanente health facilities and help achieve the goals of the Murrieta 2035 General Plan Circulation Element and the Southern California Association of Government’s 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, regarding access to the regional transportation system.

While the operational LOS on I-215 mainline will improve over current conditions and future interchange ramps will operate at acceptable LOS, the potential redistribution effects of congestion relief on I-215 will maintain poor LOS on local arterials including Keller Road

**Comments/Explanation/Details (attach additional sheets as necessary)**

The proposed I-215/Keller Road IC project is not a Project of Air Quality concern because:

- i) It is an expanded highway project that will not result in a significant increase in the number of diesel vehicles as the predicted future truck percentages are below 8% of 125,000 vehicles (10,000 AADT truck volumes) for the opening (2027) and RTP horizon (2047) years;
- ii) Although the project affects intersections that are predicted to operate at LOS C or D for the opening (2027) and horizon (2047) years, those intersections will not be affected by a significant number of diesel vehicles related to the project;

In addition, the project does not incorporate new bus or rail terminals and transfer points that significantly increase the number of diesel vehicles congregating in a single location nor expand existing bus or rail terminals or transfer points.

