

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENVIRONMENTAL ANALYSIS, MS 27
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 653-7507
FAX (916) 653-7757
TTY (916) 653-4086



*Flex your power!
Be energy efficient!*

December 8, 2006

Gene F. Fong, Division Administrator
Attention: Maiser Khaled
Federal Highway Administration, California Division
650 Capitol Mall, Ste. 4-100
Sacramento, CA 95814-4708

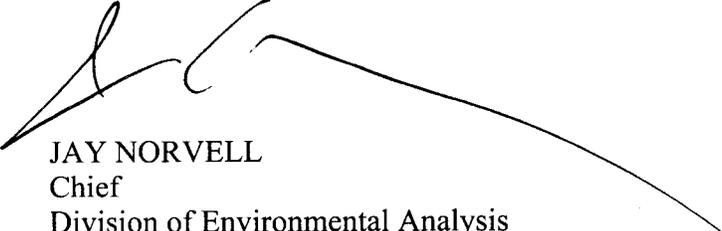
Dear Mr. Fong:

Re: Noise Study Action Plan

Enclosed, for your review, is the Noise Study Action Plan to implement recommendations contained in your final report of the California Department of Transportation's traffic noise process, dated September 28, 2006. This Action Plan includes efforts to improve both development and delivery of noise abatement on the State Highway system. We found the recommendations contained in the report to be very helpful in furthering the effort to reduce highway traffic noise.

If you have any questions, please contact Jim Andrews, at (916) 653-9554.

Sincerely,



JAY NORVELL
Chief
Division of Environmental Analysis

FHWA Noise Studies Process Review Action Plan

In August of 2006, the FHWA in conjunction with Caltrans (the Team) conducted a Noise Studies Process Review of Caltrans' internal processes to comply with provisions of Title 23 Part 772 of Federal Code. The main focus of this review was to determine the effectiveness of project noise studies and the process by which they are developed and implemented. On September 28, 2006, the FHWA sent a letter to Caltrans documenting the Team's findings and recommendations. Below is a summary of the Team's suggestions and the corresponding Caltrans response.

Finding 1: Commitments of delivering noise barriers made in the NEPA documents may not be achieved due to design and funding issues on some projects.

Recommendation 1:

The Team has recommended identifying noise cost estimates during early project development for those projects that may propose noise abatement measures. The first estimate should be contained within the Project Initiation Document (PID). Identifying this need early facilitates securing funding and avoids not being able to construct reasonable and feasible noise walls simply because of funding shortages. The Districts' noise branch must be actively involved throughout the project development process to ensure proper planning and funding is recognized early for consideration of abatement, and then tracked accordingly to help ensure all the commitments being made are delivered.

Caltrans Response

Caltrans is actively developing the new Preliminary Environmental Analysis Report (PEAR) tool to provide early environmental cost estimates prior to being programmed in the State Transportation Improvement Program (STIP). When implemented, this tool will provide a comprehensive estimate of all projected environmental costs and time constraints. Currently, the hardcopy PEAR is serving this function. The current PEAR Handbook is being revised for release in early 2007. While the current PEAR Handbook directs that potential abatement measures be identified, we will add specific language that the cost estimates for the potential abatement be included in the PEAR.

The new Noise Abatement Decision Report (NADR) that became effective in October 2006 requires that the Project Engineer work closely with the noise specialists to develop noise abatement strategies. Also, the new Traffic Noise Analysis Protocol outlines time frames for interaction between Design and Environmental throughout the project development process. All of these efforts are designed to further the continuity between the environmental commitments and the project design process.

Finding 2: Lack of procedures for the District's noise branch to get involved from the final NEPA documents through final PS&E stages (60%, 90% & final reviews).

Recommendation 2:

The Districts' noise branch should stay involved in the review of the PS&E after NEPA approval to verify that feasible/reasonable assumptions at time of NEPA approval and related proposed abatement have not changed (i.e. change in costs, change in roadway alignment both vertical and horizontal, etc.). In so doing, this would raise the confidence level in the initial noise abatement decision. It is noted that the States recently updated TNAP (as of 08/16/06) includes a flowchart and additional guidance on this matter. Also, the noise abatement information generated by the ECR/MMRR, could be verified at the time of the PS&E ready-to-list (RTL) phase.

Caltrans Response

As previously noted, the new Protocol reinforces communication between the environmental staff and design through final project PS&E. Also, we have been involved in ongoing discussions with FHWA and agreed to include final noise abatement decisions in the Environmental Commitment Record (ECR). This will provide a tool to check that prior environmental noise abatement commitments are maintained in the final project plans and are constructed.

Finding 3: Noise barriers are not being considered due to the concern that the view of noise barrier could have a severe adverse visual effect to the character of its surrounding environment (e.g. landscaping, air movement, sunlight).

Recommendation 3:

To the extent possible, the aesthetic views and scenic vistas should be preserved. However, a reasonable and feasible noise barrier cannot be rejected solely based on visual impact.

The Team recommends that in the design of a noise barrier, the visual character of noise barriers should be carefully considered in relationship to their environmental setting. This approach could utilize a consistent color and surface treatment, with landscaping elements used to soften foreground views of the barrier.

Caltrans Response

Efforts are underway to create a working group within Caltrans to help resolve competing interests in noise abatement decisions. The group will consist of representatives from Design, Landscape Architecture and Environmental (District Noise specialists and

Environmental Generalists). The objective is to make noise abatement decisions that provide the greatest benefit to impacted residents while creating the least impact in a sensitive environment. Visual impacts will be the primary focus area of this effort, which is expected to be completed in April of 2007. The group's recommendations will be incorporated in documents such as the SER, NADR, and others.

Finding 4: Incorporating noise technical studies' recommendations into NEPA documents are inconsistent throughout the Districts.

Recommendation 4:

The NEPA document is the culmination of various technical reports for full disclosure of project's impacts to the public. It is vital that the summary of these technical reports text is transferred correctly into the applicable NEPA sections/chapters. To assist environmental document writers in successfully completing this task, FHWA and Caltrans have approved annotated outlines for joint NEPA/CEQA compliance in which noise is one of the annotated sections.

In addition, consistent use of the NSR by the Districts is needed as well as development of a standard format to document noise abatement decisions (i.e. like D-11 Noise Abatement Decision Report – NADR). To reduce the amount of information being lost in the process of transferring from the NSR to the NEPA document, it is recommended that the environmental specialist review the environmental document carefully to ensure that the critical elements and conclusions in the noise technical study are included in the NEPA document.

It is understood that initially, this will take extra effort between the two sections, but in time, as "boilerplate" terms and wording is better understood, their overall time to address noise should diminish.

Caltrans Response

The Department is actively engaged in efforts to improve and streamline the environmental process. Currently an annotated outline is being prepared for the Noise Study Report (NSR) to standardize and improve consistency throughout the State. Expected completion date of the annotated outline is March 2007. The NADR will also be revised in early 2007 to further improve environmental reporting. New training is under development to address changes in the Protocol including an extensive section on reporting. District noise specialist training will begin in the summer of 2007. In addition, district environmental generalists will be given training on basic noise analysis issues at a workshop in January 2007.

Finding 5: Districts don't use the table recommended by the 1995 FHWA HO's Noise Policy, SER annotated outline, and FHWA California Division Noise Tidbits.

Recommendation 5

After reviewing the sample of the table in District 4, 6, 10, 8, & 11, the Team believes that the recommended table are much easier to use and present sufficient information that reflect noise impacts/abatement on one table, instead of a series of tables. Experience has shown that the one table can easily be used to satisfy the general public's questions regarding the basis for the noise abatement. After extensive review and for consistent application throughout the State, the Team recommends using, as a minimum, the below standard table in the annotated outline, and carry it forward into the NEPA document.

Receptor # and Location	Existing Noise Level (dBA)	Predicted Noise Level without Project (dBA)	Predicted Noise Level with Project (dBA)	Predicted Noise Level with Abatement (dBA)			Reasonable and Feasible
				2m Wall	3m Wall*	4m Wall	
1—A Street	62	64	79	74	66	64	Yes

*Indicates height of proposed wall to be included in project.

Caltrans' Headquarters also agreed to include this table in NADR.

Caltrans Response

It is agreed that the above table format is adequate for public education purposes and meets the basic needs of the Noise Study Report. Caltrans will include the above table in the new recommended NADR format for use internally and by external customers. This document is available for download on our website (<http://www.dot.ca.gov/hq/env/noise/pub/nadr.doc>)

Each District may modify this table, as needed, to address project specific considerations as long as the above information is included as a minimum.

Finding 6: Chapter 1100 in Caltrans Highway Design Manual (HDM) does not clearly define the maximum height for noise barrier.

Recommendation 6:

The Team recommends continuing education and training on the factors that roll into a noise reasonableness determination to staff (e.g. project managers, designers) that are involved in determining barrier height. Based on engineering requirements and the related reasonable and feasible noise analysis, taller barriers may be justified.

Caltrans Response

This issue revolves around the recommendation in the Highway Design Manual to limit noise barrier heights to a maximum of 14-16 feet. This is a “should” condition that is not required but represents the typical barrier heights used to abate traffic noise. The maximum height issue has also been mentioned in the new Protocol which states that barriers may exceed 16 feet in height if necessary to achieve acoustical feasibility. As mentioned above, training is under development to address many issues including visual impacts and noise barrier height limitations. It is anticipated that training classes will begin in the summer of 2007.