



LSA ASSOCIATES, INC.  
5804 N. FRUIT STREET, SUITE 103 FRESNO, CALIFORNIA 93711  
559-490-1210 TEL  
559-490-1211 FAX

BERKELEY  
CARLSBAD  
FORT COLLINS

IRVINE  
PALM SPRINGS  
POINT RICHMOND

RIVERSIDE  
ROCKLIN  
SAN LUIS OBISPO  
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## MEMORANDUM

**DATE:** November 19, 2009

**TO:** Sacramento Area Council of Governments

**FROM:** Jason Paukovits, LSA Associates, Inc.

**SUBJECT:** 4<sup>th</sup> Street and I Street Westside Access Project Particulate Matter Conformity Hot-Spot Analysis Form – Interagency Consultation

The attached Particulate Matter (PM) Conformity Hot-spot Analysis Form has been prepared for interagency consultation for the 4<sup>th</sup> Street and I Street Westside Access Project. The City of Sacramento is proposing improvements to local circulation facilities to improve access to the Amtrak Station, as well as to 3<sup>rd</sup> Street. These improvements will include a new signalized intersection on I Street (placed in line with the 4<sup>th</sup> Street alignment) near Interstate 5, construction of a new exit from the Amtrak Station parking lot at the new I Street/4<sup>th</sup> Street intersection, expansion of the Amtrak Station parking lot, and landscape improvements along I Street. The project greatly improves pedestrian and bicycle accessibility into and out of the Amtrak Station and will expand the parking capacity of the Amtrak Station.

On March 10, 2006, the Environmental Protection Agency (EPA) published a final rule that establishes the transportation conformity criteria and procedures for determining which transportation projects must be analyzed for local air quality impacts in PM<sub>2.5</sub> and PM<sub>10</sub> nonattainment and maintenance areas. EPA specified in 40 CFR 93.123(b)(1) of the final rule that Projects of Air Quality Concern (POAQC) are certain highway and transit projects that involve significant levels of diesel vehicle traffic, or any other project that is identified in the PM<sub>2.5</sub> or PM<sub>10</sub> SIP as a localized air quality concern.

The proposed project does not meet any of the criteria for a POAQC as described in the EPA final rule and guidance. The proposed project is not a new or expanded highway project, does not affect an intersection at LOS D, E, or F with a significant number of diesel vehicles, create a new bus or rail terminal, expand a bus or rail terminal with a significant increase in the number of diesel vehicles, or affect sites identified in the SIP. Therefore, the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis.

<b>RTIP ID# (required) SAC18620</b>	
<b>Project Description (clearly describe project)</b>	
<p>The City of Sacramento is proposing improvements to local circulation facilities to improve access to the Amtrak Station, as well as to 3<sup>rd</sup> Street. These improvements will include a new signalized intersection on I Street (placed in line with the 4<sup>th</sup> Street alignment) near Interstate 5, construction of a new exit from the Amtrak Station parking lot at the new I Street/4<sup>th</sup> Street intersection, expansion of the Amtrak Station parking lot, and landscape improvements along I Street. The project greatly improves pedestrian and bicycle accessibility into and out of the Amtrak Station and will expand the parking capacity of the Amtrak Station.</p> <p>I Street is a four lane, one way street in which traffic travels through the downtown area from east to west. 4th Street is a two-lane, two way street, that has a north/south alignment and is not a through road between I Street and J Street. While the project's title and scope indicate a new intersection at 4th and I Streets; 4th Street will not actually intersect I Street. 4th Street currently stops at J Street and this project does not propose to extend 4th Street. The proposed 4th Street and I Street intersection will consist of a private driveway into an office complex on the south side of I Street, and a driveway that allows vehicles out of the Amtrak station on the north side of I Street. The new intersection will require minor modifications to the northbound I-5 onramp, and the relinquishment of Caltrans property to the City of Sacramento.</p> <p>The following is a summary of proposed improvements for the project:</p> <p><u>I Street Improvements</u></p> <ul style="list-style-type: none"> <li>• Narrow I Street to accommodate parking lot expansion along north side of I Street;</li> <li>• Modify northbound I-5 on-ramp to accommodate changes along I Street;</li> <li>• Restripe I Street, maintaining the same number of travel lanes;</li> <li>• Construct a signalized intersection at 4<sup>th</sup> and I Streets; and</li> <li>• Construct curb, gutter and separated sidewalk on the north side of I Street between 4<sup>th</sup> Street and 5<sup>th</sup> Street;</li> <li>• Provide appropriate signage; and</li> <li>• Provide Street Lighting as needed</li> </ul> <p><u>Parking Lot Improvements</u></p> <ul style="list-style-type: none"> <li>• Extend parking lot, reconfigure parking to allow for additional parking stalls</li> <li>• Provide signing as needed</li> <li>• Add parking lot lighting as needed.</li> </ul>	
<b>Type of Project (use Table 1 on instruction sheet)</b>	
Intersection signalization project at individual intersections	
<b>County</b> Sacramento	<b>Narrative Location/Route &amp; Postmiles:</b> I Street from 3 <sup>rd</sup> Street to 5 <sup>th</sup> Street, including a portion of the existing parking lot at the Amtrak station, City of Sacramento
	<b>Caltrans Project – EA#03928544</b>

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

<b>Lead Agency:</b> City of Sacramento				
<b>Contact Person</b> Edward Williams	<b>Phone#</b> 916-808-8288	<b>Fax#</b>	<b>Email</b> <a href="mailto:ewilliams@cityofsacramento.org">ewilliams@cityofsacramento.org</a>	
<b>Hot Spot Pollutant of Concern</b> ( <i>check one or both</i> ) <b>PM2.5 X</b> <b>PM10 X</b>				
<b>Federal Action for which Project-Level PM Conformity is Needed</b> ( <i>check appropriate box</i> )				
<input checked="" type="checkbox"/> <b>Categorical Exclusion (NEPA)</b>	<input type="checkbox"/> <b>EA or Draft EIS</b>	<input type="checkbox"/> <b>FONSI or Final EIS</b>	<input checked="" type="checkbox"/> <b>PS&amp;E or Construction</b>	<input type="checkbox"/> <b>Other</b>
<b>Scheduled Date of Federal Action:</b> 2009				
<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>	<2009	<2009		2010
<b>End</b>	<2009	<2009		2010
<b>Project Purpose and Need (Summary):</b> ( <i>attach additional sheets as necessary</i> )				
<p>The purpose of the improvements are to provide better pedestrian access into and around the Amtrak station, add parking, improve traffic circulation at the entrances and exits of the Amtrak Station, and improve landscaping along I Street. The primary objective of this project is to improve pedestrian and bicycle access to the Amtrak Station from Old Sacramento, the nearby parking structure (Lot P) and the downtown grid. The only pedestrian access to the Amtrak building is via 2<sup>nd</sup> Street and 5<sup>th</sup> Street. The current accesses require pedestrians to take a circuitous route for those parking offsite. A pedestrian access at 4<sup>th</sup> Street will significantly reduce the walking distance from the nearby parking structure.</p> <p>A secondary objective of the project is to expand the Amtrak parking lot. Parking demands are often very high at the Amtrak facility; needs often exceed parking lot capacity. When the Amtrak parking lot is full, people are forced to park at a nearby parking structure (Lot P) which requires a substantial walk along a circuitous route.</p>				
<b>Surrounding Land Use/Traffic Generators</b> ( <i>especially effect on diesel traffic</i> )				
The project is located in an urbanized area of the City of Sacramento. Land uses in the project area include commercial, office, retail, and transit (Amtrak Station). The majority of traffic generated by these land uses would be gasoline-powered vehicles with limited effects on diesel traffic.				

<b>Opening Year: Build and No Build LOS- AM Peak/AADT, % and # trucks, truck AM Peak/AADT of proposed facility</b>				
<b>Facility Name: I Street</b>				
<b>Year: 2011</b>				
	<b>LOS</b>	<b>AM Peak / AADT</b>	<b>Truck Percent</b>	<b>Truck AM Peak/AADT</b>
Build	A	1,070 / 23,519	2	21 / 470
No-Build	Uncontrolled	1,086 / 23,888	2	22 / 478
<b>Opening Year: Build and No Build LOS- AM Peak/AADT, % and # trucks, truck AM Peak/AADT of proposed facility</b>				
<b>Facility Name: I Street</b>				
<b>Year: 2035</b>				
	<b>LOS</b>	<b>AM Peak / AADT</b>	<b>Truck Percent</b>	<b>Truck AM Peak/AADT</b>
Build	A	1,656 / 30,887	2	33 / 618
No-Build	Uncontrolled	1,676 / 31,256	2	34 / 625
<b>Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AM Peak, % and # trucks, truck AM Peak</b>				
<b>Facility Name: 4<sup>th</sup> Street</b>				
<b>Year: 2011</b>				
	<b>LOS</b>	<b>AM Peak</b>	<b>Truck Percent</b>	<b>Truck AM Peak</b>
Build	A	31	2	1
No-Build	Uncontrolled	N/A	N/A	N/A
<b>RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AM Peak, % and # trucks, truck AM Peak</b>				
<b>Facility Name: 4<sup>th</sup> Street</b>				
<b>Year: 2035</b>				
	<b>LOS</b>	<b>AM Peak</b>	<b>Truck Percent</b>	<b>Truck AM Peak</b>
Build	A	31	2	1
No-Build	Uncontrolled	N/A	N/A	N/A
<b>Describe potential traffic redistribution effects of congestion relief (impact on other facilities)</b>				
The traffic analysis found the following effects on traffic in the area:				
<ol style="list-style-type: none"> <li>1. The proposed project would substantially improve pedestrian accessibility around the Amtrak Station.</li> <li>2. The proposed project has the potential to cause queuing problems for traffic leaving downtown Sacramento during the p.m. peak hour in the future year. If a queuing problem actually materializes, the City has the option of running the traffic signal at the I Street / 4th Street intersection as an actuated-coordinated signal to reduce the potential for queuing.</li> <li>3. The proposed project would not significantly affect traffic operations at any intersections.</li> <li>4. The proposed project would not significantly affect the potential for queuing at the I- 5 J Street off-ramps.</li> </ol>				

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

On March 10, 2006, the Environmental Protection Agency (EPA) published a final rule that establishes the transportation conformity criteria and procedures for determining which transportation projects must be analyzed for local air quality impacts in PM<sub>2.5</sub> and PM<sub>10</sub> nonattainment and maintenance areas. EPA specified in 40 CFR 93.123(b)(1) of the final rule that Projects of Air Quality Concern (POAQC) are certain highway and transit projects that involve significant levels of diesel vehicle traffic, or any other project that is identified in the PM<sub>2.5</sub> or PM<sub>10</sub> SIP as a localized air quality concern. Per 40 CFR 93.123(b)(2) qualitative hot-spot analyses are required for these projects because appropriate methods and modeling guidance for a quantitative analysis are not yet available.

The final rule defines the POAQC that require a PM<sub>2.5</sub> and PM<sub>10</sub> hot-spot analysis in 40 CFR 93.123(b)(1) as:

- (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>2.5</sub> and PM<sub>10</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

According to the EPA's "Transportation Conformity Guidance for Qualitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas" dated March 2006, the following are examples of projects that are NOT an air quality concern under 40 CFR 93.123(b)(1)(i) and (ii):

- (i) Any new or expanded highway project that primarily services gasoline vehicle traffic (i.e., does not involve a significant number or increase in the number of diesel vehicles), including such projects involving congested intersections operating at Level-of-Service D, E, or F;
- (ii) An intersection channelization project or interchange configuration project that involves either turn lanes or slots, or lanes or movements that are physically separated. These kinds of projects improve freeway operations by smoothing traffic flow and vehicle speeds by improving weave and merge operations, which would not be expected to create or worsen PM<sub>2.5</sub> or PM<sub>10</sub> violations; and
- (iii) Intersection channelization projects, traffic circles or roundabouts, intersection signalization projects at individual intersections, and interchange reconfiguration projects that are designed to improve traffic flow and vehicle speeds, and do not involve any increases in idling. Thus, they would be expected to have a neutral or positive influence on PM<sub>2.5</sub> or PM<sub>10</sub> emissions.

The project does not qualify as a POAQC because of the following reasons:

- i. The proposed project is an intersection project that does not increase the capacity of I Street. I Street has approximately 30,887 ADT in 2035 with 2 percent diesel vehicles.<sup>1</sup> The proposed project would not increase the operational capacity of I Street and does not result in an increase in vehicles. Based on the traffic data, I Street would not exceed the 125,000 average daily trips threshold for a POAQC. The proposed project would not increase the traffic volumes or truck percentages along the roadways within the project vicinity.
- ii. The proposed project does not affect intersections that are at level of service (LOS) D, E, or F with a significant number of diesel vehicles.
- iii. The proposed project does not include the construction of a new bus or rail terminal.
- iv. The proposed project does not significantly increase the number of diesel vehicles congregating at a single location as a result of expanding bus and rail terminals and transfer points.
- v. The proposed project is not in or affecting locations, areas, or categories of sites that are identified in the PM<sub>2.5</sub> and PM<sub>10</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The proposed project does not meet any of the criteria for a Project of Air Quality Concern as described in the EPA final rule and guidance. The proposed project is not a new or expanded highway project, does not affect an intersection at LOS D, E, or F with a significant number of diesel vehicles, create a new bus or rail terminal, expand a bus or rail terminal with a significant increase in the number of diesel vehicles, or affect sites identified in the SIP. Therefore, the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis.

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<sup>1</sup> Bowman, Mark, 2009. Air Quality Conformity Traffic Data for 4<sup>th</sup> & I Street Intersection. Written Communication to Dave Lopez, Mark Thomas and Company, Inc. October 13.