Appendix M Responses to Comments

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Initial Study/Environmental Assessment
Volume I: Responses to Comments
I-5 Widening Project: SR-73 to El Toro Road

ORANGE COUNTY, CALIFORNIA
DISTRICT 12 – ORA – 5, PM 12.4/18.9
0K0200/EFIS 1200000318
SCH# 2013091026

Prepared by the
State of California Department of Transportation

February 2014

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Chapter 1 Responses to Comments

As required by the California Environmental Quality Act (CEQA) Guidelines Section 15087 and, a public notice of availability of the Draft Initial Study/Environmental Assessment (IS/EA) for the Interstate 5 (I-5) Widening Project was published as a display ad in the *Orange County Register*, the *Saddleback Valley News*, the *Laguna Niguel News*, the *Capistrano Valley News*, and the *Excelsior* on September 6, 2013, and September 20, 2013. The Draft IS/EA was circulated for public review for a period of 30 days, from September 6, 2013, to October 7, 2013. Copies of the Draft IS/EA were distributed to the State Clearinghouse, the Governor's Office of Planning and Research (15 copies of summary form), and other federal, State, and local agencies. Copies of the Draft IS/EA were available for public review at the California Department of Transportation (Caltrans) District 12, and the Laguna Niguel, Mission Viejo, Lake Forest, San Juan Capistrano, Laguna Woods, and Laguna Hills (technology branch) libraries. A copy of the distribution list for the Draft IS/EA is provided in Attachment A to this document.

As outlined in the Federal Highway Administration (FHWA) Guidance for Preparing and Processing Environmental and Section 4(f) Documents, Technical Advisory T 6640.8A, Section H, following the public availability period, the EA should be revised or an attachment provided, as appropriate, to (1) reflect changes in the proposed action or mitigation measures resulting from comments received on the EA or at the public hearing (if one is held) and any impacts of the changes, (2) include any necessary findings, agreements, or determination (e.g., wetlands, Section 106, Section 4(f)) required for the proposal, and (3) include a copy of pertinent comments received on the EA and appropriate responses to the comments.

A total of 82 comments on the Draft IS/EA were received during the public review period. Comments were received from State agencies, regional and local agencies, organizations and businesses, and private citizens. The 82 comments also included four public comments that were recorded by a court reporter during the public hearing for the project held on September 25, 2013. Substantive comments that relate to environmental issues are thoroughly addressed. In some cases, corrections to the Draft IS/EA are required or additional information is provided for clarification purposes. However, some of the comments do not present significant environmental issues or they request the incorporation of additional information in the Draft IS/EA

that is not relevant to environmental issues. Such comments do not require a response, pursuant to Section 15088(a) of the CEQA Guidelines.

Section 15088 of the State CEQA Guidelines, Evaluation of and Responses to Comments, states:

a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft IS/EA and shall prepare a written response. The lead agency shall respond to comments received during the noted comment period and any extensions and may respond to late comments.
b) The lead agency shall provide a written proposed response to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report.
c) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, major environmental issues raised when the lead agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail, giving the reasons that specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.
d) The Responses to Comments may take the form of a revision to the Draft IS/EA or may be a separate section in the final MND/FONSI. Where the Responses to Comments makes important changes in the information contained in the text of the Draft IS/EA, the lead agency should either:
    1. Revise the text in the body of the IS/EA; or
    2. Include marginal notes showing that the information is revised in the Responses to Comments.

No significant changes have been made to the information contained in the Draft IS/EA as a result of the responses to comments, and no significant new information has been added. Therefore, this Responses to Comments document is being prepared as a separate section of the Mitigated Negative Declaration/Finding of No Significant Impact (MND/FONSI) for consideration by Caltrans prior to consideration of the MND/FONSI for certification.

1.1 Index of Comments Received

The following is an index list of the agencies, groups, and persons who commented on the IS/EA prior to the close of the public comment period. The comments received have been organized in a manner that facilitates finding a particular comment or set of comments. Each comment has been organized into one of the following seven categories: (1) State Agencies, (2) Regional Agencies, (3), Local Agencies, (4) Utility Providers, (5) Public Comments, (6) Comment cards received during the public hearing, and (7) Public Hearing Transcripts.

This division is the basis for the numbering of each comment. Each commenter has been assigned a numbered code. This numbered code is combined with sequential numbering for each comment. For example, Comment S-1-1 refers to the first comment in the letter from the State of California Public Utilities Commission (CPUC).

Table 1 Comment Letters Received During Public Comment Period

Letter	Name	Date
S-1	State of California Public Utilities Commission	September 27, 2013
S-2	California Department of Fish and Wildlife	October 7, 2013
S-3	Native American Heritage Commission	September 13, 2013
S-4	Governor's Office of Planning and Research	October 8, 2013
R-1	Southern California Regional Rail Authority	October 3, 2013
R-2	South Coast Air Quality Management District	October 7, 2013
L-1	County of Orange, Public Works	October 2, 2013
L-2	City of Laguna Hills	October 4, 2013
L-3	OC Parks	September 17, 2013
U-1	The Gas Company	September 19, 2013
P-1	Tim Nelson	September 15, 2013
P-2	Gonzalo Navajas	September 15, 2013
P-3	Ron Restelli	September 15, 2013
P-4	Sheldon Pines	September 18, 2013
P-5	Julie Hambrick	September 18, 2013
P-6	Wendy Black	September 19, 2013
P-7	Christine Kan	September 19, 2013
P-8	Jackie Cadotte	September 19, 2013
P-9	Frank Nin	September 19, 2013

Table 1 Comment Letters Received During Public Comment Period

Letter	Name	Date
P-10	Greg Peterson	September 20, 2013
P-11	Gary Fox	September 20, 2013
P-12	Rita Seney	September 21, 2013
P-13	Melody Schultz	September 23, 2013
P-14	Gordon Glass	September 23, 2013
P-15	Ed Taylor	September 24, 2013
P-16	Don Petty	September 25, 2013
P-17	Al Holguin	September 25, 2013
P-18	Rebecca Zomorodian	September 25, 2013
P-19	Dawn Marcova	September 25, 2013
P-20	Klaus	September 25, 2013
P-21	Scott Field	September 26, 2013
P-22	Rolland Graham	September 29, 2013
P-23	Greg Peterson	September 30, 2013
P-24	Matthew Tomanek	October 3, 2013
P-25	Bob Pingle	October 4, 2013
P-26	Cecil Fraser	October 4, 2013
P-27	Floyd W. Geissler	October 4, 2013
P-28	Roger Frances	October 4, 2013
P-29	Jerry Zomorodian	October 4, 2013
P-30	Barbara Hosmer	October 6, 2013
P-31	Gregory Dohm	October 6, 2013
P-32	John Dusch	October 6, 2013
P-33	Peter Lewandowski	October 7, 2013
P-34	Judith A. Kaluzny	October 7, 2013
P-35	Ryan Loomis	October 7, 2013
P-36	Jackie Le	October 7, 2013
P-37	Jeb Kraul	October 7, 2013
P-38	Jeremy R. Niswonger	October 7, 2013
P-39	Tam Huynh	October 7, 2013
P-40	Loan Tran	October 7, 2013
P-41	Etelvina Carlile	October 7, 2013
P-42	Timothy Touve	October 7, 2013

Table 1 Comment Letters Received During Public Comment Period

Letter	Name	Date
P-43	Daniel Figueroa	October 7, 2013
P-44	John and Ellen Dusch	October 6, 2013
P-45	Lynne Elmer	October 7, 2013
P-46	Juan Camacho	October 7, 2013
P-47	Chris Yao	October 8, 2013
P-48	Michael E. Banyacki	September 19, 2013
P-49	Cecil Fraser	October 4, 2013
P-50	Harry Rockey	September 22, 2013
P-51	Lynne Elmer	N/A
P-52	Dan Grunkemeyer - Freeway Auto Supply	N/A
CC-1	Barry Steele	September 25, 2013
CC-2	Nicola E. Vardakostas Tatom	September 25, 2013
CC-3	Neil Richardson	September 25, 2013
CC-4	Janice Jacobs	September 25, 2013
CC-5	Elizabeth Geissler	September 25, 2013
CC-6	Michiyo and Chris Cahill	September 25, 2013
CC-7	Terry Tuzzolino	September 25, 2013
CC-8	Tailor Kawchanin	September 25, 2013
CC-9	Lucy Hicks	September 25, 2013
CC-10	Douglas Boyd	September 25, 2013
CC-11	Rita Tayenaka	September 25, 2013
CC-12	Kathryn Richardson	September 25, 2013
CC-13	Lucia Zamora	September 25, 2013
CC-14	Estela Reyes	September 25, 2013
CC-15	Marilyn Brumfiel	September 25, 2013
CC-16	Ernesto G. Ceja	September 25, 2013
CC-17	Brooke Morrow	September 25, 2013
T-1	Rosa Preciado	September 25, 2013
T-2	Caia Maglinao	September 25, 2013
T-3	Nicola Vardakostas Tatom	September 25, 2013
T-4	Donald L. Dobbs	September 25, 2013

Table 2 Comment Letters Received After Comment Period

Letter	Name	Date
L-4	City of Laguna Hills	December 6, 2013

1.1.1 General Responses to Comments Received

Many of the comments received during the public review period for the Draft IS/EA raised concerns regarding noise impacts as a result of the Build Alternatives. To address these comments, a single general response is provided regarding this issue, and subsequent responses refer to this general response.

General Response 1 – Noise

Noise Impacts Under CEQA: A CEQA analysis must include a description of the physical environmental conditions in the vicinity of the proposed project that existed on the date that the Notice of Preparation (NOP) was published, or if no NOP is published, the date that the environmental analysis was begun. Section 15125 of the State CEQA Guidelines states that this environmental setting normally will constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant. Because CEQA focuses on comparisons to the existing conditions baseline, Caltrans determines the significance of noise impacts under CEQA based on a comparison of design-year with-project conditions to the existing conditions baseline. The significance of noise impacts under CEQA is determined by the Project Development Team based on the project-related increase in noise and other project-specific conditions. No single numerical threshold is used on all projects. The increase in traffic noise caused by a project is the primary factor considered by Caltrans in assessing the significance of noise impacts under CEQA. The other key factor is the modeled absolute future noise level. If a proposed project is determined to have a potentially significant noise impact under CEQA, then CEQA prescribes that mitigation measures must be incorporated into the proposed project unless such measures are not feasible.

Based on the above discussion, and as shown in Appendix A of this Mitigated Negative Declaration/Finding of No Significant Impact (MND/FONSI), the Build Alternatives would not result in any significant noise impacts under CEQA.

Noise Impacts Under NEPA: A primary difference between NEPA and CEQA is that under NEPA the significance of impacts is not identified on a resource-by-

resource basis. Rather, the environmental effects of the Build Alternatives on all resources (i.e., bio, cultural, floodplain, etc.) are considered in determining whether the project as a whole will result in a significant impact.

Unlike CEQA, NEPA typically focuses on the No-Action or No-Build Alternative rather than existing conditions for the purposes of assessing the potential consequences of project-related changes. In the case of noise, the effect of the project is determined by comparing noise under design year with-project conditions to noise under design-year no-build conditions. There are no specific thresholds for assessing this incremental project-related increase in noise under NEPA. Rather, the technical information is reported and then considered along with the project-related effects on other resources and the context and intensity of noise effects to determine whether the impact of the project as a whole is significant. When discussing noise impacts under NEPA, no qualifiers such as *significant, adverse,* or *moderate* are used.

For highway transportation projects with the Federal Highway Association (FHWA) (and the California Department of Transportation [Caltrans], as assigned) involvement, the Federal-Aid Highway Act of 1970 and the associated implementing regulations (23 Code of Federal Regulations [CFR] 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations contain noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 A-weighted decibels [dBA]) is lower than the NAC for commercial areas (72 dBA). In accordance with Caltrans Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects (May 2011), a noise impact occurs, under NEPA, when the future noise level with the project approaches or exceeds the NAC. Approaching the NAC is defined as coming within 1 dBA of the NAC.

If it is determined that the project will have noise impacts, potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated into the project. In general NEPA noise mitigation above and beyond abatement required under 23CFR772 rarely would be considered or required.

Caltrans Traffic Noise Analysis Protocol sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. A minimum 5 dBA reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access requirements, other noise sources, and safety considerations. In addition, a minimum 7 dBA reduction in future noise levels must be achieved at one or more benefited receptor for an abatement measure to be considered reasonable. The reasonableness determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include residents' acceptance and the cost per benefited residence.

Based on the above discussion, and as shown in Section 2.14 of this Mitigated Negative Declaration/Finding of No Significant Impact (MND/FONSI), the Build Alternatives would result in noise impacts under NEPA and abatement in the form of sound walls is proposed. Please refer to Section 2.14 for detail on this abatement.

1.2 Comments from State Agencies

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STATE OF CALIFORNIA EDMUND G. BROWN JR., *Governor*

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013

S-1

September 27, 2013

Smita Deshpande
California Department of Transportation - District 12
3347 Michelson Drive, Suite 380
Irvine, CA 92612

Dear Ms. Deshpande:

Re: SCH 2013091026; Interstate Freeway (I-5) Widening Project from State Route 73 to El Toro Road

The California Public Utilities Commission (Commission) has jurisdiction over the safety of highway-rail crossings (crossings) in California. The California Public Utilities Code requires Commission approval for the construction or alteration of crossings and grants the Commission exclusive power on the design, alteration, and closure of crossings.

The Commission's Rail Crossings Engineering Section (RCES) is in receipt of the *Mitigated Negative Declaration (MND)* for Interstate Freeway (I-5) Widening Project from State Route 73 to El Toro Road from the State Clearinghouse. According to the MND, the California Department of Transportation (Caltrans) proposes to add general purpose lanes in each direction on the I-5 between Avery Parkway and Alicia Parkway, extend the second HOV lane from Alicia Parkway to El Toro Road, reestablish existing auxiliary lanes, construct new auxiliary lanes and improve several existing on-and off-ramps. The Southern California Regional Rail Authority (SCRRA/Metrolink) Orange County mainline crossing (CPUC No. 101OR-190.50 and DOT No. 026778B), according to our database, located under the I-5 within this particular freeway segment.

Modifications to an existing grade separated crossing require authorization from the Commission. More information can be found at http://www.cpuc.ca.gov/PUC/safety/Rail/Crossings/go88b.htm

S-1-1

Caltrans should arrange a meeting with RCES and SCRRA staff to discuss relevant safety issues and requirements for authorization to alter the existing grade-separated crossings.

If you have any questions, please contact Chi Cheung To at (213)-576-5766, email at cct@cpuc.ca.gov.

Sincerely,

Chi Cheung To
Utilities Engineer
Rail Crossings Engineering Section
Safety & Enforcement Division

CC: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044

1.2.1 S-1 – State of California Public Utilities Commission (SCPUC)

S-1-1

A General Order (GO) 88-B Authorization Request for modifications to the El Toro Overhead (located south of La Paz Road) will be submitted to the CPUC staff during the Plans Specifications and Estimates (PS&E) phase (final design) for approval, prior to construction. A meeting will be held between the California Department of Transportation (Caltrans), the Orange County Transportation Authority (OCTA), Rail Crossings Engineering Section (RCES), and the Southern California Regional Rail Authority (SCRRA) staff to review the project and relevant requirements for authorization during final design prior to submittal of the GO 88-B Request Form.

S-2

From: Dillingham, Tim@Wildlife
To: D12_5Widening@DOT
Subject: I-5 Widening Project from SR-93 to El Toro Road CDFW no comment
Date: Monday, October 07, 2013 1:52:10 PM

Thank you for the opportunity to review the Mitigated Negative Declaration (MND) for the I-5 Widening Project from SR-73 to El Toro Road. The California Department of Fish and Wildlife has no comments on the MND. S-2-1

Tim Dillingham
Senior Environmental Scientist (Specialist)
California Department of Fish and Wildlife
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4250

1.2.2 S-2 – California Department of Fish and Wildlife (CDFW)

S-2-1

It is acknowledged that the CDFW does not have any comments on the IS/EA.

STATE OF CALIFORNIA Edmund G. Brown, Jr.,, *Govemor*

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard
West Sacramento, CA 95691
(916) 373-3715
(916) 373-5471 – FAX
e-mail: ds_nahc@pacbell.net

September 136 3013

Ms. Smitra Deshpande, Environmental Planner
California Department of Transportation – District 12
3347 Michelson Drive, Suite 100
Irvine, CA 92612

RE: SCH#2013091026 CEQA Notice of Completion; proposed Mitigated Negative Declaration for the **"I-5 Widening Project from SR-73 to El Toro Road;;"**located in Orange County, California

Dear Mr. Deshpande:

The Native American Heritage Commission (NAHC) has reviewed the CEQA Notice regarding the above referenced project. In the 1985 Appellate Court decision (170 Cal App 3rd 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites.

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Contact the appropriate Information Center for a record search to determine :If a part or all of the area of project effect (APE) has been previously surveyed for cultural places(s), The NAHC recommends that known traditional cultural resources recorded on or adjacent to the APE be listed in the draft Environmental Impact Report (DEIR). S-3-1

If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. We suggest that this be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a S-3-2

separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10. S-3-2

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources. Lack of surface evidence of archeological resources does not preclude their subsurface existence. S-3-3

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Health & Safety Code Section 7050.5 and California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f). Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans. Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. S-3-4

Sincerely,

Dave Singleton
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

Native American Contacts
Orange County
September 16, 2013

Juaneno Band of Mission Indians Acjachemen Nation
David Belardes, Chairperson
32161 Avenida Los Amigos Juaneno
San Juan Capistrano CA 92675 m
chiefdavidbelardes@yahoo.
(949) 493-4933 - home
(949) 293-8522

Juaneno Band of Mission Indians Acjachemen Nation
Teresa Romero, Chairwoman
31411-A La Matanza Street Juaneno
San Juan Capistrano CA 92675-2674
(949) 488-3484
(949) 488-3294 - FAX
(530) 354-5876 - cell

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
Private Address Gabrielino Tongva
,
tattnlaw@gmail.com
310-570-6567

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
P.O. Box 490 Gabrielino Tongva
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-761-6417- fax

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 -FAX

Juaneno Band of Mission Indians
Alfred Cruz, Cultural Resources Coordinator
P.O. Box 25628 Juaneno
Santa Ana , CA 92799
alfredgcruz@sbcglobal.net
714-998-0721
714-998-0721 - FAX
714-321-1944 - cell

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
sgoad@gabrielino-tongva.com
951-845-0443

United Coalition to Protect Panhe (UCPP)
Rebecca Robles
119 Avenida San Fernando Juaneno
San Clemente CA 92672
rebrobles1@gmail.com
(949) 573-3138

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2013091026; CEQA Notice of Completion; proposed Mitigaed Negative Declaration for the I-5 Widening Project from SR73 to the El Toro Road; Orange County, California.

Native American Contacts
Orange County
September 16, 2013

Gabrielino-Tongva Tribe
Bernie Acuna, Co-Chairperson
P.O. Box 180 Gabrielino
Bonsall , CA 92003
(619) 294-6660-work
(310) 428-5690 - cell
(760) 636-0854- FAX
bacuna1@gabrielinotribe.org

Gabrielino-Tongva Tribe
Conrad Acuna,
P.O. Box 180 Gabrielino
Bonsall , CA 92003

760-636-0854 - FAX

Juaneno Band of Mission Indians Acjachemen Nation
Joyce Perry, Representing Tribal Chairperson
4955 Paseo Segovia Juaneno
Irvine , CA 92612
kaamalam@gmail.com
949-293-8522

Gabrielino /Tongva Nation
Sam Dunlap, Cultural Resorces Director
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
samdunlap@earthlink.net
909-262-9351

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
P.O. Box 180 Gabrielino
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palmsprings9@yahoo.com
626-676-1184- cell
(760) 636-0854 - FAX

Gabrieleno Band of Mission Indians
Andrew Salas, Chairperson
P.O. Box 393 Gabrielino
Covina , CA 91723
gabrielenoindians@yahoo.
(626) 926-4131

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2013091026; CEQA Notice of Completion; proposed Mitigaed Negative Declaration for the I-5 Widening Project from SR73 to the El Toro Road; Orange County, California.

1.2.3 S-3 – State of California Native American Heritage Commission (SCNAHC)

S-3-1

On April 6, 2011, a records search was conducted at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS), located at California State University, Fullerton. The records search included a review of all recorded historic and prehistoric archaeological sites within a one-mile (mi) radius of the Direct Area of Potential Effects (APE), as well as a review of known cultural resource survey and excavation reports. The results of this record search are included in Section 2.7 of the MND/FONSI.

S-3-2

An *Archeological Survey Report* was prepared to detail the findings and recommendations of the records search and field survey. Coordination with the NAHC occurred throughout this process. As noted in the comment, the locations of Native American cultural resources were included as "confidential" attachments to the *Historic Property Survey Report.* This report was not made available to the general public during the review period of the IS/EA.

S-3-3

Native Americans on the NAHC contact list were notified of the project via letter and email; comments and concerns from the Native American contacts were documented and are included in Chapter 3 and Appendix B of the IS/EA.

S-3-4

Per the State Public Resources Code (PRC), provisions for the discovery of archaeological resources and human remains during construction were included in the IS/EA under Section 2.7, Mitigation Measure CR-3.

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S-4

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

October 8, 2013

Smita Deshpande
California Department of Transportation, District 12
3347helson Drive, Suite 100
Irvine, CA 92612

Subject: I-5 Widening Project from State Route 73 to El Toro Road
SCH#: 2013091026

Dear Smita Deshpande:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on October 7, 2013, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

S-4-1

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2013091026
Project Title I-5 Widening Project from State Route 73 to El Toro Road
Lead Agency Caltrans #12

Type **MND** Mitigated Negative Declaration

Description The project limits on I-5 extend from 0.5 mi south of the SR-73 interchange (PM 12.4) to 0.2 mi north of the El Toro Rd UC (PM 18.9). The proposed project will add general purpose lanes in each direction on I-5 between Avery Pkwy and Alicia Pkwy, extend the second HOV lane from Alicia Pkwy to El Toro Rd, reestablish existing auxiliary lanes and construct new auxiliary lanes, and improve several existing on- and off-ramps. Additionally, the project proposes no HOV buffer and will accommodate continuous access throughout the project limits.

Lead Agency Contact

Name Smita Deshpande
Agency California Department of Transportation, District 12
Phone 949 724 2701 **Fax**
email
Address 3347helson Drive, Suite 100
City Irvine **State** CA **Zip** 92612

Project Location

County Orange
City Mission Viejo, Laguna Woods, Laguna Hills, Lake Forest
Region
Lat / Long 33° 35' 42.6" N / 117° 40' 24.1" W
Cross Streets Avery Pkwy, Crown Valley Pkwy, Oso Pkwy, La Paz Rd, Alicia Pkwy, El Toro Rd
Parcel No. Various
Township 4S **Range** 8W **Section** 9 **Base**

Proximity to:

Highways SR-73 and 241
Airports
Railways Amtrak/Metrolink
Waterways San Juan Creek, Oso Creek, Aliso Creek
Schools Mission Viejo HS
Land Use Transportation, Residential, Commercial

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Economics/Jobs; Fiscal Impacts; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Air Resources Board, Transportation Projects; Regional Water Quality Control Board, Region 9; Native American Heritage Commission; Public Utilities Commission; State Lands Commission

Date Received 09/06/2013 **Start of Review** 09/06/2013 **End of Review** 10/07/2013

1.2.4 S-4 – State Clearinghouse

S-4-1

The Office of Planning and Research's determination that the public review period has been completed is acknowledged. Please refer to Response to Comment S-1 for responses to the comments from the State of California Public Utilities Commission and Response to Comment S-3 for responses to the comments from the Native American Heritage Commission.

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1.3 Comments from Regional Agencies

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R-1

METROLINK®

Southern California Regional Rail Authority

October 3, 2013 File: S0000373

State of California Department of Transportation
Environmental Branch
Department of Transportation, Environmental Planning
3347 Michelson Drive, Suite 100
Irvine, CA 92612

Attn: Gabriela Jauregui

RE: INITIAL STUDY/ENVIRONMENTAL ASSESSMENT (IS/EA)
I-5 WIDENING FROM SR-73 TO EL TORO ROAD- ORANGE COUNTY

Dear Ms. Jauregui:

The Southern California Regional Rail Authority (SCRRA) has received the Notice of Public Hearing and Availability of Initial Study/Environmental Assessment (IS/EA) for the widening of the I-5 freeway between State Route 73 and El Toro Road in Orange County. Thank you for the opportunity to comment on key issues relative to SCRRA and operations of the railroad adjacent to the project site.

As background information, SCRRA is a five-county Joint Powers Authority (JPA) that operates the regional commuter rail system known as Metrolink. Additionally, SCRRA provides rail engineering, construction, operations and maintenance services to its five JPA member agencies. The JPA consists of the Los Angeles County Metropolitan Transportation Authority (METRO), San Bernardino Associated Governments (SANBAG), Orange County Transportation Authority (OCTA), Riverside County Transportation Commission (RCTC) and Ventura County Transportation Commission (VCTC).

The railroad right-of-way portion adjacent to the proposed project is operated and maintained by SCRRA and owned by OCTA. The proposed project will impact and cross the railroad right-of-way in the vicinity of the La Paz overhead with the proposed widening and interchange improvements. Easements for widening of bridges over OCTA property will be required.

Below is a list of general comments that are of concern for this proposed project near or adjacent to the railroad right-of-way. These are based on our initial cursory review of the IS/EA for the project and its possible impact on the railroad. Please note that these are initial general comments submitted to meet the public comment period. SCRRA may follow up with more specific comments for consideration if further analysis deems it necessary.

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Southern California Regional Rail Authority

The following concerns related to the projects proximity to the railroad right-of-way (R/W) should be addressed in any subsequent environmental review documents:

1. Please be advised that 49 passenger trains (Amtrak and Metrolink) as well as 4 freight trains (BNSF) operate daily within this corridor. Trains operate 24 hours per day, seven days per week and are subject to change. R-1-1

2. Any widening of existing or construction of new grade separated structures over active rail lines would require approvals from operating railroads, SCRRA and the California Public Utilities Commission (CPUC). Please check the CPUC website for their application requirements. R-1-2

3. Currently there are 2 main line tracks under the La Paz overhead and any alterations to the footprint for the existing overhead and additional ramps must be engineered not to impact current or future rail operations. SCRRA intends to add a 3rd track in this area in the future. Clear span structures that do not require configuring or re-routing the railroad track around obstructions such as piers or columns is an operational requirement. In addition, adequate space must be provided for maintenance vehicles and access. R-1-3

4. All Engineering for project development within the railroad R/W must be coordinated with SCRRA and meet all SCRRA required standards for grade separation clearances and construction over active rail lines. Metrolink ***SCRRA Grade Separation Guidelines*** can be found on our website at www.metrolinktrains.com. R-1-4

5. The La Paz overhead widening and interchange improvements (both Alternative 2 and Alternative 3) would require close coordination with SCRRA as noted in number 3 above. In addition, the railroad right-of-way in the area of the La Paz overhead is in a flood zone due to the proximity to La Paz Channel. Any placement of new piers or footings within the railroad right-of-way to accommodate the new or widened structures must be placed in a manner not to worsen the impact of the drainage around the railroad. Proper drainage of the railroad right-of-way must be maintained so that we can continue safe operation of the trains within this corridor. R-1-5

6. During construction of your project, City's contractor will be required to follow SCRRA Right-of-way Encroachment Procedures, including obtaining a Right of Entry agreement (SCRRA Form 6) and have an SCRRA Employee in Charge (flagman) present to protect train operations. These requirements can also be found on our website at www.metrolinktrains.com. R-1-6

7. Existing utilities and other existing uses in the railroad right-of-way must be protected. This may require relocation or protection of these facilities or utilities prior to construction. R-1-7

8. Agreement for reimbursement of SCRRA support services (coordination, design review, attendance at meetings, etc.) will need to be entered into prior to start of design or construction. An advance deposit will also be required to set up the billable third party project number. R-1-8

9. The construction phase of your project over the railroad right-of-way will require the majority of work to be performed at night so as not to impact the numerous passenger and freight trains on this line. R-1-9

Please note that we may have additional comments in the future as this project moves through the environmental stage to the design stage. Thank you again for cooperating with SCRRA to help ensure the development of a successful project. If you have any questions regarding these comments please contact Ron Mathieu at (909) 593-7296 or via e-mail at mathieur@scrra.net.

Sincerely,

William Doran

William Doran, PE
Director, Engineering & Construction

Cc: Ron Mathieu, SCRRA
Patricia Watkins, SCRRA
Gray Crary, SCRRA
Jeff Lustgarten, SCRRA
Daren Gilbert, CPUC
File

1.3.1 R-1 – Southern California Regional Rail Authority (SCRRA)

R-1-1

The Metrolink daily train volumes are acknowledged.

R-1-2

Please refer to Response to Comment S-1-1 regarding CPUC action for the proposed project.

R-1-3

The project proposes to widen the existing El Toro Overhead (south of La Paz Road) and replace the northbound off-ramp bridge so that they provide the same width under the structure as in the existing condition and would not preclude addition of a third track at this location. Additional coordination with SCRRA staff will be undertaken during final design as the detailed design of these structures is developed.

R-1-4

During the final design, design plans related to the SCRRA line will be prepared in compliance with Metrolink SCRRA Grade Separation Guidelines and coordination will take place with SCRRA staff. SCRRA will also be provided with copies of the plans at major milestone submittals during final design.

R-1-5

A *Floodplain Evaluation Report* (FER) was prepared to evaluate potential impacts to the La Paz Channel as a result of the project. The FER determined that there was not a substantial change to the flood zone. Recommendations from the FER as outlined in Section 2.8 of the IS/EA would be incorporated into final design to ensure that the drainage of the flood zone functions properly with the implementation of the proposed project.

R-1-6

Prior to construction (during final design), a Right of Entry agreement, SCRRA Form 6, will be submitted for approval.

R-1-7

Existing utilities have been identified based on facility maps, and preliminary recommendations have been made on the facilities that would be relocated or protected in place. Final utility plans will be prepared during final design of the proposed project. Potholing would also be coordinated with SCRRA during final design to positively locate all utilities within the construction zone.

R-1-8

The Orange County Transportation Authority (OCTA) would coordinate with SCRRA at the beginning of final design regarding reimbursement for design support services.

R-1-9

During final design, construction staging in the area of the El Toro Overhead would be developed with the objective of performing the majority of work at night.

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South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

R-2

E-mailed: October 7, 2013
D12.5Widening@dot.ca.gov

October 7, 2013

Ms. Gabriela Jauregui
Caltrans District 12 Office
3347 Michelson Dr., Suite 100
Irvine, CA 92612-8894

Review of the Draft Mitigated Negative Declaration for the Interstate 5 Widening from State Route 73 to El Toro Road Project

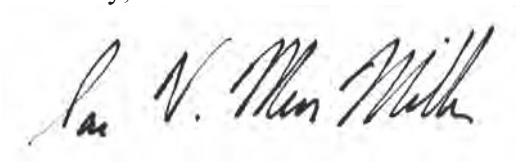
The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above mentioned document. The SCAQMD staff is concerned that the Draft Mitigated Negative Declaration (Draft MND) provides an air quality analysis for the proposed project that is not adequate to determine potential air quality impacts pursuant to SCAQMD Guidance and CEQA Guidelines. As a result, the air quality impacts appear to be understated in the Draft MND and potentially significant impacts may not have been disclosed to the public. The lead agency generally concludes that the project will have a net environmental benefit by reducing regional air quality impacts by improving traffic flow and reducing congestion in the project area. However, SCAQMD staff is concerned that the proposed project could increase health risk impacts to residents in close proximity to the Interstate 5 (I-5) Freeway. The project will add at least one general purpose lane to the I-5 Freeway (within the project area) in each direction and extend an existing High Occupancy Vehicle (HOV) lane in each direction. As a result, the additional freeway lanes placed closer to residences could potentially increase localized impacts to residents adjacent to the project area. Further, the addition of lanes may increase freeway capacity and could have potential growth inducing impacts not discussed in the Draft MND. R-2-1

There are several areas in which the Draft MND has not adequately addressed the potential for air quality impacts. These include the determination of the project's health risk impacts to surrounding sensitive receptors (i.e., residences, recreational parks and schools), local and regional air quality impacts, climate change impacts, the use of an inappropriate CEQA baseline for existing conditions, growth inducing impacts, and the lack of quantification of mitigation measure effectiveness. Because of the technical inadequacies of the Draft MND the SCAQMD staff strongly recommends that the lead agency revise the air quality analysis based on the comments contained within this letter.

SCAQMD staff requests that the lead agency provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the final environmental document.

Additional detailed comments on this project are attached to this letter. Should you have any questions, please contact Dan Garcia at (909) 396-3304.

Sincerely,



Ian MacMillan
Program Supervisor, CEQA Inter-Governmental Review
Planning, Rule Development & Area Sources

Attachment

IM:DG

ORC130910-12
Control Number

Significant Air Quality Impacts

1. The peak daily operational emissions presented in Table 17 of the Air Quality Appendix of the Draft MND demonstrates significant PM10 and PM2.5 emissions impacts from the project in comparison to the SCAQMD regional emissions thresholds. However, the lead agency determined that the proposed project will have insignificant impacts from operation related activities. Based on a review of the Section 2.13 of the Draft MND it appears that the lead agency made its significance determination solely on the Mobile Sour Air Toxics (MSAT) emissions budget analysis summarized in Table 2.13-14, however, this analysis inappropriately excludes non MSAT emissions sources that result in a substantial increase of PM10 and PM2.5 emissions from the proposed project. Specifically, Table 17 of the Air Quality Appendix demonstrates a net increase of 234 lbs/day of PM10 and 57 lbs/day of PM2.5 and both of these emissions values exceed the SCAQMD's CEQA significance thresholds for daily operations. However, the lead agency concluded that the project's operational emissions would be insignificant as a result of the project's operational activity. Therefore, SCAQMD staff recommends that the lead agency provide a revised air quality analysis that includes all emissions sources in the operational emissions analysis, quantifies all criteria pollutants and uses the SCAQMD's operational emissions thresholds to make a significance determination.[1] Although Caltrans may not have adopted SCAQMD's recommended thresholds for use throughout the state, as this project is only occurring within our jurisdiction, we strongly recommend that the lead agency use our thresholds for this project, as has been done for other Caltrans projects. Further, given that the proposed project demonstrates significant air quality impacts the SCAQMD staff recommends that the lead agency provide mitigation to minimize these impacts consistent with the CEQA Guidelines. R-2-2

Proper Quantification of Operational Air Quality Impacts

2. SCAQMD staff requests that the lead agency update two aspects of its estimation of potential emissions during operation of the project. First, the emissions estimate should include all criteria pollutants. Specifically, in Table 2.13-4 of the Draft MND the lead agency should quantify and disclose all of the project's criteria pollutant impacts from NOx, VOC, CO, PM10, PM2.5 and SOx (as mentioned above). Second, the analysis provided in the Draft MND uses EMFAC 2007 to estimate emissions for future years. The state Air Resources Board has released the updated EMFAC 2011 that updates vehicle emission factors. The final environmental document should present an estimate of operational emissions using these updated emissions factors. R-2-3

Localized Operational Air Quality Impacts

3. The lead agency did not conduct a localized air quality analysis or Health Risk Assessment (HRA) to determine how the construction or operation of the project may impact the residences, contrary to CARB, CAPCOA, and SCAQMD Guidance for projects that place sensitive receptors within 500 feet of a freeway. According to the air quality analysis, over 1.3 million additional vehicles miles traveled per day will occur on this segment of I-5 Freeway. Because of the project's widening of the freeway, the emissions source will be R-2-4

[1] http://www.aqmd.gov/ceqa/hdbk.html

located closer to adjacent residents. The lead agency did not analyze the potential impacts to all local ambient air quality standards from this activity, and its evaluation of potential health risks ignores the well-documented and industry standard procedures for quantitatively assessing carcinogenic and non-carcinogenic health risks, and potential criteria pollutant exceedances.[2]

The lead agency stated that because of limitations in the methodologies available to forecast health impacts, "any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts." This conclusory statement is not adequately substantiated in the MND and ignores the fact that CEQA documents prepared by Caltrans have relied on a HRA for other projects including the Schuyler Heim Bridge project and the I-710 Corridor Expansion project. As Caltrans is aware (evident in the aforementioned HRA's) pollutant concentrations are a result of total emissions in addition to site-specific characteristics such as proximity to the source, meteorology, and topography. As a result, the Draft MND is insufficient for determining potential health risk impacts to sensitive receptors from the project and it ignores section 15064 of the CEQA Guidelines that requires *substantial evidence* to determine the significance of an impact. Therefore, SCAQMD staff recommends that the lead agency revise the air quality analysis to include a HRA for the proposed project. R-2-4

Further, the lead agency is strongly encouraged to, at a minimum, identify the total number of residences within 500 ft of the project's boundary (as measured from the outermost travel lane) in the existing condition and for each alternative. Even though some project alternative may have lower MSAT emissions, there may be a greater number of people exposed to these emissions (especially given the estimated growth projections provided in Chapter 2.2 of the Draft MND. A standard quantitative cancer burden analysis is well suited to determine if the population-wide impacts are significant.

Bottleneck at North End of Project

4. Based on a discussion provided on page 2.2-5 of the Draft MND Alternative 3 of the proposed project would result in a bottleneck at the north end of the project site. Specifically, under Alternative 3 this segment of the project site (I-5) would narrow down from 6 lanes to 5 lanes, however, the lead agency did not present an analysis of the potential regional and localized air quality impacts from bottlenecking at this location. R-2-5

Localized and Regional Construction Air Quality Impacts

5. The lead agency concluded that the project's construction activities will not result in significant air quality impacts; however, it did not quantify any emissions resulting from construction of the proposed project. Specifically, the lead agency provided general non-substantive information regarding the construction phase of the project to reach its significance determination. For example, the lead agency requires minimization measures R-2-6

[2] http://aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html
http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf

AQ-1 through AQ-3; however, it did not provide any quantitative emissions data that demonstrates emissions reductions/benefits from compliance with these measures. Further, the lead agency did not conduct a localized construction air quality analysis. Given that sensitive land uses (i.e., sensitive land uses) are located adjacent to this segment of the I-5 Freeway (i.e., within 100 feet of the proposed project) it is imperative that the lead agency conduct a localized air quality analysis to properly demonstrate and disclose any local air quality impacts to sensitive receptors adjacent to the I-5 Freeway. Therefore, SCAQMD staff recommends that the lead agency quantify the construction emissions from the proposed project and use the SCAQMD's construction emissions thresholds to make a significance determination.[3] R-2-6

Climate Change Impacts

6. On page 2.22-17 of the Draft MND, the lead agency states, "… it is CalTrans determination, that in the absence of regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a determination of the project's direct impact and its contribution on the cumulative scale to climate change," SCAQMD staff refers the lead agency to Section 15064.4(b)(2) of the CEQA Guidelines, that state, "whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project." SCAQMD staff therefore requests that the lead agency revise the project's greenhouse gas emissions analysis to include a determination of significance, and, if necessary, feasible mitigation measures. R-2-7

CEQA Baseline

7. The lead agency used an incorrect CEQA baseline throughout the analysis to determine the significance of impacts. Pursuant to Section 15125 of the CEQA Guidelines, the existing environmental setting "at the time that environmental assessment commences . . . will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." Instead of using this required methodology, the lead agency chose to ignore this baseline and only compare a hypothetical and speculative future scenario without the project to one with the project to determine CEQA and NEPA impacts. This speculative approach is contrary to CEQA requirements and serves to underestimate potential impacts. Consistent with recent case law (e.g., Neighbors for Smart Rail), the lead agency should use both the existing conditions and the future conditions to determine impacts. R-2-8

Growth Inducing Impacts

8. Page 2.2-6 of the Draft MND states that the proposed build alternatives include capacity enhancements along an existing freeway corridor that are intended to respond to expected demand and improve operations. However, the lead agency does not specify how the future traffic volumes (presented in the air quality appendix) were determined and their relationship to the growth projections in Chapter 2.2. For example, the county-wide growth projections presented in Chapter 2.2 extend through 2035, however, the project construction terminates R-2-9

[3] http://www.aqmd.gov/ceqa/hdbk.html

in 2022. Further, the current reported volumes indicate that the alternative with more widening (i.e., Alternative 3) has higher volumes. It would therefore appear that the project is inducing growth as the widened freeway would be a trip attractor. This additional capacity may have the possibility of inducing growth in the area and have additional impacts beyond those discussed in the Draft MND. Any growth inducing impacts from potential project alternatives should be analyzed pursuant to CEQA Guidelines §15126 (d) prior to approving the final environmental document. R-2-9

Conformity

9. It is unclear if all alternatives within the Draft MND meet federal transportation conformity requirements. The final CEQA document should clarify which specific alternatives have gone through the transportation conformity analysis. R-2-10

1.3.2 R-2 – South Coast Air Quality Management District (SCAQMD)

R-2-1

This comment is a summary of comments received from SCAQMD on the Draft Initial Study/Environmental Assessment (IS/EA). Please refer to response to comments R-2-2 through R-2-10 for detailed responses to these comments.

R-2-2

The comment requests comparison of the emissions from the project to the SCAQMD regional emissions thresholds. However, the proposed project involves modifications to an interstate highway (I-5), which is under the jurisdiction of Caltrans. According to California Public Resources Code (PRC) Section 21082, the California Environmental Quality Act (CEQA) provides lead agencies with general authority to adopt criteria for determining whether a given impact is significant. As a result, the analysis for the proposed project followed the guidance within the Caltrans Standard Environmental Reference (SER) and developed by the U.S. Environmental Protection Agency (EPA).

Emissions associated with the proposed project were analyzed according to the EPA Final Rule published on March 10, 2006 (71 FR 12468). The analysis was conducted following the procedures and methodology provided in the *Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas* documentation, which was developed by the EPA and the Federal Highway Administration (FHWA).[1]

A particulate matter hot-spot analysis was reviewed by the Transportation Conformity Working Group (TCWG), which is an interagency coordination process, intended to maintain transportation conformity and help improve air quality. Membership of the

---

[1] The EPA released updated guidance documents for completing quantitative particulate matter ($PM_{2.5}$ and PM_{10}) hot-spot analyses on December 20, 2010 (75 FR 79370). However, there is a 2-year grace period before use of the new quantitative particulate matter hot-spot guidance is required for project-level particulate matter conformity determinations. Until December 20, 2012, project-level conformity determinations made using the 2006 qualitative guidance remain appropriate. The *Air Quality Assessment* prepared for the I-5 Widening Project was approved prior to December 20, 2012.

TCWG includes federal (EPA, FHWA, Federal Transit Administration [FTA]), State (California Air Resources Board [CARB], Caltrans), regional (e.g., Air Quality Management Districts, Southern California Association of Governments [SCAG]), and sub-regional (County Transportation Commissions) agencies, and other stakeholders. It should be noted that the SCAQMD has representatives on the TCWG and concurred that the project would not create a significant impact. The project is programmed within the latest SCAG *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) and the SCAG *Federal Transportation Improvement Program* (FTIP). As a result, the project is included in the emissions modeling for the region. The particulate matter hot-spot analysis determined that construction of either Build Alternative would result in improved level of service in the local project region as a whole, as the project increases efficiency of the roadway, resulting in improvements in sub-regional emissions beyond the immediate project area. Additionally, construction of either Build Alternative would result in improvement to overall speeds in the local project corridor and project region. Although project corridor emissions would increase slightly due to higher demand, traffic volumes in the surrounding area would decrease and overall operations within the surrounding project area would improve.

Specifically, Table 17 of the *Air Quality Assessment* compares emissions from the existing, opening year, and horizon year “Build” and “No Build” scenarios. As indicated in Table 17, as well as Table 16 of the *Air Quality Assessment*, vehicle miles traveled (VMT) associated with Build Alternatives 2 and 3 would increase from the No Build Alternative by 0.39 percent and 0.56 percent, respectively. However, Horizon Year vehicle hours traveled (VHT) associated with Build Alternatives 2 and 3 would increase from the No Build Alternative by 0.05 percent and 0.13 percent, respectively. As a result, VMT would increase at a higher rate than VHT, which indicates that although traffic volumes increase slightly, congestion and travel time would decrease with implementation of the Build Alternatives. Additionally, while VMT and VHT would increase within the project corridor slightly, VMT and VHT within the surrounding area would decrease when compared to No Build conditions.

It should be noted that the project is not a trip-generating land use, and that a majority of the increase in emissions is due to growth in VMTs that are projected throughout the region. The purpose of the project is to improve vehicle occupancy within the Study Area, provide continuity of the high occupancy vehicle (HOV) network within the proposed project limits, and improve ingress/egress from freeway ramps. The improvements along the project corridor would improve the operations and

functionality of the ramps and freeway mainline, and would also divert traffic from the surrounding areas, which would also reduce emissions in the surrounding area. Thus, the project would not result in a new exceedance or delay attainment of the federal or State standards for criteria pollutants.

R-2-3

Project-related emissions were analyzed within the *Air Quality Assessment*. The project was found to result in overall emissions improvements in the project area. Particulate matter emissions were analyzed in accordance with the Federal Transportation Conformity requirements outline in the EPA's March 10, 2006 Final Rule. It should be noted that this methodology was used pursuant to the recommendations and guidance from the TCWG because the project analysis commenced prior to December 2012. EMFAC2007 was used per the requirements of the Final Rule and because the EPA had not yet approved the use of EMFAC2011 for conformity purposes at the time the analysis commenced. Additionally, emission factors in EMFAC2007 are generally more conservative and yield higher emission projections than EMFAC2011. Additionally, the project is programmed within the SCAG RTP/FTIP and is included within SCAG's regional emissions model.

As described above, the project proposes alterations to a segment of I-5 that would generally improve level of service and operations of the freeway and ramps/intersections. The project is not a trip generating land use and a majority of the emissions are due to growth in VMT that are projected throughout the region. However, as requested by the commenter, all of the project's criteria pollutant emissions are provided below. It should be noted that although the emissions analysis for the project used EMFAC2007 (as directed by the TCWG and based on EPA guidance), the emissions provided below are based on EMFAC2011 (as requested by the commenter). The comparison of No Build and Build conditions indicates the direct effect of the project and show that each Build Alternative would generate a nominal increase in emissions (i.e., below the SCAQMD thresholds). These emissions are provided for informational purposes, and do not affect the impact conclusions of the IS/EA or the Air Quality Technical Report.

Scenario		ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Alternative 1 (2045 No Build)	Project Corridor	975.04	1,968.78	9,491.42	48.26	1,621.61	509.34
	Surrounding Area	517.09	1,044.10	5,033.56	25.60	859.99	270.12
	Total	*1,492.13*	*3,012.88*	*14,524.98*	*73.86*	*2,481.60*	*779.45*
Alternative 2 (2045 Build)	Project Corridor	991.32	2,001.65	9,649.88	49.07	1,648.69	517.84
	Surrounding Area	506.70	1,023.11	4,932.40	25.08	842.70	264.69
	Total	*1,498.02*	*3,024.76*	*14,582.28*	*74.15*	*2,491.39*	*782.53*
	Difference from No Build	*5.89*	*11.89*	*57.30*	*0.29*	*9.79*	*3.08*
	SCAQMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
	Is Threshold Exceeded?	*No*	*No*	*No*	*No*	*No*	*No*
Alternative 3 (2045 Build)	Project Corridor	995.84	2,010.78	9,693.88	49.29	1,656.20	520.20
	Surrounding Area	504.71	1,019.10	4,913.02	24.98	839.39	263.65
	Total	*1,500.55*	*3,029.87*	*14,606.91*	*74.28*	*2,495.60*	*783.85*
	Difference from No Build	*8.42*	*16.99*	*81.93*	*0.42*	*14.00*	*4.40*
	SCAQMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
	Is Threshold Exceeded?	*No*	*No*	*No*	*No*	*No*	*No*

R-2-4

This comment requests that the analysis address localized air quality impacts from construction and operational emissions from implementation of the proposed project. The analysis in the *Air Quality Assessment* addresses localized operational impacts using the *Transportation Project-Level Carbon Monoxide Protocol* (December 1997) developed by the Institute of Transportation Studies at the University of California, Davis, the Caltrans *Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Non-attainment and Maintenance Areas* (March 2006), and the EPA March 2006 Final Rule, which established the procedures to determine particulate matter impacts in nonattainment and maintenance areas. Implementation of the proposed project would alleviate several peak-hour mainline and freeway ramp deficiencies, thereby reducing congestion. Based on these localized hot-spot analyses, the proposed project would not create a significant increase in traffic, and air emissions would not be significant.

As described above, the proposed project was also submitted to stakeholders at a TCWG meeting on September 25, 2012, pursuant to the interagency consultation requirement of 40 Code of Federal Regulations (CFR) 93.105 (c)(1)(i). Caltrans, EPA, CARB, SCAQMD, and other interagency consultation participants reviewed additional information including the detailed particulate matter analysis and EMFAC model outputs.

This project is not a Type A (impact receptors) or Type B (place receptors near existing toxic generating sources) project as identified in the June 2009 *Health Risk Assessments for Proposed Land Use Project* prepared by the California Air Pollution Control Officers Association (CAPCOA). The proposed project is not located near existing toxic generation sources such as truck or bus idling areas, portable power generation engines (stations), cargo handling areas, transport refrigeration units, or any other planned toxic air contaminant (TAC) generating facility.

Measures and considerations on the need for a Health Risk Assessment include the following:

- The Best Available Control Measures (as included in the Caltrans Special Provisions) prepared for this project mandate that construction equipment will be equipped with the State-mandated emission control devices pursuant to State emission regulations and excessive idling would not be allowed.
- TACs for projects on existing alignments, such as this one, are expected to decline due to the effect of new EPA engine and fuel standards. Additionally, the CARB *Diesel Risk Reduction Plan* set a goal to reduce diesel particulate matter by 85 percent (from a 2000 baseline) by 2020.

The project qualitatively analyzed Mobile Source Air Toxics (MSAT) as described in Section 2.13. The project would reduce congestion and increase travel speeds, which would reduce TAC emissions.

Additionally, a qualitative particulate matter (PM) hot-spot analysis was prepared for the proposed project in accordance with 40 CFR 93.116 and 93.123, and the EPA's March 10, 2006 Final Rule (*Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Non-attainment and Maintenance Areas* ([2006 Guidelines]). The hot-spot analysis shows that the proposed project would not cause or contribute to, or worsen, any new localized violation of particulate matter less than 10 microns in diameter (PM_{10} and/or $PM_{2.5}$) standards. The PM hot-spot analysis was also reviewed by the TCWG members. Based on the *Air Quality Assessment* and the project traffic data, the proposed project would not result in a substantial increase in diesel truck percentages in the project area (i.e., heavy truck volumes would remain around approximately 3.5 percent of total volumes during both the No Build Alternative and Build Alternative). As a result, the project would not increase TACs in the area.

R-2-5

As described in the *Air Quality Assessment* and the Draft MND, Alternative 3 is similar in nature to Alternative 2 except that it proposes one additional general purpose lane from Avery Parkway to Alicia Parkway and a second additional general purpose lane from Crown Valley Parkway to Alicia Parkway. This configuration was analyzed in the traffic report and the *Air Quality Assessment* and both Build Alternatives were shown to improve operations. The reference to the "bottleneck" on page 2.2-5 refers to the differences between Build Alternatives 2 and 3 and was not a comparison between the Build Alternatives and the No Build Alternative. According to the analysis in the traffic report, Alternative 3 would generally improve level of service and operations of the freeway and ramps/intersections when compared to the No Build Alternative.

Additionally, the existing, Build, and No Build Alternatives (including Alternative 3) were fully analyzed in the Draft MND and the *Air Quality Assessment*. As described in the *Air Quality Assessment* and Response R-2-2 above, construction of either Build Alternative would result in improved level of service in the local project region as a whole, as the project increases efficiency of the roadway, resulting in improvements in sub-regional emissions beyond the immediate project area. Additionally, both Build Alternatives (including Alternative 3) would result in improvement to overall speeds in the local project corridor and project region. Although project corridor emissions would increase slightly due to higher demand, traffic volumes in the surrounding area would decrease and overall operations and emissions within the surrounding project area would improve.

R-2-6

The comment requests quantification of air quality impacts from the proposed construction activities consistent with SCAQMD guidelines. However, the proposed project involves modifications to an interstate highway (I-5), which is under the jurisdiction of Caltrans. According to PRC Section 21082, CEQA provides lead agencies with general authority to adopt criteria for determining whether a given impact is significant. As a result, the analysis for the proposed project followed the regulatory framework and recommended procedures for performing an air quality analysis for both Caltrans and local agency transportation projects. These procedures provide for a qualitative analysis for temporary construction activities. Construction of the entire project would occur in less than 5 years, which meets the Caltrans criteria as a temporary activity. As indicated in the IS/EA and discussed in further detail in the technical studies, construction activities would occur at various locations

along the 6.5-mile freeway length and would primarily involve exhaust emissions. All construction equipment would be subject to Caltrans Standard Specifications for Construction (Section 14 and 18 [Dust Control] and Section 39-3.06 [Asphalt Concrete Plants]), as well as SCAQMD Rule 403. In order to further minimize construction-related emissions, all construction vehicles and construction equipment would be required to be equipped with State-mandated emission control devices pursuant to State emission regulations and standard construction practices. The analysis concluded that project construction of this magnitude would not violate State or federal air quality standards, contribute to the existing air quality violations in the South Coast Air Basin, or exceed SCAQMD thresholds (as shown in Response R-2-3).

R-2-7

Section 2.22.2.1 of the IS/EA states the following:

> "Table 2.22-3 of the IS/EA depicts the estimated future emissions from vehicles traveling within the project limits. Refer to the Air Quality Technical Report, Appendix C (Emissions Modeling Calculations) for the emissions factors used to calculate the proposed project's GHG emissions. As shown in Table 2.22-3, the existing VMT in the Study Area generate 6,399 tons per day of CO_2. CO_2 emissions would increase during the Horizon Year scenarios due to VMT growth. Table 2.22-3 also indicates that emissions under the Build Alternatives would represent a less than 1 percent increase compared to No Build conditions due to the slight increase in VMT. When considering further emissions improvements under AB 1493 (Low Carbon Fuel Standard), Build Alternatives 2 and 3 would have a smaller increase in CO_2 emissions."

The limitations of the EMFAC model combined with the reduction in carbon dioxide (CO_2) emissions in the region in the existing condition and the increase in emissions in the region in 2045 make any significance determination speculative. Therefore, in lieu of determining significance, Caltrans has opted to implement all feasible measures to help reduce the potential effects of the project on global climate change. Those are Measures AQ-1 through AQ-3 (provided in Section 2.13, Air Quality).

R-2-8

As noted in Appendix A, Air Quality, the analysis for the proposed project analyzed the following scenarios: existing conditions, No Build (Alternative 1), and two Build Alternatives (Alternative 2 and Alternative 3). Each of these scenarios (including existing) was included in the *Air Quality Assessment* and emissions were quantified and compared. However, it should be noted that analyzing traffic volumes (and associated emissions) is different than most environmental considerations because existing conditions do not represent the level of traffic that will exist at the time the project becomes operational, and they ignore both expected road improvements that may reduce traffic congestion and expected new development that may increase it. As a result, the analysis within the IS/EA's *Air Quality Assessment* compares existing emissions, future no build, and future build emissions for each alternative. The recent legal case cited by the District/Neighbors for Smart Rail vs. Expo Metro Line, allowed for lead agencies to use a different baseline other than existing in where use of a different baseline was more appropriate for assessing project impacts.

R-2-9

As described in the IS/EA, the proposed project would not induce development in the area, but would accommodate projected growth and development by improving the mobility and operations of the roadway network in the project area. Traffic volumes used in the *Air Quality Assessment* of the Draft MND were derived from the Traffic Report for the proposed project. Additional traffic volumes (i.e., VMT) not included in the Traffic Report were also obtained. VMT data was provided for each scenario by speed bin for peak and off-peak hours.

Year 2035 traffic forecasts were prepared using OCTA's Orange County Traffic Analysis Model (OCTAM) Version 3.4 year 2035 trip tables and the OCTAM year 2035 "constrained network" (i.e., the network includes committed and/or environmentally cleared highway improvements only). The OCTAM year 2035 constrained network does not include the additional freeway mainline lanes proposed by the project. Therefore, the forecasts were used as the basis for deriving conditions applicable to the No Build Alternative. For the Build Alternatives, a version of the network was coded to include one additional mainline general purpose lane from Avery Parkway to Alicia Parkway and one additional HOV lane from Alicia Parkway to El Toro Road in each direction within the limits proposed by the project (Alternative 2). An additional general purpose lane was then coded in a second modified network (from Crown Valley Parkway to Alicia Parkway) as proposed for Alternative 3.

Since the OCTAM forecasts are for year 2035, volumes for the freeway mainline segments were increased to reflect year 2045 conditions using growth factors. Demographic data for the areas that generally contribute to traffic growth along the project corridor was provided as background to the future condition traffic volumes. This information was taken from the Orange County Projections 2010 (OCP-2010) used by OCTA to generate the OCTAM trip data. As described in the Traffic Report, traffic volume forecasts for the project opening day horizon year of 2022 have been derived by interpolating between the 2011 traffic counts and the 2045 forecasts for the No Build and the two Build conditions.

Given that the constrained model was used and the demographic data utilized to generate traffic demand is consistent with the growth projections for the County of Orange (County), the IS/EA concluded that the proposed project was not growth inducing.

R-2-10

Refer to Responses to Comments R-2-2, R-2-5, and R-2-8, above. All of the alternatives that were presented in the IS/EA were also analyzed in the Qualitative Particulate Matter Hot-spot Assessment and presented to the TCWG for conformity review. The project alternatives are documented in the project description of the Particulate Matter Hot-spot Assessment and are the same alternatives that are analyzed in the IS/EA. The Particulate Matter Hot-spot Assessment was prepared pursuant to the federal Transportation Conformity Requirements. Emissions from exhaust, break/tire wear, and road dust for each alternative, including the existing conditions, opening year, and horizon year Build Alternatives and No Build Alternatives were calculated. Each of these scenarios was included in the *Air Quality Assessment* and emissions were quantified and compared. The project and alternatives were found to result in overall emissions improvements in the project area. A final conformity finding was made by FHWA on February 13, 2014 as part of the final environmental document (refer to Appendix B, Correspondence, for a copy of this determination).

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1.4 Comments from Local Agencies

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L-1

OC Public Works
Integrity, Accountability, Service, Trust

Ignacio G. Ochoa, P.E., Interim Director
300 N. Flower Street
Santa Ana, CA 92703

P.O. Box 4048
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NCL-13-046

October 2, 2013

Ms. Gabriela Jauregui, Caltrans District 12 office
3347 Michelson Dr.
Suite 100
Irvine, California 92612-8894

SUBJECT: Notice of Intent to Adopt a Mitigated Negative Declaration/Finding of No Significant Impact Study Results Available for the I-5 Widening Project from SR-73 to El Toro Road

Dear Ms. Jauregui:

The County of Orange has reviewed the Notice of Intent to Adopt a Mitigated Negative Declaration/Finding for the I-5 Widening Project from SR-73 to El Toro Road offers the following comments.

Environmental Resources:

In response to your request for input on the subject project, Water Quality Compliance has reviewed the document. It is noted in the Initial Study Page 2.9-8 that Selenium (in groundwater) is officially recognized as impairing Aliso Creek. Since a great deal of the project involves new and replacement drainage facilities, we recommend the project design minimize the intrusion of selenium-laden perched groundwater (with levels that change seasonally) into project facilities. L-1-1

OC Engineering/Flood:

1. The proposed project has three alternatives. Widening I-5 one lane in each direction from SR-73 to El Toro interchange will add about 20 acres of impervious area. Adding two lanes in each direction doubles that value. Increased impermeable areas are likely to result in increases in runoff in downstream areas and may worsen flooding along deficient flood control facilities: Aliso Creek (J01), La Paz Channel (L04) and Oso Creek (L03). We are not sure whether the hydrology and hydraulic impacts were discussed in the "Floodplain Evaluation Report and Location Hydraulic Study," (March 2013) prepared for the project because the study was not included in the appendices. Please check these effects to make sure there is no significant impact on hydrology and hydraulics. L-1-2

2. The Cities along I-5 within project area (San Juan Capistrano, Laguna Niguel, Laguna Hills, Mission Viejo and Lake forest), as the floodplain administrators for areas within their L-1-3

boundaries, area responsible to ensure that all FEMA requirements applicable to the proposed project are met. L-1-3

3. All work (if any) within OCFCD right-of-way will require encroachment permits from OCPW/Property Permits Section. For information regarding permit application, please visit our web site http://www.ocplanning.net/. Technical reviews and approvals for the proposed work will be accomplished within the permit process. L-1-4

Flood/SAR/Trails:
Chapter 1, Project Description
Page 1.18, Section 1.2.2.6

The sentence reads:
"A portion of most of the major roadways within the Study Area are designated Class II bikeways (Avery Parkway, Cabot Road, Marguerite Parkway, Oso Parkway, La Paz Road, Muirlands Boulevard, Alicia Parkway, and Los Alisos Boulevard)." L-1-5

Please change the sentence to read:
"A portion of most of the major roadways within the Study Area are designated Class II ~~bikeways~~ on-road bike lanes (Avery Parkway, Cabot Road, Marguerite Parkway, Oso Parkway, La Paz Road, Muirlands Boulevard, Alicia Parkway, and Los Alisos Boulevard)."

The sentence reads:
"One Class I bikeway (Aliso Creek Trail) and one Class III bikeway (Crown Valley Parkway) are located within the Study Area." L-1-6

Please change the sentence to read:
"One Class I bikeway (Aliso Creek ~~Trail~~, Off-Road Paved, Class I Bikeway) and one on-road Class III ~~bikeway~~ bike lane (Crown Valley Parkway) are located within the Study Area."

Table 1.8-2, Build Alternatives 2 and 3

Please replace all references to the Aliso Creek Trail, to the Aliso Creek Class I Bikeway (If the intent is to describe the Class I Bikeway) L-1-7

Table 1.8-2, LU-1 – LU-6

Please replace all references to the Aliso Creek Trail, to the Aliso Creek Class I Bikeway. (If the intent is to describe the Class I Bikeway) L-1-8

Community Aspects
2.3.1.2 Affected Environment

The text reads:
"As discussed previously in Section 2.1, Land Use, a small portion of Aliso Creek Trail is located within the project footprint as it passes under I-5 south of Los Alisos Boulevard. However, no additional parks or recreational facilities, including equestrian trails, recreational bikeways, or recreational trails, are located within the project footprint." L-1-9

The revised sentence should be changed to state that the project will also impact a portion of the Aliso Creek Regional Riding and Hiking Trail (beginning just south of the San Diego Freeway) and possibly other sections of other regional trails to be determined by the preparer. L-1-9

2.5 Traffic and Transportation/Pedestrian and Bicycle Facilities

The text reads:

"A Class II bikeway (on-road striped) is provided along the north side of the Crown Valley Parkway overcrossing and along both sides of the La Paz Road undercrossing. The Aliso Creek Regional Riding and Hiking Trail follows Aliso Creek for approximately 15 miles (mi) through Orange County. This trail extends from Aliso and Woods Canyons Wilderness Park to Whiting Ranch Wilderness Park and continues along Laguna Hills Drive and Paseo De Valencia. A paved, off-street, Class I bike path is provided for most of this distance. The portion of the Aliso Creek Trail located within the project area is a Class I bike path. This trail crosses the project area north of the I-5 interchange with Alicia Parkway and south of the Los Alisos Boulevard overcrossing. Aliso Creek Trail is a 1.1 mi trail within the limits of the City of Mission Viejo. This trail accommodates pedestrian, bicycle, and equestrian users. The end of the trail enters into an open space area and exits the City of Mission Viejo by passing east under the freeway. Aliso Creek Trail is a 1.9 mi trail within the limits of the City of Laguna Hills. The trail segments in both cities (Mission Viejo and Laguna Hills) are maintained by the County of Orange.

Please change the text to read:

"A Class II ~~bikeway~~ (on-road striped) bike lane ~~(on-road striped)~~ is provided along the north side of the Crown Valley Parkway overcrossing and along both sides of the La Paz Road undercrossing. The Aliso Creek Class I Bikeway ~~Regional Riding and Hiking Trail~~ follows Aliso Creek for approximately 15 miles ~~(mi)~~ through Orange County. This bikeway ~~trail~~ extends from Aliso and Woods Canyons Wilderness Park to Limestone Whiting Ranch Wilderness Park. A portion of the bikeway is aligned ~~and continues south along~~ Laguna Hills Drive and Paseo De Valencia. The Aliso Creek Class I Bikeway is off-road ~~A paved, off-street, Class I bike path is provided~~ for ~~most of~~ this entire distance. The portion of the Aliso Creek Class I Bikeway ~~Trail~~ (located within the project area) is off-road ~~Class I bikeway path~~. This ~~trail~~ bikeway crosses the project area north of the I-5 interchange with Alicia Parkway ~~and~~ to a point south of the Los Alisos Boulevard overcrossing. ~~Aliso Creek Bikeway Trail is a 1.1 mi trail within the limits of the City of Mission Viejo. This~~ Class I Bikeways accommodate commuter and recreational cyclists and pedestrian~~s., bicycle, and equestrian~~ users~~. The end of the trail enters into an open space area and exits the City of Mission Viejo by passing east under the freeway.~~ Aliso Creek Trail is a 1.9 mi trail within the limits of the City of Laguna Hills. The ~~trail~~ bikeway segments in ~~both cities (~~Mission Viejo and Laguna Hills~~)~~ are maintained by the County of Orange. L-1-10

Please add the following text to the discussion above:

"A portion of a separate County recreation facility, the Aliso Creek Regional Riding and Hiking Trail (a natural-surface dirt trail), is also aligned across the project area. The Aliso Creek Riding and Hiking Trail is a master-planned trail, proposed from Cooks Corner to County's Aliso Beach Park. The Aliso Creek Trail is open beginning just south of the overcrossing of the San Diego Freeway at Aliso Creek (south) to the entrance of Aliso and Wood Canyons Wilderness Park. Segments of the trail are also open beginning at Los Alisos Park, just north of the San Diego Freeway. The trail and bikeway are distinct and separate facilities between the San Diego Freeway and Paseo de Valencia. The two routes remain separate, but parallel, along Paseo de

Valencia before they separate again along Laguna Hills Drive. The trail and the bikeway become parallel again as they pass through Sheep Hills Park, before entering Aliso and Wood Canyons Wilderness Park." L-1-10

General Comments:

- Please provide a thorough discussion for the Aliso Creek Trail where appropriate. L-1-11
- Class I (off-road, paved) bikeways should always be referred to as a "bikeway", and not as a trail. Bikeways serve commuter and recreational cyclists and pedestrian users. L-1-12
- Class II and Class III Bikeways are best described as Class II and Class III Bike Lanes, so as not to confuse on-road travel with an "off-road, paved" Class I Bikeway. L-1-13
- Riding and Hiking Trails are natural surface (often dirt or decomposed granite) routes serving walkers, joggers, runners, and mountain bicycle and equestrian riders. Trails are dirt, bikeways are paved. L-1-14
- The County encourages the preparer to review the County's Master Plan of Regional Riding and Hiking Trails to determine whether any of the County's other planned and existing (dirt) trail facilities will be impacted by the widening project. L-1-15
- If the author has any questions, feel free to contact Jeff Dickman at OC Public Works, at 714-647-3937.

If you have any questions or need clarification please do not hesitate to call me at (714) 667-3211.

Sincerely,

Polin Modanlou, Manager
Strategic Land Planning Division
OC Public Works/OC Planning Services
300 North Flower Street
Santa Ana, California 92702-4048
Polin.Modanlou@ocpw.ocgov.com

cc: Chris Crompton, Manager, OC Public Works/ OC Water Sheds/Environmental Resources
Kevin Onuma, Manager, OC Engineering/OC Flood/Flood Programs/Hydrology
Jeff Dickman, Trail Coordinator, OC Flood/SAR/Trails

1.4.1 L-1 – Orange County Public Works (OCPW)

L-1-1

The *Water Quality Assessment Report* (WQAR) prepared for the project acknowledges selenium as one of the constituents that is listed for Aliso Creek on the 2010 California 303(d) list, approved by the United States Environmental Protection Agency (EPA) in November 2010. During the final design, field investigation will be completed to determine whether dewatering is required. If dewatering is determined to be needed, it will be coordinated with the San Diego and Santa Ana Regional Water Quality Control Board (RWCQB), since currently there is no feasible option to deal with elevated levels of selenium in groundwater to meet regulatory requirements. Please refer to the avoidance and minimization measures outlined in Section 2.9.4 (specifically measure WQ-3) regarding construction site dewatering.

L-1-2

A *Floodplain Evaluation Report* with a *Location Hydraulic Study* (LHS) were prepared and discuss the effects of the additional impervious areas due to the proposed project. The impervious area as a result of the proposed project is less than one percent of the total tributary area to the concentration points for Aliso and Oso Creek. The increase is three percent for La Paz channel. These increases will have no significant impact on the hydrology or hydraulic analysis. This determination is made by comparing the Federal Emergency Management Agency (FEMA) hydraulic model for the 100-year flood conditions to the proposed 100-year hydraulic calculations using a compatible hydraulic model with appropriate modifications to the model in the project area. Therefore the 100-year discharge is applicable for both the existing and project condition. Hydraulics were also analyzed and show no impacts to the existing flood control facilities.

L-1-3

During final design, recommendations from the Floodplain Evaluation Report (as outlined in Section 2.8 of the IS/EA) would be incorporated to ensure that the drainage of the flood zones functions properly with the implementation of the proposed project. The cities involved will be kept updated on the implementation of these measures.

L-1-4

Permits and applicable documentation would be obtained, as necessary, for work within the Orange County Flood Control District (OCFCD) right-of-way.

L-1-5

The referenced sentence has been changed as requested.

L-1-6
The referenced sentence has been changed as requested.

L-1-7
All references to the Aliso Creek Trail have been changed to the Aliso Creek Class I Bikeway where appropriate in Table 1.8-2 and Sections 2.1 and 2.5.

L-1-8
All references to the Aliso Creek Trail have been changed to the Aliso Creek Class I Bikeway where appropriate in Table 1.8-2 and Sections 2.1 and 2.5.

L-1-9
Effects of the proposed project on the Aliso Creek Regional Riding and Hiking Trail have been added to Table 1.8.2 and Section 2.1. The County of Orange's (County) Master Plan of Regional Riding and Hiking Trails has been reviewed, and no additional impacts to trails/bikeways within the Study Area have been found.

L-1-10
The referenced text has been changed and incorporated into the MND/FONSI. The text has been changed as requested.

L-1-11
A thorough discussion for the Aliso Creek Regional Riding and Hiking Trail has been included in Sections 2.1 and 2.5. See Response to Comment L-1-10.

L-1-12
References to Class I bikeways have been revised where appropriate and are referred to as "bikeways" where appropriate.

L-1-13
References to Class II and Class III Bikeways have been revised where appropriate so that they are referred to as "Class II and Class III Bike Lanes."

L-1-14
The difference between riding and hiking trails, and bikeways is noted.

L-1-15
The County's Master Plan of Regional Riding and Hiking Trails has been reviewed to ensure inclusion of any planned or existing (dirt) trails in the analysis included in this document. No additional trails have been identified within the Study Area.

L-2

CITY OF LAGUNA HILLS

October 4, 2013

Caltrans District 12
Environmental Branch Attn: Gabriela Jauregui
3347 Michelson Drive, Suite 100
Irvine, CA 92612-8894

SUBJECT: COMMENTS UPON THE PROPOSED MITIGATED NEGATIVE DECLARATION FOR THE I-5 WIDENING PROJECT FROM SR-73 TO EL TORO ROAD, 12-ORA-5-PM 12.4/18.9, RELEASED FOR PUBLIC COMMENTS BETWEEN SEPTEMBER 6, 2013, AND OCTOBER 7, 2013

Dear Gabriela Jauregui,

Thank you, for the opportunity to comment upon the subject environmental document. Below are the comments provided by the City of Laguna Hills including questions and clarifications which need to be responded to before the environmental document approval process is completed.

Comment 1: <u>1.4.1.9 Noise Attenuation page 1-48 and 1-49</u>
The introductory paragraph states, "...the following noise barriers were determined to be feasible..." This statement, without any qualifying language, leaves the reader to understand that the listed walls are to be constructed with the project. Since that is not necessarily true per Section 2.14 Noise, there should be a statement included in the introductory paragraph stating that although the walls listed below are feasible to mitigate the noise impacts of the project, not all of the walls will be constructed, refer to Section 2.14. L-2-1

Comment 2: The same introductory paragraph also states, "Please refer to Figures 1-3 and 1-4 for location of these noise barriers." The referenced figures show noise barriers but they do not have any identifying information/number on them from which to determine which wall is which. And, neither Noise Barrier No. 159 nor 175 are shown on the Figures. These omissions should be corrected. L-2-2

Comment 3: <u>2.1.1.1 Existing Land Uses page 2.1-9</u>
The paragraph "City of Laguna Hills" is not accurate as to the description of land uses immediately adjacent to I-5. There are substantial residential areas immediately L-2-3

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website: www.ci.laguna-hills.ca.us

adjacent to the I-5 in the City of Laguna Hills, in addition to the noted commercial properties, and this fact should be noted in the paragraph. L-2-3

Comment 4: 2.1.1.5 Parks and Recreation page 2.1-35 & 36
The paragraph "Aliso Creek Trail" should be augmented to include a statement recognizing the City of Laguna Hills has established a monument and information rest stop along this County trail westerly of I-5 to mark the location of the Juan Avila Adobe. The Adobe is a culturally significant and historic asset that should be considered in the impact analysis. Further, the designation of Aliso Creek as having Recreation 2 level of water contact and the potential of having Recreation 1 level of contact should be noted. L-2-4

Comment 5: The paragraph "Monument Park" is inaccurate. The location of this facility is westerly of Cabot Road between Oso Parkway and Hitching Rail Road. The ownership of this park should be identified as the Nellie Gail Ranch Owners Association and not the City of Laguna Hills. L-2-5

Comment 6: 2.1.3 (Land Use) Avoidance, Minimization and/or Mitigation page 2.1-57 & 58. Mitigation measures LU-1, LU-2 and LU-3 should include a requirement that trail detours also be coordinated with, and approved by, the City of Laguna Hills as the detoured trail users will be using City facilities and City owned trail access points. In addition, the posting of detour signs will likely occur within the City of Laguna Hills rights of way with potential utility and sight distance impacts that should be mitigated. L-2-6

Comment 7: 2.5.3 (Traffic and Transportation) Avoidance, Minimization and/or Mitigation page 2.5-28. "Traffic Control" - The mitigation measure TRA-1 should recognize that temporary traffic impacts may require increased local police services on City streets and the cost of those additional services should be mitigated. L-2-7

Comment 8: "Signing" - The mitigation measure TRA-1 should recognize that the posting of traffic control signs on local streets will have an impact that will require the contractor to gain approval of any temporary signage locations and require the contractor to acquire an Encroachment Permit from the local agency. L-2-8

Comment 9: The mitigation measure TRA-1 should include the recognition that temporary traffic impacts may cause concentrations of unusual traffic volumes and truck traffic on local City streets resulting in pavement degradation and the cost of that adverse pavement impact should be mitigated. L-2-9

Comment 10: 2.8.3 (Hydrology and Floodplain) Avoidance, Minimization and/or Mitigation page 2.8-13. The discussion of "Location 1 – Aliso Creek" on page 2.8-9 L-2-10

notes "The velocities in both the existing and proposed condition are erosive..." but mitigation measure HY-5 on page 2.8-13 ignores this issue. Erosive velocities will cause erosion of the support structure of the Aliso Creek Bike Trail which can reasonably be anticipated to result in damage to this infrastructure. The mitigation measure should be revised to require that erosive velocities shall be addressed and the bike trail shall be flood proofed in the design and construction phases of the project. L-2-10

Comment 11: Section 2.8.3 does not discuss storm drain hydraulic impacts as a result of the changes to the runoff expectation into local storm drains from the widening of the I-5. Storm drain capacity in the City of Laguna Hills in the vicinity of I-5 has been exceeded in some storm events and the existing systems may not be capable of handling any additional runoff. An analysis of the storm drain systems, their ability to carry additional storm flows as a result of this project, potential flooding of local streets and private properties and mitigation of these storm flows should be included in the Environmental Document. L-2-11

Comment 12: <u>2.14 Noise (sub headings of sections and pages as noted below)</u>
2.14.2 California Environmental Quality Act, page 2.14-1, makes a reference to "Chapter 4" for further information. Please explain this reference as the document Chapter 4 is not related to Noise. L-2-12

Comment 13: 2.14.4.1 Surrounding Lands Use and Receptors, page 2.14-7, describes the land uses for I-5 Southbound between El Toro Road and Alicia Parkway. There is a reference to a trail which is understood to be the County Bike Trail in the Aliso Creek Recreational Area. The sentence, "The trail was identified under Activity Category C, and noise levels were reported because there are no outdoor frequent human use areas" should be reconsidered and the area should be classified as having frequent human use. In addition to being a Bike Trail for recreational use, the trail provides access to the Aliso Creek Recreational Area which includes access to Aliso Creek identified as having Recreation level 2 usage and potential Recreation level 1 usage per discussion in Section 2.9 Water Quality, provides access to the Juan Avilla Adobe Cultural site and informational monument, includes cultural and biological significance and provides a pedestrian alternative to Alicia Parkway or Los Alisos Boulevard for transit between the Cities of Lake Forest and Laguna Hills. There is frequent human use with exposure to high levels of noise in this area and this condition should so be noted. A Noise Barrier across the I-5 frontage of the Aliso Creek Recreational Area between Los Alisos Boulevard and Alicia Parkway should be implemented to mitigate the noise impacts to the frequent human uses of this area. L-2-13

Comment 14: 2.14.4.2 Existing Noise Level Measurements, page 2.14-8, Short Term Monitoring. The short term noise monitoring was conducted to "document existing noise levels at 62 representative receptor locations..." but no short term noise monitoring was conducted along the Aliso Creek Bike Trail. No other location within the project area is representative of the conditions in the Aliso Creek Recreational Area. Short term monitoring of this location should be performed and the noise analysis revised to take the results into account. The noise impacts should be mitigated. L-2-14

Comment 15: Table 2.14-3 identifies the short term monitoring locations including ST-48, rear yard of 24472 Christina Court, with a noise reading of 63.7 dBa Leq. However, in a report commissioned by the City of Laguna Hills and dated July 19, 2004, to address the 1992 I-5 widening unmitigated environmental impacts, LSA Associates conducted a similar study and identified a short term noise reading in the rear yard of the same home, 24472 Christina Court, of 67 dBa Leq. It is unreasonable to expect the noise level in 2013 would be less than in 2004 with all conditions otherwise unchanged. A 3 dBa difference in measurement is significant. The calibration of the current noise measurement and model should be re-checked and reevaluated and noise levels recalculated and mitigated accordingly. The potential for Noise Barriers No. 159 and 175 to be determined feasible and reasonable may be affected by this analysis. In addition, the aforementioned 2004 study noise modeling determined a number of additional homes along Christina Court to be eligible for a noise barrier and this result was not shown to be the case in the current study. This difference in modeled noise results should be explained or reevaluated. L-2-15

Comment 16: Alternatives 2 and 3 – Build Alternatives. This section, beginning on page 2.14-60, discusses Receptors that "...would continue to be exposed to noise levels that approach or exceed the NAC under Activity Categories B, C and E..." However, Receptor 216 on the Aliso Creek Bike Trail is not discussed in the following pages and this omission should be corrected. The existing noise levels for Receptor 216 already highly exceeds the recommended FHWA standard of 67 dBA. The proposed project will exacerbate the existing noise levels without providing appropriate mitigation. Furthermore, the number of receptors adversely affected by the noise impacts on the Aliso Creek Recreational Area should be identified and this value should be used in the Reasonableness determination for a noise barrier to be placed along the southbound I-5 from Los Alisos Boulevard to Alicia Parkway. L-2-16

Comment 17: The noise analysis identifies a location (Receptor R-265) that is developed with an outdoor dining area where noise impacts cannot be abated. The Mitigated Negative Declaration process does not allow for environmental impacts to go unmitigated because they are not feasible. The correct process for this type of L-2-17

determination is the preparation of an Environmental Impact Report (EIR) with the adoption of a properly supported statement of overriding considerations explaining why the project impacts will remain due to feasibility issues with the implementation of mitigation measures. The City notes that the construction of other noise barrier improvements were similarly discounted in other areas not located in the City of Laguna Hills. L-2-17

Comment 18: Noise Abatement Consideration. This section, beginning on page 2.14-65, makes reference to noise barriers being shown on Figures 2.14.2 and 2.14.3. However Noise Barriers No. 159 and 175 are not shown on these Figures and this omission should be corrected. L-2-18

Comment 19: Reflected Noise. This section, beginning on page 2.14-180, discusses noise reflection as relates to receptors on the opposite side of the freeway. However, this section does not discuss reflected noise from noise barriers placed along private property lines as a part of the project and which could then reflect noise to nearby properties on the same side of the freeway. Noise Barrier No. 115 has the potential to reflect freeway noise into the Hills Hotel outdoor and indoor use spaces. To mitigate this issue, Noise Barrier No. 115 should be constructed with noise absorbing materials and this should be a stated mitigation measure of the project. L-2-19

Comment 20: Table 2.14-12, Total Reasonable Allowance per Noise Barrier, page 2.14-185. The number of Receptors for Noise Barriers No. 159 and 175 should be revised to take into account the results of the 2004 Noise Study as described in Comment number 15 above which identifies additional affected additional Receptors along Christina Court and should include the frequent human use of the Aliso Creek Recreational Area. L-2-20

Comment 21: Table 2.14-3 Summary of Reasonable Noise Barriers, page 2.14-192. For the second analysis entry of Noise Barrier No. 121, the 408' wall length should be reduced to still effectuate the noise reduction but not exceed the reasonable allowance. As it is currently presented, the $165,000 allowance covers almost 70% of the wall cost and a short reduction in length of the wall will justify its construction. The reduced wall length should be modeled for feasibility and, as well, the likely result of construction costs being less than estimated should be taken into account in order to find this wall to be reasonable. L-2-21

Comment 22: The discussion of Noise Barrier Reasonableness and the determination of feasible or infeasible improvements as depicted in Table 2.14-13, together with proposed mitigation measure N-2, is wholly inconsistent with the requirements of CEQA L-2-22

which require impacts to be mitigated when a lead agency proposes to utilize the Mitigated Negative Declaration process. As described above, failure to mitigate a significant impact, in this instance noise, requires the preparation of an EIR pursuant to Section 15073.5(d) of Title 14, Chapter 3 of the California Code of Regulations. L-2-22

Comment 23: The Noise Analysis in Chapter 2.14 fails to clearly identify which thresholds (CalTrans, FHWA, or both) are being used to evaluate noise impacts as a result of the project. The analysis should use both Cal Trans and FHWA criteria in order to identify the truest level of impact on the environment. Instead, the analysis refers to only the CalTrans noise protocols as the sole arbiter as to whether or not an impact is occurring (See Page 2.14-3). Since the project is subject to FHWA criteria for the evaluation of noise, the project should have also evaluated noise impacts using FHWA standards to determine the significance of noise impacts as a result of the project. L-2-23

Comment 24: Further, to ensure that the public understands whether or not their property is being impacted and the extent of the impact, information depicted on Table 2.14-9 should have been compared against CalTrans noise protocols as well as FHWA standards. Instead, the public is left to guess as to whether or not their property is impacted by flipping through a myriad of tables and maps, and to what degree, and at the end must draw their own conclusions. The information should be re-formatted to clearly identify impacts which include existing conditions, predicted noise increase, final predicted noise levels (including all mitigation proposed), and a comparison between final predicted noise levels and acceptable CalTrans and FHWA noise thresholds. L-2-24

Comment 25: The Project's noise analysis fails to evaluate interior noise impacts on residential structures and other uses located adjacent to the project area in the City of Laguna Hills. The omission of such an analysis could result in significant environmental impacts on people as a result of increased interior noise in their residences that exceed 45 dBA, which is a recommended interior noise level by the Department of Housing and Urban Development for residential uses. FHWA standards identify 52 dBA as an acceptable interior noise level in for other uses. L-2-25

Comment 26: The project will leave potentially significant noise impacts in place once the project is constructed as a result of CalTrans' reliance on property owners to accept (or reject) improvements on private property in order to accomplish noise mitigation as described by the Maintenance provision associated with the use of noise barriers on Page 2.14-197. A property owner rejecting any improvements on their private property could potentially result in noise impacts that go unmitigated since improvements, such as sound walls, would fail to be constructed. Failure to mitigate a significant impact L-2-26

requires the preparation of an EIR pursuant to Section 15073.5(d) of Title 14, Chapter 3 of the California Code of Regulations. L-2-26

Comment 27: 2.21 Cumulative Impacts
The project noise analysis completely omits any discussion of potential cumulative impacts on approved projects located within the City of Laguna Hills, specifically the redevelopment of Oakbrook Village which includes an approved residential component. The impact of the proposed project on Oakbrook Village must be determined pursuant to Section 15065(a)(3) of Title 14, Chapter 3 of the California Code of Regulations. L-2-27

Sincerely,

Kenneth H. Rosenfield, P.E.
Director of Public Services

1.4.2 L-2 – City of Laguna Hills (COLH)

L-2-1

A statement has been included in Chapter 1, Section 1.4.1.9, explaining that although the walls listed below are feasible to abate potential noise impacts of the project, not all the walls would be constructed. The statement also refers the reader to Section 2.14 for more detail on sound walls.

L-2-2

Noise Barrier (NB) No. 175 is shown on both Figures 1-3 and 1-4, Sheet 6 of 6. NB No. 159 is not shown on Figures 1-3 and 1-4 because it was evaluated in a separate analysis.

L-2-3

The description of land uses in the City of Laguna Hills (City) has been updated in Section 2.1.1.1 to reflect the residential areas immediately adjacent to I-5.

L-2-4

Section 2.1.1.5 has been revised to include a statement recognizing the City of Laguna Hills and has established a monument and informational rest stop along the Aliso Creek Class I Bikeway. Additionally, the Juan Avila Adobe is discussed in Section 2.7.2.6, Cultural Resources. A statement regarding Aliso Creek's designation as a Recreation 2 level of water contact with the potential for Recreation 1 level of contact has been added to Section 2.1.1.5. Definitions of these Recreation levels have also been added to Section 2.1.1.5.

L-2-5

The location and ownership of Monument Park has been updated in Section 2.1.1.5 as requested.

L-2-6

Mitigation Measures LU-1, LU-2, and LU-3 have been revised to include a requirement that trail detours also be coordinated with, and approved by, the City of Laguna Hills. Additionally, the location and posting of detour signs, as well as any associated mitigation, will be determined during final design. The California Department of Transportation (Caltrans) and the Orange County Transportation Authority (OCTA) will continue to coordinate with the City during final design.

L-2-7

A discussion of temporary traffic impacts leading to the possibility of increased local police service has been added to Section 2.4, Utilities/Emergency Services. Funds have been allocated as part of the Transportation Management Plan (TMP) so that compensation can be provided to the cities for possible increased police services during construction.

L-2-8

The final Transportation Management Plan (TMP) will be refined during final design, and part of that process would be the coordination of the TMP components, such as signing with the applicable local jurisdictions to help reduce impacts in areas near the construction activities. As a result, each local jurisdiction would be provided an opportunity during final design to identify potential locations of signage to minimize the effects of those activities in each community. The final design will also identify that an encroachment permit must be obtained by the contractor.

L-2-9

The preliminary construction staging proposed for the project would allow for all existing lanes on Interstate 5 (I-5) to be maintained during construction. This would allow for traffic to continue using I-5 for the duration of construction and reduce the need to use local streets as an alternative. The final TMP would be developed during final design and part of that process will be the coordination of the TMP components, such as ramp and street closures and detours with the applicable local jurisdictions to help reduce truck traffic impacts in areas near the construction activities.

L-2-10

The Floodplain Evaluation and Location Hydraulic Study (LHS) report compares the existing and proposed conditions. As outlined in these documents, the velocity resulting from the Build Alternatives is similar to the existing condition meaning that the proposed project is not anticipated to induce any erosion of the support structure of the Aliso Creek Class I Bikeway.

L-2-11

A preliminary hydraulic analysis has been conducted as part of the Project Approval/ Environmental Documentation (PA/ED) phase to determine whether any hydraulic impacts will result from the Build Alternatives. As a result of this preliminary analysis, needed modifications to downstream systems were determined to be minor.

A detailed analysis will take place during final design to determine what hydraulic modifications, if any, will need to be incorporated as a result of the proposed project.

L-2-12

The reference to Chapter 4 has been revised to reference Appendix A, California Environmental Quality Act (CEQA) Checklist.

L-2-13

According to the *Caltrans Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects* (Noise Protocol, May 2011), frequent human use is defined as a location where people would be exposed to traffic noise for an extended period of time on a regular basis. The practical test for frequent human use is the presence of existing facilities that invite human use for an extended period of time, such as benches, barbeque facilities, and uncovered picnic areas. The Aliso Creek Class I Bikeway currently does not have any existing facilities that meet this test and, as a result, is considered a transient use area. Therefore, the Aliso Creek Class I Bikeway is not considered to have any frequent human use, and no noise abatement measures in the form of noise barriers are required.

L-2-14

The purpose of the short-term monitoring is to calibrate the Federal Highway Administration (FHWA) Traffic Noise Model (TNM) version 2.5. The number of short-term noise level measurements surrounding the Aliso Creek Class I Bikeway was considered adequate to calibrate the noise model for the Aliso Creek area (including the bikeway). Also, please refer to Response to Comment L-2-13 regarding the Aliso Creek Class I Bikeway as a frequent human use area.

L-2-15

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

A change in the traffic noise model could explain why some residential properties located along Christina Court were determined to be eligible for noise barriers in the July 19, 2004, noise study, and were found not to experience a traffic noise impact in the current study. The noise level at 24472 Christina Court for the July 19, 2004, noise study commissioned by the City of Laguna Hills was 65 A-weighted decibels (dBA) equivalent continuous sound level (L_{eq}) (instead of 67 dBA L_{eq} cited in the comment). The noise level measurement conducted for the proposed project was 63.7

dBA L_{eq}. The two noise level measurements are considered similar. Slight differences in the noise level measurements could be contributed by meteorological conditions. The difference in the measured noise levels between the two studies does not affect the feasibility and reasonableness of the potential noise abatement measures. Despite the slight difference in the measured noise levels, both noise studies identify traffic noise impacts, and noise abatement measures were considered in accordance with the Noise Protocol.

Other residential properties located along Christina Court that were determined to be eligible for noise barriers under the July 19, 2004, noise study, and would not experience a traffic noise impact under the current study that could be due to the change in the traffic noise model. The traffic noise model for the July 19, 2004, noise study used the SOUND32 noise model and the I-5 Widening from State Route 73 (SR-73) to El Toro Road used the FHWA TNM version 2.5, which is considered a more accurate traffic noise prediction model.

In response to concerns presented by the community and the City of Laguna Hills, a community enhancement masonry wall will be constructed on the southbound side of I-5 from the Los Alisos Boulevard OC to the northerly edge of the Aliso Creek bridge. This wall will be approximately 800 feet long and 14 feet high.

L-2-16

Receptor 216 representing the Aliso Creek Class I Bikeway is not mentioned in the text on page 2.14-60 because there are no frequent human use areas as defined by the Noise Protocol, and noise levels were not evaluated against the 67 dBA L_{eq} Noise Abatement Criteria. There are no other features in this recreational area that would necessitate placement of additional receptors. Refer to Response to Comment L-2-13, above.

A noise barrier located along the southbound side of I-5, at the edge of shoulder, extending across the bridge, was evaluated for the two impacted homes at the cul-de-sac of Christina Court. This barrier was determined to be not feasible because the barrier would not reduce traffic noise levels by 5 dBA or more. As a result, a noise barrier (NB No. 175) was proposed at the private property line, which was a feasible location. Other residences farther away from the I-5 were not identified as impacted by the I-5 traffic.

In response to concerns presented by the community and the City of Laguna Hills, a community enhancement masonry wall will be constructed on the southbound side of

I-5 from the Los Alisos Boulevard OC to the northerly edge of the Aliso Creek bridge. This wall will be approximately 800 feet long and 14 feet high.

L-2-17

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures. Additionally, please refer to Appendix A, XII(c) which explains why the project impacts are not considered significant.

L-2-18

Please refer to Response to Comment L-2-2.

L-2-19

The Hills Hotel may experience some noise reflection from NB No. 115. However, the increase in noise would be less than three dBA and would not be perceptible to the human ear in an outdoor environment. As a result, no abatement is required. NB No. 115 requires approval through the public survey process. If the wall is approved by the residents for additional consideration in final design, the material type (including absorptive materials) would be discussed in more detail. It is Caltrans' new standard practice (Caltrans Traffic Noise Analysis Protocol, May 2011) to provide walls with an acoustically absorptive material for the walls when receptors on the opposite side have a direct line of sight to the wall.

L-2-20

The number of receptors located behind NB No. 175 is the same as the 2004 Noise Study and was included in the feasibility analysis. Both studies show that the receptors represent the two homes located at the cul-de-sac of Christina Court. The total reasonable allowance is determined based on the number of receptors that can achieve a noise level reduction of 5 dBA or more from the noise barrier. NB No. 175 was determined to be feasible because the barrier would reduce noise levels by 5 dBA or more. However, NB No. 159 was not included in both studies because the barrier could not achieve a noise level reduction of 5 dBA or more, as required to be feasible. As a result, only NB No. 175 is presented in the *Noise Study Report* since it is at the feasible location.

L-2-21

The noise barrier analysis follows the Noise Protocol to determine the effective length of the noise barriers and receptors behind them. Even though NB No. 121 is close to being reasonable at a height of 16 feet (ft), reducing the length of this barrier is not

recommended because the noise reduction design goal to provide at least 7 dBA of noise level reduction at one or more benefited receptors would not be met. Receptor No. 143 is the only receptor located behind NB No. 121 that barely meets the noise reduction goal. Receptor No. 143 with a 16 ft high barrier provides a noise level reduction of 7.4 and 7.2 dBA under Alternatives 2 and 3, respectively. Therefore, reducing the barrier length of NB No. 121 would decrease its ability to provide at least a 7 dBA noise level reduction at one or more benefited receptors.

L-2-22

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures. Additionally, please refer to Appendix A, XII(c) which explains why the project impacts are not considered significant.

L-2-23

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

Both Caltrans and FHWA noise standards are the same. These standards are shown in Table 2.14-1. In fact, Caltrans is charged with implementing FHWA's policies and standards, along with their local representative. Therefore, the noise study complies with the requirements and procedures of FHWA for identifying traffic noise impacts and evaluating feasible and reasonable noise abatement measures.

L-2-24

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

L-2-25

Interior noise standards for residential uses are not included in the Noise Protocol under Activity Category D, which have a Noise Abatement Criteria of 52 dBA L_{eq}. When traffic noise impacts are identified for residential land uses, noise abatement measures to reduce noise levels in the outdoor frequent human use area are evaluated. When noise levels are reduced in the outdoor frequent human use area, ground-floor interior noise levels would also experience a noise level reduction from the noise abatement measures. Therefore, exterior noise impacts for residential land uses would indirectly address interior noise impacts.

L-2-26

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures. Additionally, please refer to Appendix A, XII(c) which explains why the project impacts are not considered significant.

L-2-27

As shown in Table 2.21-2, the Oakbrook Village redevelopment was included in the cumulative analysis, which looked at all environmental categories, including noise. Additionally, cumulative projects were included in the noise model when determining proposed project effects on sensitive receptors.

The Addendum to the City of Laguna Hills General Plan Update Environmental Impact Report (EIR) – Oakbrook Village Residential Project (The Planning Center, October 2012), identifies transportation as the most significant noise-producing source in the Oakbrook Village project area. The addendum found that the Oakbrook Village project would be subjected to a level of noise that if mitigated, could be reduced to a less than significant level. As stated in this addendum, the Oakbrook Village project would be required to comply with the State of California's interior noise standard of 45 decibels (dB) Community Noise Equivalent Level (CNEL) for multifamily residential land use. To comply with the interior noise standard, the building must provide sufficient outdoor-to-indoor noise attenuation to reduce the interior noise exposure to acceptable levels. The Oakbrook Village project committed to mitigate the exterior noise to within the interior noise standard of 45 dB CNEL with appropriate acoustical design measures. Such measures may include increasing the sound transmission class (STC) ratings of the windows/doors, exterior walls, and/or roof assemblies. Additionally, the addendum stated that to ensure that the interior noise standards are met and that adequate acoustical design measures are incorporated into the project construction, the project applicant would be required to conduct a detailed acoustical analysis in accordance with the provisions outlined in the City of Laguna Hills' noise element.

Jayna Harris

To: kncohoe@transystems.com
Subject: RE: I-5 Expansion at Aliso Creek Trail

From: Wootten, James [mailto:James.Wootten@ocparks.com]
Sent: Tuesday, September 17, 2013 2:14 PM
To: Deshpande, Smita R@DOT
Cc: Raish, Alicia
Subject: I-5 Expansion at Aliso Creek Trail

Hi Smita, I received your messages and am thankful for your response. I have been out of the office until today and wanted to provide a revision to your proposed rerouting of my trail. I have attached a file documenting our proposed revision along with the original you sent me. The revision comes from on-site inspection of traffic as it pertains to possible hazards along your proposed reroute. What I found was a dangerous intersection at Los Alisos and Paseo de Valencia. There is no cross walk across Paseo de Valencia and the corner is quite tight for the amount of travelers we are accustomed to on the Aliso Creek Bikeway. In the attached diagram I have proposed an alternative route that puts trail users back on the trail as soon and as safely as possible with minimal inconvenience. Please review the attachment and call me or send me any questions or concerns you may have. L-3-1
Thank you for your time,
James Wootten MIS
OC Parks
714-559-0936

From: Deshpande, Smita R@DOT [mailto:smita.deshpande@dot.ca.gov]
Sent: Monday, September 16, 2013 12:37 PM
To: Wootten, James
Subject: message

I received your message last week, sorry was out of the office. Please send me your question and I will be more than happy to provide you any info you may need. I also left you messages on both numbers you left me with. Thank you.

Smita Deshpande
Caltrans District 12
Division of Environmental Analysis
Chief, Branch A
(949)724-2245

I-5 Expansion at Aliso Creek Trail

Area detailed below from original Caltrans Aliso Creek Trail reroute document

I-5 Expansion at Aliso Creek Trail

I-5 Expansion at Aliso Creek Trail

1.4.3 L-3 – OC Parks

L-3-1

The proposed detour route of the Aliso Creek Class I Bikeway included in the Draft IS/EA has been revised per the commenter's request. Please refer to Appendix L for a detailed description and map of the revised detour route proposed by the County of Orange.

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1.5 Comments from Utilities and Public Services

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U-1

1919 S. State College Blvd.
Anaheim, CA 92806-6114

The Gas Company

A Sempra Energy utility

September 19, 2013

State of California
Dept. of Transportation
District 12
Environmental Planning
3347 Michelson Dr, Ste. 100
Irvine, CA 92612

Attention: Gabriela Jauregui

Subject: Proposed Mitigated Negative Declaration – Interstate 5 Widening Project from State Route 73 to El Toro Rd

This letter is not to be interpreted as a contractual commitment to serve the proposed project but only as an information service. Its intent is to notify you that the Southern California Gas Company has facilities in the area where the above named project is proposed. Gas facilities within the service area of the project could be altered or abandoned as necessary without any significant impact on the environment. U-1-1

Information regarding construction particulars and any costs associated with initiating service may be obtained by contacting the Planning Associate for your area, Brad Morrison, (714) 634-3061.

Sincerely,

Armando Torrez
Technical Supervisor
Orange Coast Region- Anaheim

AT/ps
mitnegde.doc

1.5.1 U-1 – The Gas Company

U-1-1

As outlined in Table 1.4-2, it is acknowledged that there are Southern California Gas Company facilities within the project Study Area. The California Department of Transportation (Caltrans) and the Orange County Transportation Authority (OCTA) will continue to coordinate with the Southern California Gas Company throughout final design regarding effects to Southern California Gas Company facilities.

1.6 Comments from the Public

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P-1

From: Tim Nelson
To: D12_5Widening@DOT
Subject: Sounds Great!
Date: Sunday, September 15, 2013 11:07:55 PM

I got the notice on the widening of the I-5 from the 73 to El Toro. I would love to see the freeway widened for that portion. P-1-1

Thanks,
Tim

_____

Tim Nelson
27550 Hillcrest Apt 4Q
Mission Viejo, CA 92691

1.6.1 P-1 – Tim Nelson

P-1-1

The commenter's support for the proposed project has been documented as part of the public record and considered in the decision making process.

P-2

From: Gonzalo Navajas
To: D12 5Widening@DOT
Subject: Questions on project
Date: Sunday, September 15, 2013 4:18:43 PM

Dear Gabriela Jauregui: I have several questions regarding the widening project on the I-5:

1. How many new lanes on each side of the I-5 are they planning to open?
I live on the **east** side of the segment included between Crown Valley and Oso Pkwy. Will it the same number of new lanes throughout the planned expansion, including the segment where I live? P-2-1

2. What will the increase in traffic **noise** be in that segment once it is finished? In air pollution? P-2-2

3. During construction, what will be the increase in **noise** from the construction? Will they be working at night? P-2-3

Thank you very much.

Gonzalo Navajas
27051 Calle del Cid
Mission Viejo, CA 92691

1.6.2 P-2 – Gonzalo Navajas

P-2-1

Under Build Alternative 2, the project proposes to widen and to add one additional general purpose lane in both the northbound and southbound directions from Avery Parkway to Alicia Parkway. Build Alternative 3 would widen Interstate 5 (I-5) by two lanes in each direction from Crown Valley Parkway to Alicia Parkway (which includes the segment in which the commenter resides).

P-2-2

Traffic noise would vary along the referenced section (Crown Valley Parkway to Oso Parkway) in the proposed condition, depending on distance from the freeway. As shown in Table 2.14-9, noise at sensitive receptors east of I-5 between Crown Valley Parkway and Oso Parkway would range anywhere from 51.7 A-weighted decibels (dBA) to 73.7 dBA for Build Alternative 2 and 51.8 dBA to 74.1 dBA for Build Alternative 3 in 2045, depending on the location of each receptor. As stated in Section 2.13, Air Quality, the proposed project would not result in adverse effects related to long-term air quality.

P-2-3

As stated in Section 2.14, Noise, short-term construction-related and equipment transport noise impacts would be minimal compared to existing traffic volumes on I-5 and other area streets, and the traffic noise effects of those trips would not be substantial. However, noise associated with the use of construction equipment is estimated to be between 79 and 89 dBA maximum instantaneous noise level (L_{max}) at a distance of 50 feet (ft) from the active construction area during grading. The closest residences along I-5 are within 50 ft of the construction areas associated with Build Alternative 3. Therefore, these receptors may be subject to short-term noise reaching 91 dBA L_{max} or higher generated by the construction activities associated with this alternative. However, measures will be implemented to avoid and/or minimize temporary noise impacts as described in Measure N-1. During final design, construction staging would be developed and will identify which work will be performed at night.

P-3

From: ctn8iv@cox.net
To: D12_5Widening@DOT
Subject: COMMENT ON PROPOSAL
Date: Sunday, September 15, 2013 4:21:44 PM

Gentlemen: My belief is that widening the I-5 AGAIN is unnecesary, disruptive and far to costly for the perceived benefit. As the expression goes. "build it and they will come", will not relieve present congestion, but will only draw more vehicles leading us right back to where we are now, and probably another widening. P-3-1

Recognizing the added burden from new development in South County, the answer is finishing the 241 through to the I-5, thus truly relieving the I-5. Moneys intended for the widening should go towards the 241, and if prudent, even to the extent of the State taking over the 241 from private interests. P-3-2

The so called environmentalists have held up this Project long enough with their trumped up "concerns" over some obscure wildlife, however, reality must prevail, and that should not include more disruptive burdens on those who travel the I-5 now.

RON RESTELLI
VOICE: (949) 588-8806
E-MAIL: CTN8IV@COX.NET
Cell: (714) 329-5558
25531 Classic Dr.
Mission Viejo, 92691

1.6.3 P-3 – Ron Restelli

P-3-1

The commenter's statements regarding the lack of benefit provided by the project has been documented as part of the public record and considered in the decision making process. Additionally, please refer to Chapter 1, Section 1.2, Purpose and Need.

P-3-2

The commenter's support for the State Route 241 (SR-241) project has been documented as part of the public record and considered in the decision making process. The baseline long-range traffic forecast scenario utilized for the traffic analysis of the proposed project includes the completion of the SR-241 toll road extension to I-5. Even with the SR-241 toll road extension, it was determined that the proposed project is necessary to relieve congestion on I-5.

P-4

From: jlemaster@octa.net
To: D12 5Widening@DOT
Subject: I-5 Public Comments
Date: Wednesday, September 18, 2013 2:48:34 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 9/18/2013 2:48:10 PM.

Field	Value
Full Name	Sheldon Pines
Address	25582 Breezewood Street
City	Dana Point
State	CA
Zip	92629
Business Phone	
Home Phone	949-607-6366
Email Address	sheldon11122@gmail.com
Comments	This project is not necessary. An alternate freeway already exists that can accomplish this. That is the 73 toll road itself which has both the capacity now and the potential to easily add more in the median of the road. If the 73 toll road were to be a non-toll road traffic on the I-5/I-405 would be relieved from San Juan Capistrano to Costa Mesa. The toll road was designed to become a non-toll road when the bonds used to pay for its construction would be paid off. Unfortunately, traffic and revenue on the 73 has not allowed the bonded indebtedness to be reduced. In fact in actually increases every year and the outlook for improvement is bleak because the debt service requirement goes up regularly and there is little capacity for population growth west of the I-5/I-405. Eventually, the finances for the 73 will have to be dealt with. It would be nice if this were to happen before $560 million was spent on an alternative and drivers had to endure four years of construction headaches. Sheldon Pines Dana Point Sheldon11122@gmail.com 949-607-6366
Be kept informed of the project.	true

P-4-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 9/18/2013 2:48:10 PM.

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1.6.4 P-4 – Sheldon Pines

P-4-1

Long-range traffic forecasting models prepared by the Orange County Transportation Authority (OCTA) include an additional lane in each direction on the State Route 73 (SR-73) as well as on I-5 within the project limits in order to accommodate future traffic demand on both facilities. The SR-73 toll road was constructed with a wide median to accommodate this future expansion by adding an additional lane in each direction. However, the OCTA model indicates continued growth on I-5 despite the addition of more lanes on the SR-73 toll road. The SR-73 toll road can be converted to a free facility in 2042 when the current revenue bonds are fully paid off. The cost to pay off the toll road's revenue bond principal currently exceeds $2 billion. As such, the revenue bond principal cost is greater than the estimated cost of the I-5 Widening Project, which makes the proposal to convert the toll road to a free alternative for I-5 infeasible at this time.

P-5

From: jlemaster@octa.net
To: D12_5Widening@DOT
Subject: I-5 Public Comments
Date: Wednesday, September 18, 2013 7:28:58 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 9/18/2013 7:28:36 PM.

Field	Value
Full Name	Julie Hambrick
Address	32964 Paseo Miraflores
City	San Juan Capistrano
State	CA
Zip	92675
Business Phone	
Home Phone	
Email Address	
Comments	I am in full support of option three, adding two additional lanes to the north and southbound lanes of the 5 freeway. I have lived in South Orange County since 1977 and the traffic continues to get worse. A 20 minute commute to work in Irvine in 1996 now takes double that amount during rush hour. It will only get worse in years to come.
Be kept informed of the project.	false

P-5-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 9/18/2013 7:28:36 PM.

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1.6.5 P-5 – Julie Hambrick

P-5-1

The commenter's support for Alternative 3 has been documented as part of the public record and considered in the decision making process.

P-6

From: Wendy Black
To: D12 5Widening@DOT
Subject: I-5 Widening Project
Date: Thursday, September 19, 2013 7:40:25 AM

Regarding widening project for I-5 to El Toro.

Bad idea. For those of us that remember the Toll Road and I-5 being built as well as the LA fiasco still in process.
Commute is already heavy N and S, adding more congestion with closed lanes will increase accidents. P-6-1

Please consider those that travel these roads every day, widening won't help the fact that there are too many commuters
and people living in Southern California, adding lanes wont decrease travel time or reduce traffic congestion.

Thank you,

Wendy

Wendy Black
Rx Manager

Running and Cycling Enterprises
1015 Calle Amanecer
San Clemente, CA 92673
Toll Free: (888) 860-7597 x570
Fax: (800) 272-5118
http://www.gorace.pro

wblack@gorace.pro
Direct: (949) 272-2446
Fax: (949) 260-7858
Cell: (949) 330-3572

RACE
RUNNING AND CYCLING ENTERPRISES
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1.6.6 P-6 – Wendy Black

P-6-1

The commenter's statements regarding the proposed project's lack of benefits has been documented as part of the public record and considered in the decision making process. As stated in Section 1.2.2.1 of this MND/FONSI, it is anticipated that the proposed project may lead to a decrease in the frequency of congestion-related accidents on the I-5 mainline due to the operational improvements and increased capacity. As shown in Section 2.5, Traffic and Transportation, the Build Alternatives would provide overall positive impacts (i.e., reduce congestion and traffic delay) along the I-5 within the project limits. The addition of the general purpose lanes and extension of the high-occupancy vehicle (HOV) lane would increase the capacity of the freeway, and as a result, reduce mainline congestion and freeway travel time. During final design, construction staging would be developed with the objective of keeping all existing lanes on I-5 open during construction, with the exception of overnight and short-term closures.

As shown in Section 1.2.2.1 and 1.2.2.3 of this Mitigated Negative Declaration/Finding of No Significant Impact (MND/FONSI), population and employment growth for the south Orange County (County) region is forecast to increase approximately 24 to 25 percent over a 25-year period. This growth would occur independent of the status of the proposed project.

From: jlemaster@octa.net
To: D12_5Widening@DOT
Subject: I-5 Public Comments
Date: Thursday, September 19, 2013 9:47:21 AM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 9/19/2013 9:47:22 AM.

Field	Value
Full Name	Christine Kan
Address	29836 Hiddenwood
City	Laguna Niguel
State	California
Zip	92677
Business Phone	
Home Phone	
Email Address	christine0104@gmail.com
Comments	Please, please widen the Avery off-ramp exit going South on the I-5. There is plenty of room to build a right-turn only lane. Of course, I don't know all the logistics that come with building an additional lane, but it would relieve a lot of traffic and tension from people who are being blocked from turning by motorists turning left from that lane. Thank you!!
Be kept informed of the project.	true

P-7-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 9/19/2013 9:47:22 AM.

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1.6.7 P-7 – Christine Kan

P-7-1

The project proposes to improve the southbound off-ramp to Avery Parkway to address existing congestion and queuing. The existing ramp has one exit lane that widens to two lanes at the intersection with Avery Parkway. One of these lanes allows for a left turn and the second allows for a left, through, or right-turn movement. The proposed ramp will have two exit lanes that will widen to four lanes at the intersection with Avery Parkway. This will allow for two dedicated left-turn movements and two dedicated right-turn movements. With the proposed ramp configuration, traffic congestion is expected to improve from the existing condition.

P-8

From: jlemaster@octa.net
To: D12 5Widening@DOT
Subject: I-5 Public Comments
Date: Thursday, September 19, 2013 10:07:24 AM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 9/19/2013 10:07:01 AM.

Field	Value
Full Name	Jackie Cadotte
Address	26661 Calle La Bomba
City	San Juan Capistrano
State	CA
Zip	92675
Business Phone	714-245-6061
Home Phone	949-521-3294
Email Address	jackiecadotte@gmail.com
Comments	Hello, Thank you for accepting input on this important decision. I drive from San Juan Capistrano to Santa Ana R/T daily to work. Ever since the "2 per green" N/B onramps at Crown Valley and Oso have been in effect, the traffic from south of there is a crawl most of the time. I understand the city doesn't want traffic stacking up on the the streets, but that creates gridlock on the freeway on a daily basis. As soon as those vehicles enter, they push across all four lanes to hit the carpool entry, causing vehicles to brake for them. If the open entry/open exit were extended all the way from Crown Valley to Bake, I do not believe you need an additional carpool lane. The same open entry/open exit is a problem S/B lanes from Lake Forest to Oso. The traffic stops at each one of the openings for people cross all lanes at once to exit Alicia and Oso. Please feel free to contact me with any further information you may desire.
Be kept informed of the project.	true

P-8-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 9/19/2013 10:07:01 AM.

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1.6.8 P-8 – Jackie Cadotte

P-8-1

During final design, a determination on the optimal ramp metering rate for the on-ramps within the project limits will be made by Traffic Operations. The project proposes to remove the existing HOV buffer in both directions to accommodate continuous access throughout the project limits. This will allow ingress and egress to the HOV lanes at any point through this portion of I-5.

P-9

From: Frank Nin
To: D12 5Widening@DOT
Subject: HWY 5 WIDENING
Date: Thursday, September 19, 2013 10:35:48 AM

Att. Gabriela Jauregui
We are one of the residents that live on the side of the 5 HWY in between Oso Parkway and La Paz exits. On this section the amount of pollution we got on our residents are so big that we have to live with the windows closed.
This pollution impact on 10 residents on the si de of the Hwy 5. We have to use almost daily water to clean this pollution from our back of the house. I want to bring to your attention that 23 of the resident dyed of cancer and my wife got lumb cancer however she never had been smoking. WE NEED A HIGH RETENTION WALL BETWEEN THE HWY AND OUR RESIDENTS TO PROTECT US OF THE SO CLOSE POLLUTION EMISSION FROM THE TRAFFIC ON THE HWY. P-9-1

Thank you
Frank Nin
Construction Project Manager
Mancha Development Company
(951) 271-4811 office
(949) 422-0671 cell

"Passionately committed to running GREAT restaurants, each and everyday!'

1.6.9 P-9 – Frank Nin

P-9-1

The project includes retaining and sound walls along this freeway segment. Walls are also subject to California Department of Transportation (Caltrans) design criteria within the *Highway Design Manual*, which has specifications for wall height. Additionally, the height and location of highway walls were analyzed within the *Noise Study Report* and *Noise Abatement Decision Report* prepared for the project. It should be noted that the dispersion of freeway traffic emissions are subject to local meteorology; they travel at higher elevations above the freeway and settle in various locations. As a result, walls are typically not effective at reducing pollution.

As described in the *Air Quality Assessment*, the proposed project would reduce congestion and result in overall emissions improvements in the project area. Also, heavy diesel trucks are responsible for generating the greatest toxic air contaminants (TACs). However, the proposed project would not result in a substantial increase in diesel truck percentages in the project area (i.e., heavy truck volumes would remain around approximately 3.5 percent of total volumes under both the No Build Alternative and Build Alternative). Representative monitoring data included in the *Air Quality Assessment* shows that ambient emissions are on a declining trend. Additionally, future emissions would likely be lower than current levels, due to various U.S. Environmental Protection Agency (EPA) national emissions control programs that are projected to reduce mobile source emissions. These control measures include retrofit measures that help reduce the future emissions, creating a decreasing trend in background concentrations that would help offset any increase in vehicle miles traveled related emissions in the future years. Furthermore, the California Air Resources Board (CARB) has adopted a Diesel Risk Reduction Plan (DRRP), which includes control measures that would reduce overall diesel particulate matter emissions by about 85 percent from 2000 to 2020.

P-10

From: jlemaster@octa.net
To: D12 5Widening@DOT
Subject: I-5 Public Comments
Date: Friday, September 20, 2013 1:56:04 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 9/20/2013 1:56:07 PM.

Field	Value
Full Name	Greg Peterson
Address	25971 Nellie Gail Road
City	Laguna Hills
State	California
Zip	92653
Business Phone	
Home Phone	
Email Address	bonsainut@cox.net
Comments	What are noise mitigation plans? Clearly if you increase the size of a road, and increase the number of vehicles as well as their average speed, you will increase noise. What are you doing to address this?
Be kept informed of the project.	true

P-10-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 9/20/2013 1:56:07 PM.

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1.6.10 P-10 – Greg Peterson

P-10-1

Section 2.14.4.2 of the Initial Study/Environmental Assessment (IS/EA) describes the analysis conducted to assess noise effects of the Build Alternatives and proposed noise abatement in the form of sound barriers. Figures 2.14-2 and 2.14-3 depict the location of sound barriers proposed for the project. When traffic noise impacts are identified, the noise study evaluated feasible and reasonable noise abatement measures in accordance with the guidelines and procedures specified by the *May 2011 Caltrans Traffic Noise Analysis Protocol* (Noise Protocol) to reduce traffic noise levels. Additional information about these guidelines and procedures can be found in General Response 1 – Noise, in Section 1.1.1.

P-11

From: jlemaster@octa.net
To: D12_5Widening@DOT
Subject: I-5 Public Comments
Date: Friday, September 20, 2013 5:32:01 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 9/20/2013 5:31:43 PM.

Field	Value
Full Name	gary fox
Address	25512 maximus
City	mission viejo
State	California
Zip	92691
Business Phone	7144086757
Home Phone	7144086757
Email Address	gfox1313@gmail.com
Comments	I understand how this is done, good luck in court! see you wed. 25th
Be kept informed of the project.	true

P-11-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 9/20/2013 5:31:43 PM.

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1.6.11 P-11 – Gary Fox

P-11-1

The commenter's statement regarding the proposed project has been documented as part of the public record and considered in the decision making process.

P-12

From: Rita Seney
To: D12 5Widening@DOT
Subject: I-5 Widening
Date: Saturday, September 21, 2013 10:37:47 AM

Adding 2 extra lanes at intervals merely causes bottlenecks at each end. Either go all the way or forget about it. Traffic must be kept 'flowing'. Not 6 lanes here, 8 lanes there,, back to 6 lanes. It makes no sense. P-12-1

Stop building so many houses, condos, apartments, etc. That should stop added influx. P-12-2

R. Seney
Mission Viejo resident

1.6.12 P-12 – Rita Seney

P-12-1

As outlined in Section 1.4 of the IS/EA, Alternative 2 proposes to add one lane northbound and one lane southbound on I-5 from Avery Parkway to Alicia Parkway, which would help to alleviate the existing bottlenecks north and south of the project limits.

P-12-2

The commenter's statements regarding limiting development have been documented as part of the public record and considered in the decision making process.

P-13

From: Melody Schultz
To: D12 5Widening@DOT
Subject: widening for freeway
Date: Monday, September 23, 2013 8:23:17 AM

Hi,

As an almost lifetime resident (more than 55 years) of Orange County, I have lived in Anaheim during the 50's, Fullerton in the 60's and 70's, Westminster in 80's and in Laguna Hills since 1988. My husband I lived out of state while he was in grad school and we lived for 3 years in Hacienda Heights.

I have seen the intense growth of Orange County. Not all of it is good either. There is WAY too much development. I remember when there were grass medians in the freeways!!!! And when there was no freeway between Orange County and San Diego which may have been longer but very nice drive! AND WHEN THERE USED TO BE ORANGE TREES!!!!!!!!!!!!!!!!!!!!There is too much development !!!!!!!!!!!Widening the freeway is not going to help. Stop giving developers a free reign on building!!! We would not have this problem!!!! P-13-1

Hopefully, people will leave if they don't like it!!!

I have looked at the area where the proposed new lanes would go and WAY TOO MANY businesses and people would be affected for little benefit. Only the Sierra Pools in Lake Forest, a gas station and auto repair shop in Mission and gas station in Laguna Niguel are mentioned as being needed for construction. I travel the the freeway and I know that is not all that would be acquired or affected. I am tired of road construction. The inconvenience during road work is not worth what is constructed. Just encourages more people to come here. That we do not need! P-13-2

My vote is to NOT do any widening as proposed. P-13-3

Sincerely,
Melody Schultz

1.6.13 P-13 – Melody Schultz

P-13-1

The commenter's statements regarding the effect of development in the Study Area have been documented as part of the public record and considered in the decision making process. Please refer to Response to Comment P-6-1 regarding the positive impacts of the proposed project on congestion and delay.

P-13-2

Detailed engineering plans were used to determine which properties would require acquisition. These properties were identified in Section 2.3.2 of the IS/EA. Following recommendation of a Preferred Alternative, a *Final Relocation Impact Memorandum* (FRIM) has been prepared that has identified more detail regarding the relocation impact and the appropriate replacement resources. The properties to be acquired remain the same as stated in the IS/EA (two gas stations, an auto supply store, and Swan Pools).

P-13-3

The commenter's opposition to the proposed project has been documented as part of the public record and considered in the decision making process.

From: gordon glass
To: D12 5Widening@DOT
Subject: i5 widening
Date: Monday, September 23, 2013 3:34:26 PM

---

to: Gabriela Jaurequi :

As 60 - year Orange County residents, and 60 + - year motorists between Los Angeles and San Diego, we strongly support the construction of which ever Alternative would add the maximum number of lanes - including HOV - but would also PERMANENTLY FORBID conversion to or construction of TOLL LANES !

We taxpayers have paid for FREEways. Keep it this way. P-14-1

Also, this project will better serve the LA - SD motoring public than that misadvertised " I 5 - reliever", the
241 Toll Road. It's northern terminous is 2/3rds. the way up Santa Ana Canyon, a full 16 miles east of the I 5 .

1.6.14 P-14 – Gordon Glass

P-14-1

The commenter's support of the project has been documented as part of the public record and considered in the decision making process. Toll lanes are not currently being considered as a part of this project.

P-15

From: Ed Taylor
To: D12 5Widening@DOT
Subject: Proposed I-5 widening between SR-73 and El Toro Road
Date: Tuesday, September 24, 2013 1:41:41 PM

Ms. Jauregui:

I am writing to comment on the proposed I-5 widening between SR-73 and El Toro Road in southern Orange County.

I believe the widening is unnecessary and a misplaced use of taxpayer dollars. The State of California cannot afford the hundreds of millions of dollars it will take to complete this project. Building more roads and adding road capacity is throwing good money after bad - it only encourages more people to move farther out into the suburbs, forcing the state to build more roads, etc. It is time for the State to use its hard earned tax dollars to balance the budget for all Californians, or to build infrastructure that does not encourage sprawl and climate change. P-15-1

Please proceed with the no-build option on this proposed project.

Thank you for your time.

Ed Taylor
19752 Potomac Lane
Huntington Beach, CA 92646

1.6.15 P-15 – Ed Taylor

P-15-1

The proposed project is included as part of the OCTA Renewed Measure M Transportation Investment Plan (M2). Measure M, a 0.5-cent sales tax for transportation improvements was originally passed in 1990 and renewed by County voters on November 7, 2006. As a result, it will be a continued investment of local tax dollars in the County's transportation infrastructure for another 30 years (through 2041). The proposed project is one of the projects identified in the M2020 Plan (identified as Projects C and D) for M2 that includes those projects and programs that can be delivered on an expedited schedule between now and 2020. Projects included in M2 are strategic improvements needed to minimize systemwide freeway traffic congestion in the County.

The commenter's preference for the No Build Alternative has been documented as part of the public record and considered in the decision making process. As stated in Section 2.2 of this MND/FONSI, the proposed project does not include land uses or activities that would encourage development or attract additional businesses or people. In addition, the location, timing, and level of future growth in the Study Area would also depend on the availability of certain types of infrastructure/services (e.g., water, sanitary sewers, and schools). Plans for critical future infrastructure are addressed by the individual jurisdictions and agencies providing these services to existing and future development, and their availability would affect the location, level, and timing of future development regardless of the proposed project. Because the proposed transportation improvements partially accommodate existing development, the proposed project would have no substantial potential for stimulating the location, rate, timing, or amount of growth locally or regionally. Moreover, the amount of vacant land or land ready for development within the Study Area is extremely limited.

P-16

From: Petty, Don
To: D12 5Widening@DOT
Subject: FW: Comment - Question on I5 widening Project.
Date: Wednesday, September 25, 2013 1:51:40 PM

To whom it may concern.

In the online document: 5widening/technical_studies/Noise/noise_abatement_decision_report_0K0200.pdf

Page 36:

Receptor R-227: This receptor location represents multifamily residences located along Charlinda Drive on the NB side of I-5 between Alicia Parkway and Los Alisos Boulevard. Currently, an existing 16 ft high wall along the State ROW shields these residences. One noise barrier (Noise Barrier No. 162) was modeled along the State ROW to shield these residences.

Page 136:

Noise Barrier No. 162: A 702 ft long barrier located along State ROW on the NB side of I-5 between Alicia Parkway and Los Alisos Boulevard was analyzed to shield Receptor R-227

Page 133:

Map shows: Modeled Noise Barrier No.162 - Not Feasible and there are is no further information on Noise Barrier No. 162 in the entire document.

Concerns – Question:

Homes as far in as in as Murrlands St. are impacted now by the constant traffic noise.

Why is the noise barrier No 162 not feasible and what steps are going to be taken to minimize the noise levels in this area? P-16-1

Link to full report:

http://www.dot.ca.gov/dist12/files/5widening/technical_studies/Noise/noise_abatement_decision_report_0K0200.pdf

Thanks

Don Petty
VP-EPBX-ECC Technology
Office (949) 727-7650
Cell (949) 439-5423
Fax (866) 451-2531
don.petty@owb.com
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1.6.16 P-16 – Don Petty

P-16-1

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures. Additionally, please refer to Section 2.14, Tables 2.14-10 and 2.14-11 regarding the feasibility of Noise Barrier No. 162.

P-17

From: jlemaster@octa.net
To: D12 5Widening@DOT
Subject: I-5 Public Comments
Date: Wednesday, September 25, 2013 4:40:40 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 9/25/2013 4:41:02 PM.

Field	Value
Full Name	Al Holguin
Address	26412 Jacinto Drive
City	Mission Viejo
State	California
Zip	92692
Business Phone	
Home Phone	9493646698
Email Address	al@corondadomv.com
Comments	This is regarding the off ramp at Avery Pkwy going southbound. The majority of traffic on the right turn lane are for residents in Laguna Niguel. Instead of having them go off at avery turning right, there should be a direct exit\bride going towards Paseo de Colinas on the Laguna Niguel Side. The traffic backs up onto the freeway during college sessions. We usually have to go an exit further and come back onto the freeway to reduce the time it takes but adds more traffic to surrounding streets. This will reduce the amount of traffic getting off of every.
Be kept informed of the project.	true

P-17-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 9/25/2013 4:41:02 PM.

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1.6.17 P-17 – Al Holguin

P-17-1

Please refer to Response to Comment P-7-1 regarding improvements to Avery Parkway.

From: jlemaster@octa.net
To: D12 5Widening@DOT
Subject: I-5 Public Comments
Date: Wednesday, September 25, 2013 5:09:40 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 9/25/2013 5:09:59 PM.

Field	Value
Full Name	Rebecca Zomorodian
Address	25105 Mustang Drive
City	Laguna Hills
State	California
Zip	92653
Business Phone	
Home Phone	
Email Address	rebeccazom@yahoo.com
Comments	I am not in favor of the propsed closing of the driveway on La Paz at the 5 North Freeway entrance. It is easy to make a right hand turn out of that driveway when the light on Muirlands is red for west bound traffic. That driveway serves so many business in that area. Closing it would impede the flow of traffic for the customers that shop in that area. The research I did shows that there have been no traffic incidents in that area, as far back as 2009. I would strongly suggest you consider not closing that driveway.
Be kept informed of the project.	true

P-18-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 9/25/2013 5:09:59 PM.

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1.6.18 P-18 – Rebecca Zomorodian

P-18-1

Per the Caltrans *Highway Design Manual*, Section 504.8, Access Control, access rights shall be acquired along interchange ramps to their junction with the nearest public road. At such junctions, for new construction, access control should extend 100 ft beyond the end of the curb return or ramp radius in urban areas and 300 feet in rural areas, or as far as necessary to ensure that entry onto the facility does not impair operational characteristics. Access control shall extend at least 50 ft beyond the end of the curb return, ramp radius, or taper. Because the westerly driveway did not meet this requirement, the project has included closure of this driveway so that operations of the northbound on-ramp are not impaired. During final design, this location can be evaluated in further detail with Caltrans to determine if there are any alternatives to closure of the driveway while still meeting access control requirements.

From: jlemaster@octa.net
To: D12_5Widening@DOT
Subject: I-5 Public Comments
Date: Wednesday, September 25, 2013 5:35:59 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 9/25/2013 5:36:16 PM.

Field	Value
Full Name	dawn marcova
Address	24961 wells fargo dr
City	laguna hills
State	California
Zip	92653
Business Phone	
Home Phone	9499330880
Email Address	seawitch@cox.net
Comments	I am totally against this project. Californian are paying for the La Paz onramp reconstruction that just completed and you want to put us through more headache and cost by redesigning it again? If I ran my business the way you run OCTA I would be out of business. Redoing a project just after completion because you didnt think far enough ahead is moronic. For that matter you could help pay for the mess you made of La Paz on ramp just by putting an officer at LaPaz and Cabot to nab everyone that is in the right turn lane to Cabot southbound who decides to go straight to get on the freeway. Why a lane directly ion front of the onramp lane is a right turn only is STUPID. Your resign I understand is going to take away the carpool on ramp. The mess at Alicia and the removal of the carpool onramp northbound resulted in worst traffic getting on the freeway and now I have to go south to La Paz to go north.. Adding the extra mileage on my car and extra time on the freeway contributing to the excess traffic. This was certainly not reasonable but your poor design. Now, I am utterly confused as is the staff here tonight on where the existing sound walls are and where they will be moved to. I also have no idea how long there will be no sound wall. Since not all of my windows have been retrofitted in my 40 year old house, I might as well be in a tent in the middle of the freeway for as much sound as we will have to endure. What compensation will be made so that we can prepare for the noise for extended time? You are a government entitiy so speed is not somehting we can count on. There will be construction equipment on our street it appears which will impact parking for how long? will the new sound wall be more effective than the existing one?I am 7 houses off the freeway and as it stands now you can not enjoy a nice summer dinner in the backyard due to the noise. I am also concerned that the current sound wall sits on top of the hill at the end of the street. If you move the wall even a foot, you will need to heighten the wall or build out the hill closer to the houses. How will that impact drainage. Also I am very concerned that the sound studies were only done as far as 3 house from the freeway. Again since the freeway sits above the houses now, when the wind blows from inland, the noise is much

P-19-1

P-19-2

P-19-3

	higher on the Laguna Hills side of the freeway. Why have you not studied the noise further from the freeway? As the wind comes over the sound wall it missed the first 3 houses which are protected and those 5-10 houses down the road get more impact, but you are not studying that. I voet for alternative 1 until you present a better design and better thought out use of taxpayer money.
Be kept informed of the project.	true

P-19-3

P-19-4

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 9/25/2013 5:36:16 PM.

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1.6.19 P-19 – Dawn Marcova

P-19-1

Although improvements to the I-5/La Paz Road interchange were completed recently, reconstruction at this interchange as part of this project would occur between 2018 and 2022. Unfortunately, it is not within the purview of Caltrans and/or the Orange County Transportation Authority (OCTA) to dictate the location and strategies of local law enforcement. Local agencies, including the Cities of Mission Viejo and Laguna Niguel, participate in the Project Development Team (PDT) and have been made aware of the commenter's concerns regarding law enforcement in this area.

P-19-2

Caltrans is considering the removal of the HOV preferential lanes at ramp meter locations, which has been incorporated into the proposed project. A final determination on the implementation of HOV preferential lanes will be made by Traffic Operations during final design.

P-19-3

The Existing Wall No. 7 identified in the noise study would need to be replaced in kind (same length and height) at a location slightly farther east from its existing location to the freeway in order to accommodate the proposed improvements. The replaced barrier would perform acoustically equivalent to the existing barrier since the top elevation of the top of the wall will be maintained. Existing Wall No. 7 is located within the State right-of-way and, as a result, would not require the acquisition of private property for temporary or permanent easements. Therefore, no compensation of private property owners for temporary or permanent easements is required. In addition, issues related to drainage would be addressed during the design phase. The constructability for replacement of the existing wall will be evaluated in more detail during final design with the objective of minimizing the exposure of the homes that are being shielded.

Evaluating up to three rows of homes from the highway is considered adequate because homes that are located further from the barrier (than the three rows) would not benefit sufficiently from a potential noise barrier for them to be considered benefited receptors.

P-19-4

The commenter's preference for the No Build Alternative (Alternative 1) has been documented as part of the public record and considered in the decision making process.

From: jlemaster@octa.net
To: D12 5Widening@DOT
Subject: I-5 Public Comments
Date: Wednesday, September 25, 2013 7:34:55 PM

P-20

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 9/25/2013 7:35:15 PM.

Field	Value
Full Name	Klaus
Address	#####
City	######
State	California
Zip	00000
Business Phone	
Home Phone	
Email Address	
Comments	The Open House format was very helpful in assisiting me to completely understand the exact extent of the project, its impact upon Mission Viejo residence, along with myself. The only issue which I am greatly concerned about is the previous Crown Valley (City of Mission Viejo) and the previous La Paz (City of Laguna NIguel) interchanges. My current understanding is that OCTA is currently funding the subject project, whether it be Alt. 2 or Alt. 3. Both city's have already expended a large amount of funding regarding the Crown Valley and La Paz on and off ramps. It appears that NO financial coordination with OCTA/CALTRANS was considered during the planning of those previously completed projects. Therefore, I feel, if applicable, that any city which is impacted by the subject project i.e. Los Aliso Bridge, La Paz Bridge, Train Bridge at La Paz, etc. be coordinated with the city impacted; again if financially applicable. I feel the moneys already expended by the two (2) cities should not go to waste due to the lack of past construction coordination funding. Also, I urge CALTRANS to further study ALL alternatives as to efficient traffic movement during the peak times of MAJOR construction i.e. Laz Paz new bridge construction and interchange improvements, Los Aliso bridge construction, Avery Bridge and on/off ramp construction. I thank CALTRANS for making this comment opportunity available to the residence of South Orange County.
Be kept informed of the project.	false

P-20-1

P-20-2

P-20-3

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 9/25/2013 7:35:15 PM.

1.6.20 P-20 – Klaus

P-20-1

The commenter's statement regarding the benefit of the open house format has been documented as part of the public record and considered in the decision making process.

P-20-2

The previous construction projects on Crown Valley Parkway and La Paz Road were implemented as a part of Measure M1, while this current proposed project is part of a commitment made under Measure M2. Improvements to La Paz Road and Avery Parkway were originally planned as separate project efforts and were incorporated into the I-5 Widening Project so that improvements could be delivered to the community as efficiently as possible. Additionally, the proposed project has been developed with a PDT that includes the Cities of Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, and Mission Viejo in order to ensure that the effort is coordinated with local improvements.

P-20-3

As shown in Section 2.5, Traffic and Transportation, construction impacts of all alternatives were studied. To avoid and/or minimize traffic impacts during construction, a Transportation Management Plan (TMP) will be implemented during construction, which includes traffic control measures, detour routes, a public awareness campaign, signage, emergency access, and pedestrian access. Additionally, during final design, construction staging would be developed with the objective of keeping all existing lanes on I-5 open during construction, with the exception of overnight and short-term closures.

P-21

From: Scott field
To: D12_5Widening@DOT
Subject: Gabriella Jaurequi
Date: Thursday, September 26, 2013 10:08:43 AM

Instead of widening for cars, let's do the widening for an Orange County light rail. We will never keep up with the ever increasing cars until we give people an alternative to using the car. P-21-1

Sent from my iPad

1.6.21 P-21 – Scott Field

P-21-1

The commenter's support for light rail has been documented as part of the public record and considered in the decision making process. A variety of Transportation Demand Management (TDM) strategies, including public transit, were considered as part of the Project Approval/Environmental Documentation (PA/ED) phase and were withdrawn from further consideration because they would not effectively meet the project purpose as stand-alone alternatives. The Long Range Transportation Plan prepared by OCTA includes planned light rail facilities in the County.

From: Mountain Outin" Tours / Rolland Graham
To: D12 5Widening@DOT
Subject: Comment on I-5 Improvement Project
Date: Sunday, September 29, 2013 10:21:59 AM

From:
Rolland Graham
24361 Via Santa Clara
Mission Viejo CA 92692
(949) 837-9061
mountainoutin@cox.net

Conclusion: **Alternative #1 (no build)** P-22-1

Supporting reasons:

1. Significant improvements to I-5 have been made recently, including construction of auxiliary lanes and a re-building of the La Paz interchange. Demolition and replacement of these improvements before the service life has been reached is a poor use of Taxpayer dollars. P-22-2

2. There is no dispute that traffic congestion in the area surrounding the proposed improvement zone is worsening with the growth of population in the area. Minor modifications proposed for I-5 do not address congestion issues in the long term. P-22-3

3. Improvements of traffic flow on principal roads in the region would provide effective alternate routes to I-5 for local traffic, reducing demand for I-5. Such improvements should include co-ordination of traffic signals to improve traffic flow; addition of additional left and right turn pockets at major intersections; modification of traffic signals to allow left turns on a solid green (yielding to oncoming traffic) in addition to the current green arrow) such as are in use in many cities throughout the USA (and a few here in Orange County). P-22-4

4. Work with the various cities and jurisdictions to implement #3 above including transfer of Measure M funds to the projects described.

5. Review other ways to mitigate traffic issues in I-5,
   a. improvement of the Metrolink rail line (add second track San Juan Capistrano to Oceanside) to allow for additional train service, including extending "Coaster" commute train service from Oceanside to Irvine. P-22-5
   b. Review public transit service. Coordinate bus schedules with Metrolink service. Add service from the Irvine Transportation Center to Orange County Airport and the commercial center surrounding the airport. (currently there is no scheduled public service from South County to the airport!)

Conclusion: The most effective use of the limited Measure M funds to mitigate current and projected congestion on I-5 in South Orange County is to improve transportation alternatives to I-5. P-22-6

1.6.22 P-22 – Rolland Graham

P-22-1

The commenter's preference for Alternative 1 (No Build) has been documented as part of the public record and considered in the decision making process.

P-22-2

Previous improvements to I-5 and associated interchanges within the Study Area were included in the traffic analysis when determining the project need. This analysis found that the improvements described in Chapter 1 as part of the Build Alternatives are necessary to reduce congestion and increase safety within the Study Area. Although improvements to the I-5/La Paz Road interchange were completed recently, reconstruction at this interchange as part of this project would occur between 2018 and 2022.

P-22-3

As described in Chapter 1, additional general purpose lanes, auxiliary lanes, and HOV lanes, as well as improvements to Study Area interchanges are proposed as part of the Build Alternatives. Please refer to Response to Comment P-6-1 regarding the positive impacts of the proposed project on congestion and delay.

P-22-4

Improvements to the arterial roadway network such as those cited in the comment are all effective measures for improving traffic flow and increasing vehicular capacity for local trips, but they do not meet the project purpose as a stand-alone alternative. Those improvements also improve access to regional facilities such as the I-5. Transportation Systems Management (TSM) elements will be included in the project Build Alternatives. These elements include: ramp metering, auxiliary lanes, turning lanes, traffic signal coordination, and bicycle and pedestrian improvements. Additionally, the project Build Alternatives will consist of TDM elements, as they will provide travel time savings, operating cost savings, and increased travel reliability. The proposed project provides a benefit for longer trips such as commuter trips and inter-regional trips that do not utilize the arterial roadways.

P-22-5

Please refer to Response to Comment P-21-1 regarding TDM strategies considered as part of the PA/ED phase. The Long Range Transportation Plan prepared by OCTA includes planned light rail facilities in the County. Additionally, Measure M2

includes money for transit improvements. Additional train service is under the purview of Metrolink.

P-22-6

Please refer to Response to Comment P-22-5 regarding alternative strategies considered in the PA/ED phase.

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P-23

From: Greg Peterson
To: D12 5Widening@DOT
Subject: Why can"t the Country IMPROVE the highway - instead of just widen it?
Date: Monday, September 30, 2013 12:36:01 PM

My comments on the IS/EA:

It is a fact that Orange County would benefit from additional traffic lanes in the I-5 Widening Project Area. Planned properly, the project could improve traffic AND improve the quality of the communities impacted by the project. P-23-1

Sadly, I feel no genuine effort is being made to reduce the negative impacts of this project. More traffic means more noise… but according to the "reports" the noise is acceptable. More vehicles means more pollution… but according to the "reports" the pollution is acceptable. Wider freeway means more visual blight… but according to the "reports" the blight is acceptable. P-23-2

I've gone to the public hearings and heard NUMEROUS citizens expressing their concerns. But these extensive comments are barely given lip service in the planning documents. I am writing this email directly so that it will be part of the public record, since I no longer trust that my verbal feedback will be accurately captured and presented.

Rather than planning that attempts to prove that the negative impacts of this project all fall within "acceptable ranges", I would challenge the planning group to design a project that has NO negative impact on the community. It COULD be done. However it is currently NOT the focus.

Is our future as a community to continually get louder, uglier, and more polluted – just so long as we stay below some arbitrarily established "safety guideline"? P-23-3

Greg Peterson
25971 Nellie Gail Road
Laguna Hills, CA 92653

1.6.23 P-23 – Greg Peterson

P-23-1

The commenter's support for the proposed project has been documented as part of the public record and considered in the decision making process.

P-23-2

Please refer to Response to Comment P-10-1 regarding noise abatement and Response to Comment P-9-1 regarding air quality.

A *Visual Impact Assessment* was completed for the proposed project using the guidance outlined in the publication *Visual Impact Assessment for Highway Projects* published by the Federal Highway Administration (FHWA) in March 1981. Additionally, a three-dimensional wire frame model using Computer Aided Design and Drafting (CADD) files was used to create the most accurate representation of the proposed project. As described in the *Visual Impact Assessment* and summarized in Section 2.6, Visual/Aesthetics, although long-term visual impacts would result from the permanent alteration of the visual environment, the overall visual effect of the Build Alternatives is considered to be moderate, as the project would not substantially alter the visual character or quality of the project corridor. Measures VIS-1 through VIS-3 would avoid and/or minimize permanent visual effects of the Build Alternatives.

P-23-3

One public meeting and one public hearing have been held for this project, with the meeting held at the beginning of the project before environmental analysis occurred, and the hearing held upon release of the draft environmental document for public comment. In both instances, the public was encouraged to provide written comments to ensure their inclusion in the planning process. Additionally, local agencies such as the City of Laguna Hills have been actively involved throughout this phase of the project to provide input and speak on behalf of the public. These various forms of information have been taken into consideration in the design of the proposed project.

It is the aim of Caltrans and OCTA to provide a project that has the most limited impact to the community as possible while still meeting the purpose and need of the Study Area, which in this case, is relieving congestion and increasing capacity. Several avoidance, minimization, and/or mitigation measures have been included in this MND/FONSI that represent a commitment from Caltrans and OCTA that the future impact (short- and long-term) to the Study Area communities be minimal. The

established guidelines followed for the technical reports and summarized in the environmental document come from a variety of reputable sources (FHWA, EPA, and South Coast Air Quality Management District [SCAQMD], etc.), which Caltrans and OCTA do not consider arbitrary.

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P-24

From: Matthew Tomanek
To: D12 5Widening@DOT
Subject: I5 Widening Concern/Comment
Date: Thursday, October 03, 2013 7:48:48 AM

I have family in the impacted area of this proposed improvement project and hope lessons learned from similar past projects will be applied. Please consider a thorough utilities evaluation of the impacted areas to prevent some of the project delays and associated cost increases that are inevitable during these sorts of projects. Safety of the workers and local residents is also compromised if the subsurface utilities are not accurately designated and identified before construction. Thank you for your consideration. P-24-1

Matt Tomanek

1.6.24 P-24 – Matthew Tomanek

P-24-1

A thorough utilities assessment was completed and potential utility protection and relocations are identified in Table 2.4-1 of the IS/EA. A more detailed evaluation will be conducted as part of final design to ensure that all utilities potentially impacted are identified, and appropriate measures are put in place to avoid disruption and ensure safety of workers and local residents.

P-25

From: Bob Pingle
To: D12_5Widening@DOT
Subject: I5 widening options
Date: Friday, October 04, 2013 9:54:52 AM

I would like to recommend you choose Option #3 as outlined in the Saddleback Valley News Friday, 10/4/13. This adds two additional general lanes each direction along with other additions. P-25-1

Thank you

Bob Pingle
Lake Forest, CA 92630

1.6.25 P-25 – Bob Pingle

P-25-1

The commenter's preference for Alternative 3 has been documented as part of the public record and considered in the decision making process.

P-26

P.O. BOX 3654
LAGUNA HILLS, CA 92654

PHONE • 949 • 678 • 0567
EMAIL • cecil@cfpi.biz

CF PROMOTIONS INC

October 4, 2013

To whom it may concern,

My name is Cecil Fraser and I own the company Swan Pools located at 24512 Bridger Rd., Lake Forest 92630.

I have operated our business out of this facility since 1984, approximately 30 years. During that period we have risen from the 10th largest swimming pool company in Orange County to the largest swimming pool company in Orange County. This has been accomplished in part by our optimal location. At the time of site selection I was interested in a site that was south of the 5/405 junction and north of Alicia Parkway – – which at the time was the main road to the North American Aviation facility in what is now the GSA complex. This was the stretch of freeway that would have the highest traffic volume and subsequently the greatest possible marketing value of any location in South Orange County. Our facility was inappropriately built as a single-family residence but never used for that purpose. Once converted for business use it has been able to reach its ultimate value.

During the freeway widening project approximately 15 years ago, Caltrans had an interest in taking my property. Through some simple negotiations it was possible for us to come to an agreement that allowed us to maintain and continue the use of our property. The current proposal seems to have the same possibility. In my discussions with one of your engineers at the display in Mission Viejo it appears that there is only interest in approximately 2 feet of my property for the length of the freeway boundary. My current building sits approximately 4 feet from my side of the current freeway wall. This suggests three possibilities:

1. Move the wall the required 2 feet and leave my building untouched. P-26-1
2. The centerline of the freeway is currently planned to move some distance to the southwest. I would propose that you move it an additional 2 feet thereby negating the need to touch my property at all. Keep in mind that the opposite side of the freeway from my facility is composed of a planter and Avenida De La Carlotta.
3. Do a partial take on my property and allow me to rebuild my building in the remaining space.

In summary, I fully understand and agree with the need to build the freeway system that accommodates our growth. The alternatives that I am suggesting here do nothing to impact the success of that effort. It is my sincere desire to have substantive talks with the appropriate personnel at the appropriate time. P-26-1

Sincerely,

Cecil Fraser

Owner at 24512 Bridger Rd.

1.6.26 P-26 – Cecil Fraser

P-26-1

The topographic mapping utilized to develop the proposed project geometrics is preliminary in this project phase. During this preliminary engineering (or PA/ED) phase, we have conservatively assumed relocation will be required for properties where there are impacts to buildings as shown in the topographic mapping. Detailed design and ground survey will take place during final design that will identify the exact location of existing buildings with respect to the proposed widening. As a result, once this detailed information is available, the impacts to buildings would be re-evaluated to determine whether relocation continues to be required. If relocation is required, all activities will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Relocation resources shall be available to the displacees in compliance with Title VI and State statute.

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P-27

From: GFloydguy@aol.com
To: D12_5Widening@DOT
Subject: attn.: Gabriela Jauregui
Date: Friday, October 04, 2013 11:09:38 AM

To: Gabriela Jauregui

From: Floyd W Geissler

I find it hard to believe you have found there "it will not significantly affect the guality of the the envriornment" I strongly disagree. I as a home owner, I consider myself part of the enviornment. I am likely the most effected home owner of this entire project. I have one of the nicest rear gardens in Orange County having some $350,000.00 invested value in the rear alone. I fail to see how this statement can be made when no one has set foot on my property. The last widening project did 225,000.00 in damage to my rear garden. I still have to live with ill conceived landscaping and break dust. The pool requires 2 times a day cleaning which the pool maintenance companies have quoted $850.00 per week to perform. The pool equipment must be run 24/7. This causes very large electrical bills. I can not install solar panels because they would need to be washed daily to remove the brake dust for them to function. I measured the noise level using an instrumention tape recorder before and after the last project. there was a gain of +12 db + or - 3 db (the Honeywell 5600 used is a 3bd device). All of this after I had written in advance warning that this type of damage was likely to happen. P-27-1 P-27-2

I find it had to believe Caltrans can be so cavalier with tax payer money not even look at this before making a no environmental impact statement. P-27-3

I am now 77 years old and am not interested in again losing 5 years of use and spending it in court.

Floyd W Geissler

25382 Maximus St.
Mission Viejo ca. 92691
949-837-4426

gfloydguy@aol.com

1.6.27 P-27 – Floyd Geissler

P-27-1

Advanced modeling used for the analysis performed for the project, including traffic, air quality, and noise/vibration is able to determine impacts to properties within the Study Area without having to be physically present. As part of the *Air Quality Assessment*, the Caltrans Emissions Factors (CT-EMFAC) model was used to estimate particulate matter less than 10 microns in diameter (PM_{10}) and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) emissions related to mobile exhaust, tire wear, and brake wear for each project alternative under the existing future 2045 years. The CT-EMFAC model does not estimate re-entrained road dust emissions. Therefore, re-entrained road dust emissions were calculated using the empirical equation found in Section 13.2.1 of the EPA's *AP-42 Compilation of Air Pollutant Emission Factors* (updated in January 2011). Emissions were calculated using traffic data within the Traffic Report and supplemental data. It was found that the proposed project would not result in adverse effects related to long-term air quality and would not contribute to adverse long-term air quality effects. While there will be emissions from construction operations, these are short-term and would cease upon construction completion. Section 2.13 of the IS/EA includes measure to reduce both fugitive dust and vehicle emissions.

P-27-2

The current noise study evaluates the cumulative noise impact of the previous projects as well as the current project. Based on current noise evaluation guidelines and monitoring/modeling results, the noise study has identified potential noise impact areas, and feasible and reasonable noise abatement measures have been recommended. The existing noise level was monitored, and the future noise level was modeled near the commenter's residence. Table 2.14-7 shows that the existing noise level in this area varies between 65.0 and 68.4 dBA.

P-27-3

Please refer to Response to Comment P-23-3 regarding environmental evaluation.

From: jlemaster@octa.net
To: D12 5Widening@DOT
Subject: I-5 Public Comments
Date: Friday, October 04, 2013 2:08:21 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 10/4/2013 2:08:36 PM.

Field	Value
Full Name	Roger
Address	21662 Paseo Casiano
City	Mission Viejo
State	California
Zip	92692
Business Phone	
Home Phone	949-215-2544
Email Address	rogerfrances@yahoo.com
Comments	My comment concerns plans to expand the I-5 in south O.C. found in the "Register", Saddleback Valley News, on Friday OCT 4 2013. I will "vote" for Option Three because the costs seem to be worth it (over Option 2). Drivers need this added widening to prevent slow traffic which seem to increase each year and more ease at interchangers.
Be kept informed of the project.	true

P-28-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 10/4/2013 2:08:36 PM.

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1.6.28 P-28 – Roger Frances

P-28-1

The commenter's preference for Alternative 3 has been documented as part of the public record and considered in the decision making process.

P-29

From: Jerry Zomorodian
To: D12 5Widening@DOT
Cc: musielskilaw@yahoo com
Subject: Driveway on 26001 La Paz Road
Date: Friday, October 04, 2013 2:37:40 PM

We attended the public hearing on 9/25/2013in Mission Viejo. We spoke with three people, one from Caltrans and two from OCTA. The concern we have is that if they want to close the southern most driveway on 26001 La Paz Road, Mission Viejo as it will create a deadlock in our business. The majority of our business uses the southern most driveway on 26001 La Paz Road, Mission Viejodriveway as an egress. Traffic will not be able to get out and it will result in a total loss to our business. There is plenty of land on the left side of the entry of the freeway to make adequate distance between the ingress to the freeway, and to the southern driveway. P-29-1

We strongly protest to the closing or relocating of the driveway as it will result in very expensive reparation. The losses to our business will be significant. It will be impossible for us to continue business with this driveway removed. If they proceed then there will be a permanent taking and substantial loss of business We urge you to have an engineer, prior to final approval of the plans, meet us at the site to discuss the importance of this driveway as it pertains to the survival of our business.

Jerry Zomorodian
President
All American Petroleum Corp
Phone:(714)781-2999

1.6.29 P-29 – Jerry Zomorodian

P-29-1

Please refer to Response to Comment P-18-1 regarding closure of the driveway off La Paz Road.

P-30

From: rbhosmer
To: D12_5Widening@DOT
Subject: I5 widening
Date: Saturday, October 05, 2013 1:36:31 PM

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as mission viejo residents living between oso & la paz, we have already suffered thru nighttime noise (if the wind's blowing the wrong way we had to close our windows to sleep) and the maddening traffic disruptions for the oso overpass widening & off ramp restructuring AND the very recent rework of the la paz exit ramps. P-30-1

now you're telling us that all the work (=$$$$) at la paz is going to get torn up to do something different? that seems a waste.

also, there has already been an extra lane added between the first northbound exit at alicia & el toro road. there are more than enough lanes there already. i hope you don't mean to add another??? and there are more than enough northbound AND south bound lanes from the 73 to crown valley.....where we are also several years into massive traffic issues caused by widening & so forth. P-30-2 P-30-3

crown valley's problems were caused by ladera ranch. the projected crush of traffic in the future will be because of sendera. i do hope that developer funds will be paying for this?! we've got to stop letting these developers grab their billions with no regard to the costs of infrastructure which are born by all of us. P-30-4

as for the freeway...if you build it, they will come! i'd just as soon tell the world the traffic is terrible down here...then maybe they WON'T come! P-30-5

the avery interchange has needed major restructuring for a long time & that part sounds good. also, the exit lanes at el toro both north AND south bound. P-30-6

tell swan pools we'll miss them! that always was so quirky. to have a business right smack in a residential neighborhood.

Barbara Hosmer

25672 Cervantes Ln

Mission Viejo 92691

1.6.30 P-30 – Barbara Hosmer

P-30-1

Please refer to Response to Comment P-22-2 regarding reconstruction of the I-5/La Paz Road interchange. Also, please refer to Response to Comment P-20-2 regarding the previous La Paz Road construction implemented as a part of Measure M1.

P-30-2

In the current configuration, the northbound I-5 consists of five general purpose lanes, one HOV lane, and an auxiliary lane. The project proposes to add one high-occupancy vehicle (HOV) lane in this area, by extending the second HOV lane from the Alicia Parkway interchange area to where it currently begins north of the El Toro Road undercrossing.

P-30-3

The traffic study that was approved for the proposed project indicates that there is existing and/or forecasted congestion in the peak periods on I-5 between the SR-73 and the Crown Valley Parkway interchange. As a result, the project proposes to add one general purpose lane in each direction from Avery Parkway to Crown Valley Parkway to alleviate this congestion.

P-30-4

Please refer to Response to Comment P-15-1 regarding growth. Funding for the proposed project comes from the Orange County Measure M program, which voters first approved in 1990 and approved again with a renewal in 2006. Measure M is a 0.5-cent sales tax that funds major transportation projects such as the proposed project.

P-30-5

Please refer to Response to Comment P-15-1 regarding growth.

P-30-6

The commenter’s support of the project improvements at Avery Parkway and El Toro Road has been documented as part of the public record and considered in the decision making process.

P-31

From: Gregory Dohm
To: D12 5Widening@DOT
Cc: Greg DOHM
Subject: Comments on I-5 Widening Project
Date: Sunday, October 06, 2013 4:52:24 PM

To whom it may concern,

I would encourage you to include the impact of a completed 241 Toll Road on the growth projections for I-5 traffic through this corridor, especially during peak travel times.

I have to believe such a bypass would draw significant volumes of traffic off the I-5 corridor. P-31-1

I realize the 73 Toll Road has been below projections and do not think this should justify not considering-projecting possible impact of a 241 completion in your cost equation.

The 241 has been much more successful from the startup, even though it has yet to be completed.

Thank you for your consideration of my views.

Regards, Greg Dohm

1.6.31 P-31 – Gregory Dohm

P-31-1

Please refer to Response to Comment P-3-2 regarding the SR-241 toll road extension to I-5.

P-32

From: john dusch
To: D12 5Widening@DOT
Subject: Comments on I-5 project - Option 2 is best - No need to inflate the needs
Date: Sunday, October 06, 2013 8:23:43 PM

Comments regarding I-5 widening project

Option 2 is best. There is no need to inflate the project. The residents near the I-5 would be adversely impacted by an overzealous, overbuilt project if option 3 were implemented. P-32-1

John Dusch

1.6.32 P-32 – John Dusch

P-32-1

The commenter's support of Build Alternative 2 and opposition to Build Alternative 3 has been documented as part of the public record and considered in the decision making process.

P-33

October 7, 2013

Honorable Rhonda Reardon, Mayor
City of Mission Viejo
200 Civic Center
Mission Viejo, California 92691

VIA HAND DELIVERY

RE: Interstate 5 Widening Project from State Route 73 to El Toro Road - Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment

This letter is being concurrently sent to the California Department of Transportation (Caltrans) and to the Orange County Transportation Authority (OCTA) for inclusion in the environmental review record for the "Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment – I-5 Widening Project from State Route 73 to El Toro Road" (IS/EA) and has been transmitted to those agencies within the time period specified therein. Although addressed to Mayor Reardon, both Caltrans and OCTA should assume that this correspondence is also being addressed to their attention and should be considered in the manner specified in accordance with the provisions of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

Dear Mayor Reardon:

Robert Frost's proverb *"good fences make good neighbors"* was never more true.

We are 25-year residents of the City of Mission Viejo (City) and reside in the Madrid Fore neighborhood located north of Oso Parkway (Oso) and east of the Interstate 5 (I-5) Freeway. During that quarter century, traffic along the I-5 Freeway has increased substantially. Our once much quieter neighborhood now suffers 24-hours of noise intrusion from the nearly 300,000 average annual daily traffic (AADT) traveling along the I-5 Freeway between Oso and La Paz.

While disagreeing with both the premise that increasing the number of travel lanes along the freeway will reduce congestion and the determination that the proposed "Interstate 5 Widening Project" is eligible for processing through a "mitigated negative declaration" (MND) and "finding of no significant impact" (FONSI) rather than an "environmental impact report" (EIR) and "environmental impact statement" (EIS), if the impacts of the proposed project can be effectively mitigated, this letter neither expresses opposition to that project nor advocates for one of the two "build" alternative over the other. However, if no or ineffective environmental mitigation is offered, as appears to be the case herein with regards to the attenuation of traffic noise, the City Council is encouraged to oppose the proposed project until such time as the health and safety concerns being voiced by the community's residents and business interests have been fully addressed and it can be demonstrated that the noise impacts of the freeway's existing operation and proposed expansion reduced to a less-than-significant level. P-33-1

What this letter seeks to address is: (1) the more fundamental quality of life and health-damaging consequences of the ceaseless noise generated by freeway traffic; (2) Caltrans' and the OCTA's obligations to mitigate the impacts of their actions upon proximal sensitive receptors; (3) the threshold standards being used by Caltrans and the OCTA for the purpose of assessing the "significance" of the project's environmental impacts; and (4) the EA/IS' inability to present comprehensive, effective, and timely mitigation for the project's noise impacts. Under the provisions of CEQA, the "Guidelines for the Implementation of the California Environmental Quality Act" (State CEQA Guidelines), NEPA, and the Council on Environmental Quality's (CEQ) "Regulations for Implementing the Procedural Provisions of the National Environmental Policy P-33-2

Act" (CEQ Regulations), absent more comprehensive mitigation and a firm commitment for the implementation of those corrective and compensatory measures, the proposed project is ineligible for processing through a MND/FONSI and is required to prepare an EIR/EIS. P-33-2

With regards to noise, the IS/EA appears structured to support an argument that there neither exists a need for nor an agency-borne obligation concerning comprehensive acoustical mitigation in the City. From a real-world perspective, both my exterior and interior (with windows open) spaces and, I would suspect, that of nearly all City residents living close to the I-5 Freeway is nearly unusable over the drone of freeway traffic. If those agencies believe that increasing freeway capacity, adding more vehicles to the State Highway System, and increasing vehicle miles traveled (rather than promoting public transportation) is the panacea for regional mobility, then they must concurrently embrace the obligation for protecting those parties (i.e., proximal residents, institutions, and businesses) who disproportionally suffer the adverse and ongoing impacts of that action. While commuters may fight traffic during limited morning and afternoon hours and have the luxury to select alternative travel routes when conditions become intolerable, affected residents, school children, and others must constantly live with noise intrusion without any prospects of reprieve. P-33-3

As background, I am an environmental professional and business owner with technical expertise in both CEQA and NEPA. In this instance, I am writing as a concerned long-term resident and seeking from the City a strong and forceful voice with regards to what now appears Caltrans' and OCTA's unwillingness to rectify traffic noise not only attributable to the proposed freeway improvements but also with regards to the noise the existing freeway itself now generates. If, as is likely the case, freeway improvements are inevitable, then this letter serves as a request for the City Council to champion the plea of all affected City residents for effective noise mitigation along the entirety of the I-5 Freeway frontage within this community. If Caltrans and the OCTA chose to be insensitive noisy neighbors, then all the remedies available to the City need to be utilized to rectify those conditions so that the freeway's operators and the affected public can mutually coexist in relative harmony. The means for achieving that coexistence are readily available and can be implemented with relatively little cost, namely the implementation of more comprehensive, effective, and timely noise abatement measures (e.g., construction of a more complete noise barrier) than that now proposed or analyzed in the EA/IS. P-33-4

As stipulated in the State CEQA Guidelines: "CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible" (14 CCR 15021). With regards to environmental protection, neither Caltrans nor the OCTA ever seek to ask or answer the question "what can be done to produce the greatest level of noise attenuation for those sensitive receptors located near the freeway expansion?" The primary focus of the acoustical analysis presented in the EA/IS is not on the minimization and mitigation of environmental impacts (as mandated under CEQA) but on avoiding and sidestepping any responsibility for instituting corrective actions. P-33-5

As indicated in the IS/EA and as is illustrated in Figure 2.1-1 (Existing Land Uses) therein: "Areas immediately adjacent to I-5 within the City of Mission Viejo north of the I-5/Oso Parkway interchange consist primarily of residential development with limited institutional land uses" (p. 2.1-1). The residential neighborhood in which we resident, extending from Oso on the south to Mission Viejo High School on the north is illustrated in Figure 2.14-1 (5 of 10 and 6 of 10) in the EA/IS and is inclusive of Receptors (R) 58 through 111. What consultation and communications have occurred with those receptors in order to elicit their options concerning "reasonableness"? P-33-6

For the purpose of this correspondence, each of us are "impacted receptors" (defined as recipients that have a traffic noise impact) and/or potentially "benefitting receptors" (defined as potential recipients of an abatement measure that receives a noise reduction of at least 5 dBA) (23 CFR 772.5). To the best of our knowledge, despite obligations for direct notification, neither our opinions nor those of our neighbors were solicited by Caltrans or by the OCTA with regards to the noise abatement opportunities that should be considered (e.g., construction of a continuous soundwall along the entirety of the City's frontage) and/or the acceptability of the noise abatement measures now being proposed. If not otherwise clear, we wish to express our household's support for the proposed sound barriers (soundwalls) and opposition in those instances where the IS/EA alleges that the inclusion of noise barriers (where studied) is deemed to be "infeasible" or "unreasonable." While seeking to create the perception that the noise analysis was thorough, in reality, numerous "impacted receptor" and corresponding barrier locations and other possible noise attenuating solutions (e.g., structural insulation) were never considered – thus producing an inadequate and incomplete environmental assessment. As presented, the acoustical analysis fails to provide for informed decisionmaking and the conclusions presented in the EA/IS are unsupportable under CEQA. P-33-6

Health Studies

Noise is not just a nuisance but a public health and safety hazard. Most studies equating noise to public health relate to occupational health and have resulted in the imposition of stringent workplace regulations promulgated by the United States' Occupational Safety and Health Administration (OSHA) and California's Division of Occupational Safety and Health (Cal/OSHA). OSHA and Cal/OSHA have concluded that exposure to continuous or intermittent noise is both hazardous and detrimental to the health and safety of exposed individuals. Would not it be logical to conclude that residents might also be susceptible to those same negative consequences?

There are numerous studies examining noise from a broader community-based perspective. As indicated in Attachment 1 (Noise Exposure and Public Health): "Exposure to noise constitutes a health risk. There is sufficient scientific evidence that noise exposure can induce hearing impairment, hypertension and ischemic heart disease, annoyance, sleep disturbance, and decreased school performance. For other effects such as changes in the immune system and birth defects, the evidence is limited." Even where clear scientific evidence of a direct correlation regarding certain impairments may currently be "limited," the presence of a suspected connectivity between noise and significant adverse health consequences should induce public agencies to err on the side of the protection of public health and safety. Actions taken or not taken today will have long-term environmental consequences affecting a substantial number of City residents both now and extending long into the future (e.g., the EA/IS assumes a 2045 horizon year). P-33-7

A full reading of the attached article is required but the report notes that "epidemiological studies have shown that school children when exposed to high levels of traffic noise show impairments in performing cognitive tasks." In the workplace, noise pollution is generally a problem once the noise level is greater than 55 dB(A). With regards to sleep disturbance, the authors note that "sleep is a recovery process essential for humans to function properly. In addition, people like to sleep and usually consider a good night's sleep to be an important aspect of an individual's quality of life. Deleterious health effects are expected from chronic noise-induced interference with sleep, as it impacts the functions of sleep such as brain restoration and provision of a period of respite for the cardiovascular system" (emphasis added).

The World Health Organization (WHO), in "Burden of Disease from Environmental Noise" (2011) (http://www.euro.who.int/__data/assets/pdf_file/0008/136466/e94888.pdf), reports that "1.8% of heart attacks in high income European countries are attributed to traffic noise levels higher than 60 dB. Cardiovascular disease is the largest cause of death in the EU [European Union] and accounts for approximately 40% of healthcare budgets. A 2008 report. . .found that noise from rail and road transport is linked to 50,000 fatal heart attacks every year in Europe and 200,000 cases of cardio-vascular disease". As further indicated therein: "In 2009, WHO published the 'Night Noise Guidelines for Europe.' This publication presented new evidence of the health damage of nighttime noise exposure and recommended threshold values that, if breached at night, would threaten health. An annual average night exposure <u>not exceeding 40 dB outdoors</u> is recommended in the guidelines" (emphasis added). P-33-7

California Environmental Quality Act

Under CEQA, "feasible" is defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors" (14 CCR 15364). Additionally, "effects" and "impacts" constitute both "direct or primary effects which are caused by the project and occur at the same time and place" and "indirect or secondary effects which are caused by the project and are later in time or farther removed in distance" (14 CCR 15358). None of those terms include a qualifier that some minimum number of individuals need to be affected or that some dollar threshold exists, such that project's directly or indirectly affecting a lesser number of individuals or requiring a greater capital expenditure can thus escape an obligation to mitigate that project's deleterious environmental consequences.

Here, an operator already producing known and measureable environmental degradation wants to expand its current operations, thus incrementally increasing the air, noise, and other pollutants associated with the existing use. The operator asserts no obligation for correcting, reducing, rectifying, or mitigating the impacts of the existing use and alleges that its only responsibilities under CEQA (and all other applicable statutory and regulatory requirements) relate solely to the incremental increase associated with the proposed action. Under a false premise of "logical termini," similar freeway improvements are or have been initiated along connected freeway segments but those actions are asserted as unrelated to the project and environmental analysis here at hand. Although the construction and operational impacts may be nearly identical, some of those connected and like-kind projects have been held to different environmental standards and have predicted the need for more comprehensive environmental review, including the preparation of an EIR/EIS. Similarly, connected projects proposing like-kind improvements (i.e., the addition of a second carpool lane) have been represented not as high-occupancy vehicle (HOV) lanes, as represented herein, but as high-occupancy toll (HOT) lanes. It should, therefore, not come as a surprise to City residents when, at some not too distant date, Caltrans declares an intent to convert the proposed second HOV lane into a HOT lane. P-33-8

Arguably, in this case, the "project" which must be considered is the totality of the freeway's impacts and not merely the incremental contribution to the existing degradation produced by multiple lane additions. By the nature of its operations and failure to previously impose environmental controls over those operations (e.g., previously erect sound barriers), Caltrans operates a polluting land use which has been allowed to continue in an unregulated manner. Caltrans' previous ability to avoid or minimize earlier mitigation-related obligations formulated to

protect the health and welfare of proximal sensitive receptors can no longer be excused and must now become an integral part of the debate concerning what responsibilities that agency's now must bear and what actions they must now take in response thereto. To accept anything less constitutes a failure of leadership. Caltrans' decisionmakers are not elected officials and, as a result, exhibit a single-minded viewpoint (e.g., vehicle throughput at the lowest possible cost; alleged public benefit to the detriment of private interests) which appears non-responsive to the concerns of a larger public constituency, inclusive of non-users (non-vehicle owners).

CEQA differs from its federal counterpart. Under CEQA, public agencies have a greater responsibility to mitigate the impacts of their actions and shall not rely on cost considerations alone as the basis for rejecting otherwise feasible mitigation. Under CEQA, "alternatives" and "mitigation measures" are held to be synonymous. Although it relates directly to projects requiring an EIR, the State CEQA Guideline specify that "because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, <u>or would be more costly</u>" (emphasis added) (14 CCR 15126.6). The clear Legislative intent is that public agency's cannot hide behind "costs" as the single basis for determining the feasibility or reasonableness of corrective actions and alternative remedies. P-33-8

"Mitigation" is defined as: (1) avoiding of the impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (3) rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (4) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and/or (5) compensating for the impact by replacing or providing substitute resources or environments (14 CCR 15370). Mitigation must be "enforceable through permit conditions, agreements, or other legally-binding instruments" (14 CCR 151216.4). Sole reliance upon "costs" is noticeably absent from that definition and those requirements.

Absent from the EA/IS is any information that the cost of additional noise abatement and any impacts resulting therefrom would make the totality of the proposed project infeasible; however, Caltrans and the OCTA repeatedly use cost, measured in term of "reasonableness allowance," as the basis for rejecting otherwise feasible noise abatement measures.

City of Mission Viejo is a "Responsible Agency" under CEQA

If, as alleged by Caltrans and OCTA, the "proposed project is consistent with State, regional and local plans" (p. 2.1-57), there would exist no need to amend those plans to accommodate the proposed project; however, as mitigation for the project's land-use impacts, the EA/IS states: "If a Build Alternative is selected for implementation, the Orange County Transportation Authority (OCTA) will request the County of Orange and the cities along the alignment of Interstate 5 (I-5) to amend their respective General Plans to reflect the selected Build Alternative and the modification of land use designations for properties that will be acquired for the project that are not currently designated for transportation uses" (EA/IS, Measure LU-6, p. 2.1-58). P-33-9

As a result, the City is being asked to amend the "City of Mission Viejo General Plan" (General Plan) to accommodate the proposed project. Under CEQA, a general plan amendment is a

discretionary action. Because the City is being directed to undertake a discretionary action in furtherance of the proposed project, its status is elevated to that a "responsible agency" under CEQA (14 CCR 15096 and 15381) and must, therefore, take independent, objective action (including independent compliance with CEQA). If a "responsible agency" believes a CEQA document prepared by another agency to be deficient, it has an obligation to voice those concerns or forfeit future opportunities to pursue other actions.

Pursuant to Section 15096(d)-(e) of the State CEQA Guidelines:

> (d) Comments on Draft EIRs and Negative Declarations. A Responsible Agency should review and comment on draft EIRs and Negative Declarations for projects which the Responsible Agency would later be asked to approve. Comments should focus on any shortcomings in the EIR, the appropriateness of using a Negative Declaration, or on additional alternatives or mitigation measures which the EIR should include. The comments shall be limited to those project activities which are within the agency's area of expertise or which are required to be carried out or approved by the agency or which will be subject to the exercise of powers by the agency. Comments shall be as specific as possible and supported by either oral or written documentation.
>
> (e) Decision on Adequacy of EIR or Negative Declaration. If a Responsible Agency believes that the final EIR or Negative Declaration prepared by the Lead Agency is not adequate for use by the Responsible Agency, the Responsible Agency must either: (1) Take the issue to court within 30 days after the Lead Agency files a Notice of Determination; (2) Be deemed to have waived any objection to the adequacy of the EIR or Negative Declaration; (3) Prepare a subsequent EIR if permissible under Section 15162; or (4) Assume the Lead Agency role as provided in Section 15052(a)(3).

P-33-9

If not already, it is requested that the City because an active participate in the current CEQA process and forcefully express and convey to Caltrans and to the OCTA the desire of City residents for more comprehensive, effective, and timely noise mitigation, focusing specifically on the project's noise impacts on those "sensitive receptors" located along and proximal to the I-5 Freeway's frontage. As a "responsible agency," the City can legitimately assert that the project is obligated to comply with the City's requirements and standards including, but not limited to: (1) attainment of the City's 60 dBA standard relating to "acceptable" noise levels affecting residential receptors; (2) use of a 3 dBA threshold standard as the basis for determining whether a noise impact is significant and thus warranting mitigation; and (3) the imposition of corrective actions to ameliorate existing exceedance conditions.

City of Mission Viejo General Plan

As indicated in the General Plan, it is the adopted goal of the City to "minimize noise impacts from transportation noise sources" (Noise Element, Goal 1). In response to that goal, as indicate in the Noise Element, it is the City's policy to:

P-33-10

- Require the construction of noise barriers to mitigate sound emissions where necessary or where feasible. Actively participate in the development of noise abatement plans for freeways, tollroads, and railroads (Policy 1.1).
- Employ noise mitigation practices, as necessary, when designing future streets and highways, and when improvements occur along existing road segments. Mitigation measures should emphasize the establishment of natural buffers or setbacks between the arterial roadways and adjoining noise-sensitive areas (Policy 1.2).
- Control truck traffic routing to reduce transportation-related noise impacts to sensitive land uses (Policy 1.3).
- Continue to enforce the noise standards of the State Motor Vehicle Code and other state and federal legislation pertaining to motor vehicle noise (Policy 1.4).
- Require that development generating increased traffic and subsequent increases in the ambient noise level adjacent to noise-sensitive land uses provide appropriate mitigation measures (Policy 1.5).
- Require sound walls, berms and landscaping along freeways, tollroads, and railroad rights-of-way to beautify the landscape and reduce noise, where appropriate (Policy 1.7).
- Require the inclusion of design features in development and reuse/revitalization projects to reduce the impact of noise on residential development (Policy 2.2).
- Reduce the impacts of noise-producing land uses, activities, and businesses on noise-sensitive land uses (Policy 3.1).

As further indicated therein: "City noise programs focus on reducing the impact of transportation noise on the community. The most effective ways to mitigate transportation noise impacts on the community are through utilization of a design review process, and implementation of the California Environmental Quality Act. Identification potential impacts from transportation noise will occur during these stages of the development process and mitigation measures may be required to meet City noise standards identified in this Element. The most common ways to reduce transportation-related noise impacts are through site planning, landscaping, use of natural topography, and the design and construction of noise barriers" (Noise Element, p. 14). P-33-10

The above referenced policies are neither acknowledged in nor is the proposed project consistency with those policies. In what appears purely promotional (rather than factual), Caltrans and OCTA allege that "the No Build Alternative would not be consistent with applicable goals and policies identified in the General Plans for the County of Orange and the Cities of San Juan Capistrano, Mission Viejo, Laguna Niguel, Laguna Hills, Laguna Woods, and Lake Forest" (EA.IS, p. 2.1-41). With regards to "Build Alternatives 2 and 3," Caltrans and the OCTA further allege that "the proposed project is consistent with State, regional, and local plans" (EA/IS, p. 2.1-57). Both statements are false, misleading, and disingenuous.

As indicated in the City's "Mission Viejo General Plan Program EIR" (March 2013) (General Plan PEIR), when the existing ambient noise level is above 60 dBA, a "significant" change in the environment (predicating the preparation of an EIR or imposition of mitigation measures) is described as being any increase which is "+3 dBA or greater" (General Plan PEIR, Table 3.4-6). Under Caltrans' methodology, noise has to increase by at least 12 dBA (400 percent greater) in order to be deemed "significant."

A doubling of traffic volumes along most roadways produces a 3 dBA CNEL increase. Traffic volumes would have to increase 400 percent to produce a 12 dBA increase. A 12 dBA threshold

criteria is, therefore, inappropriate for a freeway repair or expansion project because that criteria will rarely be reached. A 12 dBA standard does not serve to protect the environment, rather it only serves to rationalize the avoidance of the initiation of a more substantive environmental review and public outreach process.

In Mission Viejo, a "significant" increase in noise is considered to be 3 dBA and not the 12 dBA now being used by Caltrans and the OCTA. If a "3 dBA" standard were to be utilized in the EA/IS, a substantially different analysis and mitigation requirements would then exist. If an operator wants to do business in this community, should not that operator be held to this community's standards? Is that same "professional courtesy" (e.g., allowing an applicant to set its own performance standards) equally applied to the private sector?

Based on these adopted policies, the proposed project (absent comprehensive mitigation) is inconsistent with both the General Plan and General Plan PEIR. Independent of the public-entity nature of the sponsor, projects which are inconsistent with the General Plan and found to be in contradiction to the General Plan PEIR should not be supported by the City Council until such time as those projects and their accompanying environmental analyses can be deemed consistent therewith. In this case, there are available remedies that, merely for cost considerations and to the substantial detriment of City residents, the project sponsor chooses not to pursue. P-33-10

Since individual property owners lack the political clout to dissuade Caltrans and the OCTA from taking actions detrimental to or to encourage those agencies to take actions benefiting a large number of City residents, it is hoped that the City Council will serve as our advocates not in opposition to the proposed project but in support of a more comprehensive environmental assessment and more effective and broader application of noise abatement measures

Caltrans' Traffic Noise Analysis Protocol

With regards to the "feasibility" and "reasonableness" of noise abatement measures, Caltrans' own "Traffic Noise Analysis Protocol for New Highway Construction, Reconstruction, and Retrofit Barrier Projects" (May 2011) (Protocol) notes:

- **Feasibility**. "The feasibility of a noise abatement measure is an engineering consideration. Noise abatement must be predicted to <u>reduce noise by at least 5 dB at an impacted receptor</u> to be considered feasible from an acoustical perspective. . .[N]oise abatement measures that provide noise reduction of more than 5 dB are encouraged as long as they meet the reasonableness guidelines covered below. Feasibility may be restricted by various factors, including topography, access requirements for driveways, presence of local cross streets, underground utilities, other noise sources in the area, and safety considerations. For safety reasons the Caltrans 'Highway Design Manual' states that noise barriers should not exceed 14 feet in height (measured from the pavement surface at the face of the safety-shape barrier) when located 15 feet or less from the edge of the traveled way" (emphasis added) (Protocol, p. 15). P-33-11

- **Reasonableness**. "The determination of the reasonableness of noise abatement is <u>more subjective</u> than the determination of its feasibility. . .[R]easonableness is the combination of social, economic, and environmental factors considered in the evaluation of a noise abatement measure. The overall reasonableness of noise abatement is determined by the

following three factors. [1] The noise reduction design goal. [2] The cost of noise abatement. [3] The viewpoints of benefited receptors (including property owners and residents of the benefited receptors). . .The Project Development Team will make the proposed noise abatement decisions that will be incorporated into the final environmental documentation" (emphasis added) (Protocol, pp. 15-16).

.

"Cost considerations in the reasonableness determination of noise abatement are based on a 2011 allowance per benefited receptor of $55,000. A benefited receptor is a dwelling unit that is predicted to receive a noise reduction of at least 5 dBA from the proposed noise abatement measure. A receptor can be a benefited receptor even if it is not subject to a traffic noise impact. The 2011 allowance of $55,000 is based on the published Caltrans annual Construction Price Index (CPI). In the future, the base allowance will be adjusted based on the most recent annual CPI found on the Caltrans web site. If the engineer's cost estimate for a given proposed noise abatement measure is less than the total reasonableness allowance for all benefited receptors, the noise abatement measure is considered to be reasonable from a cost perspective. The total reasonableness allowance for a given barrier is the reasonableness allowance per receptor multiplied by the number of benefited receptors for that barrier" (Protocol, pp. 16-17). "The cost calculation of the noise abatement measure must include all items appropriate and necessary for the construction of the noise abatement measure" (Protocol, p. 17).

As specified, in part, in Paragraph (d) in Section 772.13 (Analysis of Noise Abatement) in Title 23 of the Code of Federal Regulations: "A highway agency has the option of justifying, for FHWA approval, different cost allowances for a particular geographic area(s) within the State, however, the highway agency must use the same cost reasonableness/construction cost ratio statewide. . .[A] highway agency has the option to also include the following reasonableness factors: Date of development, length of time receivers have been exposed to highway traffic noise impacts, exposure to higher absolute highway traffic noise levels, changes between existing and future build conditions, percentage of mixed zoning development, and use of noise compatible planning concepts by the local government. No single optional reasonableness factor can be used to determine reasonableness" (emphasis added). P-33-11

Between the Second Quarter of 2011 (ending June 30, 2011) and the Second Quarter of 2013 (ending June 30, 2013), the "price index for selected highway construction items" increased from "85.2" to "129.8" (http://www.dot.ca.gov/hq/esc/oe/hist_price_index.html). Nowhere in the IS/EA is that nearly 58 percent increase in the CPI acknowledged or considered in the "reasonableness" assessment. If the increased CPI were applied to the supposed $55,000 base allowance, in the Second Quarter of 2013, the reasonableness allowance would be about $83,800 per receptor. As such, absent the inflationary index and the presentation of site-specific cost estimates for each of the barriers included in Table B (Summary of Reasonable Noise Barriers) in the "I-5 Widening Project Noise Abatement Decision Report" (NADR), no factual conclusion (other than a veiled effort to avoid mitigation) concerning reasonableness can be or has been presented.

One of the inherent fallacy in Caltrans' "reasonableness allowance" is based on the false assumptions that costs are universal throughout California and that the cost for land, materials, and labor is the same in Orange County as it is in the most rural area of the State. As indicated

in the FHWA's "Highway Traffic Noise: Analysis and Abatement Guidance" (December 2011): "Some highway agencies may choose to implement a tiered approach to cost reasonableness based on regional cost differences within the State. This approach conforms to the regulations. However, the ratio of the unit cost of abatement and the reasonable cost per residence must remain the same statewide. Highway agencies must ensure that the reasonable cost of abatement is justified based on actual construction costs and clearly communicate all reasonableness criteria to the public" and "the report must provide thorough documentation of the feasibility and reasonableness analysis" (emphasis added).

Absent from the IS/ES is any information supporting the $55,000 per receptor reasonableness allowance (e.g., "The cost consideration for residential land uses in the reasonableness determination of noise abatement is based on a 2011 allowance per benefitting unit/receptor of $55,000," EA/IS, p. 2.14-182), including any documentation serving as a factual basis for this analysis and the purported FHWA's concurrence therewith. It does not appear that any opportunities ever existed for the public to review, consider, or submit comments to Caltrans regarding the formulation and application of the "reasonableness allowance." Key factors, asserted to be fundamental to the environmental analyses have not been revealed, are unverifiable, were formulated absent opportunities for peer review, and were generated outside the perusal of the affected public.

It is noted that a different "reasonableness allowance" was applied by Caltrans and the OCTA in the "Draft Environmental Impact Report/Environmental Impact Statement – San Diego Freeway Improvement Project, Orange and Los Angeles Counties, California, SCH #2009091001" (May 2012). Since the two freeway segments abut, the use of different criteria for adjoining freeway segments in Orange County raise consistency issues with regards to the manner in which Caltrans and the OCTA define, evaluate, and selectively apply "reasonableness" to the consideration of noise abatement. Does Caltrans deem it "reasonable" for affected near-source residents to suffer health impairment from unmitigated traffic noise?

P-33-11

Similarly, with regards to construction cost estimates, without any substantiation, the EA/IS notes that "the estimated noise barrier construction cost for each barrier under each scenario was developed by the project engineer" (EA/IS, p. 2.14-189). Other than a raw conclusion, the project engineer's estimates have neither been presented nor have any unit factors and applicable quantities been identified to allow for independent validation.

Since the size, type, and location of sound barriers can each affect the barrier's cost, the itemized cost of each of those components needs to be clearly identified (e.g., masonry costs, footing costs, structural excavation and backfilling costs, berm embankment costs, demolition costs, clearing and grubbing costs, landscaping costs, cost of traffic controls, storm water pollution prevention program costs, easement costs, and other relevant costs). At a minimum, a unit price must be assigned to each construction component based on historic and localized construction costs for each component. No such unit pricing is, however, presented in the EA/IS. As such, no factual basis is presented for the construction cost estimates presented therein. Notwithstanding the absence of a supported base allowance and verifiable construction cost estimates, the EA/IS presents unsupported conclusions which cannot be independently verified regarding preliminary determinations of each barrier's reasonableness.

Because CEQA does not consider "cost" to be an appropriate basis for environmental mitigation, the reasonableness allowance has no relevancy under CEQA and: (1) does not accurately represent higher material, labor, and land costs in Orange County; (2) no methodology is presented in support of alleged noise abatement costs; (3) is not supported by any factual information in the environmental review record; and (4) does not examine noise mitigation more holistically (e.g., examining the area between Oso and La Paz as a single assemblage of "impacted" and "benefitting" receptors and the soundwall as a continuous unit for that larger geographic area). P-33-11

Additionally, as specified in the State CEQA Guidelines: "CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible" (emphasis added) (14 CCR 15021). CEQA does not specify a minimum performance standard for mitigation; however, as specified in Caltrans' "Project Development Procedures Manual" (June 18, 2009), "any noise barrier considered under this program must provide a minimum of 5 dBA noise reduction" (Section 30-16). Similar language can be found in the EA/IS (e.g., "A minimum reduction of 5 dBA must be achieved at an affected receiver for the noise abatement measure to be considered feasible," EA/IS, p. 2.14-181). If a barrier only produces 4.9 dBA in noise abatement, Caltrans will deem that barrier to be "infeasible". Similarly, the EA/IS further notes that "in accordance with the Caltrans Traffic Noise Analysis Protocol, each noise barrier must provide at least 7 dBA of noise reduction at one or more benefited receivers to be considered reasonable. Therefore, if the estimated noise barrier construction cost exceeds the total reasonable allowance or was not predicted to provide at least 7 dBA of noise reduction at one or more benefited units/receptors, the noise barrier is determined to be not reasonable" (EA/IS, p. 2.14-189). If a barrier only produces 6.9 dBA of attenuation, Caltrans will deem that barrier to be "unreasonable." Contrary to CEQA, it appears that many of Caltrans' self-imposed procedures are designed to rationalize the avoidance of noise mitigation.

Caltrans' Highway Design Manual

"CEQA was intended to be interpreted in such a manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language" (14 CCR 15003).

Section 1101.2(3) (Noise Abatement) of Caltrans' "Highway Design Manual" states that "the Department will attempt to locate, design, construct, and operate State highways to minimize the intrusion of traffic noise into adjacent areas. When this is not possible, noise impacts may be attenuated by the construction of noise barriers. Construction of noise barriers must result in at least a 5 decibel reduction of noise at the affected receptors. In instances when the construction of noise barriers is either not desirable or possible, consideration may be given to mitigating traffic noise by other means, including providing adjacent residents with double-paned windows and/or building insulation. FHWA approves such extraordinary abatement on a case-by-case basis. The FHWA area engineer should be consulted early in the project delivery process" (emphasis added). P-33-12

In those instances where a soundwall is deemed to be unreasonable purely for cost reasons, absent from the EA/IS is any discussion or analysis of "other means" of noise attenuation. For example, each "impacted" and "benefitting" receptor in the City could be provided $55,000 for added insulation and sound-proofing. In lieu thereof, Caltrans' and OCTA now merely assert that since the soundwall costs more than the reasonableness allowance, they do not have to do

anything. That failure to earnestly attempt to "minimize the intrusion of traffic noise into adjacent areas" is contrary to the requirements outlined in Caltrans' "Highway Design Manual."

As further specified, in part, under Section 1102.5 (Alternative Noise Barrier Designs) therein: "Every noise barrier that is constructed as a part of new highway construction or reconstruction, or along freeways as a part of the Community and School Noise Abatement Programs, requires at least two alternative designs. . .The contract plans should include masonry block as the state design and at least one of the approved soundwall systems listed in the Specification 51-56 (51SWAL)" (emphasis added). While acknowledging that different wall heights have been examined, with the sole exception of height variations, no other alternatives (e.g., berms, non-masonry walls, soundproofing of affected residences) have been presented. The analysis of a single mitigation strategy (i.e., block walls) is inconsistent with both Caltrans' methodology and CEQA obligations. P-33-12

Noise Study Report / Noise Abatement Decision Report

As indicated in the EA/IS, "potential long-term noise effects under the No Build Alternative would be solely from traffic noise" (EA/IS, p. 2.14-47). As such, existing traffic in the predominant noise source in the general project area.

The NSR states that "traffic noise impacts result from one or more of the following occurrences: (1) an increase of 12 A-weighted decibels (dBA) or more over their corresponding existing noise level, or (2) predicted noise levels approach or exceed the Noise Abatement Criteria (NAC)" (NSR, p. vii). For residential uses (Activity Category B), the NAC is 67 dBA Leq. As indicated in Table 2.14-7 (Existing Traffic Noise Levels) in the EA/IS, with regards to R-58 through R-111, a total of 11 receptors (28 benefitting units/receptors) are already exposed to freeway noise in excess of that NAC. Vehicles traversing the I-5 Freeway right-of-way (ROW) are the major contributors to those excesses.

In the future, as indicated in Table 2.14.9 (Predicted Traffic Noise Levels) in the EA/IS, with regards to R-58 through R-111, under Alternative 2, a total of 15 receptors (unspecified number of benefitting units/receptors) and under Alternative 3, a total of 18 receptors (unspecified number of benefitting units/receptors) will exceed the NAC. With regards to R-58 through R-111, post-project noise levels of 71.4 dBA (R-85) are reported. Nonetheless, the modeling indicates not even a single 3 dBA increase. From that, Caltrans and OCTA assert that there are no significant impacts attributable to either the freeway's existing operation or its proposed expansion (i.e., "Caltrans has prepared an Initial Study for this project, and pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment," Proposed Mitigated Negative Declaration, p. 1). P-33-13

Construction noise levels will reach 91 dBA at the nearest residential receptors (e.g., "The worst-case composite noise level at the nearest residence during grading would be 91 dBA," EA/IS, pp. 2.14-47 and 2.21-14) and "between the hours of 9:00 p.m. and 6:00 a.m. [noise] will not exceed 86 dBA Leq(h) at a distance of 50 feet" (EA/IS, Measure N-1, p. 2.14-198). OSHA requires protection from noise exposure when sound levels exceed 85 decibels (e.g., an employer must implement a hearing-conservation program at or above 85 dBA) and administrative and engineering controls must be used if workers are exposed to noise levels greater than 90 decibels.

Caltrans, however, asserts that residential exposure to 86 dBA during late-night hours (typically when people are sleeping) is not significant and offers no mitigation or other remedies for affected receptors.

From the City's perspective, based on its 60 dBA "acceptable" standard for residential use, the more important variable is the number of receptors that are now exposed to traffic-related noise levels in exceedance of community standards. As indicated in Table 2.14-7 (Existing Traffic Noise Levels), with regards to R-58 through R-111, as represented, a total of 38 receptors (82 benefitting units/receptors) are presently exposed to freeway noise above levels deemed "acceptable" by the City. In the future, as indicated in Table 2.14.9 (Predicted Traffic Noise Levels), with regards to R-58 through R-111, under Alternative 2, a total of 44 receptors (unspecified number of benefitting units/receptors) and under Alternative 3, a total of 46 receptors (unspecified number of benefitting units/receptors) will exceed City standards. No acknowledgement or acceptance of direct responsibility for those existing exceedance conditions is presented in the EA/IS and no recommendations for minimization or mitigation have been presented by Caltrans and the OCTA. P-33-13

When the proposed second HOV lane is subsequently converted to a HOT lane (an anticipated project consequence which is never revealed in the EA/IS but decipherable from other concurrent and contiguous freeway improvement projects now being processed by Caltrans and the OCTA), by fragmenting the freeway into segmented components and ignoring the affects that the freeway's existing operation already has on the affected environment, Caltrans and the OCTA will again argue that any resulting increase remains below a level of significance and no noise mitigation is, therefore, required.

It can be surmised that, absent the freeway, noise levels at each of those receptors would be substantially lower than is now evident; therefore, it is Caltrans' activities which have and which will continue to adversely affect sensitive receptors located near the freeway. Caltrans, however, accepts no responsibility for those noise impacts and does not seek to utilize the opportunities generated by the proposed action to remedy the conditions that Caltrans, through its earlier actions, is solely responsible for produced and perpetuating. It is, therefore, disingenuous for Caltrans to limit its consideration of noise abatement responsibilities to only those properties experiencing a 12 dBA noise increase attributable to the incremental increase in traffic associated with the proposed lane additions. P-33-14

As indicated in the "Noise Abatement Decision Report" (NADR), included in Appendix H of the EA/IS, with regards to R-58 through R-111, only three soundwalls were deemed to be "reasonable" by Caltrans. Referencing Table B (Summary of Reasonable Noise Barriers) therein, only in the event that the ROW for those soundwalls "is donated" by the abutting property owners are the following barriers deemed to be "reasonable" by Caltrans and the OCTA (i.e., if there is no offer of donation by even a single property owner, the three identified barriers will then deemed to be "unreasonable): P-33-15

- "Noise Barrier No. 41: A 416 ft long barrier located along the property line on the NB side of I-5 between Oso Parkway and La Paz Road was analyzed to shield Receptors R-61 and R-62" (see Figure 4 [8 and 10 of 24], NADR) (EA/IS, p. 2.14-190; NSR, p. 197).

- "Noise Barrier No. 49: A 283 ft long barrier for Alternative 2 and a 500 ft long barrier for Alternative 3, located along the property line on the NB side of I-5 between Oso Parkway

and La Paz Road, was analyzed to shield Receptors R-65 and R-66 (Alternative 3 only)" (see Figure 4 [10 of 24], NADR) (EA/IS, p. 2.14-191; NSR, p. 197).

- "Barrier No. 63: A 1,947 ft long barrier, located along the property line on the NB side of I-5 between Oso Parkway and La Paz Road, was analyzed to shield Receptors R-82, R-84 through R-86, R-87 (Alternative 3 only), R-88, R-89, and R-100" (emphasis added) (see Figure 4 [10 and 11 of 24], NADR) (EA/IS, p. 2.14-191; NSR, p. 197).

The document indicates that "Barrier No. 63" is only 1,303 feet long (not 1,947 feet as represented) and only achieves a 5.2 to 10.3 dBA noise attenuation (EA/IS, p. 2-14-191; NADR, pp. 147 and 150). It is, therefore, uncertain whether "Barrier No. 63" will be subsequently eliminated because it may fail to "provide at least 7 dB of noise reduction" (EA/IS, p. 2.14-189). Similarly, it is unclear how a 1,947-foot long barrier became a 1,303-foot long barrier and which receptors have been adversely affected by the elimination of 644 feet of the proposed soundwall. Additionally, when multiple wall heights are deemed "reasonable," absent any declaration as to which wall height is being proposed for implementation, it is not possible to understand the precise nature of the project being considered and/or the specific actions which have been formulated by the project proponent to address the project's environmental effects.

As such, since ROW dedication is required from all abutting property owners (e.g., "Noise Barrier Nos. 4, 19a, 41, 49, 63, 79, 115, 117, and 676 would be located outside of State ROW, along private property lines," EA/IS, p. 2.14-197), there exists no assurance that any soundwalls east of the I-5 Freeway between Oso and La Paz will, in fact, be construction as part of the proposed project. Even if soundwalls are included in both the EA/IS and NADR, the document warns that "the design of noise barriers presented in this report is preliminary and has been conducted at a level appropriate for environmental review and not for final design of the proposed project. If pertinent parameters change substantially during the final project design, preliminary noise barrier designs may be modified or eliminated from the final report" (emphasis added) (NSR, p. 212). Since those actions will likely occur after the completion of the environmental process and outside the view of the affected public, it is evident that, in fact, no actual commits have been made by Caltrans and the OCTA with regards to noise abatement.

The following "avoidance, minimization, and/or mitigation measure" is presented in the EA/IS: "Prior to completion of Project Approval/Environmental Documentation (PA/ED), the noise barriers that are determined to be feasible and reasonable and were preferred by affected homeowners and residents, will be considered for construction. The final decision on construction of the noise barriers will be made during final design" (emphasis added) (EA/IS, Measure N.2, p. 2.14-199). As such, based on both the absence of a firm commitment (e.g., "consideration" is not evidence of a binding obligation) and the potential for subsequent "modification or elimination," Barrier Nos. 41, 49, and 63 fail to satisfy CEQA's requirements for mitigation (i.e., "enforceable through permit conditions, agreements, or other legally-binding instruments," 14 CCR 151216.4). Absence enforceable mitigation, noise impacts upon affected receptors remain significant and the proposed project is ineligible for processing through the use of a MND under CEQA. P-33-15

Under CEQA, effectuation of "mitigation measures" must be closely monitored in order to ensure both the implementation and efficacy of the measures formulated for the purpose of environmental protection. Because they are identified as "avoidance, minimization, and/or mitigation measures" in the EA/IS, it is likely that none of the actions so cited are, in fact, "mitigation measures" which

will be subject to independent verification. Absence monitoring and verification, including public oversight, there are no assurance that any of the "avoidance, minimization, and/or mitigation measures" will either be implemented or enforced. P-33-15

By asserting that the proposed project is eligible for processing through a MND (CEQA) and FONSI (NEPA), opportunities for public participation have been unreasonably restricted. What has been presented for public consideration is a defective analysis with inadequate environmental controls. The EA/IS presents insufficient and unenforceable noise mitigation for those City residents, institutions, and businesses located in close proximity to the I-5 Freeway. While it is acknowledged that the City cannot regulate vehicle noise, it can and must, however, regulate noise intrusion no matter the source and notwithstanding the purported urgency of the represented need. P-33-16

Acting individually, the City's residents will likely be unable to dissuade Caltrans and the OCTA from continuing their current course of action and current environmental process without the active and aggressive assistance of the City Council. Should the "I-5 Freeway Widening Project" be approved, we look to the City's courage and the City Council's leadership to ensure that comprehensive, effective, and timely noise abatement become mandatory project components. P-33-17

Benjamin Franklin's adage *"act in haste, repent in leisure"* suggests that a greater opportunity for critical review of the EA/IS is required before Caltrans and the OCTA formally consider this project. P-33-18

Sincerely,

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Noise Exposure and Public Health

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Exposure to noise constitutes a health risk. There is sufficient scientific evidence that noise exposure can induce hearing impairment, hypertension and ischemic heart disease, annoyance, sleep disturbance, and decreased school performance. For other effects such as changes in the immune system and birth defects, the evidence is limited. Most public health impacts of noise were already identified in the 1960s and noise abatement is less of a scientific but primarily a policy problem. A subject for further research is the elucidation of the mechanisms underlying noise-induced cardiovascular disorders and the relationship of noise with annoyance and nonacoustical factors modifying health outcomes. A high priority study subject is the effects of noise on children, including cognitive effects and their reversibility. Noise exposure is on the increase, especially in the general living environment, both in industrialized nations and in developing world regions. This implies that in the twenty-first century noise exposure will still be a major public health problem.
Key words: annoyance, cardiovascular effects, children's health, environmental health, environmental noise, hearing impairment, noise exposure, noise metrics, occupational noise, performance. — *Environ Health Perspect* 108(suppl 1):123–131 (2000).
http://ehpnet1.niehs.nih.gov/docs/2000/suppl-1/123-131passchier-vermeer/abstract.html

Noise Exposure and Health

Assessment of the human health risk associated with the presence of a xenobiotic substance in the environment usually follows the relatively simple scheme depicted in Figure 1. The substance occurs in environmental media at certain concentrations, depending on, among other factors, lifestyle, residence time, and dietaty habits, that people may be exposed to this xenobiotic. Any subsequent harm depends on the level of exposure. The modifying impact of exogenous determinants and personal characteristics on the level of exposure and sensitivity with respect to the toxic action usually are not taken into account or are only considered in a standardized way, at least for risk assessment and standard-setting purposes. The data available, often derived from animal experiments and surveys of population behavior, do not allow a more refined analysis.

In the case of the assessment of the health effects of noise exposure, the scheme in Figure 1 is too simple. With the exception of damage to the hearing organ, the exposed organism's reaction to the perception of sound is strongly dependent on the context of the exposure. The effects of noise exposure cannot be understood only by taking mechanisms of toxic action into account. For example, the sounds in a discotheque are music to the dancers but noise to the neighbors. In the first case, the exposure would not be annoying but is expected to contribute to hearing loss; for the neighbors, hearing loss would be improbable, but annoyance would certainly occur. A conceptual model to address the health effects of noise exposure is presented in Figure 2.

The model considers effects on health and quality of life as the outcome of a processing of exogenous determinants or environmental factors—in this case, noise exposure. Exposure, processing, and effect take place within economic and social environments and all are modified by societal factors. Furthermore, lifestyle and concurrent exposure to other factors play a role. An example of the former was given above. An example of the latter is the finding that the perceived presence of the risk of an aircraft crash has been found to augment annoyance (and vice versa) (*1*). This processing of sounds is influenced by the genetic and acquired characteristics of the organism. For example, some people have a specific sensitivity to noise and will be more susceptible to one or all of its effects than other people. Examples of societal factors that determine the adverse effects associated with noise exposure are insulation of houses, noise level-related depreciation of house prices, and individual and societal appreciation of the activities generating the noise.

These insights, as depicted in the model in Figure 2, are not new. On the contrary, it is striking that in the 1960s most of the effects of sound on health and quality of life were already known or at least hypothesized, including the variety of modifying factors referred to above (*2*). In the 1970s the research results were sufficiently reviewed to allow science-based recommendations to be made for policy measures to protect public health (*3–5*). In the last three decades new data have confirmed the earlier insights and, as reviewed here in our present paper, have made more precise assessments of exposure–response relationships and observation thresholds possible. Many of the newer data stem from epidemiologic studies. If politicians had taken a more protective stance in the 1970s—which would have been legitimate on the basis of the then-available data—this review probably would have been superfluous, as new data would not have been published, but also harm would have been avoided.

In this review we emphasize development of insights into the effects of noise exposure on health and quality of life. In accordance with the relevant literature, we use the term noise to represent sounds generated by sources in the environment (indoors, outdoors, at work, etc.); noise is often appreciated negatively. Because several reviews on this subject have been published recently—some by international groups of scientists (*6*)—we refer to original research papers only when necessary for our argument. Furthermore, given our background in environmental health sciences, we also discuss policy instruments for health protection.

Characterization of Noise Exposure

Sound Pressure Level and Sound Level

Sound is a physical phenomenon consisting of alternating compression and expansion of air that propagate in all directions from a source. These alternating compressions and expansions can be described as small changes in pressure around atmospheric pressure. The frequency of the alternations determines the pitch of a sound: a high-pitched tone (e.g., 4,000 Hz) has a squeaking sound; a low-pitched tone (e.g., 200 Hz), a humming sound. The environmental noise sources discussed in this review usually generate sounds within a broad frequency range. Sound pressures, relative to the atmospheric pressure, range from < 20 micropascal to > 200 pascal, a range of 1–10 million. Therefore, in acoustics, the logarithm of sound pressure relative to a reference sound pressure is used as a basis for a sound (and noise) exposure measure: the physical quantity sound pressure level expressed in decibel (dB).

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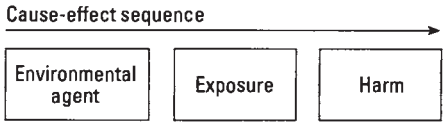

Figure 1. Simple cause–effect chain for the assessment of the health effects of an environmental agent, such as a xenobiotic substance.

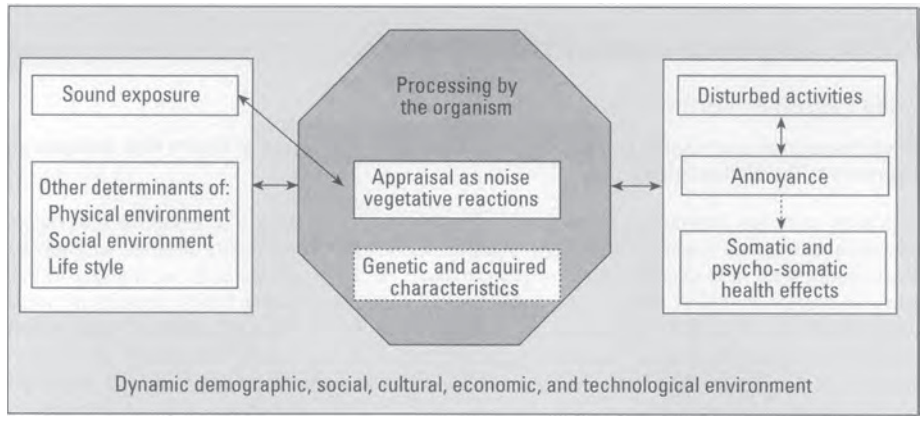

Figure 2. Conceptual model of the interaction of sound with the organism and the occurrence of effects on health and quality of life.

The human hearing organ is not equally sensitive to sounds of different frequencies. Therefore, a spectral sensitivity factor is used that rates sound pressure levels at different frequencies in a way comparable to that of the human hearing organ; this is called A-weighting. The biophysical quantity A-weighted sound pressure level (L) is expressed as dB(A) and is referred to as sound level. Examples of sound levels in some common situations are falling leaves (very quiet), 10–20 dB(A); vacuum cleaner, 55–65 dB(A); location close to a main road or highway, 70–80 dB(A); pop music concerts, 100–110 dB(A).

Equivalent Sound Level and Day–Night Level

Sound level is the basic metric from which other biophysical metrics to specify long-term exposure to noise are derived. Usually a noise metric is assessed on an annual basis. In environmental and occupational situations, sound levels fluctuate with time. From these fluctuating sound levels, the equivalent sound level ($L_{Aeq,T}$) over a period of time, T, is determined from [see (*7*)]:

$$L_{Aeq,T} = 10\log\frac{1}{T}\int_T 10^{\frac{L(t)}{10}}\,dt$$

Common exposure periods T are 24 hr (full day) and 8 hr (work day).

For some environmental health assessment purposes, the day–night level (L_{dn}) is used. This metric is the equivalent sound level over 24 hr with the sound levels during the night (11 PM–7 AM) increased by 10 dB(A). Also a day-evening-night level (L_{den}) is used, which is constructed similarly, such that the sound levels during the evening (7 PM–11 PM) are increased by 5 dB(A) and those during the night (11 PM–7 AM) by 10 dB(A). These adjustment factors of 10 or 5 dB(A) take into account that night-time and evening-time noise are more annoying than day-time noise with the same equivalent sound level.

Because of road, railway, and aircraft traffic noise, most of the urban population in industrialized countries are exposed to outdoor L_{dn} levels of > 50 dB(A). Rural populations usually are exposed to outdoor traffic L_{dn} values of < 50 dB(A). Rough estimates of the percentage of people in Europe living in locations with L_{dn} values > 60 dB(A) vary from 2 to 8%, depending on the country in which they live. For the Netherlands population this percentage is 4%. It is further estimated that 0.6% of the Netherlands population is exposed to traffic noise with L_{dn} values of > 70 dB(A) (*8,9*).

Both in research and in policy, L_{dn} or L_{den} is applied in a specific way: the metrics are used as location-specific quantities to be measured in front of the facade of residential buildings.

Sound Exposure Level

A single noise event is characterized by its sound exposure level. The sound exposure level (SEL) of a noise event, such as the overflight of an airplane or the passage of a truck, is the equivalent sound level during the event normalized to a period of 1 sec (*10*).

Exposure Settings

In this review we discuss the health effects of occupational and environmental noise exposure. Even though noise sources at work are quite divergent, the exposure setting is well defined; i.e., exposure during the execution of occupational tasks. In the living environment not only the sources but also the exposure settings are quite diverse. As mentioned above, a common environmental noise source is traffic. In addition, in industrialized regions industrial noise may affect environmental quality. Another type of noise is neighbor noise, a factor frequently mentioned in surveys on residential satisfaction. Increasingly, people are exposed to noise during recreational activities such as pop music concerts, motor races, and arcade activities; often these types of exposures are undergone consciously or at least taken for granted. In this review emphasis is on chronic environmental noise exposures, particularly those due to traffic and industrial noises. If other sources of noise or exposure settings are meant, this will be mentioned explicitly.

Assessment of Health Effects

The Committee on Noise and Health, an international committee of the Health Council of the Netherlands, in 1994 assessed the health effects of environmental and occupational noise exposure (*6*). It rated the evidence in terms of categories used by the International Agency on the Research of Cancer (*11*) as "sufficient," "limited," "inadequate," or "lacking". The report also presents observation thresholds for those adverse health effects for which sufficient evidence was considered available. The observation threshold for an effect was defined in the report as the lowest noise exposure value at which on average the effect was observed in well-designed epidemiologic studies (*12*). This definition implies that in the course of time the observation threshold of an effect may have to be lowered if supported by new information from epidemiologic studies.

In this review, the 1994 Health Council report (*6*) is considered a starting point. More recent reviews (*13–19*) and papers presented at the November 1998 meeting in Sydney, Australia, of the International Commission on the Biological Effects of Noise (*20*) were used to extend the 1994 evaluation. In general, the more recent reviews and papers (*13–20*) concur well with the conclusions of the Health Council if we take a rating of "inconclusive" (*15,16*) to be equivalent to the Health Council's "limited." With respect to some effects such as ischemic heart disease, hypertension, and congenital defects, there appear to be differences of opinion. This will be further discussed below ("Noise-Induced Stress-Related Health Effects").

In Table 1 information is presented about the adverse effects related to environmental and occupational noise exposure that have been examined in epidemiologic studies. The table is adapted from Table 1 of the 1994 Health Council report (*6*). Changes concern the noise metric in which the observation thresholds for hypertension and ischemic heart disease were originally given (*21*). Also the observation threshold for being awakened

by a single noise event was lowered by 5 dB(A). Finally, we have added that the observation threshold for sleep pattern changes is < 60 dB(A) (expressed in outdoors $L_{Aeq,night}$).

Several health end points are not specific to noise exposure. In fact, in accordance with the conceptual model of Figure 2, factors that apparently modify the effects of noise exposure may also affect health in ways similar to those for noise exposure. Situations exist in which it is difficult to identify primary and modifying factors.

The following sections highlight the main aspects of the data presented in Table 1.

Table 1. Long-term effects related to exposure to noise and classification of the evidence for a causal relationship between noise and effect. The last three columns contain information on the observation threshold of an effect for which the causal relationship with noise exposure (second column) is judged to be sufficient.[a]

Effect	Classification of evidence[b]	Exposure situation	Observation threshold: Metric	Observation threshold: Value (dB(A)	Observation threshold: Indoors/ outdoors[c]
Hearing impairment	Sufficient	Occ	$L_{Aeq,8h}$	75	Indoors
		Env	$L_{Aeq,24h}$	70	Indoors
		Occ unb	$L_{Aeq,8h}$	< 85	Indoors
Hypertension	Sufficient	Occ ind	$L_{Aeq,8h}$	< 85	Indoors
		Env	L_{dn}	70	Outdoors
Ischemic heart disease	Sufficient	Env	L_{dn}	70	Outdoors
Biochemical effects	Limited	Occ			
		Env			
Immune effects	Limited	Occ			
		Env			
Birth weight	Limited	Occ			
		Env air			
Congenital effects	Lacking	Occ			
		Env			
Psychiatric disorders	Limited	Env air			
Annoyance	Sufficient	Occ office	$L_{Aeq,8h}$	< 55	Indoors
		Occ ind	$L_{Aeq,8h}$	< 85	Indoors
		Env	L_{dn}	42[d]	Outdoors
Absentee rate	Limited	Occ ind			
		Occ office			
Psychosocial well-being	Limited	Env			
Performance	Limited	Occ env			
	Sufficient	School	$L_{Aeq,school}$	70	Outdoors
Sleep disturbance, changes in					
Sleep pattern	Sufficient	Sleep	$L_{Aep,night}$	< 60	Outdoors
Awakening	Sufficient	Sleep	SEL	55	Indoors
Sleep stages	Sufficient	Sleep	SEL	35	Indoors
Subjective sleep quality	Sufficient	Sleep	$L_{Aep,night}$	40	Outdoors
Heart rate	Sufficient	Sleep	SEL	40	Indoors
Hormone levels	Limited	Sleep			
Immune system	Inadequate	Sleep			
Mood next day	Sufficient	Sleep	$L_{Aep,night}$	< 60	Outdoors
Performance next day	Limited	Sleep			

Abbreviations: env, living environment; ind, industrial; occ, occupational situation; school, exposure of children at school; unb, unborn: exposure of pregnant mother. [a]The table is adapted from Table 1 of the 1994 Health Council report (6). [b]Classification of evidence of causal relationship between noise and health. [c]Value relates to indoor or outdoor noise assessment. [d]The observation threshold for percentage of highly annoyed persons is about 12 dB(A) lower for environmental impulse noise.

Noise-Induced Hearing Impairment

Hearing impairment is an increase in the hearing threshold level. In the International Standard ISO 1999 (*22*), a hearing handicap is defined as the disadvantage imposed by hearing impairment sufficiently severe to affect one's personal efficiency in the activities of daily living, usually expressed in terms of understanding conventional speech in low levels of background noise. Hearing impairment is also associated with aging as well as as certain diseases, exposure to some industrial chemicals, ototoxic drugs, head injuries, accidents, or factors that are of hereditary origin.

ISO 1999 (*6*) gives a method to estimate noise-induced hearing impairment in populations exposed to continuous, intermittent, or impulse noises during working hours. Noise exposure is characterized by the equivalent sound level over an 8-hr work day ($L_{Aeq,8h}$). Relations are given (for exposure times up to 40 years) between $L_{Aeq,8h}$ and noise-induced hearing impairment at frequencies between 500 and 6,000 Hz. These relations show that noise-induced hearing impairment occurs predominantly in the higher frequency range of 3,000–6,000 Hz, with largest effects observed at 4,000 Hz. With increasing $L_{Aeq,8h}$ and increasing exposure time, noise-induced hearing impairment can also occur at lower frequencies, more specifically at 2,000 Hz. Even with prolonged occupational noise exposure, however, according to ISO 1999 noise-induced hearing impairment does not occur at $L_{Aeq,8h}$ levels of 75 dB(A) and lower. This value is equal to the value specified in 1980 by the World Health Organization (*23*).

Since the method specified in ISO 1999 is the only universally adopted method to estimate occupational noise-induced hearing impairment, attempts have been made to assess whether this method also applies to hearing impairment due to environmental noise, including leisure-time noise. The results of various studies strongly suggest that the ISO 1999 procedure can also be accepted for environmental and leisure-time noise exposures of adults and older children provided the exposures are not too extreme and the exposures are expressed in $L_{Aeq,24h}$ (because exposure during the full 24-hr day is important in this case) instead of $L_{Aeq,8h}$ (*6,23–31*). This implies that exposure to environmental and leisure-time noise with $L_{Aeq,24h}$ values < 70 dB(A) does not cause hearing impairment in the large majority of people (> 95%), even in the case of life-time exposure (*32*). It should be considered, however, that there are no large-scale epidemiologic studies that investigated noise-induced hearing impairment in the general population that support this proposition. Also, data from animal experiments indicate that young children may be more vulnerable to noise-induced hearing impairments than adults (*31*). For impulsive (shooting) noises with $L_{Aeq,24h}$ > 80 dB(A) studies on temporary threshold shifts (*26*) suggest the possibility of an increased risk for impulse noise-induced hearing impairment in adults.

At high instantaneous sound levels, mechanical damage to the outer and the inner ear may occur. Occupational limits for such types of exposures have been set equal to the observation threshold for this effect at a peak sound pressure level of 140 dB (*33*). For adults, it is reasonable to assume that a similar threshold applies with respect to exposure to environmental and leisure-time noise. In the case of children, however, taking into account their habits of playing with noisy toys, peak sound pressure levels > 120 dB may cause mechanical damage to the hearing organ (*31*).

Noise exposure may also result in tinnitus (ringing in the ears). This effect has been observed among teenagers attending pop music concerts and discotheques (*34*). Noise-induced tinnitus may be temporary, lasting up to 24 hr after exposure, or it may have a more permanent character, such as after prolonged occupational noise exposure. Approximately 25% of workers with both noise-induced

hearing impairment and tinnitus consider tinnitus the more disturbing effect (*35*).

The main social consequence of hearing impairment is the inability to understand speech in daily living conditions—a severe social handicap. Even small values of hearing impairment (10 dB averaged over 2,000 and 4,000 Hz and over both ears) may have an effect on the understanding of speech. When the hearing impairment exceeds 30 dB (again averaged over 2,000 and 4,000 Hz and both ears), a social hearing handicap is noticeable.

Psychosocial Effects

Psychosocial effects due to exposure to environmental noise that have been studied in epidemiologic investigations include annoyance, psychosocial well-being, and psychiatric hospitalization. The main psychosocial effect from exposure to occupational noise observed in epidemiologic investigations is annoyance.

Noise annoyance is a feeling of resentment, displeasure, discomfort, dissatisfaction, or offense when noise interferes with someone's thoughts, feelings, or actual activities. It is not yet possible to predict noise annoyance on an individual basis because of the large variety of (partly unknown) endogeneous and exogeneous characteristics that affect annoyance (Figure 2). However, relationships between noise annoyance and noise exposure have been elucidated on a population level together with several effect-modifying factors. Annoyance in populations is evaluated using questionnaires. Exposure–effect relationships have been derived for exposure to the three main types of traffic noise: road, railway, and aircraft. The most recent and comprehensive relationships are shown in Figure 3 (*36*). These relationships pertain to populations chronically exposed to noise at specified levels for periods of more than a year. The effect is given as the percentage of the population highly annoyed by a specific environmental noise. "Highly annoyed" persons are those

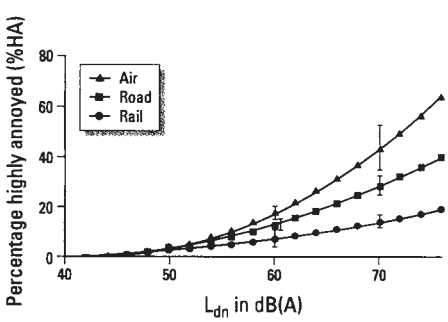

Figure 3. Relationships between the percentage of highly annoyed persons and L_{dn} for air, road, and railway traffic noise. Each curve has been derived by a multilevel analysis of all studies for which original data were available. The vertical bars at 60 and 70 dB(A) represent 95% confidence intervals [bar at 60 dB(A) for road has been *displaced* by 0.5 dB(A) for clarity].

who respond to a question about the degree of annoyance in the worst 25% range of answer categories (*37*). The noise exposure is expressed in L_{dn}, assessed in front of dwellings. The relationships depicted in Figure 3 demonstrate that annoyance induced by the different modes of transport—air, road, and rail—differs at higher exposure levels. Taking into account the statistical variations within and between the various studies, Miedema and Vos showed that aircraft noise is statistically significantly more annoying and railway noise is less annoying than road traffic noise (*36*).

Environmental noise exposure is only one of the factors that contributes to noise annoyance, albeit a significant one. The degree of annoyance experienced by an individual as well as that on a population level in practice can differ considerably from the exposure–response relationships presented in Figure 3 because of the influence of so-called nonacoustical factors. Important nonacoustical effect-modifying factors are anxiety, fear of the noise source, and a feeling that the noise could be avoided. These effect-modifying factors have been identified in multivariate analyses of population data (*19,38–41*). However, general quantitative multifactorial exposure–response relationships have not yet been published.

Much attention has been paid in laboratory experiments to the effects of uncontrollable noise exposure on such things as task performance and annoyance. No relationships have been assessed between general noise annoyance experienced during working hours and noise exposure. Epidemiologic studies show that annoyance in offices is considerable at equivalent sound levels > 55 dB(A). A few studies show that 35–40% of office workers are highly annoyed at noise levels from 55 to 60 dB(A). If the noise source is more or less constant, such as the noise produced by ventilation systems (e.g., fans in computers), the observation threshold for annoyance in offices is lower than a $L_{Aeq,8h}$ value of 55 dB(A). In industrial situations, similar percentages of highly annoyed workers occur at equivalent sound levels > 85 dB(A).

Also at the workplace, nonacoustical factors have a large effect on the actual noise annoyance on an individual and on a population level. These factors include the meaning and information contents of the noise (telephone conversations and discussions between colleagues score high), predictability, avoidability, controllability, task demands, and attitudes toward the noise source.

Noise-related annoyance is widespread in present-day society. Even though annoyance as such is not directly invalidating, there are indications that for sensitive individuals or in cases of concurrent exposure to other environmental agents or socially distressing situations, more serious health effects can occur [see Figure 2 and a recent report of another International Health Council committee (*42*)].

Noise-Induced Stress-Related Health Effects

Reactions to a stressor can be psychologic (feelings of fear, depression, sorrow), behavioral (social isolation, aggression, excessive use of alcohol, tobacco, food, drugs), and somatic (cardiovascular, gastrointestinal, respiratory illnesses) in nature. A large number of laboratory experiments [reviewed by Passchier-Vermeer (*24*)] have shown noise-induced temporal changes in the cardiovascular system. These findings led to several investigations into possible long-term effects associated with noise exposure, e.g., stress-related cardiovascular disorders. In addition, some research has been conducted on the effects of noise exposure on the hormone and immune systems. Effects from occupational or environmental noise on reproduction and development were also studied. High-frequency hearing impairment in babies of mothers exposed to high levels of occupational noise during pregnancy is also considered to be a consequence of a mother's stress induced by exposure to noise during pregnancy (*43*).

Research into the chronic effects of long-term exposure to noise is complicated because cardiovascular and biochemical changes are nonspecific and a number of other factors may also cause these changes; these factors must be controlled for in research projects. In cross-sectional studies it is difficult to obtain appropriate information about past noise exposure, and longitudinal studies are time-consuming and financially draining. Furthermore there are large individual differences in susceptibility. Also, people intervene in their own situations, e.g., by changing jobs [thus contributing to the "healthy worker effect" (*44*)] or by moving from noisier surroundings to quieter places. This may result in "noise proof" populations exposed to the higher noise levels (*45*). Not withstanding these complications, conclusions on the relationship between noise exposure and cardiovascular disease appear possible from meta-analyses of the available epidemiologic data (*6*).

Cardiovascular effects in adults. Epidemiologic environmental noise studies on changes in blood pressure and increased risk for ischemic heart disease in adults are limited mainly to the effects of road traffic noise, with the exception of a Dutch study on the effects of aircraft noise (*46,47*). In general these studies demonstrate no obvious effects from noise exposure on mean diastolic and mean systolic blood pressure, but some effects

were observed in terms of an increase in the percentage of people with hypertension (including those who use medication for hypertension). The observation threshold for hypertension is estimated to correspond to an L_{dn} value of 70 dB(A) for environmental noise exposure. The Health Council of the Netherlands in 1994 (*6*) suggested the same observation threshold for ischemic heart disease (Table 1). The relative risks (compared to populations with low environmental noise exposure) for both hypertension and ischemic heart disease for exposure levels above the observation thresholds are estimated to be about 1.5 (48).

In 1997 a Chinese study (*49*) was conducted among a large sample of more than 20,000 residents in rural communities. The results show that self-reported exposure to noise (unfortunately, exposure was not assessed objectively) is an important determinant of systolic and diastolic blood pressure. Of special interest is the outcome of the recent, unique longitudinal study (*50*) on the effect of road traffic noise exposure on the incidence of ischemic heart disease. In this Caerphilly and Speedwell study, two cohorts of about 2,500 middle-aged men in the United Kingdom were recruited for a study of the predictive power of already-known and new risk factors for ischemic heart disease. Noise measurements were performed in each of the streets where subjects lived. Even in the highest noise exposure class, L_{dn} did not exceed 70 dB(A). Statistical analysis on the relationships between incidence of ischemic heart disease (classified in a standardized way) and environmental noise exposure was controlled for potentially confounding factors. The average annual incidence rate of ischemic heart disease appeared to be 1.4% during the second phase of the study (6 year follow-up; mean age of the men, 57 years). If orientation of the living room and the bedroom, window opening habits, and years of residence over 15 years were taken into account, the relative risk for incidence of ischemic heart disease of the highest exposed group relative to the group exposed to levels between 50 and 55 dB(A) was 1.6, which statistically is not significantly different from 1 at the 5% level ($p < 0.10$). This study fits in with the earlier evaluation that above levels of 70 dB(A) there is sufficient evidence for a noise exposure-related effect, and provides no support for lowering the observation level of 70 dB(A) for ischemic heart disease.

Through analysis of twelve studies on the risk of hypertension among occupational noise-exposed workers, the observation threshold for industrial noise exposure was determined to be at most equal to an $L_{Aeq,8h}$ value of 85 dB(A) (*24*). No data are available for noise exposure in offices. If annoyance and stress-related health effects are associated, and taking into account that the observation threshold for annoyance in offices is much lower than that for industrial situations, we hypothesize that the observation threshold for noise-induced risk for hypertension in office workers is about 30 dB(A) lower than that for hypertension in blue-collar workers. The data in more recent publications on cardiovascular effects from exposure to noise are not in disagreement with the previous findings (*51–53*). However, one must be careful interpreting the results of these studies, as either noise measurements or proper control groups are lacking or the size of populations studied is small.

Only few epidemiologic studies considered biochemical and immunologic effects (*54,55*). More recently, overnight resting levels of epinephrine and norepinephrine levels were assessed in a study of middle-aged women living in Berlin (*56*). Significantly elevated levels of norepinephrine were found in women whose bedrooms faced busy streets (> 20,000 vehicles a day) and epinephrine levels were also higher in women reporting high disturbances of communication and sleep under closed window conditions. Some smaller studies in industrial settings showed the effects of wearing personal hearing protection on urinary excretion of catecholamines (epinephrine and norepinephrine) and cortisol (*57,58*). On the days hearing protectors were worn, urinary catecholamine levels were statistically significantly lower than on days protectors were not worn.

Cardiovascular effects in children. Two early studies (*59,60*) showed an increase in systolic and diastolic blood pressure in children exposed to very high road traffic noise levels or aircraft noise levels. The increases were assumed to be of a transient nature. Recently, Slovakian researchers studied 1,542 children 3–7 years of age in kindergartens (*61*). The authors observed significantly higher systolic and diastolic blood pressures among children in noisy environments [> 60 dB(A)] compared to those among children in quieter environments. Although the study is carefully designed, the possibility that social class has confounded the results cannot be excluded [see also Lercher et al. (*62*)]. In the Munich airport study (*63,64*), schoolchildren were examined during the years Munich airport moved from one location to another. One study location was close to the old airport and another was close to the new airport. The cross-sectional part of the study showed a marginally significant higher systolic blood pressure in children highly exposed at school. Children were matched on socioeconomic characteristics. In the study, neuroendocrine indices of chronic stress (urinary cortisol levels and levels of epinephrine and norepinephrine) were also examined. Overnight resting levels of epinephrine and norepinephrine levels were significantly higher in children exposed to aircraft noise at the old Munich airport compared to control groups. There were no differences in cortisol levels. After the airport was moved, overnight resting levels of epinephrine and norepinephrine rose significantly among children living under the flight paths of the new airport. Again, no effects were observed on urinary cortisol levels. We propose that this subject be studied further.

Effects on the unborn child. Data from older studies suggest that it is possible that when pregnant women are exposed to high levels of aircraft noise [L_{dn} > 62 dB(A)], small reductions in birthweight occur. In a more recent study of 200 Taiwanese women, noise exposure was measured by personal noise dosimeters on three occasions during pregnancy (*65*). Noise exposure was not related to birthweight after adjustment for social class, smoking and alcohol use, maternal weight gain in pregnancy, gender of the child, and duration of pregnancy. Older and more recent investigations do not show statistically significant effects of occupational or environmental exposure of pregnant women to noise in the course of pregnancy and congenital defects of babies, with the exception of high-frequency hearing damage mentioned at the beginning of this section.

Absences due to accident and sickness. Epidemiologic studies suggest that the absentee rate of industrial workers increases when they are exposed to equivalent sound levels during working hours of over 75 dB(A) [CORDIS study, (*66*)] or over 90 dB(A) (*67*). The CORDIS study also showed that the number of accidents increases with rises in equivalent sound levels during working hours. Mortality from injury was studied in more than 20,000 steelworkers (*68*). On the basis of job and workplace information, industrial hygienists estimated noise exposure as high [$L_{Aeq,8h}$ > 95 dB(A)], medium [$L_{Aeq,8h}$ 90–95 dB(A)], low [$L_{Aeq,8h}$ 85–90 dB(A)], and minor. Hearing damage and noise exposure in the high and medium noise classes appeared to be factors that contributed statistically significantly to mortality. The study did not identify the mechanisms behind these findings. Moreover the impact of using personal hearing protectors is unclear. Wearing of hearing protection by workers with substantial noise-induced hearing impairment reduces the possibility of hearing moving sound sources, warning signals, or colleagues shouting and hampers localization of moving sound sources because of reduced capacities to determine the direction of a sound source. Therefore, we hesitate to consider stress as the underlying mechanism for the increase in mortality.

Sleep Disturbance

Sleep is a recovery process essential for humans to function properly. In addition, people like to sleep and usually consider a good night's sleep to be an important aspect of an individual's quality of life. Deleterious health effects are expected from chronic noise-induced interference with sleep, as it impairs the functions of sleep such as brain restoration and provision of a period of respite for the cardiovascular system (*69,70*). In addition to the physiologic aspects of a noise-induced reduction of sleep quality, night-time noise exposure of sufficient intensity (Table 1) is also related to subjectively experienced sleep quality (*71*). Reduced sleep quality also interferes with daytime functioning and can have adverse effects on mood next day and possibly on vigilance and cognitive performance.

Sleep quality can be quantified by subjective and objective methods. The most commonly applied subjective methods are self-reporting using sleep logs or diaries and, to a lesser extent, behavioral observations. The most commonly used objective methods are electroencephalograph (EEG) recordings and actimetry. In field studies on noise-induced sleep disturbance subjects usually wear watchlike actimeters for movement detection at their wrist. Sleep quality may be adversely affected by

- changes in the cardiovascular system;
- changes in sleep pattern such as increased sleep latency time and reduced sleep time because of premature awakening;
- changes in sleep stages from deeper to less-deep sleep;
- increases in motility during the sleep period;
- increases in number of awakenings during the sleep period;
- changes in subjectively experienced sleep quality; and
- changes in the hormonal and immune systems.

Present knowledge about the relationships between awakening and exposure to single noise events indicates that habituation or adaptation occurs. This insight is not new. Cohen stated in 1968 [in Ward and Fricke (*2*)] that

> Aspects of adaptation to noise with regard to sleep disturbance also need to be evaluated. Common experience has found that the city dweller, frequently encountering significant levels of outdoor and indoor noise, becomes accustomed to such exposures and can sleep in their presence. The same individual vacationing in the quiet atmosphere of the country finds it difficult to sleep because of the background of cricket noise. The degree of familiarity or meaningfulness of the noise has a considerable effect on its disturbing quality.

From the epidemiologic studies there appears to be sufficient evidence for a causal relationship between exposure to night-time noise and changes in sleep pattern, sleep stages, awakenings, subjective sleep quality, heart rate, and mood the next day (*6*). Observation thresholds for these effects are given in Table 1. Evidence for other effects is limited (hormone levels and performance the next day) or inadequate (immune system). Exposure–response functions have been derived from field studies for only some of these effects, among others or reduction of subjective sleep quality and increase in number of awakenings during sleep period time. The relationship between the risk of awakening and exposure to night-time environmental noise is established only for single noise events, with exposure specified by the indoor SEL values of the events.

An international group of experts who were convened in 1997 by the Health Council of the Netherlands assessed the observation threshold for awakening due to single noise events at the lower indoor SEL value of 55 dB(A) (Table 1) instead of 60 dB(A) (*8*). This change reflected improved knowledge of the transfer functions of SEL values measured outdoors compared to those measured indoors in some of the underlying studies. Using the relationship between indoor SEL value and the risk of awakening due to single noise events, the expected maximal number of awakenings per year in an adult habituated to night-time noise exposure was estimated as a function of the equivalent sound level during the night. The latter quantity was calculated from the number of single noise events during the night and their indoor SEL values (*8*). The result, which represents a worst-case situation, is depicted in Figure 4.

Apart from the direct effects of night-time noise on sleep, various authors point to the importance of the impact of sleep disturbance on quality of life, including such factors as somatic health and annoyance. Such observations had already been made in the 1950s. Cohen, referring to a paper of Borsky from 1958, states

> Field studies have shown that much greater annoyance results when sleep and rest are disturbed than when only talking or listening activities are interrupted. This finding plus the health significance attributed to rest and sleep suggest that criteria for annoyance be based on noise-induced disturbances to sleep. [in Ward and Fricke (*2*)]

Babisch et al. reported larger overnight changes in epinephrine levels in subjects reporting high disturbance of sleep than in those without severe complaints (*56*). Another study showed that psychosocial well-being of subjects exposed to high levels of road traffic noise was not related to daytime noise exposure but to night-time equivalent sound level in the bedroom and to subjectively experienced sleep quality (*71*).

Although in the 1990s several field studies were started (*72*) or completed (*73–76*), there still is an urgent need for a tested model on sleep disturbance, environmental noise exposure, and secondary effects, in which causal and modifying factors and their mutual relations are assessed.

Effects on Performance

There is overwhelming evidence from laboratory experiments that the presence of uncontrollable noise can significantly impair cognitive performance. Noise can induce learned helplessness, increase arousal, alter the choice of task strategy, and decrease attention to the task. Noise may also affect social performance, mask speech and other sound signals, impair communication, and distract attention from relevant social clues. Adverse acute effects already have been assessed at low levels. Performance of a task involving motor and monotonous activities is sometimes not only is not decreased, but on the contrary, is enhanced.

Two older epidemiologic studies have shown that schoolchildren when exposed to high levels of traffic noise show impairments in performing cognitive tasks (*59,60*). The observation threshold derived from these data is 70 dB(A) (expressed in $L_{Aeq,schoolhours}$). More recently this subject has received renewed attention (*64,77–78*). In the Munich airport study mentioned previously, reading comprehension and long-term memory were impaired in children attending schools located around the old Munich airport and reading comprehension improved after the closing of the airport. However, reading comprehension deteriorated in children subjected to aircraft noise exposure near the new Munich airport. Recently, in the United Kingdom a field study with tests repeated annually was conducted to assess whether the association between aircraft noise exposure and reading comprehension was mediated

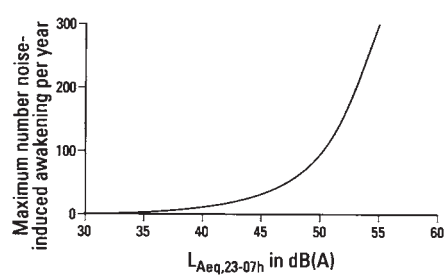

Figure 4. The maximum number of awakenings per year as a function of the outdoors night-time equivalent sound level (*8*).

through sustained attention and whether it was confounded by social deprivation and language spoken at home. The 340 children who participated were about 9 to 10 years of age. They attended a school classified either as a high-noise school [$L_{Aeq,16\,h}$ > 66 dB(A)] or as a low-noise school [$L_{Aeq,16\,h}$ < 57 dB(A)]. There appeared to be a high correlation between the noise at school and the aircraft noise exposure at home. Results show that the average reading comprehension of children attending the high-noise schools was poorer at both measuring times compared with that of children from the low-noise schools. Sustained attention, measured only at follow-up, was poorer in children at the high-noise schools than in children at the low-noise schools. Sustained attention did not play a significant role in explaining the relation between reading comprehension and aircraft noise exposure. However, if adjustments are made for age, main language spoken at home, and social deprivation, the differences in reading comprehension failed to be significant. These results are not in disagreement with the 1994 evaluation (*6*) leading to an observation threshold of 70 dB(A) (expressed in $L_{Aeq,schoolhours}$), but setting the threshold at a lower level does not appear to be warranted. Given the possible long-term consequences of cognitive effects in children, we feel that further research into mechanisms and contributing factors is urgently needed.

Noise Metrics and Noise Limits for Health Protection

Several biophysical quantities to represent noise exposure were introduced in the section "Characterization of Noise Exposure." Exposure quantities are not only of scientific interest, i.e., for recording data and communicating research results; policymakers and risk managers need exposure quantities to judge the necessity of taking protection or mitigation measures and to evaluate the effectiveness of such measures. Criteria for noise exposure metrics to be used in health and environmental policy (*8*) are that they should be *a*) relatively simple to determine or measure; *b*) transparent with respect to exposure–response relationships; *c*) correlated with health effects on a population level; *d*) applicable to all outdoors noise sources; *e*) universal; and *f*) communicative. In practice it appears almost impossible to derive a single metric and at the same time fulfill all these criteria because noise sources, noise characteristics, and exposure situations differ extensively.

One application of noise metrics is to set exposure limits. Because such limits are intended for health protection it is essential that the science policy decisions made to derive the metrics be known to the policymaker.

Noise-Induced Hearing Impairment

Sound exposure measures were already being proposed in the 1960s and 1970s that would apply to a variety of settings and, if an exposure–response relationship were known, would be a good predictor of effects to be expected for any case at the population level. A good example is the equivalent sound level over an 8-hr work period ($L_{Aeq,8h}$), which correlates well on a population level with noise-induced hearing impairment. Confidence in the exposure–response relationships is such that they have been standardized by ISO (*22*). This is reflected in policy debates; such debates focus on the measures to be taken if certain exposure levels are exceeded, and not on the validity of the exposure–response relationships.

A value of $L_{Aeq,8h}$ of 85 dB(A) (sometimes lower) has been almost universally adopted as a limit for unprotected occupational noise exposure, with additional requirements for personal hearing protection above this value (*79*). However, among workers exposed to an $L_{Aeq,8\,hr}$ value of 85 dB(A), some noise-induced hearing impairment will occur. Given such exposure over a lifetime in a job, a hearing impairment at 4,000 Hz of about 5–10 dB is estimated for most workers, although for those persons highly sensitive to noise, noise-induced impairment is considerably greater. This implies that a lifetime of exposure to 85 dB(A) of occupational noise will slightly increase the risk for a hearing handicap in a small proportion of exposed persons.

We concur with the suggestion to use the equivalent noise level over a period of 24 hr, to set targets for the exposure during the full 24-hr day for protecting the hearing of the general population (*80*). Setting such targets appears to be warranted, given the increasing number of noisy activities and exposure duration, such as loud music in cars, the use of portable music cassette and CD players, and the playing of loud computer games at home and in arcades.

Annoyance and Stress-Related Disorders

Metrics such as $L_{Aeq,24\,r}$, L_{dn}, and L_{den} came into use several decades ago (*3,4*) to regulate general annoyance. Recently, an international group of experts convened by the Health Council of the Netherlands again studied specification of a biophysical metric to express noise-induced general annoyance for public health purposes (*8*). The Health Council committee agreed on adjustment factors to be applied to the metrics to account for differences in annoyance related to the tonal and impulse characteristics of noise. The committee extensively debated the choice between L_{den} and L_{dn}. Analysis of available data indicated that for road traffic noise, general annoyance is estimated from L_{den} with smaller confidence intervals than those from the other metrics. However, a decision based on statistical grounds could not be made (*81*). Because from a policy viewpoint, using L_{den} would result in somewhat more plausible protection and mitigation measures, the committee finally expressed its preference for this metric. In Europe L_{den} may become the future noise metric to represent general noise-related annoyance (*82*).

When using the adjusted L_{den} levels, the exposure–response relationships are statistically significantly different for different modes of transport. One might envisage performing a further adjustment that would result in a single relationship for all types of transportation noise and possibly industrial noise; in fact recommendations for such a further integration were made in the Health Council report (*8*). We strongly support such a development that would require standardization of the noise exposure–general annoyance relationship; basic data for reaching that goal are presently available (*36*). The final step to representing general annoyance with a universal noise metric would be a procedure to combine concurrent noise exposures from different sources. This step requires further research, as limited data have been published on exposure to two or more sources at the same time. However, in most practical situations exposure from one source will dominate.

A question arises about whether noise abatement policies based on the adjusted L_{den} are also effective in reducing the prevalence of other noise-induced health effects such as hypertension, ischemic heart disease, and cognitive performance in schoolchildren. Although this appears to be plausible, further study is needed.

A cautionary remark is in order here. As previously indicated, many other factors in addition to noise exposure influence noise-related health effects on a population level. The exposure–response relationships between, for example, the percentage of highly annoyed persons and L_{den} should be used for policy guidance rather than to obtain accurate predictions of effects expected in specific situations. However, the quantitative relationships presented here are the best science has to offer today and appear to be rather robust.

Sleep Disturbance

There appears to be consensus that for protection against sleep disturbance a separate night-time noise exposure metric is required, even though limiting exposure using L_{den} or a similar 24-hr metric would also provide some limitation of night-time noise exposure. The Health Council committee report (*8*) mentioned previously proposed the night-time equivalent sound level (see Figure 4). A

1.6.33 P-33 – Peter Lewandowski

P-33-1

The commenter's statements regarding the significance of existing and future effects has been documented as part of the public record and considered in the decision making process. Section 2.14, Noise, and Appendix A, Section XII, of the IS/EA and the *Noise Study Report* were prepared consistent with the guidelines and procedures in the Noise Protocol. Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

P-33-2

The commenter's statement that the environmental document should be an Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) has been documented as part of the public record and considered in the decision making process. Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

Abatement measures have been identified in the environmental document, and Caltrans is committed to providing all noise barriers that are reasonable and feasible.

P-33-3

The commenter's statements regarding the existing noise conditions adjacent to I-5 have been documented as part of the public record and considered in the decision making process. The *Noise Study Report* was prepared in accordance with the Noise Protocol to identify traffic noise effects and evaluate feasible and reasonable noise abatement measures. All feasible and reasonable noise barriers have been identified and included in the *Noise Study Report.*

P-33-4

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

P-33-5

The commenter's statements regarding the adequacy of the evaluation of noise effects pursuant to CEQA have been documented as part of the public record and considered in the decision making process. Please refer to General Response 1 – Noise, in

Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

P-33-6

For noise barriers that were determined to be feasible and reasonable, noise barrier survey letters were delivered to property owners to determine if they were in favor of the proposed noise barriers. For the noise barriers located on the northbound side of I-5 from Oso Parkway to La Paz Road, where the noise barrier is proposed along the residential property line (instead of the State right-of-way), 100 percent of the property owners must be in favor of the barrier in order for it to be considered for construction. Residents were also provided the opportunity to comment on the IS/EA regarding the abatement measures being implemented by the proposed project.

Three noise barriers (NB Nos. 41, 49, and 63) were analyzed along the northbound side of I-5 from Oso Parkway to La Paz Road. NB Nos. 41 and 49 were determined to be feasible and reasonable. NB No. 63 was determined to be feasible. However, the barrier was determined to be not reasonable. As a result, a shorter length version of the barrier was proposed to determine whether it could be found to be reasonable for the areas with the highest noise levels. It was found that the shorter length version was reasonable and the property owners were surveyed. As previously outlined in Response to Comment P-33-1, the CEQA evaluation of noise impacts was conducted consistent with the Caltrans Noise Protocol.

P-33-7

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

Projected traffic on arterials within the Study Area was taken into consideration in the noise model for the project alternatives. Sound walls would be implemented as discussed in Section 2.14 and Appendix A of the IS/EA. The final locations and design of sound walls as abatement measures would be determined after completion of the public input process as part of the MND/FONSI. In addition, the proposed project would not substantially increase the existing traffic noise in areas where traffic noise would approach or exceed the noise abatement criteria (NAC).

P-33-8

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

The proposed project would add High Occupancy Vehicle (HOV) lanes. Currently, the proposed project does not evaluate the construction of High Occupancy Toll (HOT) lanes. A separate evaluation would be required if HOT lanes were proposed within the Study Area.

P-33-9

The measure noted by the commenter, Measure L-6, relates to properties that may be acquired as part of the proposed project, so that their land use is accurately reflected in the General Plan. The Build Alternatives would require the acquisition of two commercial properties in the City of Mission Viejo. The City of Mission Viejo has been an active member of the PDT and has provided input on the proposed project through its participation.

P-33-10

The City of Mission Viejo's General Plan noise criteria are applicable for projects for which the City acts as the Lead Agency, with approval authority. The City has been an active participant in the PDT for the proposed project and has been involved in the evaluation of the proposed project's environmental effects.

The *Noise Study Report* was prepared in accordance with the Noise Protocol. A CEQA noise impact would occur if the proposed project would substantially increase noise. The *Noise Study Report* utilized the guidance in the Noise Protocol regarding the definition of a substantial increase. It was determined that the proposed project would not substantially increase noise and noise impacts are considered less than significant under CEQA.

P-33-11

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

The *Noise Study Report* for the proposed project was prepared using the Noise Protocol, which uses a cost allowance of $55,000. This cost allowance was developed based on the Caltrans Construction Price Index (CPI). Caltrans must use a consistent

reasonable allowance across the State. The noise study for the San Diego Freeway Improvement Project (SCH No. 2009091001), referenced by the commenter, was prepared under the August 2006 Protocol, which uses a base allowance of $31,000 and is adjusted upward based on a number of factors deemed appropriate by Caltrans. The reasonable allowance is different between the two studies because they were prepared under different versions of the Noise Protocol.

The development of the construction cost estimates is contained in the *Noise Abatement Decision Report* for the proposed project. The development of the construction cost estimate includes all of the necessary items directly related to the construction of the barrier, as required by the Noise Protocol. The noise barrier construction cost estimates were reviewed and approved by Caltrans. An independent validation of the noise barrier construction cost estimate is not required. Also, efforts were made throughout the project limits to meet the reasonableness criteria where possible. One continuous noise barrier was evaluated for the impacted residences located along the northbound side of I-5 between Oso Parkway and La Paz Road and was determined to be not reasonable because the estimated construction cost of the barrier would exceed the total reasonable allowance. The noise barrier was divided into segments to identify reasonable segments of the barrier. Reasonable segments of the barrier are identified when the estimated construction cost of the barrier is within the total reasonable allowance.

P-33-12

As described in the comment, the *Highway Design Manual* does provide for extraordinary abatement on a case-by-case basis. To receive extraordinary abatement, noise levels would need to be designated as severe, with an exterior noise level of 75 dBA L_{eq} or higher. Since none of the project area is identified as severely impacted and requiring extraordinary abatement measures, no such measures were evaluated. In the case of the proposed project, Caltrans guidelines only allow the use of block walls as the possible noise abatement measure for the purpose of the reasonableness allowance. However, noise barriers consisting of other forms or materials would be discretionary decision to be determined by the lead agency. Alternative noise barrier designs would be discussed during final design, if applicable.

P-33-13

The *Noise Study Report* conducted the noise impact analysis in compliance with FHWA and Caltrans guidelines and noise standards. Noise standards used by FHWA and Caltrans are in terms of peak hour equivalent continuous noise level (L_{eq}h),

which is different from the noise standard metric used in the City's General Plan Noise Element, which uses the Community Noise Equivalent Level (CNEL), a noise metric based on a 24-hour weighted average, with adjustment to the noise levels occurring during evening and nighttime hours. These two noise metrics are different and should not be compared to each other. While there would be changes in the projected traffic noise levels along the project corridor, none of the receivers evaluated would experience a substantial increase. All receivers that would be exposed to traffic noise levels that approach or exceed the Noise Abatement Criteria have been evaluated for possible noise attenuation by noise barriers. Feasible and reasonable noise barriers have been identified and recommended in the *Noise Study Report*.

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

Noise associated with construction of the proposed project would comply with Caltrans specifications where nighttime construction noise levels would be restricted.

As described in Response to Comment P-33-8, HOT lanes are not part of the proposed project. If HOT lanes are considered in the future, a separate evaluation will be required.

P-33-14

The commenter's statements regarding the evaluation of noise impacts has been documented as part of the public record and considered in the decision making process. Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

P-33-15

Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

Noise barrier survey letters were delivered to property owners to determine if they were in favor of the proposed noise barrier. Additionally, if, during the final design process, modification to the proposed project would affect the construction of any noise barriers that were considered feasible and reasonable, modification or

elimination of the noise barrier could occur. However, since no receivers would experience a substantial increase in traffic noise level exposure, under CEQA, constructing a noise barrier for noise mitigation purposes is not required.

Additionally, NB No. 63 (with a length of 1,947 ft) was evaluated with barrier heights from 6 to 16 ft at 2 ft increments. All barrier heights for NB No. 63 with a length of 1,947 ft were determined to be not reasonable because the estimated construction cost exceeded the total reasonable allowance. In an effort to identify a reasonable portion for NB No. 63, a shorter barrier length was evaluated (with a length of 1,303 ft) with the same barrier heights from 6 to 16 ft at 2 ft increments. From this analysis, the 14 and 16 ft high barriers were determined to be reasonable because the estimated construction cost was within the total reasonable allowance. However, the lower barrier heights remained not reasonable because the estimated construction cost exceeded the total reasonable allowance.

P-33-16

One public meeting and one public hearing have been held for this project, with the meeting held at the beginning of the project before environmental analysis occurred, and the hearing held upon release of the draft environmental document for public comment. In both instances, the public was encouraged to provide written comments to ensure their inclusion in the planning process. Noise abatement measures for the proposed project are included in the Environmental Commitment Record in Appendix F, which is an enforceable commitment to provide such abatement and other measures outlined in the IS/EA. Therefore, measures outlined in the IS/EA will be regulated by enforceable means, and an IS/EA with an MND/FONSI is the appropriate level of environmental document for this project.

P-33-17

The City of Mission Viejo is an active participant in the PDT and has, and will continue to, provide input on behalf of the City and its residents throughout each phase of the project.

P-33-18

The commenter’s statement regarding additional review of the document has been documented as part of the public record and considered in the decision making process.

P-34

From: Judith A.Kaluzny
To: D12 5Widening@DOT
Subject: widening again?
Date: Monday, October 07, 2013 12:26:21 PM

October 7, 2013
re: I-5 Widening Project

Cal Trans
Gabriela Jauregui
D12.5Widening@dot.ca.gov

Orange County Transportation Authority
octa.net/I5comments

To My State and County Representatives:

I see nothing but futility in widening Interstate 5, even though more houses are being build. I object to my taxes going to facilitate profits for developers. But you could give us and those prospective new residents public transportation efficiency. Do not facilitate more congestion and production of greenhouse gases.

When you widened the 91, a friend who drives it said it improved traffic for about 15 minutes. Then it was back to the usual crush. The same will happen with any widening. I believe there is research to show that. It is insane to build more concrete roads for single occupancy vehicles – doing the same thing over and over and expecting a different result is a definition of insanity, so quit building roads, thinking you will solve traffic problems. P-34-1

At all times, you make travel by bus more and more difficult, inconvenient and time-consuming. You should consider the time of non-auto commuters to be as valuable at that of single-occupancy vehicles. More so, actually, since we are not contributing so much to pollution.

Give us sane solutions for traffic and travel in Southern California. Please!

JUDITH A. KALUZNY

Judith A. Kaluzny, Mediator and Lawyer
marital solutions or guided divorce
149 West Whiting Avenue
Fullerton, California 92832

1.6.34 P-34 – Judith Kaluzny

P-34-1

The commenter's opposition to the proposed project has been documented as part of the public record and considered in the decision making process. Please refer to Response to Comment P-15-1 regarding the investment of local tax dollars and Response to Comment P-6-1 regarding the positive impacts of the proposed project on congestion and delay. Additionally, please refer to Response to Comment P-21-1 regarding TDM strategies.

P-35

From: jlemaster@octa.net
To: D12_5Widening@DOT
Subject: I-5 Public Comments
Date: Monday, October 07, 2013 12:29:52 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 10/7/2013 12:30:18 PM.

Field	Value
Full Name	Ryan Loomis
Address	23871 Sycamore Drive
City	Mission Viejo
State	California
Zip	92691
Business Phone	
Home Phone	
Email Address	
Comments	Save the money and headaches for motorists and build a light rail system down the freeway to Irvine, JWA area.
Be kept informed of the project.	false

P-35-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 10/7/2013 12:30:18 PM.

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1.6.35 P-35 – Ryan Loomis

P-35-1

The commenter's opposition to the proposed project and support for a light rail system on I-5 has been documented as part of the public record and considered in the decision making process. Additionally, please refer to Response to Comment P-21-1 regarding TDM strategies that have been previously considered but withdrawn as they would not effectively meet the project purpose and need.

P-36

From: jlemaster@octa.net
To: D12 5Widening@DOT
Subject: I-5 Public Comments
Date: Monday, October 07, 2013 1:00:26 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 10/7/2013 1:00:48 PM.

Field	Value
Full Name	Jackie Le
Address	19431 Rue De Valore. #28C
City	Foothill Ranch
State	California
Zip	92610
Business Phone	(949)851-5020
Home Phone	(714) 717-0469
Email Address	guavaoixaly@yahoo.com
Comments	Dont think it needs to be done. There are plenty of lanes as it has been. I drive to work in Laguna Niguel every day and I have no problem with 5 lanes. Thank you, Jackie Le
Be kept informed of the project.	true

P-36-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 10/7/2013 1:00:48 PM.

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1.6.36 P-36 – Jackie Le

P-36-1

The commenter's opposition to the proposed project has been documented as part of the public record and considered in the decision making process. As stated in Section 1.2.2, the existing (2011) traffic volume for this corridor was approximately 358,000 vehicles per day and is expected to increase by approximately 25 percent by 2045, bringing freeway volumes up to 448,000 vehicles per day.[1] Currently, this stretch of the I-5 corridor has insufficient capacity on the freeway mainline, interchange areas, on- and off-ramps, and local intersections to handle existing and projected future (2045) travel demand in the Study Area. This condition also affects the traffic operation at the interchanges within this segment of I-5. The mainline within the proposed project limits generally exceeds the desired operating condition of level of service (LOS) C (average delay of 20.1 to 35.0 seconds per vehicle) for most segments. Several segments, in both the northbound and southbound directions, operate at LOS D (average delay of 35.1 to 55.0 seconds per vehicle), E (average delay of 55.1 to 80.0 seconds per vehicle), or F (average delay of over 80.0 seconds per vehicle). Within the proposed project limits, the a.m. peak hour is more congested on northbound I-5, and the p.m. peak hour is more congested on southbound I-5, indicating a peak directional flow. However, there are some instances where northbound I-5 experiences LOS E and F conditions in the p.m. peak hour and southbound I-5 experiences LOS E and F conditions in the a.m. peak hour. This is due to commuter traffic as a result of major employment centers south of El Toro Road. Based on the information summarized above, there is a need for the proposed project in the Study Area.

Additionally, please refer to Response to Comment P-21-1 regarding TDM strategies considered but withdrawn from further consideration.

---

[1] *I-5 Widening Project from SR-73 to El Toro Road PA/ED Traffic Study*, June 2012 (Table 2-10).

P-37

From: jlemaster@octa.net
To: D12_5Widening@DOT
Subject: I-5 Public Comments
Date: Monday, October 07, 2013 1:33:11 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 10/7/2013 1:32:52 PM.

Field	Value
Full Name	Jeb Kraul
Address	1345 Cabrillo Park Dr, #E8
City	Santa Ana
State	California
Zip	92705
Business Phone	
Home Phone	
Email Address	
Comments	Cost our tax payers too much money, and it is un-nessessary.
Be kept informed of the project.	true

P-37-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 10/7/2013 1:32:52 PM.

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1.6.37 P-37 – Jeb Kraul

P-37-1

Please refer to Response to Comment P-36-1 regarding the need for the proposed project.

P-38

From: jlemaster@octa.net
To: D12 5Widening@DOT
Subject: I-5 Public Comments
Date: Monday, October 07, 2013 2:16:11 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 10/7/2013 2:16:36 PM.

Field	Value
Full Name	Jeremy R Niswonger
Address	14 Summerwood
City	Aliso Viejo
State	California
Zip	92656
Business Phone	
Home Phone	562-706-5678
Email Address	
Comments	I feel this is an unnecessary project, it will not be cost effective, and should not be commenced.
Be kept informed of the project.	false

P-38-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 10/7/2013 2:16:36 PM.

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1.6.38 P-38 – Jeremy Niswonger

P-38-1

The commenter's opposition to the proposed project has been documented as part of the public record and considered in the decision making process. Please refer to Response to Comment P-36-1 regarding the need for the proposed project.

From: jlemaster@octa.net
To: D12_5Widening@DOT
Subject: I-5 Public Comments
Date: Monday, October 07, 2013 2:22:48 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 10/7/2013 2:23:13 PM.

Field	Value
Full Name	Tam Huynh
Address	3705 CarmeL Ave
City	Irvine
State	California
Zip	92606
Business Phone	
Home Phone	
Email Address	
Comments	NO! TRAFFIC IS GOING TO BE NIGHTMARES!
Be kept informed of the project.	false

P-39-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 10/7/2013 2:23:13 PM.

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1.6.39 P-39 – Tam Huynh

P-39-1

The commenter's opposition to the proposed project has been documented as part of the public record and considered in the decision making process.

P-40

From: jlemaster@octa.net
To: D12_5Widening@DOT
Subject: I-5 Public Comments
Date: Monday, October 07, 2013 2:26:19 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 10/7/2013 2:26:46 PM.

Field	Value
Full Name	Loan Tran
Address	16425 Henderson St
City	Sanata Ana
State	California
Zip	92707
Business Phone	
Home Phone	
Email Address	
Comments	Project cost way too much $!!! I vote "NO"
Be kept informed of the project.	false

P-40-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 10/7/2013 2:26:46 PM.

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1.6.40 P-40 – Loan Tran

P-40-1

The commenter's opposition to the proposed project has been documented as part of the public record and considered in the decision making process.

P-41

From: jlemaster@octa.net
To: D12 5Widening@DOT
Subject: I-5 Public Comments
Date: Monday, October 07, 2013 2:28:37 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 10/7/2013 2:29:03 PM.

Field	Value
Full Name	Etelvina Carlile
Address	16 Chandler Pl.
City	Las Flores
State	California
Zip	92688
Business Phone	
Home Phone	
Email Address	
Comments	I would like to suggest some improvements on Oso Parkway and the 5 Frwy. From Mission Viejo going west on Oso towards the freeway, both north and south bound on ramps could really benefit from having an additional lane to relieve the back up. For the north bound ramp it would be very beneficial to have the 2 lanes begin at the light on Montanoso Dr. The south bound ramp also should have the lane open right after the north bound ramp. There is the space already but it's marked off. Thank you for taking these items into consideration.
Be kept informed of the project.	false

P-41-1

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 10/7/2013 2:29:03 PM.

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1.6.41 P-41 – Etelvina Carlile

P-41-1

The proposed project does not include local street improvements on Oso Parkway. However, the City of Mission Viejo currently has plans to widen Oso Parkway from three to four lanes in each direction between I-5 and Country Club Drive. Construction is scheduled to begin in 2014.

P-42

From: tt tt
To: D12_5Widening@DOT; tt tt
Subject: Tim Touve Comment: I-5 Freeway widening
Date: Monday, October 07, 2013 4:14:45 PM

I represent a personal opinion.
I would like to provide a comment about the widening of the I-5 Freeway by El Toro CA.
I would prefer option 1 (No change).
This would be the best option, in my opinion, because of the currrent fiscal situation in California. P-42-1
I do not think that widening the lanes will help, because people continually are buying bigger and bigger cars and trucks, for no reason.
We should assume that it would help greatly if we were to support the use of smaller cars.
Timothy Touve
tim2v2@hotmail.com

1.6.42 P-42 – Timothy Touve

P-42-1

The commenter's opposition to the proposed project has been documented as part of the public record and considered in the decision making process. Please refer to Response to Comment P-15-1 regarding investment of local tax dollars and Response to Comment P-6-1 regarding the positive impacts of the proposed project on congestion and delay.

From: jlemaster@octa.net
To: D12 5Widening@DOT
Subject: I-5 Public Comments
Date: Monday, October 07, 2013 4:51:19 PM

Data from form "I-5 South County Improvement Project (SR-73 to El Toro Road)" was received on 10/7/2013 4:51:45 PM.

Field	Value
Full Name	Daniel Figueroa
Address	35 Segada
City	Rancho Santa Margarita
State	California
Zip	92688
Business Phone	
Home Phone	
Email Address	
Comments	How will this widening affect the financial situation and the future expansion of the toll roads? When completed, will the widening cause a reduction in the use of the toll roads, which are already supposedly under-utilized? How reliable are the projections for the 25% increase in traffic on the affected area of the I-5? I ask this question, because the projections for the traffic on the toll roads were grossly over-stated. It appears to me that the OCTA has a responsibility to make sure that projects such as this one, are done correctly "the first time". Measure M has given the OCTA too much money to play with. The car-pool lanes on this stretch of highway were poorly designed from the start. They create bottleneck situations and rather than reward drivers for "carpooling". They penalize such drivers, by causing them to get stuck in traffic that is worse than that for non-carpool lane drivers. Whatever you do, don't add toll lanes to this area. We as taxpayers are already paying for the construction of the highways, and to make us pay for it again, when the construction is complete, would be absurd.
Be kept informed of the project.	true

P-43-1

P-43-2

P-43-3

Email "I-5 Public Comments" originally sent to D12.5widening@dot.ca.gov from jlemaster@octa.net on 10/7/2013 4:51:45 PM.

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1.6.43 P-43 – Daniel Figueroa

P-43-1

Completion of the proposed project will result in modest traffic volume reductions on most parallel facilities, which includes the toll roads. Long-range traffic and revenue projections prepared by the toll road agency take into account planned regional projects such as the proposed project, the effect of which is reflected by the forecasts produced by the toll road agency. The projections for an approximate 25 percent increase in traffic volumes are based largely on projected increases in demographic variables such as population and employment.

Additionally, the baseline long-range traffic forecast scenario utilized for the traffic analysis of the proposed project includes the completion of the SR-241 toll road extension to I-5. Even with the SR-241 toll road extension, it was determined that the proposed project is necessary to relieve congestion on I-5.

P-43-2

It is Caltrans' and OCTA's intent to construct projects as efficiently as possible.

P-43-3

The proposed project includes a lengthening of the existing second southbound HOV lane, which will help alleviate the current bottleneck condition. Toll lanes are not currently being considered as a part of the proposed project.

Jayna Harris P-44

From: kncohoe@transystems.com
Sent: Monday, October 07, 2013 5:09 PM
To: Jayna Harris
Cc: gabriela_jauregui@dot.ca.gov; jssalman@transystems.com
Subject: FW: I-5 widening project and noise barrier - We do NOT want a noise barrier - Option 2 is best

Follow Up Flag: Follow up
Flag Status: Flagged

FYI

From: Ryan Romeos [mailto:rromeos@octa.net]
Sent: Monday, October 07, 2013 9:24 AM
To: SA-Karen Cohoe
Subject: FW: I-5 widening project and noise barrier - We do NOT want a noise barrier - Option 2 is best

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From: john dusch [mailto:jfdusch@cox.net]
Sent: Sunday, October 06, 2013 8:56 PM
To: Ryan Romeos
Cc: jnedusch@cox.net; emdusch@cox.net
Subject: I-5 widening project and noise barrier - We do NOT want a noise barrier - Option 2 is best

Ryan Romeos,

We are sending you this e-mail to let you know that we are adamantly opposed to a noise barrier on our property located at 26061 Via Remolino, Mission Viejo, CA 92691 APN No. 784-591-I5. We purchased our home for the views on our property. We would feel like prisoners in our home if a noise barrier would be located on our property. P-44-1

We also want to let you know that option 2 is the best option. Option 1 is the best option for us personally; however, we recognize the needs of the community for widening. Option 3 is an overzealous option. There is no need to over build or overestimate the needs.

Please let us know if there is anything we can do to stop the consideration of option 3. Thank you.

Sincerely,

John and Ellen Dusch

The information in this e-mail and any attachments are for the sole use of the intended recipient and may contain privileged and confidential information. If you are not the intended recipient, any use, disclosure, copying or distribution of this message or attachment is strictly prohibited. If you believe that you have received this e-mail in error, please contact the sender immediately and delete the e-mail and all of its attachments.

1.6.44 P-44 – John and Ellen Dusch

P-44-1

The commenter's opposition to the noise barrier on their property and support for Build Alternative 2 has been documented as part of the public record and considered in the decision making process.

P-45

From: Lynne Elmer
To: D12_5Widening@DOT
Subject: Re: Public Comment/Interstate 5 widening project SR-73 to El Toro Rd
Date: Monday, October 07, 2013 8:35:13 PM

Lynne Elmer
25402 Maximus
Mission Viejo, Ca 92691

Please add me to the distribution list.

Comments & Concerns.

***Noise**
***Air Quality - Brake dust**
***Vibration - Damage to my house I may not even be aware of yet.**
***Long term work (4 yrs) on going additional noise, dust, dirt Day & Night**
***Real estate value - how would I sell this home?** P-45-1

I had to remove a swimming pool and decking due to damage from the last road and sound wall project -- and have now added new cement patios and decorative walkways, sprinkler system and sod. - Very concerned about general damage to my property!

1.6.45 P-45 – Lynne Elmer

P-45-1

Please refer to Response to Comment P-10-1 regarding noise abatement measures and Response to Comment P-27-1 regarding air quality and road dust emissions.

Construction equipment would generate vibration levels that would be perceptible and cause community annoyance. However, vibration levels are not anticipated to cause damage to nearby properties. Passenger vehicles and trucks traveling on poor roadway conditions such as potholes, bumps, expansion joints, or other discontinuities in the road surface could cause groundborne vibrations. As the proposed project will use new concrete for the proposed new travel lanes, the potholes, bumps, expansion joints, or other discontinuities in the road surface that would generate groundborne vibration or direct or indirect noise impacts from vehicular traffic traveling on I-5 would be minimal. For any concerns regarding damage to your property, please contact the Caltrans Public Information Officer at (949) 724-2000 and/or attend public outreach meetings during final design and construction.

Avoidance and minimization measures will be implemented during project construction to minimize construction-related noise and dust.

Real estate market prices are based on comparative sales in the area. There are many factors that contribute to market values, such as quality of the school system, crime, taxes, government services, parks and recreation, neighborhood aesthetics, etc. To the extent that a perceived diminution in property values or decline in quality of life would be caused by or result in a degradation in the physical environment, the IS/EA discusses measures that will be adopted as conditions of project approval to mitigate environmental impacts.

P-46

From: Juan Camacho
To: D12 5Widening@DOT
Cc: aoswald@sanjuancapistrano.org
Subject: n/b I-5 widening
Date: Monday, October 07, 2013 9:49:24 PM

To Whom it may concern at Cal-Trans;

It has been brought to my attention that there is a widening project that could affect my property. I have not received any e-mail or notice by mail regarding this issue.
went to an open house a couple of months ago at Laguna Hills Community Center a few months ago. At that point I asked the question if my property at 24535 Bridger Road and the rest of the properties along this street (Bridger Rd.) would be affected- as far as being eliminated and the answer was no by CAL-TRANS officials. P-46-1
I just today found out that there is a plan to eliminate/take out the the houses along this street for widening purposes.

I STRONGLY OPPOSE OF THIS ACTION. P-46-2

I would like an invititation to all future meetings from this day forward on this issue/project. P-46-3

Alan,
Do you have any information on this matter- I-5 improvement?

1.6.46 P-46 – Juan Camacho

P-46-1

As noted in the *Draft Relocation Impact Memorandum* and Section 2.3.2, Relocations and Real Property Acquisitions, no acquisition of residences along Bridger Road are included as part of the proposed project.

P-46-2

The commenter's opposition to the proposed project has been documented as part of the public record and considered in the decision making process.

P-46-3

The commenter has been added to the distribution list for the proposed project and will be informed of any future public meetings.

P-47

From: Chris Yao
To: D12_5Widening@DOT
Subject: No widening
Date: Tuesday, October 08, 2013 5:19:19 AM

I would like to vote NO on the widening project. P-47-1

1.6.47 P-47 – Chris Yao

P-47-1

The commenter's opposition to the proposed project has been documented as part of the public record and considered in the decision making process.

P-48

Caltrans District 12
3347 Michelson Drive, Ste: 100
ATTN: Gabriela Jauregui
Irvine, CA 92618-8864

Date: 9-19-13

Dear Ms. Jauregui

In response to a proposal notice I received on a Public Hearing to widen the San Diego Freeway (I-5) between San Joaquin Toll Road (SR73) and El Toro Road, my comment is simply that the majority of major work be done from 10PM to 5AM in the evening to relieve the congestion that occurs when work is done during the morning rush hour of people trying to get to work (or) to begin work after 9AM to 4PM when the majority of people have been able to get to work. P-48-1

Sincerely

Michael E. Banyacki
24992 Spadra Lane
Mission Viejo, CA 92691-5225
Email: *m_banyacki@ yahoo.com*
Ph: 949-770-3172 Msg. Phone

1.6.48 P-48 – Michael Banyacki

P-48-1

The commenter's preference for construction to occur either between 10:00 p.m. and 5:00 a.m. or 9:00 a.m. to 4:00 p.m. has been documented as part of the public record and considered in the decision making process. To avoid and/or minimize traffic impacts during construction, a Transportation Management Plan (TMP) will be implemented, which includes traffic control measures, detour routes, a public awareness campaign, signage, emergency access, and pedestrian access. Construction hours and durations would be determined during final design, with the objective of minimizing disruptions to area traffic.

October 4, 2013

To whom it may concern,

My name is Cecil Fraser and I own the company Swan Pools located at 24512 Bridger Rd., Lake Forest 92630.

I have operated our business out of this facility since 1984, approximately 30 years. During that period we have risen from the 10th largest swimming pool company in Orange County to the largest swimming pool company in Orange County. This has been accomplished in part by our optimal location. At the time of site selection I was interested in a site that was south of the 5/405 junction and north of Alicia Parkway – – which at the time was the main road to the North American Aviation facility in what is now the GSA complex. This was the stretch of freeway that would have the highest traffic volume and subsequently the greatest possible marketing value of any location in South Orange County. Our facility was inappropriately built as a single-family residence but never used for that purpose. Once converted for business use it has been able to reach its ultimate value.

During the freeway widening project approximately 15 years ago, Caltrans had an interest in taking my property. Through some simple negotiations it was possible for us to come to an agreement that allowed us to maintain and continue the use of our property. The current proposal seems to have the same possibility. In my discussions with one of your engineers at the display in Mission Viejo it appears that there is only interest in approximately 2 feet of my property for the length of the freeway boundary. My current building sits approximately 4 feet from my side of the current freeway wall. This suggests three possibilities:

1. Move the wall the required 2 feet and leave my building untouched.
2. The centerline of the freeway is currently planned to move some distance to the southwest. I would propose that you move it an additional 2 feet thereby negating the need to touch my property at all. Keep in mind that the opposite side of the freeway from my facility is composed of a planter and Avenida De La Carlotta.
3. Do a partial take on my property and allow me to rebuild my building in the remaining space.

P-49-1

In summary, I fully understand and agree with the need to build the freeway system that accommodates our growth. The alternatives that I am suggesting here do nothing to impact the success of that effort. It is my sincere desire to have substantive talks with the appropriate personnel at the appropriate time. P-49-1

Sincerely,

Cecil Fraser

Owner at 24512 Bridger Rd.

1.6.49 P-49 – Cecil Fraser

P-49-1

Please refer to Response to Comment P-26-1 regarding this potential acquisition.

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Mr. Harry Rockey
766 Calle Aragon Unit A
Laguna Woods, CA 92637-3552

949 462 0972
9/22/13

Gabriela Jauregui
Dept. Transportation
Environmental Branch
3347 Michelson Dr.
Suite 100
Irvine, CA. 92612

Dear Gabriela:

An alternative to highway widening would be to have my article KILL THE COMMUTE published (free). Call the Register & tell them this.

Sincerely,

Harry Rockey

P.S. Unfortunately, I'll be out of town until Oct. 3.

P-50-1

1.6.50 P-50 – Harry Rockey

P-50-1

The commenter's request has been documented as part of the public record and considered in the decision making process.

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans

OCTA

Please print:

Name: Lynne Elmer

Address: 25402 Maximus

City: Mission Viejo, CA Zip: 92691

☑ Please add me to the distribution list.

Comment:

* Noise
* Air Quality - brake, dust etc
* Vibration - damage to my house I may not even be aware of yet.
* Long Term Work (4 yrs) on going - additional noise, dust, dirt Day & Night
* Real Estate value - how would I sell this home?

I had to remove a swimming pool and decking due to damage from the last road and soundwall project - and have now added new cement patios and decorative walk ways - sprinkler system and sod - I'm very concerned about general damage to my property.

P-51-1

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.6.51 P-51 – Lynne Elmer

P-51-1

This comment is duplicative of Comment P-45. Please refer to Response to Comment P-45-1.

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans

OCTA

Please print:

Name: FREEWAY AUTO SUPPLY.- DAN GRUNKEMEYER OWNER

Address: 26242 AVERY PKWY.

City: MISSION VIEJO, CA Zip: 92692

☒ Please add me to the distribution list.

Comment:

I AM ABOUT TO LOSE MY SOURCE OF INCOME THAT I HAVE BEEN WORKING AT FOR 40 YEARS. 1/2 AS EMPLOYEE 1/2 AS OWNER. IT IS VERY HARD TO FIND A BUILDING TO ALLOW US TO CONTINUE TO MAKE A LIVING. THERE ARE 5 OF US WHO WILL PROBABLY BE ON UNEMPLOYMENT & WELFARE TO SURVIVE. WE ENJOY WHAT WE DO AND THERE IS NO OTHER PLACE LIKE THIS IN MISSION VIEJO. YOU ARE WIDENING AVERY ANOTHER LANE AND MOVING THE OFF RAMP. AS WIDE AS YOU MAKE AVERY TO MARGUERITE AND NOT FARTHER IS WRONG, IT IS STILL GOING DOWN TO 2 LANES, WHAT DO YOU THINK THIS WILL ACOMPLISH, MORE CROWDING, MORE ACCIDENTS, MORE BACKUP. I DON'T THINK THIS WILL WORK VERY WELL AND YOU WILL BE DOING THIS OVER & OVER.

P-52-1

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In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.6.52 P-52 – Dan Grunkemeyer

P-52-1

A Final Relocation Impact Memo (FRIM) has been prepared, which has identified in more detail the relocation impact and the appropriate replacement resources for Freeway Auto Supply. The displacing agency and/or the appropriate consultant(s) will assure adequate relocation assistance staffing to meet each displacee's relocation needs. The Relocation Assistance Program (RAP) is deemed to be adequate to provide for necessary relocation resources and assistance.

The FRIM considers appropriate solutions to meet various relocation needs of displaced businesses such as obtaining zoning variances and/or special permits, which are considered long-lead items. Long-lead items may also include the time necessary to relocate and re-calibrate sensitive machinery. It is anticipated that preliminary and ongoing meetings would help to identify and address all the relevant relocation issues in a timely and appropriate manner.

Any business that moves from real property, moves personal property from real property as a result of the acquisition of the real property, or is required to relocate as a result of a written notice from the lead agency from the real property required for a transportation project is eligible for "Relocation Assistance." All activities will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Relocation resources shall be available to the displacees in compliance with Title VI and State statute.

In the existing condition, in the eastbound direction, Avery Parkway has two through lanes and two left-turn lanes at the intersection with Marguerite Parkway, while westbound Avery Parkway has three through lanes. The project proposes to add one additional lane in the eastbound direction, which will allow for a dedicated right turn to southbound Marguerite Parkway. An additional lane is also proposed in the westbound direction, in addition to standard shoulders and sidewalks. The improvements to Avery Parkway were analyzed in the approved traffic study, which found that the LOS at the Avery Parkway/Marguerite Parkway intersection will be improved from an E to a D in the a.m. peak hour and from an F to a D in the p.m. peak hour.

1.7 Comments from the Comment Cards

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CC-1

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans

OCTA

Please print:

Name: BARRY STEELE

Address: 25771 Chrisanta Dr

City: Mission Viejo Zip: 92691

☑ Please add me to the distribution list.

Comment:

My neighbors received notice about the construction of the sound wall. I did not. It appears that the sound wall ends right on my property line. This is absurd because my property backs up to the freeway. The noise level was already deemed unacceptable 5 years ago in a previous study. CC-1-1

I would like to have someone contact me, to come out and measure the sound level in my backyard. Phone: (949) 855-8484

Email: steele2688@hotmail.com

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.1 CC-1 – Barry Steele

CC-1-1

A noise barrier was evaluated for the property at 25771 Chrisanta Drive in the City of Mission Viejo (represented by receptor R-84). R-84 was found to exceed the Noise Abatement Criteria (67 A-weighted decibels [dBA]) in both the existing condition (67.5 dBA), future No Build (67.5 dBA), Build Alternative 2 (69.1 dBA), and Build Alternative 3 (69.6 dBA). As a result, a noise barrier was modeled at the property, shown as Noise Barrier (NB) No. 63. NB No. 63 was determined to be feasible. However, the barrier was determined to be not reasonable. As a result, a shorter version of the barrier was proposed to determine whether it could be found to be reasonable for the areas with the highest noise levels.

CC-2

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans · OCTA

Please print:

Name: Nicola E Vardakostas TRUM

Address: 28698 Camino Capistrano

City: SJC Zip: 92675

☑ Please add me to the distribution list.

Comment: 9-25-13

CC-2-1 Would like 'Vardakostas Holdings Corp' to purchase the Remainder of the Gas Station lot at the So. West Corner of Aliso Parkway!

Sincerely, Nicola Vardakostas Trustee

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

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In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.2 CC-2 – Nicola Vardakostas Tatom

CC-2-1

The request to purchase any remaining property at 28692 Camino Capistrano in the City of Laguna Niguel has been documented as part of the public record and considered in the decision making process. At this time, it is not known if excess land will be available, however if excess land is determined to be available after completion of the construction project, the disposal of any excess land will follow Caltrans Policy..

CC-3

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans

OCTA

Please print:

Name: NEIL RICHARDSON

Address: 26931 VIA GRANDE

City: MISSION VIEJO Zip: CA 92691

☒ Please add me to the distribution list.

Comment: SOUND WALL DISCUSSION NB MILE 14.6
WALL PLACEMENT STUDY SEEMS
TO MISS THE SITUATION W REGARD
TO THE STEEP GRADIENT AND
UNSTABLE GROUND IN THE AREA.
EXISTING FEATURES REQUIRE SIGNIFICANT
DEMO OF ITEMS (DECKS, GARDENS ETC)
AND ACCESS FOR CONSTRUCTION IS
QUESTIONABLE / NOT FEASIBLE.

IN SHORT THE "SOLUTION" TO MITIGATE
NOISE FOR THESE HOMES IS A
NON SOLUTION - NEAR R.40 VIA GRANDE -

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

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In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.3 CC-3 – Neil Richardson

CC-3-1

NB No. 4 is proposed to be located along the private property line, which is the only location where the barrier would be feasible and reasonable. If the noise barrier is approved through the public survey process, detailed design to ensure the constructability of the barrier (including foundation and slope stability) would be further investigated and determined during final design.

CC-4

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans

OCTA

Please print:

Name: Janice Jacobs

Address: ~~2000~~ 1004 Buckingham #15

City: Newport Beach Zip: 92660

☒ Please add me to the distribution list.

Comment:

CC-4-1 abennett55@cox.net

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.4 CC-4 – Janice Jacobs

CC-4-1

The commenter has been added to the distribution list for the proposed project.

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans

OCTA

Please print:

Name: Elizabeth Geissler

Address: 25382 Maximus St.

City: Mission Viejo, Ca. Zip: 92691

☑ Please add me to the distribution list.

Comment:

We are concerned about damage to our pool from construction - need someone to come to our home before construction in case of damage CC-5-1

Existing sound wall seem to be slipping toward freeway CC-5-2

Very conserned about noise from long term construction, can't sleep and can't afford to stay in motel CC-5-3

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.5 CC-5 – Elizabeth Geissler

CC-5-1

As the project progresses through the final design and construction phases, Caltrans will continue to provide updates to the distribution list for the project. For any concerns regarding damage to your property, please contact the Caltrans Public Information Officer at (949) 724-2000 and/or attend public outreach meetings during final design and construction.

CC-5-2

This comment does not raise an environmental issue within the context of the California Environmental Quality Act (CEQA) and/or National Environmental Policy Act (NEPA) and does not ask any questions regarding the technical analyses in the Initial Study/Environmental Assessment (IS/EA). Therefore, no response is necessary. Consistent with the requirements of CEQA and NEPA, comments that raised environmental issues under CEQA and NEPA are responded to in this document. In addition, all comments received on the IS/EA are included in this document and will be made available to the public and decision-makers prior to any action on the proposed project. Please see Responses to Comments CC-5-1 and CC-5-3 regarding specific concerns related to the proposed project.

CC-5-3

The construction of the proposed project would comply with Caltrans Standard Specifications in Section 14-8.02. This compliance would minimize noise impacts during nighttime activities to 86 dBA at a distance of 50 feet (ft).

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans · OCTA

Please print:

Name: Michiyo & Chris Cahill

Address: 26951 Via Grane

City: Mission Viejo Zip: 92691

☒ Please add me to the distribution list.

Comment:

We have multiple cracks all through the walls and ceilings in side our home as a result of vibrations from the free way traffic. CC-6-1 We are concern that it will get worse as a result of the free way expansion. CC-6-2 Top of the hill between our house and the freeway is about 6 feet tall. CC-6-3 We hope it does not need to be lowered. Also we are concerned about increased noise, CC-6-4 Since our house is the closest to the freeway of the all the houses on Via Grande (West & South side.)

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.6 CC-6 – Michiyo and Chris Cahill

CC-6-1

This comment does not raise an environmental issue within the context of the CEQA and/or NEPA and does not ask any questions regarding the technical analyses in the IS/EA. Therefore, no response is necessary. Consistent with the requirements of CEQA and NEPA, comments that raised environmental issues under CEQA and NEPA are responded to in this document. In addition, all comments received on the IS/EA are included in this document and will be made available to the public and decision-makers prior to any action on the proposed project. Please see Responses to Comments CC-6-2 through CC-6-4 regarding specific concerns related to the proposed project.

CC-6-2

Construction equipment would generate vibration levels that would be perceptible and cause community annoyance. However, vibration levels are not anticipated to cause damage to nearby properties. Passenger vehicles and trucks traveling on poor roadway conditions such as potholes, bumps, expansion joints, or other discontinuities in the road surface could cause groundborne vibrations. As the proposed project will use new concrete for the proposed new travel lanes, the potholes, bumps, expansion joints, or other discontinuities in the road surface that would generate groundborne vibration or direct or indirect noise impacts from vehicular traffic traveling on Interstate 5 (I-5) would be minimal.

CC-6-3

The slope described in the comment is not within State right-of-way. As a result, the project proposes no modifications to this slope. Grading to accommodate the improvements is proposed to take place within State right-of-way in this area.

CC-6-4

Traffic noise impacts were identified near 26951 Via Grande in the City of Mission Viejo. NB No. 4 was evaluated and determined to be both feasible and reasonable. The noise barrier would reduce traffic noise levels by 5 dBA or more.

CC-7

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans · OCTA

Please print:

Name: TERRY TUZZOLINO TUZZDADDY@AOL.COM

Address: 26935 VIA GRANDE

City: MISSION VIEJO. CA Zip: 92691

☒ Please add me to the distribution list.

Comment:

I would like to invite a Caltrans representative to my home to personally help me understand why my only option for a sound wall is in my back yard and not along the freeway. I believe the proposed length, height, and difficulty in constructing the proposed sound wall for me and my five neighbors is probably 3 times as costly as a wall adjacent to the proposed new lanes. Shorter distance – much shorter RIGHT wall and ~~accessibility~~ more accessible. I personally invited Jason Tait (noise specialist at the meeting) to come to my home and I will arrange my neighbors to attend. I would greatly appreciate this consideration. CC-7-1

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.7 CC-7 – Terry Tuzzolino

CC-7-1

NB No. 4 is only feasible and reasonable at the private property line. A noise barrier located along I-5 would not be feasible because the homes located along Via Grande are approximately 40 ft higher in elevation than the I-5 freeway and would not break the line-of-sight to the freeway when standing in the backyard at one of the homes. Caltrans sent a representative to the commenter's home and responded to their concerns.

CC-8

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans · OCTA

Please print:

Name: TAILOR KANUHAN.N.

Address: 24902 SARA LN.

City: LAGUNA HILLS Zip: 92653

☐ Please add me to the distribution list.

Comment:

I Fully Understand the need to accomodate Traffic needs but at the same time adding Lanes ~~lanes~~ will INCREAS more traffic, NOISE etc.. ALTERNATE OPTION Would Be more Welcome. CC-8-1

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WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.8 CC-8 – Tailor Kawchanin

CC-8-1

The commenter's request for an alternate option has been documented as part of the public record and considered in the decision making process. A variety of alternative strategies were considered as part of the Project Approval/Environmental Documentation (PA/ED) phase but were withdrawn from further consideration because they would not effectively meet the project purpose as stand-alone alternatives. As shown in Section 2.5, Traffic and Transportation, the Build Alternatives will provide overall positive effects (i.e., reduce congestion and traffic delay) along I-5 within the project limits. The addition of the general purpose lanes and extension of the high-occupancy vehicle (HOV) lane would increase the capacity of the freeway, and as a result, reduce mainline congestion and freeway travel time. Additionally, the project has identified traffic noise impacts related to the proposed Build Alternatives. As a result of these impacts, feasible and reasonable noise abatement measures must be considered. Please refer to Section 2.14 of the IS/EA for more information regarding noise levels and abatement measures.

CC-9

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans · OCTA

Please print:

Name: Lucy Hicks

Address: 24901 Georgia Sue

City: Laguna Hills Zip: 92653

☐ Please add me to the distribution list.

Comment:

I hope there are no more lanes added. The noise level is terrible now - can't imagine any more can be tolerated! CC-9-1

I know there is a traffic problem but there has to be another way to address it.

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WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.9 CC-9 – Lucy Hicks

CC-9-1

Please refer to Response to Comment CC-8-1 regarding the positive impacts of the proposed project on congestion and delay.

CC-9-2

Please refer to Response to Comment CC-8-1 regarding alternative strategies considered as part of the PA/ED phase.

CC-10

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans

OCTA

Please print:

Name: DOUGLAS Boyd

Address: 24721 NYMPHA DRIVE

City: MISSION VIEJO Zip: 92691

☒ Please add me to the distribution list.

Comment:

WIDENING BADLY NEEDED
HOPE NO HOUSES WILL BE LOST

CC-10-1

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

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In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.10 CC-10 – Douglas Boyd

CC-10-1

The commenter's support of the proposed project has been documented as part of the public record and considered in the decision making process. The project does not propose any residential acquisitions.

CC-11

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans · OCTA

Please print:

Name: Rita Tayenaka

Address: 25931 Portabello Dr

City: MV Zip: 92691

☑ Please add me to the distribution list.

Comment:

Alternative 2 seems to be the best way to go
No homes taken
- traffic would flow rather than funnel in and the funnel out - so more lanes to sit

CC-11-1

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.11 CC-11 – Rita Tayenaka

CC-11-1

The commenter's preference for Alternative 2 has been documented as part of the public record and considered in the decision making process.

CC-12

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans · OCTA

Please print:

Name: Kathryn Richardson

Address: 26931 Via Grande

City: MV Zip: CA 92691

☐ Please add me to the distribution list.

Comment:

CC-12-1 concerns with the sound wall proposed to the five homes on Via Grande - ~~two of th~~ four of us would have no use on the lower 1/3 of property where we have extensive landscaping, walkways decks, fruit trees. The slope to golf course is too steep by today's standards. Golf course doesn't maintain drainage ditch per CC&R's and they

CC-12-2 have major failures - putting our property at risk right now even without the weight of the wall. Sound is high now and anticipating much worse.

CC-12-3 would like to discuss feasibility of sound wall next to freeway - 500ft would be our back yards - I don't think you would have to have one that long on freeway and cost to build

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

CC-12-4 Please visit the homes on Via Grande to see the situation and what would take place with a sound wall in backyard versus on freeway

Again, why the hurry to approve an EIR towards one not opposed to sound mitigation, just need to see and discuss options.

Please give me for the information

Thank you for the opportunity today and I hope they will work with the community.

----------Fold Here----------

Place
Stamp
Here

Smita Deshpande
Environmental Branch Chief
Attn: Gabriela Jauregui
Caltrans District 12
3347 Michelson Drive, Suite 100
Irvine, CA 92612-8894

1.7.12 CC-12 – Kathryn Richardson

CC-12-1

The noise barrier has been proposed in the location that would provide the most noise abatement benefit; it is acknowledged that it could limit the use of certain portions of the property. Property owners have been surveyed and have the option to decline the proposed noise barrier.

CC-12-2

The slope being discussed is not within State right-of-way. As a result, the project proposes no modifications to this slope. In the event that the sound wall proposed is considered further in this location, the slope will be evaluated to ensure that a stable wall foundation can be provided.

CC-12-3

A noise barrier located along I-5 would not be feasible because the homes along Via Grande are located approximately 40 ft higher than the I-5 and would not break the line of sight to the freeway when standing in the backyard at one of the homes. Therefore, a noise barrier located along the private property line is the only location that is feasible and reasonable.

CC-12-4

This comment requests that Caltrans staff contact the resident to discuss the results of the noise study and explain why a barrier located along the freeway is not possible Caltrans sent a representative to the commenter's home and responded to their concerns.

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Tarjeta de comentario público
Proyecto de ensanchamineto de I-5 desde San Joaquin Toll Road (SR-73) a El Toro Road
Estudio Inicial/Evaluación Medioambiental
(Con Propuesto Declaración Negativa Mitigada/Hallazgo de Impacto No Significativo)

Porfavor imprima:

Nombre: Lucia Zamora - 949) 290-8268

Dirección: 24421 Bridger Rd

Ciudad: Lake Forest CA Código Postal: 92630

☐ Por favor agregarme a la lista de distribución.

Comentario:

No estoy de acuerdo en este proyecto de agrandar lo hancho del freway 5. Por que seria reducir la calle de enfrente mi propiedad esta frente a la pared del freway y el ruido de los carros se escucha muy fuerte y el olor de el humo es muy fuerte, estoy viviendo en esta casa por Diez años y a mi edad ya no podria comprar en otro lugar, seria muy dificil empezar de nueva por que soy madre soltera al vender mi casa no recibiria nada porque baja mucho de valor cuando esta cerca del freway, no estoy de acuerdo y tengo muchas preguntas. Para poder entender este proyecto

CC-13-1

Período de comentarios públicos: 6 de septiembre de 2013 hasta 7 de octubre de 2013. El Estudio Inicial/Evaluacion Medioambiental y los apoyando estudios técnicos están disponibles para su revision y comentario a Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (días hábiles de 8 am a 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637.
El documento se puede ver en internet a: http://www.dot.ca.gov/dist12/files/5Widening.

Comentarios Escrítos: Proporcionar comentarios escrítos durante la audiencia pública o por corréo a Caltrans District 12 por plegado, grapado, y mandando esta carta a la dirección al reverso.
Además, comentarios se pueden mandar por correo electrónico a: **D12.5Widening@dot.ca.gov**.

quiero saber que tipo de maquina van a hazer en la contrucción, por que mi casa esta vivrando todo el tiempo cuando pasa un carro pesado.
y se siente como tiembla.

CC
-13
-1

muchas gracias

Lucia Zamora.
lucyg zamora@gmail.com

----------Doblar Aquí----------

Ponga
el sello
aquí

Smita Deshpande
Environmental Branch Chief
Attn: Gabriela Jauregui
Caltrans District 12
3347 Michelson Drive, Suite 100
Irvine, CA 92612-8894

Name: Lucia Zamora

I do not agree with this project of widening the I-5 freeway since it will reduce the front street. My property is in front of the freeway wall and the noise from the cars is very load, and the car exhaust fumes are very strong. I have lived at this house for ten years and due to my age I would not be able to buy somewhere else. It would be very difficult to start over because I am a single mother, if I sell my house I wouldn't receive anything for it since the value depreciates a lot when it's close to the freeway. I do not agree and I have several questions in order to fully understand this project. I would like to know what type of machinery will be used during construction, because my house constantly vibrates when a heavy truck passes by and the vibration can be felt.

Thank you
Lucia Zamora
Lucygzamora@gmail.com

1.7.13 CC-13 – Lucia Zamora

CC-13-1

La oposicion del comentarista sobre el proyecto fue considerada. Favor de dirijirse a la respuesta del comentario CC-6-2 con respecto a los efectos de vibraciones y en respuesta al comentario CC-8-1 con respecto a medidas para dismininuir el ruido.

Como se describe en *La Evaluacion de la Calidad de Aire,* el proyecto planteado reduciria el congestionamiento, y como resultado reducira en gran parte las emisiones ambientales a los alrededores de el proyecto. Ademas, los camiones pesados de disel son los responsables de generar los gases toxicos que contaminan el ambiente. Sin embargo el projecto planteado no agrega un porcentaje sustancial de camiones pesados en la area del proyecto. (e.g., el numero de camiones pesados se mantendra aproximadamente en un percentage total de 3.5 antes y despues de la construccion del proyecto). Respectivamente el monitoreo de los resultados de estudios echos en *La Evaluacion de la Calidad de Aire* muestran una constante reduccion en emisiones ambientales. Adicionalmente, emisiones ambientales a future reduciran devido a varias regulaciones ambientales establecidas por E.U. Agencia de Proteccion al Ambiente (*U.S. Environmental Protection Agency (EPA)).* La agencia establece programas sobre medidas nacionales para protejer y reducir la contaminacion al medio ambiente. Dichos programas controlan y actualizan medidas para reducir contaminantes a futuro minimizando las tendencias a una incrementacion de contaminantes por el total de millas recorridas que pertenecen a emisiones a futuro. Ademas, el Gabinete de Recursos Aereos de California tambien conocido como the California Air Resources Board (CARB) a adoptado un plan sobre El Riesgo de Reduccion de Disel tambien concido como Diesel Risk Reduction Plan (DRRP), el cual incluye el control de emisiones obtenidas a consecuecia de vehiculos de disel. Dichas medidas traeran una reduccion de emisiones en un 85 porciento del 2000 al 2020.

Los precios de vienes raices son valorados en base a areas similares a la del proyecto. Varios factores contribuyen al valor commercial, por ejemplo la calidad de las escuelas, el crimen en la area, impuestos, servicios gubernamentales, parques, areas de recreacion familiar, condiciones del vecindario etc. La agencia de Caltrans no ha encontrado estudios o evidencia alguna de que el valor de cualquier propiedad haya disminuhido por su proximidad a una autopista ni tampoco a un proyecto en el cual se extendio la autopista enfrente de una propiedad. En caso de que eso llegue a suceder como resultado a la expancion de la autopista la IS/EA propondra medidas que podran ser implementadas durante el proyecto para aminorar efectos ambientales.

CC-13-1

The commenter's opposition to the proposed project has been documented as part of the public record and considered in the decision making process. Please refer to Response to Comment CC-6-2 regarding vibration effects and Response to Comment CC-8-1 regarding noise abatement measures.

Additionally, as described in the *Air Quality Assessment*, the proposed project would reduce congestion and result in overall emissions improvements in the project area. Also, heavy diesel trucks are responsible for generating the greatest toxic air contaminants (TACs). However, the proposed project would not result in a substantial increase in diesel truck percentages in the project area (i.e., heavy truck volumes would remain around approximately 3.5 percent of total volumes under both the No Build Alternative and the Build Alternative). Representative monitoring data included in the *Air Quality Assessment* shows that ambient emissions are on a declining trend. Additionally, future emissions would likely be lower than current levels, due to various U.S. Environmental Protection Agency (EPA) national emissions control programs that are projected to reduce mobile source emissions. These control measures include retrofit measures that help reduce future emissions, creating a decreasing trend in background concentrations that would help offset any increase in vehicle miles traveled-related emissions in the future years. Furthermore, the California Air Resources Board (CARB) has adopted a Diesel Risk Reduction Plan (DRRP), which includes control measures that would reduce overall diesel particulate matter emissions by about 85 percent from 2000 to 2020.

Real estate market prices are based on comparative sales in the area. There are many factors that contribute to market values, such as quality of the school system, crime, taxes, government services, parks and recreation, neighborhood aesthetics, etc. To the extent that a perceived diminution in property values or decline in quality of life would be caused by or result in a degradation in the physical environment, the IS/EA discusses measures that will be adopted as conditions of project approval to mitigate environmental impacts.

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Tarjeta de comentario público
Proyecto de ensanchamineto de I-5 desde San Joaquin Toll Road (SR-73) a El Toro Road
Estudio Inicial/Evaluación Medioambiental
(Con Propuesto Declaración Negativa Mitigada/Hallazgo de Impacto No Significativo)

Caltrans · OCTA

Porfavor imprima:

Nombre: Estela Reyes

Dirección: 24371 Bridger

Ciudad: Lake Forest Código Postal: 92630

☐ Por favor agregarme a la lista de distribución.

Comentario:

CC-14-1 yo estoy en desacuerdo por qué ya tengo 20 años viviendo en esa propiedad y hace como 12 años ya nos cortaro mucho en lo que es la calle y la banqueta y fue ridículo lo que no dieron una puerta bien corriente y unas ventanas muy corriente fue todo, cuando izieron esa construcción, las maquinas pesadas, craquearón nuestras casas y si hacercan n la borda seria una nueva construcción nos va afectar mas nuestra propiedad, nuestra Salud y el precio de mi casa se iria abajo. si ahora quisiera vender por culpa de este proyecto nadie va a querer compra la propiedad o la van a querer regalada y no es justo

Continua

Período de comentarios públicos: 6 de septiembre de 2013 hasta 7 de octubre de 2013. El Estudio Inicial/Evaluacion Medioambiental y los apoyando estudios técnicos están disponibles para su revision y comentario a Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (días hábiles de 8 am a 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637.
El documento se puede ver en internet a: http://www.dot.ca.gov/dist12/files/5Widening.

Comentarios Escrítos: Proporcionar comentarios escrítos durante la audiencia pública o por corréo a Caltrans District 12 por plegado, grapado, y mandando esta carta a la dirección al reverso.
Además, comentarios se pueden mandar por correo electrónico a: **D12.5Widening@dot.ca.gov**.

Bueno hay muchos Puntos de los que no estoy de acuerdo el unico. Punto que me haria cambiar de opinion es que los del proyecto comprarán esas propiedades de la calle Bridger a muy Bue precio $ y que ahora si hagan lo que quieran con la construcción

CC-14-1

Gracias

----------Doblar Aquí----------

Ponga
el sello
aquí

Smita Deshpande
Environmental Branch Chief
Attn: Gabriela Jauregui
Caltrans District 12
3347 Michelson Drive, Suite 100
Irvine, CA 92612-8894

Name: Estela Reyes

I am in disagreement, I have lived at this property for 20 years and approximately 12 years ago they cut off a lot from the street and sidewalk. Also, it was ridiculous that they only gave us, a very ordinary door and some very ordinary windows. During that construction the heavy machinery caused cracks in our homes and if they bring the walls closer it would be a new construction with greater impact to our property, health and cost of our property which will devaluate it. If I wanted to sell in attributing to this project no one would want to buy the property, or they would want it at a very low price and it's not fair. There are several things I do not agree with, the only way I would change my opinion is if the project representatives would buy the properties at Bridger at a very good price. After that they can construct as they please.

Thank you

1.7.14 CC-14 – Estela Reyes

CC-14-1

La solicitud del commentarista de adquirir la propiedad fue tomada en cuenta por Caltrans. Favor de referirse al comentario CC-13 en respuesta a los otros comentarios.

CC-14-1

The commenter's request for Caltrans to purchase their property has been documented as part of the public record and considered in the decision making process. Please refer to Response to Comment CC-13 for responses to other comments.

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CC-15

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans

OCTA

Please print:

Name: Marilyn Brumfiel

Address: 26051 Via Remolino

City: Mission Viejo, CA Zip: 92691

☒ Please add me to the distribution list.

Comment:

Instead of constructing 8- 10- 12 or 14 ft. sound walls, please consider planting evergreen trees along edge of freeway.

The trees would be so much more aesthetic in appearance than a concrete wall.

The trees would grow to heights much taller than a 14-ft wall and reduce the freeway noise. CC-15-1

In addition, the trees would reduce air pollutants generated from freeway traffic. Thank you!

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.15 CC-15 – Marilyn Brumfiel

CC-15-1

Planting trees or vegetation would not meet the Federal Highway Administration (FHWA) *Noise Barrier Design Handbook* density requirements to reduce noise levels by 5 dBA or more. However, planting will be incorporated as part of the proposed project and the landscape concept, plan, and plant palate will be determined in consultation with, and approved by, the Caltrans District Landscape Architect during the PS&E phase (as described under VIS-1).

CC-16

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans

OCTA

Please print:

Name: ERNESTO G. CEJA

Address: 24391 BRIDGER RD

City: LAKE FOREST Zip: 92630

☒ Please add me to the distribution list.

Comment:

AS A HOMEOWNER AT THE ADDRESS LISTED ABOVE I AM CONCERNED FOR SEVERAL REASONS AND WITH THIS BEING SAID I DISAGREE AND AM AGAINST SUCH CONSTRUCTION. AT THIS POINT I WOULD LIKE TO KNOW THE ESTIMATED EXIT DATE (IF ANY). I HAVE RECENTLY MADE SEVERAL UPGRADES (IN THE LAST 3 YEARS) AND TO THIS DATE I HAVE BEEN UPGRADING THE APPEARANCE OF MY HOME. I WOULD LIKE TO KNOW WHAT KIND OF COMPENSATION WILL BE OFFERED FOR THESE HOMES AND IN THAT CONSIDERATION WOULD YOU BE ALLOWING THE COST OF RELOCATION. LASTLY IS THERE A CURRENT UPDATE OR TIMELINE FOR THIS PROJECT. CC-16-1

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.16 CC-16 – Ernesto Ceja

CC-16-1

The commenter's opposition to the proposed project has been documented as part of the public record and considered in the decision making process. Construction of the proposed project is anticipated to begin in 2018 and be completed by 2022. As stated in Section 2.3.2, Relocations and Real Property Acquisition, no acquisition of residences are proposed as part of the project.

CC-17

Public Comment Card
Interstate 5 Widening Project from SR-73 to El Toro Road
Initial Study/Environmental Assessment
(With Proposed Mitigated Negative Declaration/Finding of No Significant Impact)

Caltrans

OCTA

Please print:

Name: Brooke Morrow

Address: 25761 Chrisanta Dr.

City: Mission Viejo Zip: 92691

☒ Please add me to the distribution list.

Comment:

I am for the wall and am the one who delievered 2 letters to all my neighbors stating why we need it. The one main person objecting in my area is Doyle Potter on verdugo street (cul-de-sac). If he's not on board is it possible to have the wall stop before it gets to that cul de sac since everyone else wants the wall? CC-17-1

949 235-7466

PUBLIC COMMENT PERIOD: September 6, 2013 to October 7, 2013. The Initial Study/Environmental Assessment and supporting technical studies are available for review and comment at Caltrans District 12 office, 3347 Michelson Drive, Suite 100, Irvine, CA (Weekdays 8 am to 5pm); Orange County Public Library – Laguna Niguel, 30341 Crown Valley Parkway, Laguna Niguel, CA 92677; Orange County Public Library – Mission Viejo, 100 Civic Center, Mission Viejo, CA 92691; Orange County Public Library – Technology Branch, 25555 Alicia Parkway, Laguna Hills, CA 92653; Orange County Public Library – Lake Forest, 24672 Raymond Way, Lake Forest, CA 92630; Orange County Public Library – San Juan Capistrano, 31495 El Camino Real, San Juan Capistrano, CA 92675; Laguna Woods Mini-Branch Library, 24264 El Toro Road, Laguna Woods, CA 92637. The document can be viewed online at: http://www.dot.ca.gov/dist12/files/5Widening.

WRITTEN COMMENTS: Provide written comments during the public hearing or mail to Caltrans District 12 by folding, stapling, and sending this card to the address on the reverse.
In addition, comments can be e-mailed to: **D12.5Widening@dot.ca.gov**.

1.7.17 CC-17 – Brooke Morrow

CC-17-1

It is not likely that the noise barrier would be reasonable if the barrier length is reduced to exclude the property at Assessor's Parcel Number (APN) 784-141-35. This is mainly because it would result in a reduction in the reasonable allowance, meaning that the estimated construction cost of the reduced barrier length could exceed the reasonable allowance. The reasonableness allowance is calculated based on the number of benefited residences for the reduced barrier length.

1.8 Comments from Transcripts

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INTERSTATE 5 WIDENING PROJECT
FROM SR-73 TO EL TORO ROAD
Mission Viejo, California
Wednesday, September 25, 2013
4:30 p.m. to 7:30 p.m.

REPORTER'S TRANSCRIPT OF PUBLIC HEARING COMMENTS

ROSA PRECIADO
24401 Bridger Road
Lake Forest, California 92620

"One of the reasons why we are in disagreement is because there is a lot of noise. There is a lot of smog in the area. Night and day our house shakes from all the noise and the freeway noise. T-1-1

A few years back they already have taken some half of the street from near our property. They also have taken sidewalk away. T-1-2

Apart from the construction, the houses began to crack -- oh,

1 also from the construction equipment,
2 we believe. So now the home, as it
3 shakes from the freeway noise, our
4 home is cracking even more from the
5 vibrations of the noise.
6 For us to be happy with the
7 change, they gave us new windows and
8 doors. But they didn't fix our
9 home -- and the least expensive.
10 Now they want to take more of
11 the street. It will be worse for us.
12 Every day we smell the smells burn,
13 like burning. The smoke is from the
14 freeway. But we think it's the house
15 burning because it smells like inside
16 the house.
17 Our house -- we believe our home
18 value is going to go down. If we sell
19 now, nobody is going to want to buy
20 because the freeway is going to be
21 adjacent to our home.
22 Yeah. It's not going to be easy
23 for us to start over again to buying
24 a new home now that we have -- even
25 though we have 24 years here in the

T-1-2

T-1-3

T-1-4

house. It's hard for us to start again. If they want to buy our home, they can do that. We can consider that. T-1-4

But taking a lot of property, a lot of smoke day night and vibrations, we live in nice area. It's not true on that street. So we are not -- we are not in agreement with this project. T-1-5

There is a lot of people who thinks the way I do. The only way that they will accept the project is if they buy our home for the current price of the homes. T-1-6

She's a single mom -- Estella Reyes. And I'm Rosa Preciado, P-R-E-C-I-A-D-O. And I live there for 24 years. And I don't want to start again. At least they pay for, you know, the right price. T-1-7

Every time I go to apply for a new job they think I'm too old. So I'm going to stay in my house. It's 24401 Bridger Road, Lake Forest, 92620."

1.8.1 T-1 – Rosa Preciado

T-1-1

Regarding noise abatement measures, Section 2.14.4.2 of the Initial Study/ Environmental Assessment (IS/EA) describes the analysis conducted to assess noise effects of the Build Alternatives and proposed noise abatement in the form of sound barriers. Figures 2.14-2 and 2.14-3 depict the location of sound barriers proposed for the proposed project. Please refer to General Response 1 – Noise, in Section 1.1.1 regarding the determination of noise impacts under CEQA and NEPA and potential abatement measures.

Regarding air quality, as part of the *Air Quality Assessment*, the Caltrans' Emissions Factors (CT-EMFAC) model was used to estimate particulate matter less than 10 microns in diameter (PM_{10}) and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) emissions related to mobile exhaust, tire wear, and brake wear for each project alternative under the existing future 2045 years. The CT-EMFAC model does not estimate re-entrained road dust emissions. Therefore, re-entrained road dust emissions were calculated using the empirical equation found in Section 13.2.1 of the U.S. Environmental Protection Agency's (EPA) *AP-42 Compilation of Air Pollutant Emission Factors* (updated in January 2011). Emissions were calculated using traffic data within the Traffic Report and supplemental data. It was found that the proposed project would not result in adverse effects related to long-term air quality and would not contribute to adverse long-term air quality effects.

T-1-2

Construction equipment would generate vibration levels that would be perceptible and cause community annoyance. However, vibration levels are not anticipated to cause damage to nearby properties. As the proposed project will use new concrete for the proposed new travel lanes, the potholes, bumps, expansion joints, or other discontinuities in the road surface that would generate groundborne vibration or direct or indirect noise impacts from vehicular traffic traveling on Interstate 5 (I-5) would be minimal. Avoidance and minimization measures will be implemented during project construction to minimize construction-related noise and dust.

T-1-3

As stated in Section 2.13, Air Quality, the proposed project would not result in adverse effects related to long-term air quality and would not contribute to adverse long-term air quality effects.

T-1-4

Regarding property value, real estate market prices are based on comparative sales in the area. There are many factors that contribute to market values, such as quality of the school system, crime, taxes, government services, parks and recreation, neighborhood aesthetics, etc. To the extent that a perceived diminution in property values or decline in quality of life would be caused by or result in a degradation in the physical environment, the IS/EA discusses measures that will be adopted as conditions of project approval to mitigate environmental impacts.

T-1-5

The commenter's opposition to the proposed project has been documented as part of the proposed project and considered in the decision making process.

T-1-6

The commenter's preference that Caltrans purchase their home has been documented as part of the public record and considered in the decision making process. However, the acquisition of residential properties is not proposed as part of the project.

T-1-7

Please see Response to Comment T-1-6 regarding property acquisition.

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T-2

CAIA MAGLINAO
24461 Christina Court
Laguna Hills, California

"Yet again our home is screwed. I'm Caia Maglinao, M-A-G-L-I-N-A-O. Do you want the address, too? Because it's directly impacted on there. It's 24461 Christina Court, Laguna Hills. T-2-1

When we purchased our home, there was one less lane than there is now on the freeway. We lived through nights of construction, noise and lights at 2:00 in the morning as they built another lane, the extended lane.

Now they are looking at adding yet another lane with, 'Oh, no. I'm sorry. A soundwall would not be cost-effective to protect only two houses.' T-2-2

So, yet again, we fought for years to try and get a soundwall. And it got thrown out. And now they are adding yet another lane. And we are looking at more noise, more construction,

more disruption and still no soundwall and no compensation.

Basically I was told, 'Well, yeah. Sorry. You are just not worth it.'

So I'm really not happy with Caltrans or OCTA at this point. And I hope this project totally fails."

T-2-2

1.8.2 T-2 – Caia Maglinao

T-2-1

The commenter's concern regarding the project impact to their home has been documented as part of the public record and considered in the decision making process.

T-2-2

Noise Barrier (NB) No. 175 was determined to be feasible because it could reduce noise levels by 5 A-weighted decibels (dBA) or more. However, this barrier was determined not to be reasonable because it either could not provide at least a 7 dBA noise level reduction at one or more of the benefited residences or the estimated construction cost of the barrier exceeded the total reasonable allowance.

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T-3

NICOLA VARDAKOSTAS TATOM
A's Burgers Owner
28698 Camino Capistrano
San Juan Capistrano, California 92675

"I am an owner of A's Burgers on Avery -- on Camino Capistrano, 28698 Camino Capistrano.

My name is Nicola Vardakostas Tatom, V-A-R-D-A-K-O-S-T-A-S, Tatom, T-A-T-O-M.

And we are very interested to know the process of how to acquire what is left over of the gas station lot directly next to us that looks like it's going to be taken out with the road expansion -- southwest corner.

And so we would like to know the process of the steps to take to acquire that and to stay in touch and to get feedback.

We would like to know how to -- what the process is and what is going to happen to the remainder of the land on the southwest corner of Avery and Camino Capistrano -- southwest corner. T-3-1

There is going to be land left

1 over from the acquisition of the gas
2 station. And we are interested in the
3 remaining portion of that lot."
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T-3-1

1.8.3 T-3 – Nicola Vardakostas Tatom

T-3-1

At this time, it is not known if excess land will be available, however if excess land is determined to be available after completion of the construction project, the disposal of any excess land will follow Caltrans Policy.

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T-4

DONALD L. DOBBS, D-O-B-B-S
25485 El Picador Lane
Mission Viejo, California 92691

"Okay. My first comment was that the eastbound El Toro Road on-ramp to the northbound 5 merges too soon. The on-ramp is too short, and it snags the traffic because slow cars are trying to get into the lane with fast cars. T-4-1

And they say they are going to improve that. But I want to go on record that that is very definitely needed.

Okay. The other comment was the southbound 5 from El Toro Road down to Alicia there is too much crossover. The two right lanes disappear into Alicia, and people are forced to move over. And they are considering that. But that is definitely a problem. T-4-2

The third thing which I think is very important is when you have two lanes of HOV merging into one lane, which they are going to do, right now they merge before El Toro Road or around there. They T-4-3

are going to extend those down to Alicia and then merge.

But when the two lanes merge right now, the left lane has to merge over to the right lane. And that is unnatural for a driver because if you have the right lane merging to the left lane, that is kind of the way drivers get on the freeway. So that is a natural merge because the driver is on the side where he can see the other cars.

T-4-3

Yeah. And then the fourth point was that the Oso over-crossing at the 5, there is four traffic signals in a row there. They need to be synchronized because everything just jumps through. You've probably experienced that.

T-4-4

So those were the points I had."

* * *

Veritext National Deposition & Litigation Services
877-955-3855

1.8.4 T-4 – Donald Dobbs

T-4-1

The commenter's support of the project improvements to the I-5 northbound on-ramp from the El Toro Road has been documented as part of the public record and considered in the decision making process.

T-4-2

The project proposes to maintain the two existing dedicated auxiliary lanes to Alicia Parkway on southbound I-5 because of the large volume of traffic exiting at this location. However, in the existing condition, the outside general purpose lane becomes an auxiliary lane that is forced to exit. In the proposed condition, the auxiliary lane would be added by the El Toro Road on-ramp, and the general purpose lane would continue through the interchange, which would reduce the need to weave out of this lane.

T-4-3

It is standard practice for the outermost lane to merge into an inner lane. In the case of the second high-occupancy vehicle (HOV) lane, the left lane drops and merges into the right lane (per the Caltrans HOV Guidelines).

T-4-4

The proposed project does not include local street improvements on Oso Parkway. The Orange County Transportation Authority (OCTA) does have a Regional Traffic Signal Synchronization Program that evaluates the need for synchronizing signals across city boundaries. While Oso Parkway is not currently identified in this program, it is possible that it could be included in the future.

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1.9 Comments Received After the Comment Period

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CITY OF LAGUNA HILLS

City Manager

December 6, 2013

Mr. Darrell Johnson, CEO
OCTA
P.O. Box 14184
Orange, CA 92863-1584

Dear Darrell:

Thank you for taking the time, on such short notice, to meet with me and my staff members, Ken Rosenfield and David Chantarangsu, last Tuesday. We truly value our positive working relationship with OCTA and your continued willingness to listen to our concerns and work cooperatively toward developing mutually agreeable solutions, no matter how difficult or complex the problem may be.

With regard to the specific matter of the City Council's concern over the unmitigated noise impacts created by the proposed I-5 Widening Project, I was very heartened to hear you express support for both building the desired noise barrier along the edge of the CalTrans right-of way (on the bridge) across the entire length of the Aliso Creek expanse and for including the cost of that noise barrier in the project budget, paid for with OCTA funds. L-4-1

Since our meeting, I have spoken with District 12 Director, Ryan Chamberlain and I believe we had a very positive conversation and clear understanding regarding the city's concerns and desires for the noise barrier and CalTrans' limitations and restrictions associated with the use of federal funds for noise barriers. We agreed, just as you and I agreed, that spending large sums of money on litigation over the environmental document was not in the best interest of any of us. To that end, he committed to getting his staff together with yours and talking further about finding a win-win solution for everyone.

Again, I truly appreciate your offer of assistance regarding this matter and look forward to reaching a successful outcome. Should you desire any assistance from me or Ken, please do not hesitate to give me a call.

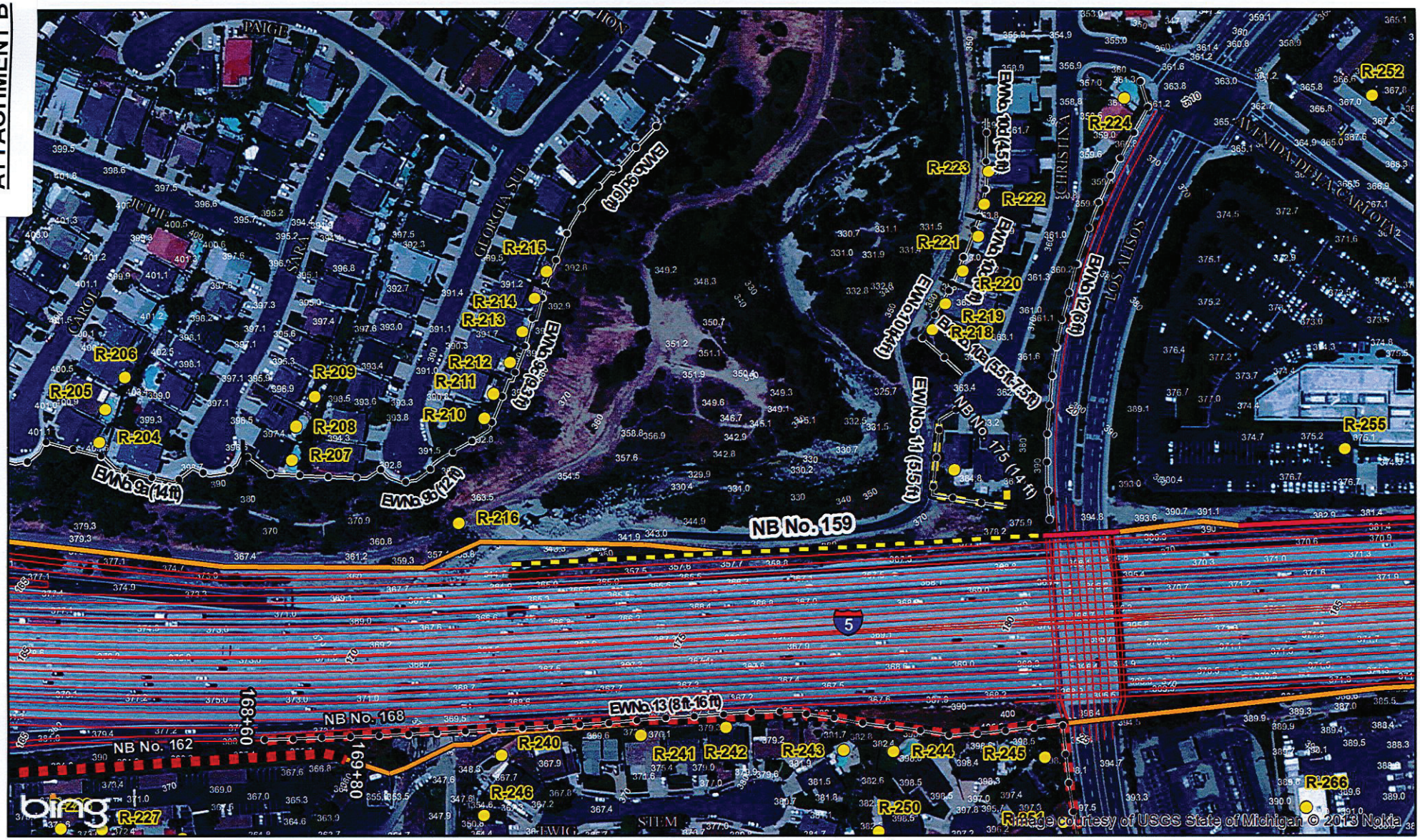
Sincerely,

BRUCE E. CHANNING
City Manager

Cc: City Council
Ken Rosenfield
David Chantarangsu

24035 El Toro Road • Laguna Hills, California 92653 • (949) 707-2610 • FAX (949) 707-2614
website: www.ci.laguna-hills.ca.us

ATTACHMENT B



LEGEND

- Alternative 2
- Existing Right-of-Way
- Proposed Right-of-Way
- Modeled Receptor Locations
- Modeled Noise Barriers
- Modeled Noise Barriers - Not Feasible
- Existing Wall

0 120 240
FEET

SOURCE: Bing Maps (c. 2010); Transystems (2012)

I:\ACE1101H\GIS\Noise\NoiseAlt2_NB159 Short.mxd (12/16/2013)

FIGURE 1

I-5 Widening Project: SR-73 to El Toro Road

Alternative 2
Modeled Noise Barriers
and Receptor Locations

12-ORA-5 PM 12.4/18.9
EA# 0K0200

1.9.1 L-4 – City of Laguna Hills

L-4-1

Please refer to Responses to Comments L-2-15 and L-2-16 regarding noise impacts.

In response to concerns presented by the community and the City of Laguna Hills, a community enhancement masonry wall will be constructed on the southbound side of I-5 from the Los Alisos Boulevard OC to the northerly edge of the Aliso Creek bridge. This wall will be approximately 800 feet long and 14 feet high.

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