

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105  
October 15, 2012

Manuel Sanchez  
Federal Highway Administration  
401 B Street, Suite 800  
San Diego, California 92101

Subject: EPA Comments on the Interstate 5 North Coast Corridor Project, San Diego, County, California (CEQ#20120285 and CEQ# 20100249)

Dear Mr. Sanchez:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (EIS), published in 2010, and the Supplemental Draft EIS for the Interstate 5 North Coast Corridor Project. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. EPA is both a Cooperating Agency and a "Participating Agency" (as defined in 23 USC 139 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)) for this project. The project is also a Priority Project identified in Executive Order (EO) 13274, which was issued to promote environmental stewardship in the nation's transportation system and to streamline the environmental review and development of transportation infrastructure projects.

To facilitate timely reviews and pursue innovative strategies in the interest of environmental stewardship and project streamlining, a Working Group Communications Strategy was developed for this project and early interagency coordination through the NEPA/Clean Water Act Section 404 Integration Process Memorandum of Understanding (NEPA/404 MOU)<sup>1</sup> has been underway since 2003. During the Draft EIS public comment period in 2010, EPA discussed several potential inadequacies of the document, including critical pending hydrological studies that would inform bridge designs for several lagoon crossings, with Federal Highway Administration (FHWA), California Department of Transportation (Caltrans), and federal and state resource and regulatory agencies. In response, the FHWA and Caltrans agreed that the Draft EIS needed revisions and decided to defer acceptance of EPA's formal comments on the Draft EIS until such time that EPA had an opportunity to review a revised or supplemental NEPA document for the project. EPA appreciates the rigorous on-going coordination with resource and regulatory agencies provided over the last two years and the new project information clarified and presented in the Supplemental Draft EIS. This letter provides EPA's comments and rating on both of these documents. We appreciate Caltrans' regular coordination and communication with our agency in being responsive to the recommendations we have provided for this project.

Following our review of the Draft EIS and the Supplemental Draft EIS, EPA notes that many of our concerns have been addressed. While the Supplemental Draft EIS filled in some of the critical gaps in the Draft EIS regarding phasing and coordinated construction of projects in the corridor, lagoon

---

<sup>1</sup> The NEPA/404 MOU for California federal aid surface transportation projects was revised in 2006. Past concurrence checkpoints (i.e., purpose and need, screening criteria, and range of alternatives) for the Proposed Project followed 1994 NEPA/404 MOU procedures.

crossings, common features of the alternatives, and community and regional enhancement projects, EPA has rated the documents as *Environmental Concerns – Insufficient Information* (EC-2) (see enclosed “Summary of EPA Rating Definitions”) based on several resource areas. EPA recommends that, for the Final EIS, FHWA and Caltrans 1) expand the indirect effects analysis for waters of the U.S., 2) confirm the scope of the impacts to waters of the U.S. beyond proximity to the lagoons and clarify the permitting and mitigation strategy for impacts to waters of the U.S., and 3) further assess and mitigate air quality-related impacts of the project.

The enclosure further describes the above-listed concerns and the additional environmental concerns that EPA identified following our review of the documents. We appreciate the ongoing refining of the proposed project. We believe continued coordination through the NEPA/404 forum, in close coordination with state and regional resource agencies, will ensure that environmental issues are addressed as early as possible. If you have any questions on our comments, please contact Susan Sturges (415-947-4188) or Elizabeth Goldmann (415-972-3398), lead reviewers for this project.

When you are ready to submit your Final EIS, please note that EPA Headquarters no longer accepts paper copies or CDs of EISs for official filing purposes. Submissions must now be made through EPA’s new electronic EIS submittal tool: *e-NEPA*. While this system eliminates the need to submit paper or CD copies to EPA Headquarters to meet official filing requirements, lead agencies should continue to distribute 1 CD copy and 2 hard copy EISs for review to the EPA Region 9 San Francisco Office. Electronic submission does not change requirements for distribution of EISs for public review and comment. To begin using *e-NEPA*, you must first register with EPA’s electronic reporting site - [https://cdx.epa.gov/epa\\_home.asp](https://cdx.epa.gov/epa_home.asp).

Sincerely,

/s/

Connell Dunning, Transportation Team Supervisor  
Environmental Review Office  
Communities and Ecosystems Division

Enclosures: Summary of EPA Rating Definitions  
EPA’s Detailed Comments

cc via Email: Shay Lynn Harrison, California Department of Transportation  
Bruce April, California Department of Transportation  
John Chisholm, California Department of Transportation  
Stephanie Hall, U.S. Army Corps of Engineers  
Sally Brown, U.S. Fish and Wildlife Service  
Bryant Chesney, National Marine Fisheries Service  
Tami Grove, California Coastal Commission  
Tim Dillingham, California Department of Fish and Game  
Mike Porter, California Regional Water Quality Control Board San Diego Region

# SUMMARY OF EPA RATING DEFINITIONS\*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

## ENVIRONMENTAL IMPACT OF THE ACTION

### *“LO” (Lack of Objections)*

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

### *“EC” (Environmental Concerns)*

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

### *“EO” (Environmental Objections)*

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

### *“EU” (Environmentally Unsatisfactory)*

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

## ADEQUACY OF THE IMPACT STATEMENT

### *Category “1” (Adequate)*

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

### *Category “2” (Insufficient Information)*

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

### *Category “3” (Inadequate)*

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

**EPA provides the following comments on the Supplemental Draft EIS, informed by information in the Draft EIS.**

**Meeting Clean Water Act (CWA) Section 404(b)(1) Requirements**

This Supplemental Draft EIS provides additional critical information on bridged lagoon crossings from recently completed hydrological studies. The 2010 Draft EIS had only examined the current bridge lengths and worst case impacts pending completion of these lagoon studies, which EPA believed did not meet the intent of National Environmental Policy Act (NEPA). Further, the 2010 Draft EIS did not ensure that any of the alternatives would lead to the least environmentally damaging practicable alternative (LEDPA), and, therefore, would have resulted in challenges meeting provisions of EPA's Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA (Guidelines). We note that the additional information in this Supplemental Draft EIS provides a more thorough description of proposed actions along the lagoon crossings.

While the additional information provided will contribute to necessary project description and analysis for permitting under Clean Water Act Section 404, we note that the Supplemental Draft EIS does not discuss the overall permitting strategy for impacts to waters of the U.S., or indirect impacts that will result from the project. Considering that the Proposed Project will be constructed in phases over the next twenty years, crossing several lagoon systems, the Final EIS should ensure that impacts from all build alternatives are avoided and minimized to the extent practicable throughout the entire construction timeline, ultimately satisfying the 404(b)(1) requirements. In addition, analyzing (and minimizing) potential indirect impacts to waters is critical for the CWA Section 404 permitting process. Only when this analysis has been performed can the applicant or the resource and regulatory agencies be assured that no discharge other than the practicable alternative with the least impact on the aquatic ecosystem has been selected (40 CFR 230.10(a)).

The project's coordination under the NEPA/Clean Water Act Section 404 Integration Process Memorandum of Understanding (NEPA/404 MOU) includes a preliminary LEDPA checkpoint that precedes the publishing of the Final EIS. In the 1994 NEPA/404 MOU which the project followed for past concurrence points, FHWA agrees to not approve an Final EIS unless there is preliminary agreement from the Corps, after consultation with EPA, that the project complies with Section 404(b)(1) Guidelines<sup>2</sup>.

---

<sup>2</sup> The 2006 NEPA/404 MOU states FHWA does not issue the Final EIS until the Corps concurs on preliminary LEDPA/conceptual mitigation. In the 2006 NEPA/404 MOU, EPA's decision point is to agree or disagree on preliminary LEDPA/conceptual mitigation. As the last MOU checkpoint occurred in 2006, the I-5 NEPA/404 interagency workgroup needs a shared understanding on whether future preliminary LEDPA/conceptual mitigation decision points will follow 1994 or 2006 MOU procedures.

*Recommendations:*

- A CWA Section 404(b)1 alternatives analysis should be included in the Final EIS to ensure that impacts from all build alternatives are avoided and minimized to the extent practicable. EPA recommends that FHWA and Caltrans continue to work with the Corps and EPA, in coordination with other resource and regulatory agencies, to develop a CWA Section 404(b)(1) alternatives analysis and permitting strategy that meets the requirements of the Guidelines.
- EPA recommends that FHWA and Caltrans clarify and quantify the indirect impacts to all waters of the U.S., both at the lagoons and along the remainder of the 27-mile route, (as further explained below) and propose compensatory mitigation for any unavoidable, indirect impacts. While the Supplemental Draft EIS qualitatively discusses indirect impacts of the Proposed Project, it is unclear if numbers reported as “permanent impacts” include indirect impacts.
- Given the primary focus of the Supplemental Draft EIS on the lagoons, we recommend that the Final EIS clearly present impacts that will result throughout the length of the 27-mile project corridor.
- While the separate Table 2.2.2 of the Supplemental Draft EIS includes information on impacts waters of the U.S. from community and regional enhancements projects and major common project design features, EPA recommends that FHWA and Caltrans prepare one table that identifies impacts to federal (and state) waters, both direct and indirect, and permanent and temporary along the entire corridor. EPA understands that impacts are provided by watershed and recommends that this summary of impacts be further broken out to reflect impacts within watershed from common features, enhancement projects, bridge design, etc., so that this information can help inform further discussions for where to minimize impacts to aquatic resources.

***Further Minimization of Impacts through Earlier Bridge Construction***

Pages 3-28, 3-34, and 3-35 of the Supplemental Draft EIS indicate that earlier bridge replacements can reduce wetland impacts by 1.27 acres (federal jurisdiction) at the Batiquitos and Buena Vista lagoons.

*Recommendation:*

We recommend that this option be pursued even though it is not currently funded. If this option will affect advance mitigation opportunities, then the document should describe these impacts. To the extent that replacement of these bridges can be performed in an earlier phase to reduce impacts, EPA recommends that FHWA and Caltrans commit to do so in the Final EIS and Record of Decision (ROD).

***Mitigation***

The presentation of mitigation in the Supplemental Draft EIS provides a good overview of the developing Resource Enhancement Program (REP), a key component of the project’s future Public Works Plan, which will be prepared to meet the California Coastal Commission’s requirements for this project. The REP includes a regional mitigation strategy for several



transportation projects in the vicinity of the I-5 North Coast Corridor Project, including mitigation for the freeway improvements associated with this project.

*Recommendations:*

- While EPA understands that the REP and a formal mitigation banking proposal are undergoing separate development and analysis from this project's NEPA process, the Final EIS should clearly articulate the specific compensatory mitigation proposal for this project and its timeline for how mitigation will be phased and implemented with respect to the project's permitting and other relevant decisions.
- In addition, the Final EIS should ensure the compensatory mitigation proposal addresses the full extent of unavoidable direct *and* indirect impacts.

### **Water Quality Impacts**

Section 3.3 suggests some possible measures and locations to address water quality impacts from this project, but does not provide specific commitments, such as design measures at specific locations tied to impact reductions. Further, EPA notes some discrepancies in reported acreage of impervious surface between those reported in the Draft EIS and the Supplemental Draft EIS (e.g., the Supplemental Draft EIS reports 248.6 acres of new pavement and 566 acres of existing pavement, while the Draft EIS reports 311 acres of new impervious surface area and 398 acres of existing impervious area).

*Recommendations:*

- FHWA and Caltrans should explain in the Final EIS how project design has been proposed to reduce impacts to water quality and commit to specific measures to implement to reduce impacts in the Final EIS and ROD.
- Explain in the Final EIS why pavement/impervious surface acreage differ between the Draft and Supplemental Draft EISs. Confirm the correct numbers in the Final EIS.

**EPA provides the following air-related comments on the project's 2010 Draft EIS.**

### **Air Quality Impacts**

#### ***Construction Emissions***

A detailed construction emissions analysis was not included the Draft EIS. This could inform the assessment of what specific construction impacts may be adverse. Considering the large scale and duration of the project, other neighboring large projects, the amount of disturbance proposed, and the proximity to sensitive receptors in several locations along the proposed alignments, a detailed construction emissions analysis is appropriate to disclose impacts and inform emission reduction strategies under NEPA.

*Recommendation:*

Include a detailed construction emissions analysis in the Final EIS. The analysis should consider phases and duration of construction, the types of construction equipment that will be used, an estimate of the number of truck trips required to haul or import material

as part of the construction activities, and proximity to sensitive receptors. Where significant emissions are identified, propose strategies to reduce emissions, reduce exposure to emissions, and/or reduce impacts to sensitive receptors.

The Draft EIS identifies some measures to reduce construction emissions. EPA recommends the following additional measures to reduce the impacts resulting from future construction associated with this project.

*Recommendations:*

We recommend that 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 earth-moving equipment to 10 mph.

*Mobile and Stationary Source Controls:*

- Minimize use, trips, and unnecessary idling of heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, where applicable, 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. The California Air Resources Board has a number of mobile source anti-idling requirements which could be employed. See their website at: <http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm>
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal<sup>3</sup> or State Standards<sup>4</sup>. In general, meet and ideally go beyond CARB requirements for in-use diesel engines and equipment, particularly for non-road construction fleets. Through December 31, 2014, ensure that all construction equipment meets or exceeds equivalent emissions performance to that of U.S. EPA Tier 3 standards for non-road engines. From January 1, 2015 onward, ensure that all construction equipment meets or exceeds equivalent emissions performance to that of U.S. EPA Tier 4 standards for non-road engines.

---

<sup>3</sup> EPA's website for nonroad mobile sources is <http://www.epa.gov/nonroad/>.

<sup>4</sup> For ARB emissions standards, see: <http://www.arb.ca.gov/msprog/offroad/offroad.htm>.



- 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.) Meet EPA diesel fuel requirements for off-road and on-highway, and, where appropriate, use alternative fuels such as natural gas and electric.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.

***Mobile Source Air Toxics (MSAT)***

EPA appreciates that the MSAT analysis in the Draft EIS quantifies emissions for the six primary MSATs and reports these emissions by segments for existing, no build, and build conditions. The Draft EIS also includes Table 3.14.4, which identifies sensitive receptors (hospitals, schools, day care centers, nursing homes, and parks/playgrounds) near the proposed project and their distances from the proposed project. EPA recommends that the Final EIS also discuss the project's MSAT impacts in the context of these specific sensitive receptors and include information and locations for the closest residential areas, including environmental justice communities, such as the Barrio Carlsbad community where a 47-unit apartment complex sits directly adjacent to the I-5 freeway.

EPA disagrees with the claim in the Draft EIS on page 3.14-10 that "...available technical tools do not enable us to predict the project-specific health impacts of the emission changes associated with implementation of the proposed project." Tools and models are available that EPA (as well as other agencies) routinely use effectively. 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. EPA has published an Air Toxics Risk Assessment Reference Library ([http://www.epa.gov/ttn/fera/risk\\_atra\\_main.html](http://www.epa.gov/ttn/fera/risk_atra_main.html)) that addresses 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](http://www.oehha.ca.gov/air/hot_spots/pdf/HRAguidefinal.pdf)). While we agree with the statement in the Draft EIS that there are always uncertainties associated with such an analysis, for this project, most uncertainties would be consistent across alternatives; thus such an analysis

would still be sufficient for distinguishing between the impacts among scenarios and informing mitigation.

Because the existing highway already accommodates a tremendous volume of traffic and a number of sensitive receptors and neighboring residential communities are likely currently exposed to substantial MSAT emissions, additional increases in MSATs may have significant impacts. The MSAT Discussions of Results (p. 3.14-9) is misleading because it does not discuss localized impacts as “hot spots” along the proposed alignments and does not consider proximity to sensitive receptors and residential areas.

*Recommendations:*

- Identify projects segments that may have potential for hot spot impacts, such as:
  - 1) Project segments with the closest sensitive receptors and residential areas, such as the Barrio Carlsbad community,
  - 2) Project segments with the largest increases in vehicle miles traveled (VMT) or highest baseline emissions (e.g., segments 2 and 5), and
  - 3) Project segments with the largest emissions changes and distance reductions to sensitive receptors and residential areas.
- Expand the MSAT analysis in the Final EIS to include dispersion modeling and an assessment of health risk for the six primary MSATs for areas above that appear to have potential hot spot concerns. If significant impacts are identified, include appropriate mitigation or design changes to reduce potential operational impacts in the Final EIS.
- Eliminate incorrect statements regarding technical shortcomings and uncertain science. The March 2007 report entitled “Analyzing, Documenting, and Communicating the Impacts of Mobile Source Air Toxic Emissions in the NEPA Process” conducted for the American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on the Environment and funded by the Transportation Research Board ([http://www.trb.org/NotesDocs/25-25\(18\)\\_FR.pdf](http://www.trb.org/NotesDocs/25-25(18)_FR.pdf)) discusses available methodologies and tools. Procedures for toxicity-weighting, which EPA has found to be especially useful for the targeting of mitigation, are described in EPA’s Air Toxics Risk Assessment Reference Library (Volume 3, Appendix B, beginning on page B-4, [http://www.epa.gov/ttn/fera/risk\\_atra\\_main.html](http://www.epa.gov/ttn/fera/risk_atra_main.html)).
- EPA also suggests presenting the MSAT results in tons/year for the Final EIS, which the public may be more familiar with as a unit of measure.

***Updated monitoring data for 8-hour ozone (O3)***

Table 3.14.3 *Federal Nonattainment and Attainment/Maintenance Pollutants in the SDAB* in the Draft EIS reports 8-hour ozone exceedances for “the last three years” as three in 2004, none in 2005, and none in 2006.

*Recommendation:*

Given that recent data are available from 2007 to 2011 identifying exceedances, EPA recommends including the additional monitoring data for 8-hour ozone exceedances from

2007 to 2011 in the Final EIS to more accurately reflect current conditions in the San Diego Air Basin.

### ***Addressing Climate Change Under NEPA***

EPA notes that the 2010 Draft EIS document relegated analysis and discussion of climate change and greenhouse gas (GHG) emissions mitigation to a section entitled *Chapter 4 – California Environmental Quality Act Evaluation*. While we are aware that the EPA and FHWA have not issued specific climate change guidance or methodology to conduct project-level greenhouse gas (GHG) analysis, this doesn't preclude a lead agency's responsibility, under NEPA, to disclose potentially significant impacts related to greenhouse gas emissions nor to assess how climate change may affect the project itself or influence the project's impacts on other resources.

The CEQA climate change analysis in the document does reference the Governor's Strategic Growth Plan and discuss AB 32. EPA applauds Caltrans for its collaborative efforts, highlighted in the document, on land use change and fuel efficiency; although, as the document indicates, Caltrans has direct authority over neither. However, FHWA and Caltrans do have the capacity to reduce GHG emissions using tools at their disposal, such as strategic planning and improvements to transportation infrastructure that would permit and promote carbon-efficient travel behavior.

#### ***Recommendation:***

- While the Draft EIS indicates that the California Environmental Quality Act (CEQA) climate change section may be used to inform the NEPA decision, EPA recommends including the climate change analysis in the NEPA portion of the Final EIS or more definitively stating that the CEQA analysis for climate change is relevant for NEPA and informing the federal decisions.
- EPA recommends the analysis of GHGs in the Final EIS focus on relating them to existing policy goals, for example, emissions targets prescribed under California's Assembly Bill (AB) 32 and SB 375.
- EPA recommends including the following additional analyses of GHGs in the build scenarios for comparison to GHGs in the no-build scenario in the Final EIS. The build scenarios analyses should include: 1) emissions from demand induced by increased in highway capacity; 2) emissions from roadways throughout the network which are affected by this project, including carrying increased vehicle flows resulting from that induced demand; and 3) an accurate analysis of the effect of vehicle speed changes on fuel efficiency given the likely future vehicle fleet. GHGs resulting from a highway project of this large scale should be quantified using regional travel demand models coupled with emissions models, such as the latest EMFAC model for California (the MOVES model is available for other states).