

Attachment A

Project Assessment Form for PM_{2.5} Interagency Consultation

The San Francisco Bay Area is designated as nonattainment for the 24-hour PM_{2.5} standard. Beginning December 14, 2010, certain projects are required to engage in interagency consultation and complete PM_{2.5} hot-spot analysis as part of the project-level conformity determination process.

The purpose of this form is for the project sponsor to provide sufficient information to allow the Air Quality Conformity Task Force to determine if a project is considered a project of air quality concern and therefore requires a project-level PM_{2.5} hot-spot analysis pursuant to Federal Conformity Regulations.

A project of air quality concern is defined in 40 CFR 93.123(b)(1) as follows:

- (i). New or expanded highway projects that have a significant number of or significant increase in 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 PM₁₀ or PM_{2.5} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The form is not required under the following circumstances:

The project does not require a project-level PM hot spot analysis since it:

- Is exempt pursuant to 40 CFR 93.126; or
- Is a traffic signal synchronization project under 40 CFR 93.128; or
- Uses no Federal funds AND requires no Federal approval.

Instructions

The project sponsor is responsible for taking the following actions:

1. Fill out this form in its entirety and ensure that there is a sufficient level of detail about the project for the Air Quality Conformity Task Force to make an informed decision on whether or not a project requires a project-level PM_{2.5} hot-spot analysis.
2. Upload and submit this completed form to MTC via the FMS so that MTC can schedule this project for interagency consultation by the Air Quality Conformity Task Force. In addition to this form, the project sponsor may upload the PM_{2.5} hot-spot analysis via FMS for review by the Conformity Task Force.
3. Ensure a representative is available to discuss the project at the Air Quality Conformity Task Force meeting if necessary.

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RTIP ID# <i>(required)</i> 22142					
TIP ID# <i>(required)</i> SCL050034					
Air Quality Conformity Task Force Consideration Date Next available date. April 26, 2012					
Project Description <i>(clearly describe project)</i> Modify US-101/Capitol Expressway interchange to partial cloverleaf, remove southbound C-D road between Capitol Expressway and Yerba Buena Road. Extend Auxiliary lane on southbound 101 between Capitol and Yerba Buena Road. Widen Yerba Buena Road off ramp to 2 lanes and realign to exit directly from southbound 101. Widen Yerba Buena Road on ramp to northbound 101 to 2 lanes. Modify C-D road system between Yerba Buena and Capitol to construct a new on ramp to northbound 101.					
Type of Project: Highway Improvement Project					
County Santa Clara	Narrative Location/Route & Postmiles From Yerba Buena Road Undercrossing to 0.4 mile north of Tully Road Caltrans Projects – EA# 04-1G3604				
Lead Agency: California Department of Transportation on behalf of FHWA					
Contact Person Samantha Swan	Phone# 408-321-5785	Fax# 408-321-5787	Email samantha.swan@vta.org		
Federal Action for which Project-Level PM Conformity is Needed <i>(check appropriate box)</i>					
X	Categorical Exclusion (NEPA)	EA or Draft EIS	FONSI or Final EIS	PS&E or Construction	Other
Scheduled Date of Federal Action: May 15,2012					
NEPA Delegation – Project Type <i>(check appropriate box)</i>					
Exempt	Section 6004 – Categorical Exemption	X	Section 6005 – Non-Categorical Exemption		
Current Programming Dates <i>(as appropriate)</i>					
	PE/Environmental	ENG	ROW	CON	
Start	08/01/07	03/15/10	09/15/10	08/31/12	
End	05/31/12	05/31/12	03/30/12	09/01/15	

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Project Purpose and Need (Summary): *(please be brief)*

Purpose of the Project

The purpose of the proposed project is to reduce the traffic congestion resulting from merging and weaving conflicts and to improve the overall U.S. 101 freeway system performance in the eastern part of the City of San Jose. This includes eliminating mainline traffic bottlenecks, reducing congestion duration, and improving safety,

Need for the Proposed Project

As described in the following paragraphs, the project segment of U.S. 101 (i.e., 1-280/680 to Yerba Buena Road) currently experiences substantial congestion during the AM and PM peak commute periods. This congestion is projected to worsen as traffic volumes increase over time.

Existing Conditions

Along the project segment of U.S. 101, peak-hour traffic is heaviest in the northbound direction during the AM commute and is heaviest in the southbound direction during the PM commute. The substantial peak-hour traffic demand, coupled with the significant merging and weaving movements associated with the various on-ramps and off-ramps, creates congestion, queuing, and delay. In addition, insufficient storage space behind various ramp meters results in vehicle queuing that often extends onto the freeway and/or local streets.

AM Peak Period - Northbound U.S. 101

- Traffic on the on-ramp from westbound Capitol Expressway backs up onto Capitol Expressway. The backup sometimes extends through the Capitol Expressway/Silver Creek Road intersection.
- Traffic on the Capitol Expressway collector-distributor road to northbound U.S. 101 backs up to where it blocks the entrance to the northbound U.S. 101 to westbound Capitol Expressway loop off-ramp.

PM Peak Period - Southbound U.S. 101

- Congestion at the Capitol Expressway interchange due to the loop ramp interchange configuration causes traffic to back up onto the U.S. 101 mainline. This back up causes congestion among vehicles exiting and entering U.S. 101 at Capitol Expressway.

By year 2030, peak-hour traffic volumes on U.S. 101 are projected to increase by 22% and 24% over existing volumes during the AM and PM peak-hours; respectively. This increase will exacerbate congestion over and above that which presently occurs and will further increase travel times during the AM and PM peak periods.

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

Numerous residential subdivisions, several shopping centers and various industrial uses.

Opening Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Not Applicable

RTP Horizon Year / Design Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Not applicable

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

Opening Year: 2014

US 101; No Build: AADT – ~~194,095~~ 215,900; Truck AADT – ~~17,274~~ 9,830 (~~8.9~~ 4.55%);

Build: AADT – ~~195,429~~ 215,900; Truck AADT – ~~17,393~~ 9,830 (~~8.9~~ 4.55%)

Capitol Expressway;

West of US 101: No Build: AADT – ~~95,095~~ 75,100; Truck AADT - ~~5611~~ 3,417 (~~5.9~~ 4.55%)

Build: AADT – ~~95,310~~ 75,100; Truck AADT – ~~5623~~ 3,417 (~~5.9~~ 4.55%)

Capitol Expressway;

East of US 101: No Build: AADT – 90,400; Truck AADT - 4,113 (4.55%)

Build: AADT – 90,400; Truck AADT – 4,113 (4.55%)

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

Horizon Year: 2035

US 101; No Build: AADT – ~~254,786~~ 267,500; Truck AADT – ~~22,676~~ 12,179 (~~8.9~~ 4.55 %);

Build: AADT – ~~258,786~~ 267,500; Truck AADT – ~~23,031~~ 12,179 (~~8.9~~ 4.55%)

Capitol Expressway;

West of US 101: No Build: AADT – ~~133,286~~ 107,500; Truck AADT - ~~7864~~ 4,891 (~~5.9~~ 4.55%)

Build: AADT – ~~133,929~~ 107,500; Truck AADT – ~~7902~~ 4,891 (~~5.9~~ 4.55%)

Capitol Expressway;

East of US 101: No Build: AADT – 127,600; Truck AADT - 5,806 (4.55%)

Build: AADT – 127,600; Truck AADT – 5,806 (4.55%)

Notes:

- The methodology used to calculate the original AADT numbers was incorrectly based on the AADT for all trucks and future growth in the area.
- The revised and corrected numbers are shown in red and are based on the AADT for trucks with 3 or more axles and on the future AADT from the project's Final Traffic Operations Report.
- See the attached Revised AADT table.

Opening Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses

The proposed project is not a bus, rail, or intermodal facility/terminal/transfer point project; this data request is not applicable.

RTP Horizon Year / Design Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses

The proposed project is not a bus, rail, or intermodal facility/terminal/transfer point project; this data request is not applicable.

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

Overall there is 31% reduction in vehicle hours of delay during PM peak hour. There is 17% reduction in vehicle hours of travel. The travel speeds on freeway will improve by 11% during AM peak hour and 241% during PM peak Hour.

Comments/Explanation/Details *(please be brief)*

The project is not considered a POAQC, as defined in 40 CFR 93.123(b), for the following reasons:

- The project is not a new or expanded highway project with a significant number of or increase in diesel vehicles.
- The project does not include intersections that are or will be at LOS D, E, or F with a significant number of diesel vehicles.
- The project does not include the construction of a new bus or rail terminal with a significant number of diesel vehicles congregating at a single location.
- The project does not expand an existing bus or rail terminal with a significant number of diesel vehicles congregating at a single location.
- The project is not in or affecting locations, areas, or categories of sites that are identified in the PM_{2.5} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The project will make minor modifications to existing freeway facilities to improve system operation and does not generate more vehicle or truck traffic or increase the capacity of the freeways or highways (U.S. 101). This type of project improves freeway interchange operations by reducing traffic congestion.

Therefore, the project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The project will not create a new, or worsen an existing, PM_{2.5} violation.

REVISED Annual Average Daily Traffic (AADT)

Location	AADT	2010 (Existing)		Opening Year: 2014		Horizon Year: 2035	
		#	%	No Build / Build ¹	%	No Build / Build ¹	%
US 101 at RTE. 82 (Blossom Hill Road)	Vehicle AADT						
	Total	149,000	100.00%				
	Trucks: 3+ axles	6,784	4.55%				
	All other vehicles	142,216	95.45%				
US 101 at Capitol Expressway	Vehicle AADT						
	Total	205,000	100.00%	215,900		267,500	
	Trucks: 3+ axles	9,334	4.55%	9,830	4.55%	12,179	4.55%
	All other vehicles	195,666	95.45%				
US 101 at Capitol Expressway	Vehicle AADT						
	Total	205,000	100.00%	215,900		267,500	
	Trucks: 3+ axles	6,171	3.01%	6,500	3.01%	8,053	3.01%
	All other vehicles	198,829	96.99%				
US 101 at RTE. 280/ RTE. 680	Vehicle AADT						
	Total	191,000	100.00%				
	Trucks: 3+ axles	5,750	3.01%				
	All other vehicles	185,250	96.99%				
Local Roads²							
Capitol Expressway west of US 101	Vehicle AADT						
	Total	68,200	100.00%	75,100		107,500	
	Trucks: 3+ axles	3,103	4.55%	3,417	4.55%	4,891	4.55%
Capitol Expressway east of US 101	Vehicle AADT						
	Total	90,400	100.00%	90,400		127,600	
	Trucks: 3+ axles	4,113	4.55%	4,113	4.55%	5,806	4.55%

Sources:

1. 2010 Annual Average Daily Truck Traffic on the California State Highway System compiled by Traffic and Vehicle Data Systems, State of California, Business, Transportation and Housing Agency, Department of Transportation, website: <http://traffic-counts.dot.ca.gov/truck2010final.pdf>.

2. 2010 Traffic Volumes on the California State Highway System, State of California, Business, Transportation and Housing Agency, Department of Transportation, Division of Traffic Operations, website: <http://traffic-counts.dot.ca.gov>.

3. December 2011 Final Traffic Operations Report for the US 101 Operational Improvement Phase 2, US 101 Capitol Expressway and Yerba Buena Road Interchanges by Fehr & Peers

Notes:

¹No Build and Build numbers are the same. The project will not add more vehicles to the roadways. This project will improve the operations of the interchange and this 2-mile segment of US 101.

²AADT volumes for Capitol Expressway were converted from the AM and PM peak hour counts based on Caltrans' US 101 data. The truck percentage used is the higher of the 2 percentages for US 101. Land uses along Capitol Expressway are residential and commercial. Truck percentage on Capitol Expressway will not be greater than on US 101.

Underlined numbers were calculated using the AADT totals and Truck percentages for the closest locations for which data is available.

Percentage from closest location south of the 101/Capitol interchange for which AADT data is available.

Percentage from closest location north of the 101/Capitol interchange for which AADT data is available.