

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

<b>RTIP ID#</b> <i>(required)</i> SBD031276				
<b>Project Description</b> <i>(clearly describe project)</i>				
Ranchero Road 7 <sup>th</sup> Avenue to Danbury, realign road and widen from 2 to 4 lanes and construct railroad undercrossing.				
<b>Type of Project</b> <i>(use Table 1 on instruction sheet)</i>				
Roadway realignment				
<b>County</b>	<b>Narrative Location/Route &amp; Postmiles</b>			
San Bernardino	<p>The Project would begin at 7<sup>th</sup> Avenue and extend approximately 7,700 feet easterly to Danbury Avenue, with the existing Ranchero Road west of the railroad right-of-way reconstructed to a grade that would enable traffic to pass under the BNSF Railroad tracks.</p> <p><b>Caltrans Projects – EA#</b> 965100</p> <p><b><sup>1</sup>Hot Spot Concern</b></p> <p>The FCAA requires a quantitative analysis of PM10 impacts if the EPA has prepared guidance for this analysis. At this time, a quantitative analysis methodology for assessment of PM10 impacts has not been released by the EPA. Therefore, a qualitative assessment is performed based on FHWA’s “Guidance for Qualitative Project Level “Hot Spot” Analysis in PM10 Non-attainment and Maintenance Areas” and Caltrans’ “Particulate Matter and Transportation Projects, an Analysis Protocol.” This analysis concludes that it is highly unlikely that the project will cause an exceedance of the PM10 NAAQS in the vicinity of the project. Therefore, the project will not result in an adverse local PM10 impact.</p>			
<b>Lead Agency:</b> City of Hesperia				
<b>Contact Person</b>	<b>Phone#</b>	<b>Fax#</b>	<b>Email</b>	
Dave Reno	760-947-1253	760-947-1221	dreno@cityofhesperia.us	
<b>Hot Spot Pollutant of Concern</b> <i>(check one or both)</i> <b>PM2.5</b> Not required <b>PM10</b> X <sup>1</sup>				
<b>Federal Action for which Project-Level PM Conformity is Needed</b> <i>(check appropriate box)</i>				
<b>Categorical Exclusion (NEPA)</b>	X	<b>EA or Draft EIS</b>	<b>FONSI or Final EIS</b>	<b>PS&amp;E or Construction</b>
<b>Scheduled Date of Federal Action:</b> 07/08/09				
<b>Current Programming Dates</b> <i>as appropriate</i>				
	<b>PE/Environmental</b>	<b>ENG</b>	<b>ROW</b>	<b>CON</b>
<b>Start</b>	N/A	Prior	06/07	07/08
<b>End</b>	N/A	Prior	06/07	08/09

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

The purpose of the proposed Ranchoero Road project is to provide the City of Hesperia with an additional arterial level east-west access route across the City, consistent with the City's adopted 2001 update of the Circulation Element of the General Plan. More specifically, the project's purpose is to:

- Improve the City's overall circulation system by providing an additional grade separated crossing of the BNSF railroad right-of-way/tracks, with an arterial road that would connect the City from its boundary on the east to the I-15 freeway on the west; and
- Improve traffic circulation in the City by reducing traffic congestion on Main Street.

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

Surrounding land uses consist of developed residential neighborhoods and portions of the road are within the Antelope Valley Wash. Other land uses in the vicinity include the Hesperia Airport to the south and two water reservoirs (tanks) and a cell tower northwest of the railroad right-of-way. Areas west of the railroad right-of-way and east of the wash are zoned single-family residential.

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

According to the City of Hesperia’s Circulation Element, Ranchero Road is not designated as a truck route. Therefore, truck traffic is not anticipated. Refer to the Tables below for existing LOS and anticipated LOS with improvements.

**Current Level of Service**

		<b>Peak Hour Delay (Measured in Seconds)</b>			
<b>Intersection</b>	<b>Traffic Control</b>	<b>AM</b>	<b>LOS</b>	<b>PM</b>	<b>LOS</b>
Mariposa Road (NS) @ Ranchero Road (EW)*	All Way Stop	23.4	C	88.4	F
Cottonwood Avenue (NS) @ Ranchero Road (EW)	All Way Stop	10.1	B	16.1	C
Balsam Avenue (NS) @ Main Street (EW)*	Cross Street Stop	99.9 <sup>1</sup>	F	99.9 <sup>1</sup>	F
7 <sup>th</sup> Avenue (NS) @ Main Street (EW)	Traffic Signal	22.3	C	19.4	B
7 <sup>th</sup> Avenue (NS) @ Ranchero Road (EW)	All Way Stop	8.7	A	11.7	B
Summit Valley Road (NS) @ Ranchero Road (EW)	All Way Stop	11.6	B	11.8	B
C Avenue (NS) @ Main Street (EW)	All Way Stop	35.1	D	36.7	D
C Avenue (NS) @ Ranchero Road (EW)	All Way Stop	11.3	B	11.8	B
Danbury Avenue (NS) @ Ranchero Road (EW)	All Way Stop	11.8	B	13.5	B
I Avenue (NS) @ Main Street (EW)	All Way Stop	24.6	C	27.1	C

\* = Current condition is no traffic signal and traffic signal is warranted.  
 1 = Delay high, intersection unstable, Level of Service

**Level of Service– Year 2010 With Proposed Project Improvements**

		<b>Peak Hour Delay (Measured in Seconds)</b>			
<b>Intersection</b>	<b>Traffic Control</b>	<b>AM</b>	<b>LOS</b>	<b>PM</b>	<b>LOS<sup>1</sup></b>
Mariposa Road (NS) @ Ranchero Road (EW)	Traffic Signal	8.2	A	5.9	A
Cottonwood Avenue (NS) @ Ranchero Road (EW) *	Traffic Signal	13.2	B	13.4	B
Balsam Avenue (NS) @ Main Street (EW)	Traffic Signal	9.8	A	15.6	B
7 <sup>th</sup> Avenue (NS) @ Main Street (EW)	Traffic Signal	21.3	C	16.8	B
7 <sup>th</sup> Avenue (NS) @ Ranchero Road (EW) *	Traffic Signal	19.4	B	16.0	B
Summit Valley Road (NS) @ Ranchero Road (EW) *	Traffic Signal	16.0	B	13.9	B
C Avenue (NS) @ Main Street (EW)	Traffic Signal	33.1	C	34.8	C
Danbury Avenue (NS) @ Ranchero Road (EW)	Cross Street Stop	15.8	C	20.6	C
I Avenue (NS) @ Main Street (EW)	Traffic Signal	25.0	C	29.0	C

\*= Current condition (Year 2004) is no traffic signal, but traffic signal is projected to be warranted in 2010.  
 1= LOS Projections based on completion of proposed project improvements and recommended traffic signals are installed.

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

According to the City of Hesperia’s Circulation Element, Rancho Road is not designated as a truck route. Therefore, truck traffic is not anticipated. However, Year 2030 LOS with improvements is indicated below.

**Level of Service – Year 2030 With Proposed Project Improvements**

		Peak Hour Delay (Measured in Seconds)			
Intersection	Traffic Control	AM	LOS	PM	LOS <sup>1</sup>
Mariposa Road (NS) @ Rancho Road (EW)	Traffic Signal	35.1	D	26.9	C
Cottonwood Avenue (NS) @ Rancho Road (EW)	Traffic Signal	15.5	B	12.5	B
Balsam Avenue (NS) @ Main Street (EW)	Traffic Signal	11.5	B	10.5	B
7 <sup>th</sup> Avenue (NS) @ Main Street (EW)	Traffic Signal	25.4	C	20.5	C
7 <sup>th</sup> Avenue (NS) @ Rancho Road (EW)	Traffic Signal	18.6	B	22.4	C
Summit Valley Road (NS) @ Rancho Road (EW)	Traffic Signal	20.2	C	23.0	C
C Avenue (NS) @ Main Street (EW)	Traffic Signal	38.3	D	40.1	D
Danbury Avenue (NS) @ Rancho Road (EW) *	Traffic Signal	20.3	C	20.6	C
I Avenue (NS) @ Main Street (EW)	Traffic Signal	25.0	C	29.0	C

\* = Current condition (Year 2004) is no traffic signal, but traffic signal is projected to be warranted in 2030.

1 = LOS Projections based on completion of proposed project improvements and recommended traffic signals are installed.

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

The proposed project is not the development of an interchange or intersection. The proposed project is the realignment of Rancho Road from 7<sup>th</sup> Avenue to Danbury, widening from 2 to 4 lanes and the construction of a Railroad undercrossing.

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

The proposed project is not the development of an interchange or intersection. The proposed project is the realignment of Rancho Road from 7<sup>th</sup> Avenue to Danbury, widening from 2 to 4 lanes and the construction of a Railroad undercrossing.

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

Refer to comments section below.

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

The BNSF Railroad bisects the City of Hesperia in a north/south direction. There are two crossings over the railroad to serve the City's approximately 78,000 (according to the 2005 US Census Bureau population estimates) residents; one at Bear Valley Road, the northern boundary of the City, and one at Main Street which provides the only centrally located east-west corridor to serve the entire City. According to City of Hesperia data, approximately 47 percent of the City's residents live on the east side of the BNSF line. Development of the proposed project will improve the City's overall circulation system by providing an additional grade-separated crossing of the BNSF railroad right-of-way/tracks, with an arterial road that would connect the City from its boundary on the east to the I-15 freeway on the west; and improve traffic circulation in the City by reducing traffic congestion on Main Street.

Air Quality report attached titled: Air Quality Assessment For: Ranchero Road Grade Separation Project (Seventh Avenue to Danbury Avenue) City of Hesperia.