

US EPA ARCHIVE DOCUMENT



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX**

75 Hawthorne Street
San Francisco, CA 94105

September 20, 2007

Mr. Ron Kosinski
California Department of Transportation
100 South Main Street
Los Angeles, California 90012-3606

Subject: Draft Environmental Impact Statement for the Interstate 405 Sepulveda Pass Widening Project, from Interstate 10 to U.S. 101, Los Angeles County, California (CEQ #20070218)

Dear Mr. Kosinski:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the Interstate 405 (I-405) Sepulveda Pass Widening Project, from Interstate 10 (I-10) to U.S. 101, Los Angeles County, California and two updates to the project provided to our agency on May 28, 2007 and July 20, 2007 (herein, referred to as July 2007 DEIS Revisions). Our comments on these three documents are provided under the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act. Our detailed comments are enclosed.

Based on our review, we have rated the proposed I-405 Sepulveda Pass Widening Project DEIS as Environmental Concerns – Insufficient Information (EC-2). A *Summary of EPA Rating Definitions* is enclosed. While the DEIS was updated and revised in July 2007 to include several project changes, including the addition of a south bound mixed flow lane which extends for several miles, the sections evaluating impacts to the physical and biological environment, such as air quality, water quality, and natural communities, do not appear to have been updated. EPA recommends that Caltrans clarify whether the July EIS Revisions would affect the reporting or analysis provided in the May 2007 DEIS in both the physical and biological environments sections, and provide additional information in the Final Environmental Impact Statement (FEIS) regarding impacts and mitigation if warranted.

EPA also recommends that the discussion on dispersion modeling and exposure and health effects for mobile source air toxics be updated to reflect the findings of recent studies and reports. Our additional detailed comments provide several recommendations to reduce project impacts associated with increased impervious surfaces and construction emissions and runoff.

EPA commends the efforts of Caltrans to coordinate with the Santa Monica Mountains Conservancy to address impacts to existing wildlife corridors. In addition, Caltrans coordination with the Veterans Administration and the Salvation Army Westwood Transitional Village,

including the Bessie Pregerson Child Development Center, provided for a thorough assessment of impacts to these facilities. EPA encourages continued coordination with these groups to ensure that construction and operational impacts are further minimized.

Thank you for the opportunity to comment on the DEIS. We look forward to working with you to resolve the issues raised in our detailed comments. When the FEIS is released for public review, please send two hard copies and two electronic copies to the address above (mail code: CED-2). If you have any questions, please contact me or Susan Sturges, the lead reviewer for this project. Susan can be reached at 415-947-4188 or sturges.susan@epa.gov.

Sincerely,

/s/ Connell Dunning for

Nova Blazej, Manager
Environmental Review Office

Attachments:

Summary of EPA Rating Definitions
EPA's Detailed Comments

cc: Carlos Montez, California Department of Transportation
Steve Healow, Federal Highway Administration
Paul Edelman, Santa Monica Mountains Conservancy
Mark Cohen, U.S. Army Corps of Engineers

Project Revisions and Analysis and Reporting of Impacts

After the Interstate 405 (I-405) Corridor Improvement Project Draft Environmental Impact Statement (DEIS) was made available for public comments, California Department of Transportation (Caltrans) provided notice to EPA on May 28, 2007 that several changes to the project were mandated by Federal Highway Administration (FHWA). Caltrans provided modified sections of the DEIS to EPA on July 20, 2007 to reflect these project changes (herein, referred to as July 2007 DEIS Revisions), including the addition of a south bound mixed flow lane which extends for several miles. Although supplemental documentation was provided to EPA to note project changes and disclose changes to visual impacts and impacts to neighboring properties and traffic, little to no revisions were made in sections evaluating impacts to the physical and biological environment, such as air quality, water quality, and natural communities. EPA recommends that Caltrans evaluate whether the revisions would affect the reporting or analysis provided in the May 2007 DEIS in both the physical and biological environments sections.

Recommendations:

- Clarify that the analyses and reporting of impacts in both the May 2007 DEIS and the July 2007 DEIS Revisions consistently reflect all project revisions and the additional impacts that all revisions may have on the physical, human, and biological environment. Additional analyses and mitigation should be included in the Final EIS (FEIS). Specifically, if the conclusions in the DEIS regarding the significance of impacts or the evaluation of alternatives are affected, this should be stated in the FEIS.
- EPA notes that the July 2007 EIS Revisions identify that a supplemental wildlife corridor evaluation and supplemental traffic analyses were performed in July 2007. Include additional supplemental analysis for other resources. Specifically, the FEIS should include additional analysis of the potential impacts from an additional mixed flow lane. If other supplemental evaluations are not needed, summarize the justification for lack of supplemental analyses in the FEIS for each resource area.
- Results of the supplemental wildlife corridor evaluation were not summarized in the July 2007 DEIS Revisions and should be included in the FEIS.

Water Quality

Storm water runoff from urban areas has been recognized as a major source of degradation to aquatic systems. According to the May 2007 version of the DEIS, the I-405 Sepulveda Pass Widening Project would increase the amount of impervious surfaces in the area by 14.3 acres, thereby increasing storm water runoff to downstream waterbodies. Although the project footprint was increased between the May 2007 DEIS and the July 2007 DEIS Revisions, the reported acreage of increased impervious surface did not change. The project will involve

increasing discharges to the Los Angeles River (at the north end) as well as the Sepulveda Channel/Ballona Creek (at the south end). Both of these waterways are listed as impaired waterways under Section 303(d) of the Clean Water Act (CWA). The sources of the impairment are multi-faceted and include trash, ammonia, DDT, PCBs, and many other high priority pollutants.

Section 3.9.3 of the DEIS states that the “Effluents from the proposed project location would not further impair or adversely affect the concentration of contaminants from the water bodies located in the project area.” Although the document states that the project would be designed to comply with Best Management Practices (BMPs), it is unclear how storm water will be managed to prevent further impairment to downstream waters.

In addition to the increased impervious surfaces from the widening of the highway system, runoff associated with construction activities has the potential to contribute to further water quality impairment. The May 2007 DEIS reports that the total disturbed soil area from the project ranges from 121.3 acres (Alternative 2) to 178.5 acres (Alternative 3)(EPA notes that the acreage for Alternative 3 was not increased in the July 2007 DEIS Revisions). Storm water runoff from construction sites is a major concern and may facilitate the discharge of pollutants such as sediment, fertilizers, pesticides, oil and grease, and other construction chemicals and debris. In just a very short time, construction sites can deposit more sediment into rivers and estuaries than can be deposited naturally over several decades.

Although the DEIS mentions that a Construction Storm Water Pollution Prevention Plan (SWPPP) would be prepared prior to starting construction activities, very little information is contained in the document to support the conclusion that, “The proposed project would not further impair the 303(d) listed water bodies” (Section 3.10.3). Section 3.10.4 mentions that a Storm Water Data Report was completed for the project that includes treatment BMPs to prevent sediment and other pollutants from entering the storm drain system. Although Figure 3.10-1 contains a few proposed Storm Water Treatment locations, it is unclear how these BMPs will meet water quality criteria for the downstream waterbodies.

Recommendations:

- Provide more information in the FEIS to support the conclusion that the project will not cause or contribute to further impairment of downstream waterbodies.
- Include storm water performance standards for both construction site sediment control and post-construction project design standards in the FEIS and ROD.
- Provide more information regarding the placement, selection, and performance of the BMPs mentioned in Section 3.10.4 (Avoidance, Minimization and Mitigation Measures) in the FEIS.
- Design, install, and maintain BMPs to control total suspended solids (TSS) carried in runoff post-construction of the project.
- Employ BMPs to maintain or reduce the peak runoff discharge rates, to the maximum extent practicable, as compared to the pre-development conditions for the 2-year, 24-hour design storm event.

- Design, install, and maintain BMPs to infiltrate sufficient runoff volume such that post-development infiltration volume should be at least 90 percent of the predevelopment infiltration volume. That is, no more than 10-percent decrease in infiltration would be allowed.
- Determine if the project revisions impact the acreages reported in the May 2007 version of the DEIS for: 1) the increase in the amount of impervious surface (14.3 acres) associated with project, and 2) the total disturbed soil area for Alternative 3 (178.5 acres).

Air Quality

The proposed project is located in the South Coast Air Basin (SCAB). The South Coast Air Quality Management District (SCAQMD) implements local air quality regulations in the SCAB to carry out Federal Clean Air Act (CAA) requirements, as authorized by the EPA. The current SCAB nonattainment designations under the Federal CAA are as follows: carbon monoxide - serious nonattainment; 8-hour ozone - severe nonattainment; particulate matter with a diameter of 10 microns or less (PM₁₀) - serious nonattainment; and particulate matter with a diameter of 2.5 microns or less (PM_{2.5}) - nonattainment. The SCAB has the worst 8-hour ozone and PM_{2.5} problems in the nation, and attainment of these National Ambient Air Quality Standards (NAAQS) will require massive reductions from mobile sources, given the rapid growth in this emissions category and the long lifespan of diesel engines.

Construction Mitigation Measures

The DEIS includes SCAQMD requirements to reduce emissions. In addition to these measures, EPA recommends the following additional measures to reduce the impacts resulting from future construction associated with this project.

Recommendations:

Due to the serious nature of the PM₁₀ and PM_{2.5} conditions in the SCAB, EPA recommends that the best available control measures (BACM) for these pollutants be implemented at all times and that the FEIS and ROD incorporate a Construction Mitigation Plan. We recommend that (1) all applicable requirements under SCAQMD Rules, (2) the Caltrans Standard Construction Specifications and recommended measures listed on pages 310 and 311 of the DEIS, and (3) the following additional and/or revised measures be incorporated into a Construction Mitigation Plan.

Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.

- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earthmoving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Reduce use, trips, and unnecessary idling from heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
- Prohibit any tampering with engines and require continuing adherence to manufacturers recommendations
- If practicable, lease newer and cleaner equipment meeting the most stringent of applicable Federal or State Standards (see table: <http://arb.ca.gov/msprog/ordiesel/documents/Off-Road%20Diesel%20Stds.xls>). In general, only Tier 2 or newer engines should be employed in the construction phase, given the scale of the construction project and the high background levels of pollutants in the area.
- Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.

Administrative controls:

- Identify all commitments to reduce construction emissions and update the air quality analysis to reflect additional air quality improvements that would result from adopting specific air quality measures.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.)
- Utilize cleanest available fuel engines in construction equipment and identify opportunities for electrification. Use low sulfur fuel (diesel with 15 parts per million or less) in engines where alternative fuels such as biodiesel and natural gas are not possible.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintain traffic flow.
- Identify sensitive receptors in the project area, such as children, elderly, and infirm, and specify the means by which you will minimize impacts to

these populations. For example, locate construction equipment and staging zones away from sensitive receptors away from fresh air intakes to buildings and air conditioners.

Air Toxics
Dispersion Modeling

The discussion of limitations in the dispersion models in the DEIS has been updated from previous information presented in the February 2006 FHWA MSAT interim guidance, but still does not reflect current available science. While the CALINE and CAL3QHC were developed and validated a number of years ago, as stated in the DEIS, they continue to undergo validation. A number of recent studies have determined that CALINE, especially CALINE4, accurately predicts ambient concentrations in near-roadway environments for both gaseous and particulate pollutants (see, for example, Gramatnev *et al.*, Atmospheric Environment, volume 37, pages 465-474, 2003; Zhang *et al.*, Atmospheric Environment, volume 39, pages 4155-4166, 2005). The joint University of California Davis - Caltrans report, entitled "A Survey of Air Quality Dispersion Models for Project-Level Conformity Analysis" (June 19, 2006), concluded that available models are appropriate for modeling project-level dispersion of on-road and construction emissions, contradicting the language in the DEIS.

In the near-roadway environment, the major mobile source air toxics (MSATs) will behave similarly to carbon monoxide: both are treated as inert gases for the purposes of dispersion. In fact, one of the most reactive MSATs, formaldehyde, has an atmospheric half-life very similar to carbon monoxide: 4-10 hours for formaldehyde compared to 4-6 hours for carbon monoxide under typical conditions. Since the majority of impacts are expected to occur within 1000 feet of the roadway or closer (for a summary of supporting studies, see Section 3.1.3 of EPA's "Draft Regulatory Impact Analysis: Control of Hazardous Air Pollutants from Mobile Sources," February 2006, <http://www.epa.gov/oms/regs/toxics/ria-sections.htm>), pollutants are dispersed within a few minutes under average wind speeds. Neither MSATs nor carbon monoxide undergo significant reactions in a few minutes, and thus both can be accurately treated as inert gases for the purposes of dispersion, as is standard practice for carbon monoxide.

Based on these recent studies and reports, CALINE4 would be an appropriate tool for dispersion analysis of MSATs within the DEIS, if desired. The March 2007 report, entitled "Analyzing, Documenting, and Communicating the Impacts of Mobile Source Air Toxic Emissions in the NEPA Process" ([http://www.trb.org/NotesDocs/25-25\(18\)_FR.pdf](http://www.trb.org/NotesDocs/25-25(18)_FR.pdf)), prepared for the American Association of State Highway and Transportation Officials (AASHTO), identifies CALINE4 as the "Best Available Air Quality Modeling Tool for use in Analyzing MSATs under NEPA" for purposes of both roadway widening and high occupancy vehicle (HOV) lane addition.

Furthermore, the discussion in the DEIS references a lack of adequate monitoring data as a limitation. While air toxics monitoring data is frequently limited, Southern California is one of the most studied areas of the country. There are numerous sources of both monitored and modeled ambient air toxics concentrations in Southern California, including several fixed site air toxics monitors operated by South Coast Air Quality Management District (SCAQMD) and

California Air Resources Board, EPA's National Air Toxics Assessment (NATA, <http://www.epa.gov/ttn/atw/nata1999/>), and SCAQMD's Multiple Air Toxics Exposure Study (MATES, <http://www.aqmd.gov/matesiidf/matestoc.htm> and <http://www.aqmd.gov/prdas/matesIII/matesIII.html>). Thus it would be straightforward to determine MSAT background concentrations, providing context for any potential dispersion analysis.

Recommendation:

EPA recommends the following updates regarding information provided in the MSATs Section:

- Update the language on "Information that is Unavailable or Incomplete," beginning on page 194, as noted above.
- Revise the discussion of uncertainties in "Dispersion" to include an updated discussion of the use of CALINE4 in situations similar to the proposed project, referencing more recent studies and the report prepared for AASHTO.
- Revise the discussion to more accurately reflect dispersion of MSATs and carbon monoxide. Specifically, the FEIS should remove implications that dispersion of MSATs would differ from dispersion of carbon monoxide.

EPA also recommends that the concern about establishing project-specific MSAT background concentrations be amended to note that Caltrans could work with EPA and SCAQMD to determine relevant background concentrations. EPA is not recommending that Caltrans perform a dispersion analysis of air toxics for this DEIS. We do, however, acknowledge that this analysis is possible. If dispersion modeling is pursued in the FEIS, we are available to assist Caltrans in developing meaningful model inputs and interpreting the results.

Exposure Levels and Health Effects

Both EPA and California Office of Environmental Health Hazard Assessment (OEHHA) have long standing experience and published, peer-reviewed guidance for evaluating long-term health effects, including cancer risk. The concerns raised about estimating exposure over a 70-year lifetime have been addressed extensively by our agencies. Recently, EPA has published an Air Toxics Risk Assessment Reference Library (http://www.epa.gov/ttn/fera/risk_atra_main.html) that addresses the precise concerns raised in this section of the DEIS – namely how to develop appropriate exposure scenarios in a risk assessment. Similarly, California OEHHA has hot spot risk assessment guidance published in support of California's Air Toxics "Hot Spots" Information and Assessment Act of 1987 (a.k.a. AB2588, http://www.oehha.ca.gov/air/hot_spots/pdf/HRAguidefinal.pdf). While we agree with the statement in the DEIS that there are always uncertainties associated with risk assessments, for this project most uncertainties would be consistent across alternatives, and thus such an analysis would still be sufficient for distinguishing between the impacts among scenarios and informing mitigation.

Recommendation:

Revise the discussion of uncertainties in “Exposure Levels and Health Effects” to include a discussion of possible exposure scenarios typically used by EPA and California OEHHA in air toxics risk assessments. EPA is not recommending that Caltrans perform a human health risk assessment. We do, however, acknowledge that such an assessment is possible. If a human health risk assessment is pursued in the FEIS, we are available to assist Caltrans in developing meaningful exposure scenarios.

The DEIS provides toxicity information for the six MSATs of most concern. We support the need to provide this information in the DEIS, but note the following corrections for incorporation into the FEIS:

Recommendations:

The summary of toxicological endpoints included in the DEIS (Pages 172-173) should also include health endpoints other than cancer for acrolein, benzene, acetaldehyde, formaldehyde, and 1,3-butadiene. Update the FEIS to include the following:

- The primary health concern for acrolein is not cancer, but rather a respiratory endpoint (nasal lesions, <http://www.epa.gov/iris/subst/0364.htm#refinhal>). Remove references to potential carcinogenicity for acrolein.
- Similarly, benzene (decreased lymphocyte count, <http://www.epa.gov/iris/subst/0276.htm#refinhal>), acetaldehyde (degeneration of the olfactory epithelium, <http://www.epa.gov/iris/subst/0290.htm#refinhal>), formaldehyde (respiratory, <http://www.atsdr.cdc.gov/toxprofiles/tp111-c2.pdf>), and 1,3-butadiene (ovarian atrophy, <http://www.epa.gov/IRIS/subst/0139.htm#refinhal>) all have non-cancer health endpoints of potential concern.

Wildlife Corridors

EPA commends the extensive efforts of Caltrans to work with the Santa Monica Mountains Conservancy to address project impacts to critical east-west wildlife habitat links separated by the freeway. The DEIS provides extensive mitigation measures to minimize impacts to wildlife movement at the Sepulveda Boulevard Underpass and I-405 (at the Getty View Trailhead), Bel Air Crest Underpass, and the Skirball Center Drive Overpass. To ensure that these measures are carried forward and are effective, EPA recommends the following:

Recommendations:

- Commit to mitigation measures identified in Section 3.17.4 in the FEIS and ROD.
- Continue to coordinate with Santa Monica Mountains Conservancy to address wildlife passage impacts associated with the I-405 project, particularly to ensure that any additional impacts to the wildlife corridors from the recent changes to Alternative 3 are considered in the mitigation measures.

Environmental Justice

Executive Order 12898 on Environmental Justice addresses disproportionate and adverse impacts of federal actions on minority and low-income populations. Environmental justice communities in the project area are identified in a few tracts in the project area. The DEIS identifies a higher density of Asians in census tracts 2673 and 2677 in the West Los Angeles community of the project area than either the city or the county of Los Angeles. Approximately a quarter of the West Los Angeles and the Palms-Del Rey-Mar Vista communities are Spanish-speaking. Census tract 7011 contains a Veterans Administration (VA) facility and the Salvation Army Westwood Transitional Village, which provides transitional housing for homeless families and veteran families with long term supportive needs. This tract has a higher percentage of a minority population (43.4 % black), people living below the poverty level (53.7%), renters (100%), single family parents (48.5%), and people with disabilities (76%) than either the city or the county. EPA commends Caltrans for meeting with the VA and the Salvation Army Westwood Transitional Village, including the Bessie Pregerson Child Development Center, to identify their concerns with the project. To further minimize potential impacts of the project to the identified communities above, EPA recommends the following:

- To ensure that community members that do not speak English as their primary language understand future construction and traffic-related activities, assess potential language barriers when providing information on the project and related construction and traffic activities. Working directly with the communities and examining census data can help determine these barriers and where to focus efforts. Identify in the FEIS what resources or capabilities were utilized to effectively outreach to the community so that affected people can easily comprehend information (written materials, in-person or telephone inquiries, community meetings, etc.).
- Provide ongoing contact and coordination with the VA facility and the Salvation Army Westwood Transitional Village, similar to efforts proposed for the University of California Los Angeles (UCLA), to identify any future concerns during project development and construction. Identify a process for continued coordination in the FEIS.
- To compensate for additional noise and air quality impacts to the Salvation Army Westwood Transitional Village outdoor toddler play area that would be adjacent to the proposed northbound I-405 Wilshire off-ramp, assess options to relocate the outdoor play area further away from these near-roadway impacts and include these options in the FEIS.