Appendix O  Responses to Comments

This appendix contains the comments received on the Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) and the responses to those comments.
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State Route 91 Corridor Improvement Project
Riverside and Orange Counties, California
ORA-91-R14.43/R18.91
RIV-91-R0.00/R13.04
RIV-15-35.64/45.14
EA 08-0F5400
PN 080000000136

Responses to Comments
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Appendix O  Responses to Comments

O.1  Introduction

The Draft EIR/EIS was circulated for public review from May 20, 2011, to July 11, 2011. The Draft EIR/EIS was distributed to the agencies listed in Chapter 7, Distribution List, starting on page 7-1 in the EIR/EIS. Chapter 7 also lists organizations and members of the general public who received the Notice of Availability for the Draft EIR/EIS.

Comments received during the public circulation period included letters, e-mails, comments received through the Riverside County Transportation Commission (RCTC) project website, and written comment cards and oral comments from the public hearing. Copies of all the written comments and the verbal comments provided to the court reporters at the June 9, 2011, public hearing are included in this appendix.

Refer to Chapter 5, Comments and Coordination, in the EIR/EIS for additional discussion of the public review period for the Draft EIR/EIS.

O.2  June 9, 2011, Public Hearing

A public hearing was held on June 9, 2011, to allow the public an opportunity to provide oral and written comments on the Draft EIR/EIS and the proposed project. Responses to comments received during the public review period and at the public hearing were prepared and are provided in this appendix.

Refer to Chapter 5 for detailed discussion of the June 9, 2011, public hearing.

O.3  Format of Responses to Comments

All the written comments received during, or shortly after the close of, the public review period and verbal comments provided to the court reporters at the June 9, 2011, public hearing are included in this appendix. Substantive environmental issues raised within each comment letter are numbered along the right-hand margin of each letter. The responses to comments in each comment letter are referenced by the index numbers in the margins of the letters.

The format of the responses to comments is based on a unique letter and number code for each comment. The number at the end of the code refers to a specific comment within the individual letter. Therefore, each comment has a unique code assignment.
Appendix O Responses to Comments

For example, P-1-1 is the first substantive comment in letter P-1. "P" represents a comment letter from a member of the general public, "1" refers to the first letter from a member of the general public, and the second "1" refers to the first comment in that letter. The alphanumeric codes used in this appendix are:

- "F" for federal agencies;
- "S" for State agencies;
- "R" for regional agencies;
- "L" for local agencies;
- "O" for organizations, groups, and utility providers;
- "P" for comments from the general public;
- "C" for comment cards received during the June 9, 2011, public hearing; and
- "T1" for transcript number 1 and "T2" for transcript number 2 (there are two transcripts from the June 9, 2011, public hearing, one each from the two court reporters taking comments and testimony at the hearing).

O.4 Index of Comments Received

Table O.1 lists the agencies, organizations, and persons who commented on the Draft EIR/EIS during, or shortly after the close of, the public comment period. Each comment letter or verbal comment from the public hearing transcripts is listed by its unique number. The comments are listed within each category (agencies, organizations, etc.) by the date they were received. The comment letters provided in this appendix are followed by their associated responses.

O.5 Common Responses

Where there are multiple comments that raise the same or similar issue or concern, a common response was prepared to address the specific issue comprehensively. The responses to those types of comments refer the reader to one or more of the common responses provided in this section.
Table O.1 Summary of Comments Received On the Draft EIR/EIS During, or Shortly After the Close of, the Public Circulation Period on July 11, 2011

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<td>United States Army Corps of Engineers</td>
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<td>S-3</td>
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<td>S-4</td>
<td>Department of Toxic Substances Control</td>
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<td>Center for Biological Diversity</td>
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<td>P-10</td>
<td>H.G. Chaffin</td>
<td>June 21, 2011</td>
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<tr>
<td>P-11</td>
<td>Bill Baker</td>
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<tr>
<td>P-12</td>
<td>Gary Bailey</td>
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</tr>
<tr>
<td>P-13</td>
<td>Mike Hafez</td>
<td>June 16, 2011</td>
</tr>
<tr>
<td>P-14</td>
<td>Jim Ogle</td>
<td>June 16, 2011</td>
</tr>
<tr>
<td>P-15</td>
<td>Mary Lou Shina</td>
<td>June 19, 2011</td>
</tr>
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Table O.1 Summary of Comments Received On the Draft EIR/EIS
During, or Shortly After the Close of, the Public Circulation Period on
July 11, 2011

<table>
<thead>
<tr>
<th>Letter Number</th>
<th>Agency/Commenter Name</th>
<th>Date of Comment</th>
</tr>
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<tbody>
<tr>
<td>P-16</td>
<td>Victor &amp; Karen Quintana</td>
<td>June 27, 2011</td>
</tr>
<tr>
<td>P-17</td>
<td>Carmen Padilla</td>
<td>July 1, 2011</td>
</tr>
<tr>
<td>P-18</td>
<td>Dr. Bruce V. Armstrong</td>
<td>June 29, 2011</td>
</tr>
<tr>
<td>P-19</td>
<td>John Thalasinos</td>
<td>July 7, 2011</td>
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<td>P-20</td>
<td>Stuart Johnson</td>
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<td>P-21</td>
<td>Brent Thalasinos</td>
<td>July 7, 2011</td>
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<tr>
<td>P-22</td>
<td>Sal Riela, Ralph Kulajian, and Vahe Joknavarian</td>
<td>June 27, 2011</td>
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<tr>
<td>P-23</td>
<td>John Reist</td>
<td>July 7, 2011</td>
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<td>P-24</td>
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<td>Christopher Perez</td>
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<td>P-26</td>
<td>Ryan Smith</td>
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<td>P-35</td>
<td>Constance Spencer</td>
<td>September 26, 2011</td>
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Comment Cards Received at the June 9, 2011 Public Hearing:

| C-1           | Anonymous                                     | June 9, 2011    |
| C-2           | Bruce Armstrong                               | June 9, 2011    |
| C-3           | Dr. George Beloz                              | June 9, 2011    |
| C-4           | Jack Brown                                    | June 9, 2011    |
| C-5           | Kevin Bullon                                  | June 9, 2011    |
| C-6           | H.G. Chaffin                                  | June 9, 2011    |
| C-7           | H.G. Chaffin                                  | June 9, 2011    |
| C-8           | Yatish Chaudhri                               | June 9, 2011    |
| C-9           | Vicky Chhour                                  | June 9, 2011    |
| C-10          | William H. H. Cortez                          | June 9, 2011    |
| C-11          | Sally Cote                                    | June 9, 2011    |
| C-12          | Kevin Lee Cruz                                | June 9, 2011    |
| C-13          | Alma Cuevas                                   | June 9, 2011    |
| C-14          | Can Thuy Dang                                 | June 9, 2011    |
| C-15          | Richard Everhart                              | June 9, 2011    |
| C-16          | Ramie Fernandez                               | June 9, 2011    |
| C-17          | Joline Fuentes                                | June 9, 2011    |
| C-18          | Boka Gan                                      | June 9, 2011    |
| C-19          | Sonia & Jose Garcia                           | June 9, 2011    |
| C-20          | John W. Hathaway                             | June 9, 2011    |
| C-21          | Roy Hungerford                                | June 9, 2011    |
| C-22          | Eric Johnson                                  | June 9, 2011    |
| C-23          | Ron Kammeyer                                  | June 9, 2011    |
| C-24          | Robert Lind                                   | June 9, 2011    |
| C-25          | Jesus Reyes Lopez                             | June 9, 2011    |
| C-26          | Tim Lynch                                     | June 9, 2011    |
| C-27          | Mary Mendoza                                  | June 9, 2011    |
| C-28          | Paul & Cheryl Ramirez                         | June 9, 2011    |
| C-29          | Jesus Reyes                                  | June 9, 2011    |
| C-30          | Ruben Reyna                                   | June 9, 2011    |
Table O.1 Summary of Comments Received On the Draft EIR/EIS During, or Shortly After the Close of, the Public Circulation Period on July 11, 2011

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<td>C-37</td>
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<td>C-38</td>
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Transcript No. 1 from the June 9, 2011 Public Hearing

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<td>T1-7</td>
<td>Gloria Salgado</td>
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<td>Jesus &amp; Esperanza Reyes</td>
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<tr>
<td>T1-9</td>
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Transcript No. 2 from the June 9, 2011 Public Hearing

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<td>T2-3</td>
<td>Brenda Urrutia</td>
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<td>T2-4</td>
<td>Truyen Nguyen – Gala Nails</td>
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<td>T2-5</td>
<td>Carthauy Tanteh</td>
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<tr>
<td>T2-6</td>
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<td>T2-7</td>
<td>Don Bowker</td>
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<td>T2-8</td>
<td>Yalish Chauchri</td>
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<td>T2-9</td>
<td>Greg Tesdahl</td>
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</tr>
<tr>
<td>T2-10</td>
<td>Charlie Webb</td>
<td>June 9, 2011</td>
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1 The California Department of Fish and Game submitted comments jointly with the United States Fish and Wildlife Service. Refer to Letter F-2.
2 Some public commenters mailed written comments on the comment card form after the public hearing; those comment cards are included in the "Members of the General Public" section. Comment cards received at the public hearing are provided in the "Comment Cards received at the June 9, 2011, Public Hearing" section.
EIR = Environmental Impact Report
EIS = Environmental Impact Statement
The common responses are provided in the following subsections:

- O.5.1 Common Response Related to the Property Acquisition Process (page O-6)
- O.5.2 Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses (page O-7)
- O.5.3 Common Responses Related to Noise (page O-8)
- O.5.4 Common Response Related to the Environmental Process and Schedule (page O-14)
- O.5.5 Common Response Related to Chino Hills State Park (page O-18)
- O.5.6 Common Response Related to Noise Barriers on I-15 (page O-29)
- O.5.7 Common Response Related to Alternatives (page O-30)
- O.5.8 Common Response Related to Billboard Relocation (page O-35)
- O.5.9 Common Response Related to the Identification of the Preferred Alternative (page O-38)
- O.5.10 Common Response Related to the Biological Opinion (page O-39)

**O.5.1 Common Response Related to the Property Acquisition Process**

If a Build Alternative is selected for implementation, the RCTC will be in contact with all property owners and tenants affected by that State Route 91 (SR-91) Corridor Improvement Project (CIP) Build Alternative to advise them of the property acquisition needs for the selected alternative.

RCTC will follow a step-by-step acquisition process defined by the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act). Refer also to the Appendix D, Summary of Relocation Benefits, in the EIR/EIS. RCTC will provide a summary of the property acquisition process to each affected property owner and tenant prior to beginning the purchase. An overview of the process and the rights and benefits of affected property owners and tenants is described in Appendix D. Property needs for the project will include permanent effects (full acquisition of some parcels, partial acquisition of other parcels, and permanent easements on some parcels) and temporary effects (temporary use of parts of parcels for temporary construction easements and other short-term temporary uses).
RCTC will work directly with the property owner(s) and tenant(s) to assist with the acquisition process. Before making an offer, RCTC will obtain an appraisal of the property to establish its fair market value. The owner of the property will be given an opportunity to accompany the appraiser during the inspection and provide information that may be relevant to the value of the property to the appraiser.

If it is necessary to purchase the property in full, relocation advisory assistance and benefits are available, including identification of comparable replacement properties, assistance with purchase of replacement property, moving expenses and related payments, payment of transaction fees, and assignment of an acquisition/relocation agent to each owner and tenant. Property owners and tenants will not be required to move until the property is needed for project construction.

Any project impacts to a property will be evaluated during the appraisal process. Damages associated with partial acquisitions will be assessed and compensated in accordance with California eminent domain law. Access to properties for both private and emergency vehicles and the location of public utilities will be addressed through consultation with the City of Corona, other local jurisdictions, and public utility providers. RCTC is actively engaged with the adjacent local jurisdictions to ensure that access and public utilities are maintained.

**O.5.2 Common Response Related to Loss of Parking and Other Potential Impacts to Businesses**

Under the Uniform Act, project impacts to individual properties identified in this Final EIR/EIS will be evaluated during final design with regard to specifics including parking spaces, landscaping, hardscape features, lighting features, driveway access, sign structures, parking lot circulation, delivery locations, and building access. For each property, the impacts will be determined and tabulated. Once the individual property owner and RCTC agree to the impacts, RCTC’s Right-of-Way Agents will investigate ways to minimize, eliminate, address, and/or compensate for those impacts. The Right-of-Way Agents will use City codes, site engineering, and feedback from the property owner on how to minimize effects of the project on an individual property.

As part of the evaluation process under the Uniform Act used in right-of-way acquisitions, a major consideration is whether a property can continue to function effectively if only part of the property is acquired for the project. Properties considered not to be able to function effectively if part of the parcel is acquired for
the project were identified for full acquisition. The impacts on adjacent properties were assessed, and if impacts to a partial acquisition could be mitigated by use of an adjacent full acquisition to replace lost parking or other features, then the property was listed as a partial acquisition.

As part of compliance with the Uniform Act for loss of parking on individual properties, RCTC’s Right-of-Way Agents will conduct a detailed parking study to investigate the use of adjacent acquisitions for replacement parking, reconfiguring parking lots on the property, restriping parking spaces, enlarging parking lots, and reconfiguring delivery locations to avoid and minimize damages to the property owners and tenants. Measure CI-2 in Section 3.4, Community Impacts, includes conducting parking studies for properties where the parking is impacted by the project.

If impacts to a property cannot be minimized or mitigated to allow the business to remain in operation, then RCTC’s Right-of-Way Agents will work with the property owner in an attempt to find a replacement location first within the same vicinity, and if not in the same vicinity then in the same city, and then in adjacent cities. The property owner will be compensated for the relocation costs, loss of business, and other losses. Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6, and to Appendix D, Summary of Relocation Benefits, in the EIR/EIS for additional information regarding the right-of-way acquisition process and relocation benefits for affected property owners and tenants.

RCTC will make every effort to provide access to businesses during construction. A detailed stage construction plan will be developed during the construction phase of the project. The stage construction and detour plans will detail how access will be provided to each property and for how long, if at all, the access will be restricted. The use of temporary pavement and/or temporary driveways may be used in some cases to ensure that adequate access is provided to each property during construction.

O.5.3 Common Responses Related to Noise
O.5.3.1 Common Response Related to the Noise Process
This section describes the process used to complete the Final Noise Study Report (April 2010) and the Final Noise Abatement Decision Report (NADR; July 2010) for approval by the California Department of Transportation (Department) and Federal Highway Administration (FHWA). This section describes the processes for noise measurements, identifying the need for noise barriers as a result of with-project noise
levels, determining if noise barriers are both feasible and reasonable, and the identification of noise barriers determined to be reasonable and feasible and recommended for implementation.

Short-term (15- to 20-minute) and 24-hour noise measurements were taken at 63 locations in the project study area (55 short-term measurements and 8 24-hour measurements) that were representative of frequent human use areas, such as backyards of single-family residences, ground-floor patios at multifamily residences, playgrounds, parks, and churches as discussed in Section 3.15.2.2, Noise Level Measurements, starting on page 3.15-3 in the EIR/EIS. The measurements were conducted following the guidelines and procedures in the Department Traffic Noise Analysis Protocol (Protocol) and the associated Technical Noise Supplements (TeNS), which specifically address traffic-related noise. According to the TeNS, noise level measurements under certain meteorological conditions such as high wind conditions should be avoided. A no wind condition is the most optimal condition for noise level measurements because the traffic noise model used in the analysis has no provisions to consider meteorological effects or other effects such as noise reflection from buildings. This optimal condition was ensured during the monitoring of existing noise levels in the project study area to ensure that the most accurate noise measurements were used and that the resulting impact analysis was as accurate as possible. Tables 3.15.3 to 3.15.11 starting on page 3.15-22 in the EIR/EIS show the results of these measurements. Using the measured noise levels and traffic counts gathered during the noise measurements, the existing traffic noise model built using the FHWA traffic noise model (TNM) version 2.5 was run to verify that the modeled numbers and the measured numbers were within the margin of error of the FHWA TNM 2.5 model (±3 A-weighted decibels [dBA]). All sites were within ±2.5 dBA. TNM 2.5 is the FHWA-approved modeling software for noise studies on State highways.

Using the verified model as a base, the Build Alternatives were modeled to predict with-project noise levels at the 63 locations where noise measurements were taken. An additional 128 locations were modeled for a total of 191 modeling locations. Existing and future peak-hour noise levels were predicted by running the model with 1,950 cars per traffic lane at the road design speed (65 miles per hour [mph]). This produces the highest noise level for the road because this is the maximum number of cars per lane that can operate on a road at 65 mph. The peak Existing, No Build, and Build noise levels are shown in Table 3.15.13 on page 3.15-31 in the EIR/EIS. The Protocol establishes that where the noise levels are 66 dBA, or above, or where the
predicted build noise levels are 12 dBA higher than the predicted no build noise levels, measures to reduce noise need to be evaluated. Noise abatement measures were considered in 33 areas, and it was determined that noise barriers represented the most practical and economical method for reducing the noise effects of the proposed project at those locations.

O.5.3.2 Common Response Related to Noise Barriers
Noise abatement measures such as noise barriers are considered if the predicted future worst-case noise levels are 66 dBA or above for residential uses or substantially increases over existing noise levels. Noise levels 75 dBA or higher are considered to be severe noise impacts. Areas of severe noise impacts are shown in Table O.2. A substantial increase in noise is considered as 12 dBA over the existing noise level. The SR-91 CIP noise impact analysis identified 33 areas with traffic noise impacts and evaluated the benefits of 37 noise barriers as abatement for reducing noise levels at those locations (Figure 3.15-1 starting on page 3.15-63 in the EIR/EIS).

Noise abatement in the form of noise barriers must provide a minimum noise level reduction of 5 dBA or more to be considered feasible and cost-effective for consideration as a reasonable noise abatement. Cost effectiveness is considered by comparing the cost estimate to construct the noise barrier to the total reasonable allowance for constructing that barrier. The total reasonable allowance is determined by multiplying the reasonable allowance per residence by the number of benefited residences (benefited residences are the residences that would benefit from the noise barrier). The reasonable allowance per residence begins at $31,000 and is adjusted based on a number of factors that include the future worst-case noise level, the change in noise level from the existing noise, the achieved noise level reduction with the barrier, and whether the residence is new construction or predates 1978. Several locations for noise barriers were analyzed in the technical report for the SR-91 analysis for each area with a noise impact. Some of those locations were found to provide feasible noise abatement while others were not. Figure 3.15-1 in the EIR/EIS shows the results of that evaluation and identifies which barriers were considered acoustically feasible.

The noise barriers found to be feasible were carried forward for evaluation in the NADR. The NADR takes the calculated reasonable cost for each barrier and compares it to the cost estimate to build that noise barrier. If the cost estimate is less
## Table O.2 Areas of Severe Noise Impacts

<table>
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<th>Receiver I.D.</th>
<th>Area</th>
<th>Alternative 2f Predicted Noise Level (dBA)</th>
<th>Proposed Noise Barrier</th>
<th>Reasonable Cost Allowance</th>
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<td>$1,088,000</td>
</tr>
<tr>
<td>37M</td>
<td>Q</td>
<td>77</td>
<td>Q-1</td>
<td>$3,596,000</td>
<td>$1,088,000</td>
</tr>
<tr>
<td>26Q</td>
<td>Q</td>
<td>76</td>
<td>Q-1</td>
<td>$3,596,000</td>
<td>$1,088,000</td>
</tr>
<tr>
<td>25</td>
<td>R</td>
<td>76</td>
<td>P-1</td>
<td>$2,418,000</td>
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<td>P-1</td>
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<tr>
<td>38M</td>
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<td>79</td>
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<td>$3,596,000</td>
<td>$1,088,000</td>
</tr>
<tr>
<td>39M</td>
<td>S</td>
<td>78</td>
<td>Q-1</td>
<td>$3,596,000</td>
<td>$1,088,000</td>
</tr>
<tr>
<td>50M</td>
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<td>48M</td>
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<tr>
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<tr>
<td>52M</td>
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<td>80</td>
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<td>$3,596,000</td>
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</tr>
<tr>
<td>53M</td>
<td>U</td>
<td>77</td>
<td>Q-1</td>
<td>$3,596,000</td>
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<tr>
<td>58M</td>
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</tr>
<tr>
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<td>W</td>
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<td>W-1</td>
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<td>$253,056</td>
</tr>
<tr>
<td>39</td>
<td>D1</td>
<td>80</td>
<td>D1-B</td>
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<td>$531,780</td>
</tr>
<tr>
<td>70M</td>
<td>D1</td>
<td>76</td>
<td>D1-B</td>
<td>$300,000</td>
<td>$531,780</td>
</tr>
<tr>
<td>93M</td>
<td>N1</td>
<td>76</td>
<td>N1-A</td>
<td>$1,798,000</td>
<td>$1,153,470</td>
</tr>
<tr>
<td>94M</td>
<td>N1</td>
<td>79</td>
<td>N1-A</td>
<td>$1,798,000</td>
<td>$1,153,470</td>
</tr>
<tr>
<td>50</td>
<td>N1</td>
<td>78</td>
<td>N1-A</td>
<td>$1,798,000</td>
<td>$1,153,470</td>
</tr>
<tr>
<td>95M</td>
<td>N1</td>
<td>75</td>
<td>N1-A</td>
<td>$1,798,000</td>
<td>$1,153,470</td>
</tr>
<tr>
<td>96M</td>
<td>N1</td>
<td>79</td>
<td>N1-A</td>
<td>$1,798,000</td>
<td>$1,153,470</td>
</tr>
<tr>
<td>51</td>
<td>N1</td>
<td>78</td>
<td>N1-B, N1-C, N1-D</td>
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<td>$2,709,401</td>
</tr>
<tr>
<td>52</td>
<td>N1</td>
<td>76</td>
<td>N1-B, N1-C, N1-D</td>
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<td>$2,709,401</td>
</tr>
<tr>
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<td>54</td>
<td>Q1</td>
<td>77</td>
<td>Q1-A</td>
<td>$624,000</td>
<td>$1,231,211</td>
</tr>
</tbody>
</table>

Source: Riverside County Transportation Commission (November 2011).
dBA = A-weighted decibels
than the total reasonable allowance for that barrier, the preliminary determination is that the abatement is reasonable. If the cost estimate is higher than the total reasonable allowance, the preliminary determination is that abatement is not reasonable. As described above, noise barriers must meet both feasible and reasonable criteria to be recommended for consideration in the final design of the SR-91 CIP. Refer to Figure 3.15-1 in the EIR/EIS for the noise barriers considered to be both feasible and reasonable.

The final location and design of noise barriers will be determined during the design/build phase of the project and may include solid block walls, transparent materials, or berms. The final design of the noise barriers will consider input from the adjacent property owners. Those residents that would benefit from noise barriers found to be both reasonable and feasible received noise barrier survey letters requesting their input on receiving this abatement. A noise barrier does not have to be constructed as a solid block wall. A transparent material could be used to preserve views from homes if the cost for a given barrier with that alternative material is determined to still be reasonable. The type of material for each noise barrier determined to be reasonable and feasible will be finalized in the design/build project phases in consultation with the adjacent property owners. Third-party funding, such as from the adjacent property owners, can be used for functional enhancements to noise barriers already determined to be reasonable and feasible (based on a block wall design). Functional enhancements can include the use of alternative materials such as transparent materials or other aesthetic enhancements. The potential for third-party-funded functional enhancements to noise barriers will be discussed during the consultation with the adjacent property owners.

If noise barriers are to be located within the right-of-way for a State Highway, 51 percent of the property owners with property affected by the barrier need to approve the noise barrier for the final project design to include that noise barrier. If a noise barrier is located on private property, 100 percent of the property owners need to approve the noise barrier. In response to requests from local homeowners, meetings were held with some affected property owners in August 2011 and November 2011 to address their concerns regarding the construction of noise barriers as noise abatement for the SR-91 CIP. The meetings were designed to obtain input from the property owners on the type of barriers and their placement. The noise barriers discussed in those meetings were Noise Barriers (NBs) I-1, I-2 and D1-B.
Section 3.15, Noise, in the Final EIR/EIS includes the results of the noise barrier surveys and identification of the noise barriers that have been approved by property owners that will be carried forward into the design/build phase of the SR-91 CIP. During the design/build phase, if there are substantial changes to the project design, noise barriers in the area may be re-evaluated and their designs may change, which may require supplemental environmental review. If this occurs, the affected property owners will be notified of any changes to the noise barrier design.

**O.5.3.3 Common Response Related to Noise Barrier Survey Process**

Permanent noise impacts were identified at 416 properties. In accordance with Department procedures, the noise barrier survey package was sent by certified mail to each property owner on May 20, 2011.

Due to the low number of completed surveys received during the initial survey mail-out and that additional clarification on the purpose of the noise barrier survey and the voting process was requested, the RCTC sent out an invitation for a focused meeting for property owners affected by NBs D1-B, I-1, and I-2 on August 25, 2011, and August 17, 2011, and a second mail-out of noise barrier survey information on August 5, 2011, to 319 property owner addresses on the updated noise barrier mailing list.

The first noise barrier focus meeting for property owners affected by NBs I-1 and I-2, was held at The Veranda at the Green River Golf Club, 5215 Green River Road, Corona, on August 23, 2011 from 7:00 p.m. to 8:00 p.m. A similar meeting with the same format and handouts was held for property owners affected by Noise Barrier (NB) D1-B from 7:00 p.m. to 8:00 p.m. on August 25, 2011, at the Multipurpose Room in Corona City Hall at 400 South Vicentia Avenue, Corona. All property owners were requested to provide their votes by September 9, 2011.

Due to a large number of no responses being received from affected property owners, there were not enough votes to constitute a 100 percent (for noise barriers on private property) or majority (for noise barriers in State right-of-way) vote in support or against all noise barriers. Therefore, RCTC and the Department prepared a cover letter and noise barrier survey that were distributed during door-to-door home visits conducted between the hours of 3:30 p.m. and 7:30 p.m. on September 30, 2011, and October 4, 2011. Completed surveys were requested to be returned and postmarked no later than October 5, 2011.
In addition, RCTC and the Department held a meeting with the Villaggio Homeowners Association and interested residents at the Villaggio community pool on Saturday, November 12, 2011, from 11:00 a.m. to 12:30 p.m. During the meeting, the Homeowners Association voted in support of the construction of NB D1-B.

Noise Barrier K1-A within the project footprint was considered reasonable under Alternatives 1 and 2 and their design variations. However, NB K1-A, within the project footprint and along Interstate 15 (I-15), would not meet the required 20-year minimum life cycle and, therefore, was not considered reasonable prior to the circulation of the Draft EIR/EIS. Based on public comments on NB K1-A received during the public review period for the Draft EIR/EIS and previous commitments made as part of previous projects in the area, RCTC decided to make a special exception and fund the construction of NB K1-A as part of the SR-91 CIP even though this noise barrier did not meet the required 20-year minimum life cycle.

A noise barrier survey package was sent by certified mail and regular first class mail to 53 property owners potentially affected by the construction of NB K1-A on December 7, 2011, and December 8, 2011. Property owners were asked to return their surveys no later than December 20, 2011. In an effort to obtain enough votes for a majority approval of NB K1-A, an additional public outreach effort was conducted through door-to-door surveys on January 12, 2012. Property owners were asked to return their surveys no later than January 19, 2012.

Detailed discussion regarding the outcome of the noise barrier survey vote and additional public outreach efforts is provided starting on page 3.15-10 in Section 3.15.3.2, Permanent Impacts, in the EIR/EIS, and in Section 5.2.7, Noise Barrier Survey Public Outreach Efforts, on page 5-24 in the EIR/EIS.

O.5.4 Common Response Related to the Environmental Process and Schedule

O.5.4.1 Schedule

Both the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) provide opportunities for the public to engage in the environmental evaluation process and provide input regarding project alternatives and the environmental analyses. Table O.3 summarizes the major steps leading to the circulation of the Draft EIR/EIS for the SR-91 CIP. Some commenters requested additional information about the project process and schedule, particularly related to when property acquisition and construction would begin. Table O.3 also shows the
Table O.3 Environmental Process Schedule for Project

<table>
<thead>
<tr>
<th>Tasks/Description</th>
<th>Actual or Anticipated Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public scoping: request for public input on the alternatives and the environmental analyses</td>
<td>July 29, 2008</td>
</tr>
<tr>
<td>Preparation of the technical studies</td>
<td>July 30, 2010</td>
</tr>
<tr>
<td>Begin circulation of the Draft EIR/EIS</td>
<td>May 20, 2011</td>
</tr>
<tr>
<td>Public hearing</td>
<td>June 9, 2011</td>
</tr>
<tr>
<td>Identification of the Preferred Alternative</td>
<td>September 20, 2011</td>
</tr>
<tr>
<td>Begin availability of the Final EIR/EIS</td>
<td>August 2012</td>
</tr>
<tr>
<td>Publication of the Record of Decision in the Federal Register</td>
<td>November 2012</td>
</tr>
<tr>
<td>Project and environmental documentation approved</td>
<td>November 2012</td>
</tr>
<tr>
<td>Right-of-way acquisition complete</td>
<td>early 2013</td>
</tr>
<tr>
<td>Project construction begins</td>
<td>spring to summer 2013</td>
</tr>
<tr>
<td>Open to traffic</td>
<td>fall to winter 2017</td>
</tr>
</tbody>
</table>

Source: Riverside County Transportation Commission (2012).
EIR = Environmental Impact Report
Environmental = Environmental Impact Statement

next steps in the environmental and project implementation processes in the event a Build Alternative is selected for implementation. Those potential future steps include selection of a Build Alternative for implementation, right-of-way, acquisition and project construction.

O.5.4.2 Responses to Comments

In an effort to continue public outreach for the project, those persons who provided comments on the RCTC SR-91 website were sent a response stating that their comments were received, that comments received from May 20, 2011, to July 11, 2011, would be part of the public record and would be responded to in the Final EIR/EIS. That response also indicated that when the Final EIR/EIS is released, it will be posted to the RCTC SR-91 website and an email will be sent to those persons who provided comments on the Draft EIR/EIS (if they provided an email address).

Commenters who requested that their contact information be added to the project distribution list were added to that list in Chapter 7.0, Distribution List, in the EIR/EIS and will be notified about the circulation of the Final EIR/EIS.

O.5.4.3 Recirculation of the Environmental Document

Requirements for Recirculation

CEQA requires a lead agency to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft but before certification of the Final EIR (CEQA Guidelines Section 15088.5(a)). That new information could be:
- A new significant environmental impact or a new mitigation measure (15088.5(a)),
- A substantial increase in the severity of an environmental impact unless mitigation is adopted to reduce the impact to below a level of significance (15088(b)),
- A feasible alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen the environmental effects of the project, but the project proponent’s decline to adopt it (15088(c)), or
- The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded (15088.5(d)).

Recirculation under CEQA is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR (15088(b)).

Under NEPA, a Supplemental EIS would be required if there are substantial changes made to the proposed project that are relevant to the environmental effects of the project, or there are significant new circumstances or information relevant to the environmental concerns that bear on the proposed action or its impacts.

**Review of Reasons Recirculation Was Requested**

**Inadequate Impact Analysis and/or Mitigation**

Some comments requested recirculation of a revised Draft EIR/EIS based on those commenters’ assertions that the Draft EIR/EIS did not adequately identify project effects and/or provide adequate mitigation for the project impacts. As reflected in the responses to comments received on the Draft EIR/EIS provided in this appendix and the technical analyses throughout the EIR/EIS, the Draft EIR/EIS as prepared and circulated to the public provided sufficient information to adequately and fully identify and assess the potential impacts of the proposed project and included mitigation that was sufficiently detailed to adequately address those potential impacts.

**Significant New Impacts**

No new significant project impacts under CEQA were identified after the release of the Draft EIR/EIS for public review. As noted in this Responses to Comments appendix, modifications were made to some mitigation measures to more clearly indicate the specific actions or timing of the measures or to reflect the final agreement on a measure (specifically related to Chino Hills State Park [CHSP]). However, none of those modifications resulted in a substantial change in the mitigation in the
EIR/EIS. No substantial increases in the project impacts or new feasible alternatives were identified after the public review of the Draft EIR/EIS. No mitigation measures for substantial impacts were deleted after the public review of the Draft EIR/EIS. The Draft EIR/EIS documents the extensive analysis conducted to assess the project impacts and which supports the conclusions regarding the types and severity of those impacts. No substantial changes were made to the proposed project, and no significant new circumstances or information relevant to the environmental concerns that bear on the proposed action or its impacts were identified after the public review of the Draft EIR/EIS. As a result, RRTC and the Department did not prepare or circulate a revised Draft EIR/EIS because such recirculation was not required under either CEQA or NEPA.

**Impacts and Mitigation at Chino Hills State Park**

Some comments requesting recirculation of a revised Draft EIR/EIS focused on the project effects and mitigation at CHSP. The Draft EIR/EIS as prepared and circulated to the public provided sufficient information to adequately and fully identify and assess the potential impacts of the proposed project on CHSP and included mitigation that was sufficiently detailed to adequately address those potential impacts. The potential project effects at CHSP described in Section 3.1.3.2, Environmental Consequences, starting on page 3.1-59 in the EIR/EIS, were identified in consultation with the State Parks Department (State Parks). As indicated in that section, the consultation with State Parks and the National Park Service (NPS) was ongoing at the time the Draft EIR/EIS was circulated. The project effects discussed with those agencies after the circulation of the Draft EIR/EIS are essentially the same as reported in the Draft EIR/EIS. The mitigation for those impacts provided in Section 3.1.4.3, Measures for Parks and Recreation Facilities, in the Final EIR/EIS reflect the agreement regarding the project mitigation at the completion of the consultation with State Parks. As shown, the mitigation commitments in the Final EIR/EIS are refinements of the mitigation commitments provided in the Draft EIR/EIS and substantially mitigate the project effects on CHSP. As a result, RRTC and the Department did not prepare or circulate a revised Draft EIR/EIS related to the project effects on, and mitigation for those effects at, CHSP because such recirculation is not required under either CEQA or NEPA.
O.5.5 Common Response Related to Chino Hills State Park
Questions or comments regarding the project effects at CHSP and compliance with the requirements of Section 4(f) regarding the project effects at CHSP were raised by several commenters. The following sections discuss the identified impacts of Alternatives 1 and 2 at CHSP, the mitigation included in those alternatives to address those impacts, consultation with State Parks, and the Section 6(f) process for the project effects at CHSP.

O.5.5.1 Impacts of the SR-91 CIP to Chino Hills State Park
The planning for the SR-91 CIP Build Alternatives included extensive consideration of the locations of resources including parks, open space, biological resources, and other sensitive land uses and resources. The design team focused efforts to minimize the permanent acquisition of land from, or temporary construction easements (TCEs) at, parks and other recreation resources. As a result of those efforts, the effects of the SR-91 CIP Build Alternatives were minimized, as described in the following sections.

There are no design variations along the project alignment adjacent to CHSP. Therefore, the impacts to CHSP for Alternative 1 would be the same for Alternative 1 with any of the four design variations (a through d) in that Build Alternative, and the impacts to CHSP for Alternative 2 would be the same for Alternative 2 with any of the eight design variations (a through g) in that Build Alternative. As a result, the impacts of Alternative 2f on CHSP, which has been identified as the Preferred Alternative, would be the same as the impacts described in this section for Alternative 2.

Permanent Use of Land in CHSP under Section 4(f)
The potential impacts of the SR-91 CIP Build Alternatives on CHSP were reduced after the Draft EIR/EIS, based on consultation with State Parks and design refinements. The updated effects are described in Table 3.1.6 in Section 3.1.3.3, Section 4(f), Section 6(f), and the Public Parks Protection Act of 1971, and in Appendix B in the EIR/EIS. Those updated effects are also summarized in Table O.4. As shown in Table O.4, the total permanent use of land in CHSP is 0.48 acre (ac) under both Alternatives 1 and 2, which represents approximately 0.008 percent of the total 14,173 ac in CHSP. The use of 0.48 ac in CHSP would be a project impact under Section 4(f).
### Table O.4 Summary of Permanent Use, Permanent Easements, and Temporary Occupancies at Chino Hills State Park by Alternative

<table>
<thead>
<tr>
<th>Use</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impacts of Alternative 1</strong></td>
<td></td>
</tr>
<tr>
<td>Permanent Use</td>
<td><strong>Initial Phase:</strong> Permanent use of a total of 0.48 ac of land and a permanent aerial easement to accommodate the elevated Green River Road off-ramp. The footings for two columns under the elevated Green River Road off-ramp are within the area under the elevated structure and the aerial easement.</td>
</tr>
<tr>
<td><strong>Ultimate Project:</strong> None beyond the 0.48 ac in the Initial Phase.</td>
<td></td>
</tr>
<tr>
<td>Permanent Easement</td>
<td><strong>Initial Phase:</strong> No permanent easements.</td>
</tr>
<tr>
<td><strong>Ultimate Project:</strong> 1.65 ac permanent subsurface easement.</td>
<td></td>
</tr>
<tr>
<td>TCEs and Other Temporary Occupancies</td>
<td><strong>Initial Phase:</strong> 1.1 ac for one TCE.</td>
</tr>
<tr>
<td><strong>Ultimate Project:</strong> 1.0 ac for six TCEs.</td>
<td></td>
</tr>
<tr>
<td><strong>Impacts of Alternative 2</strong></td>
<td></td>
</tr>
<tr>
<td>Permanent Use</td>
<td><strong>Initial Phase:</strong> Permanent use of a total of 0.48 ac of land and a permanent aerial easement to accommodate the elevated Green River Road off-ramp. The footings for two columns under the elevated Green River Road off-ramp are within the area under the elevated structure and the aerial easement.</td>
</tr>
<tr>
<td><strong>Ultimate Project:</strong> None beyond the 0.48 ac in the Initial Phase.</td>
<td></td>
</tr>
<tr>
<td>Permanent Easement</td>
<td><strong>Initial Phase:</strong> No permanent easements.</td>
</tr>
<tr>
<td><strong>Ultimate Project:</strong> 1.88 ac permanent subsurface easement.</td>
<td></td>
</tr>
<tr>
<td>TCEs and Other Temporary Occupancies</td>
<td><strong>Initial Phase:</strong> 1.1 ac for one TCE.</td>
</tr>
<tr>
<td><strong>Ultimate Project:</strong> 1.0 ac for six TCEs.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Riverside County Transportation Commission (2011).

Note: There are no design variations along the project alignment adjacent to CHSP. Therefore, the impacts to CHSP for Alternatives 1 and 2 would be the same with any of the design variations for those Build Alternatives (i.e., the permanent subsurface easement of 1.65 ac is the same for all Alternative 1 design variations and the permanent subsurface easement of 1.88 ac is the same for all Alternative 2 design variations). As a result, the impacts of Alternative 2 on CHSP, which has been identified as the Preferred Alternative, would be the same as the impacts described in this table for Alternative 2.

ac = acre
BNSF = Burlington Northern Santa Fe
CHSP = Chino Hills State Park
ft = foot
L&WCF Act = Land and Water Conservation Fund Act
SR-91 = State Route 91
TCEs = temporary construction easements

**Permanent Easements in CHSP**

As shown in Table O.4, the Alternative 1 and 2 Initial Phases would each result in a permanent aerial easement at the location of the new westbound Green River Road off-ramp bridge over the Burlington Northern Santa Fe (BNSF) railroad tracks and Prado Road. The Alternative 1 and 2 Ultimate Projects would each result in one permanent subsurface easement in CHSP for tiebacks extending from the SR-91 right-of-way to under CHSP. The subsurface easement of 1.65 ac for Alternative 1 and 1.88 ac for Alternative 2 would not affect the surface land in that area, and no project construction, structures, or activities would occur at the ground surface in CHSP above the subsurface tiebacks. That subsurface easement would not affect the
surface land in that area, and no project construction, structures, or activities would occur at the ground surface in that location. There are currently no recreation facilities or activities in the area above the subsurface easement. Recreation activities that could be proposed at that location, such as trails, trail signage, benches, or other facilities/amenities, could be implemented without adversely affecting the subsurface tiebacks or being adversely affected by those tiebacks. As a result, the permanent subsurface easements in CHSP under the Alternative 1 and 2 Ultimate Projects are expected to result in only minor effects that would not be so severe that the activities, features, or attributes that qualify CHSP for protection under Section 4(f) would be substantially impaired. The text in Section 3.1.3, Parks and Recreation Facilities, and Appendix B in the EIR/EIS was expanded to more clearly explain this.

**Temporary Construction Easements at CHSP**

As described in the subsection titled “Temporary Construction Easements” on page 2-39 in the EIR/EIS, TCEs would be necessary under Alternatives 1 and 2 for constructing walls along the right-of-way, for extending major drainage facilities, for utility relocation/modifications, and for widening bridges. Land in CHSP used as a TCE would be returned to State Parks in its original or better condition after completion of the construction activities requiring each TCE. As shown in Table O.4, Alternatives 1 and 2 would each require the use of 2.0 ac of land in CHSP for TCEs during construction.

The following conditions must all be met for a temporary effect to be considered a temporary occupancy of a property:

- The duration of the occupancy must be temporary (i.e., less than the time needed for construction of the project), and there should be no change in ownership of the land;
- The scope of the work must be minor (i.e., both the nature and the magnitude of the changes to the Section 4(f) property must be minimal);
- There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, and/or attributes of the property on either a temporary or permanent basis;
- The land being used must be fully restored (i.e., the property must be returned to the condition that existed prior to the project); and
- There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.
The TCEs in CHSP under Alternatives 1 and 2 meet these conditions as follows:

- The TCEs will be used only for project construction activities within or in the immediate vicinity of the TCEs and would be occupied for only part of the total construction period for the Initial Phases of Alternatives 1 and 2.
- The TCEs would be easements granted to the Department by State Parks for the duration of the period the TCEs would be used. The land would be returned to State Parks on termination of each TCE.
- The TCEs in CHSP will be used for the following during construction of the Initial Phases of Alternatives 1 and 2: work on and/or extensions of existing culverts, and work in and around the BNSF railroad tracks in the vicinity of Green River Road. These work activities would result in minor permanent changes in CHSP related to the modifications of the existing culverts.
- There would be no permanent adverse impacts to CHSP as a result of the use of land in the park for TCEs. The work at the existing culverts will be designed in consultation with State Parks to ensure no adverse effects to the park. The culvert work would not interfere with or substantially impair the protected activities, features, and/or attributes that qualify CHSP for protection under Section 4(f) on either a temporary or permanent basis.
- At the completion of the construction in the TCEs and when the TCEs are no longer needed for any project-related activities, the land within the TCEs will be fully restored to the condition that existed prior to the project. That restoration will be conducted in consultation with State Parks to ensure the consistency of the vegetation on the land used for the TCEs and the adjacent areas in the park.
- In a letter dated March 26, 2012, State Parks concurred with the determination that the use of land in CHSP for TCEs would be a temporary use and, therefore, does not constitute the use of land from CHSP under Section 4(f). Refer to Section O.5.5.4, De Minimis Determination, below, for additional discussion regarding State Parks concurrence with that determination.

The text in Section 3.1.3 and Appendix B in the EIR/EIS was also expanded to more clearly explain why the TCEs in CHSP would be a temporary occupancy of land in that park.

**O.5.5.2 Constructive Use Effects**

The potential for Alternatives 1 and 2 to result in proximity impacts so severe that the activities, features, and/or attributes that qualify CHSP for protection under Section 4(f) would be substantially impaired was evaluated as described in Appendix B in the
EIR/EIS. Based on that evaluation and on the requirements of Section 4(f), it was determined that Alternatives 1 and 2 would not result in proximity impacts on CHSP so severe that the activities, features, or attributes that qualify CHSP for protection under Section 4(f) would be substantially impaired.

It is acknowledged that the modifications at the Green River Road westbound off-ramp and the retaining wall on the north side of SR-91 facing the park will be visible to trail users on the trail just north of SR-91. Alternatives 1 and 2 will bring the freeway facilities closer to the trail in the vicinity of Prado Road. Under Alternatives 1 and 2, trail users would hear noise from SR-91 similar to existing noise levels. Trail users are transient users in this area who already have views of and hear noise from SR-91, the BNSF railroad tracks, and the park service road; there are also residential uses just north of this segment of the trail. The trail users in this area would be using that trail segment to either enter or exit CHSP or traverse the southern boundary of CHSP just north of SR-91. The park is not currently developed in this area other than the trail and the vegetation is relatively disturbed. Therefore, the indirect effects of Alternatives 1 and 2 in this area would not substantially impair the activities, features, or attributes that qualify CHSP for protection under Section 4(f). The discussions of constructive use impacts in Appendix B in the EIR/EIS were expanded to more clearly indicate why Alternatives 1 and 2 would not result in constructive use impacts at CHSP.

**O.5.5.3 Consultation with California State Parks**
As discussed in Chapter 5, Comments and Coordination, starting on page 5-1 in the EIR/EIS, RCTC and the Department have conducted consultation with State Parks since 2008 regarding identifying the project effects at CHSP and mitigation to address those effects. Part of that consultation was to refine the effects at Green River Road to accommodate the elevated Green River Road off-ramp. Refer to Section 5.2.2.2, Section 4(f) and Section 6(f) Consultations, in the EIR/EIS for a summary of that consultation through March 2012.

**O.5.5.4 De Minimis Determination**
As explained in Section 3.1.3.3, in the EIR/EIS, Section 6009(a) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) amended the Section 4(f) statute to allow the United States Department of Transportation (DOT) to determine that certain uses of Section 4(f) land will have no adverse effect on a protected resource. As a result, the Department, under its assumption of responsibility pursuant to 23 United States Code (USC) 327,
can determine whether a transportation use of a Section 4(f) resource, after consideration of any impact avoidance, minimization, mitigation, or enhancement measures, will result in a de minimis impact on that protected resource.

De minimis impacts on publicly owned parks, recreation areas, and wildlife and waterfowl refuges are defined as those that do not adversely affect the activities, features, and attributes of the Section 4(f) property. The Department must make a finding for each property, and the responsible official with jurisdiction over each resource must agree in writing with that finding.

The permanent use of 0.48 ac of land from CHSP at the Green River Road off-ramp will not substantively affect park users and will not affect access to/from this part of the park for park users or staff. As a result, the Department determined that the SR-91 CIP satisfies the criteria for de minimis under Section 4(f) and that the permanent use of 0.48 ac of land from CHSP under Alternatives 1 and 2 would result in only a minor, or de minimis, effect on CHSP. In addition, although trail users will have views of the elevated off-ramp and the retaining wall on the north side of SR-91, those views would be for only limited periods of time as trail users pass through the area. This area is not currently developed to attract park users to stay in the area for an extended period of time (no benches, shelters, picnic areas, substantial areas of natural resources, etc.). Views of the Santa Ana River are available to the west of this area, but the Santa Ana River is not visible from this area. There would be no interference with the features, activities, attributes, or purposes of CHSP, on either a temporary or permanent basis. The SR-91 CIP will not affect existing or future public access to hikers and vehicles. The land that will be used temporarily will be fully restored and returned to the condition that existed prior to the project, or better. As a result, the Department has determined that the SR-91 CIP satisfies the criteria for de minimis under Section 4(f). Therefore, Alternatives 1 and 2 would result in only a minor, or de minimis, effect on CHSP.

On April 5, 2012, State Parks provided written agreement that the project effects at CHSP would be de minimis impacts. A copy of that letter is provided in Appendix B. Key agreement points regarding State Parks’ concurrence on the de minimis for the project impacts are:

- Concurrence that the TCEs and the permanent subsurface easements constitute temporary occupancies and, therefore, are not uses of parkland under Section 4(f)
• Concurrency on the de minimis finding that the SR-91 CIP would not adversely affect the activities, features, and attributes that qualify CHSP for protection under Section 4(f)

• Concurrency that the transportation use of the Section 4(f) resource, together with the 4(f) impact avoidance, minimization, and mitigation or enhancement measures incorporated in the SR-91 CIP, does not adversely affect the activities, features, and attributes that quality CHSP for protection under Section 4(f)

O.5.5.5 Measures for Effects at Chino Hills State Park under Section 4(f)

The project will result in impacts at CHSP related to the permanent use of 0.48 ac of land and TCEs. Measure CI-2, from Section 3.4, Community Impacts, in the EIR/EIS addresses the process and requirements associated with the permanent acquisition of land for Alternatives 1 and 2, including land in CHSP, as follows:

CI-2 Where property acquisition and relocation are unavoidable, RCTC’s Right-of-Way Agents will follow the provisions of the Uniform Act and the 1987 Amendments as implemented by the Uniform Relocation Assistance and Real Property Acquisition Regulations for Federal and Federally Assisted Programs. Appendix D in the EIR/EIS provides a summary of the RCTC Relocation Assistance Program for implementing the Uniform Act.

As discussed above, the land in CHSP that will be used temporarily for TCEs will be fully restored and returned to the condition that existed prior to the project, or better, prior to the return of that land to State Parks.

The Green River Road westbound off-ramp under Alternatives 1 and 2 is close to an existing entrance to CHSP that is accessible from Prado Road. Although Alternatives 1 and 2 do not directly affect the entrance to that trail or the trail itself, the following measures are included in the Initial Phases of Alternatives 1 and 2 to provide improvements to the trail entrance at Prado Road and for RCTC to participate in regional trail planning:

PR-1 During final design/construction of the Initial Phase, RCTC will contribute $100,000 to the planning and implementation of improvements in that area that would support and expand regional trail connectivity.
PR-2 During final design/construction of the Initial Phase, RCTC will coordinate with State Parks on the aesthetic features that will be included in the project specifications for the proposed retaining wall facing CHSP between State Route 71 (SR-71) and the westbound Green River Road off-ramp, consistent with the aesthetic and features required in Measure V-1. The aesthetic treatment will include a texture to simulate a natural type appearance such as a soil or rock surface, or equivalent.

O.5.5.6 Measures for Other Effects at Chino Hills State Park
There are number of other measures provided in the EIR/EIS that would also protect resources in CHSP, as described below.

Measures for Fire Prevention and Suppression
The following measures in Sections 3.5 and 3.17, respectively, in the EIR/EIS would provide fire suppression and prevention benefits to CHSP:

UES-4 Fire Prevention Adjacent to CHSP. The final design of the SR-91 CIP Build Alternatives will include closing gaps so there is the equivalent of a continuous barrier 30 to 36 inches high on the edge of the shoulder on both westbound and eastbound SR-91 from SR-71 to State Route 241 (SR-241), as follows:

- **Initial Phase**: The 36-inch high concrete barrier on westbound SR-91 between SR-71 and Green River Road already included in the design alternatives will meet the requirements for this barrier;
- **Ultimate Project**: Close gaps to provide an equivalent continuous barrier 30 to 36 inches high on the edge of shoulder on SR-91 in both directions between Green River Road and SR-241 meeting Department standards applicable at the time.

In response to State Park’s concern about fires propagating over parkland from the freeway, the Department and California Department of Parks and Recreation (CDPR) representatives met with the California Department of Forestry and Fire Protection (CAL FIRE) and fire department representatives. The prevailing opinion of the local
fire experts was that a low, continuous concrete barrier would be effective in arresting freeway-to-wildland fire ignition and preventing the spread of fire from vehicles on the freeway into adjacent vegetation. The local fire experts preferred a 3-foot (ft) barrier to a higher barrier, because they still would need to get hoses and staff over the barrier to respond to fires and other emergency response.

For the first phase of this project, the proposed design already includes concrete barrier at the edge of shoulder on the north side of SR-91 between SR-71 and Green River Road for safety reasons, as this stretch is on high fill being supported by a retaining wall. This would both serve a safety need as well as providing a barrier to fire ignition sources from the freeway.

In informal consultation with statewide fire experts at CAL FIRE, it is clear there is no standard or research that can document the effectiveness of a vertical barrier for fire prevention from highways, although the prevailing opinion of local and statewide fire professionals is that it would be helpful. The standard approach is a horizontal 100 ft clear zone with limited fuel for fire within that distance which is not being considered here due to the impacts on adjacent wildlife habitat.

The project sponsors and State Parks agree that fire ignition sources from the freeway are an issue that should be further studied as part of the future expansion of SR-91 in the Ultimate Project. The current mitigation measure, proposed in concept, is for a fire resistant barrier, 3 ft in height, continuous but with limited access openings for vehicle passage for emergency and maintenance vehicles. There will be some years before final design to develop a concept and obtain all necessary federal and state approvals for such a pilot installation in consultation with fire professionals, Department traffic safety experts, and State Parks.

**NC-4** When work is conducted during the fire season (as identified by the Orange County Fire Authority [OCFA], Riverside County Fire Department [RCFD], City of Norco Fire Department, and/or the City of Corona Fire Department) adjacent to any vegetated open space, RCTC’s Resident Engineer will require the design/build contractor to ensure that appropriate firefighting equipment (e.g., extinguishers, shovels, water tankers) is available on site during all phases of project construction to help minimize the potential for human-caused wildfires. Shields,
protective mats, and/or other fire-preventive methods will be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventive actions, and responses to fires will advise contractors regarding fire risk from all construction-related activities.

If a responsible fire agency (OCFA, RCFD, City of Norco Fire Department, or City of Corona Fire Department) requires RCTC to clear defensible spaces during construction, the RCTC Resident Engineer, the design/build contractor, and the design/build contractor’s Designated Qualified Biologist will coordinate with the United States Fish and Wildlife Service (USFWS) prior to this clearing effort. In the event there are resources in the areas identified for defensible clearing, RCTC’s Resident Engineer and the Designated Qualified Biologist will coordinate with any applicable permitting agencies regarding possible effects to those resources prior to approving the defensible clearing of any areas by the contractor.

During all Red Flag Warning periods as issued by the National Weather Service, the design/build contractor will not be allowed to operate mechanized equipment or equipment that could throw off sparks or potentially start fires in any areas of natural open space in CHSP or other areas.

**Measure Regarding Construction Hours in CHSP**

The following measure in Section 3.1 in the EIR/EIS will limit construction activities to minimize nighttime noise impacts to CHSP:

**PR-3** RCTC’s Resident Engineer will require the design/build contractor to limit the hours of construction in CHSP to daylight hours (7:00 a.m.–7:00 p.m.), with the exception of limited periods when evening or night construction is necessary for operational reasons. Operational reasons may include the desire to conduct certain construction activities, such as closing multiple ramps or travel lanes, during night
hours to minimize delays to the traveling public. Any night construction must be approved in writing by the RCTC Resident Engineer and coordinated with the District 8 and 12 biologists, the USFWS, and CDFG.

The entry gates at Coal Canyon must remain closed at all times except to provide access to and from the construction site for construction workers, materials delivery, and construction equipment, to prevent wildlife from inadvertently entering the freeway area.

**Measure Regarding Small Animal Movement at Coal Canyon**

The following measure in Section 3.20 in the EIR/EIS will protect small animals in the vicinity of Coal Canyon and CHSP:

**AS-8** RCTC's Resident Engineer will require the design/build contractor to install and maintain silt fence barriers at all staging or construction areas at Coal Canyon and areas within CHSP to prevent small animals from entering those areas.

In addition to the measures listed above, there are other measures included in the Build Alternatives that will also apply adjacent to CHSP to protect resources in CHSP as well as other areas. Refer to Appendix E, Environmental Commitments Record, for all the project measures, including biological resources measures that would be applicable adjacent to CHSP.

**O.5.5.7 Other Commitments by RCTC Relevant to Chino Hills State Park**

In addition to the measures described above and in Appendix E in the EIR/EIS and separate from the mitigation requirements for the SR-91 CIP, RCTC has committed to an additional action in the Coal Canyon area, as follows. A stand-alone project will be developed to construct barriers on the south and north sides of SR-91 to shield headlight glare and freeway noise. The required barriers are estimated to be approximately 1,500 ft and 1,300 ft long on the south and north sides of SR-91, respectively. The project will follow environmental process requirements and engage subject area experts to establish the specific requirements and effectiveness of the proposed barriers to meet the project purpose as well as ensure safety and structural standards are met.
In consideration of and reliance on the needs of State Parks and other open space plans that depend on CHSP, and subject to environmental review, RCTC commits to build this barrier in tandem with the completion of the SR-91 widening in this area currently planned for completion in 2035. RCTC intends to work with the Department and other agencies to fund and implement this project. RCTC’s commitment to provide this barrier is documented in a Letter of Intent to State Parks dated March 26, 2012. The Department has also agreed to support this project and work with RCTC in their letter dated March 26, 2012.

**O.5.5.8 Section 6(f) and Consultation with the National Park Service**

In its consultation letter dated January 26, 2012, the NPS indicated that two previous Land and Water Conservation Fund (L&WCF) Act grants were used for the acquisition of land for CHSP. The Build Alternatives would require acquisition of a small amount of land in parcel #31 in CHSP, which was not acquired with those grant monies. The NPS letter goes on to say “...we have determined that LWCFA §6(f)(3) does not now apply to parcel #31, and that the proposed project, were it to be built today, would not cause a LWCFA conversion of parkland on parcel #31.” As a result, at this time, the requirements for the protection and mitigation of the acquisition of land from parcel #31 for the proposed project under Section 6(f) do not apply.

However, the NPS also indicated in its consultation letter that the timing of the closing of an approved third major L&WCF Act grant to State Parks for CHSP is not known. When that grant is closed, it will modify the Section 6(f) boundary for CHSP to include all the existing land in the park, including all of parcel #31. Because of the uncertainty of the timing of the closing of that approved L&WCF Act grant to CHSP, the NPS consultation letter also recommends “...that CEQA and NEPA environmental compliance treat the property as if §6f applied now, in terms of potential impacts assessment and mitigation measures.”

Because parcel #31 is not currently subject to the requirements of protection and mitigation under Section 6(f), RCTC and the Department are proceeding without treating parcel #31 as if Section 6(f) applies now and will continue to monitor the status of the L&WCF Act grant closing. However, in the event that the grant is closed prior to construction of the SR-91 CIP, the requirements for the protection under Section 6(f) will need to be analyzed and addressed with CHSP and CDPR, Office of Grants and Local Services.

The NPS consultation letter is provided in Appendix B of the EIR/EIS.
O.5.6 Common Response Related to Noise Barriers on I-15
Noise barriers that would not meet a minimum life span of 20 years are not considered reasonable by the Department and therefore were not considered for inclusion in the final design for the SR-91 CIP. Based on comments received during the public review period of the Draft EIR/EIS and prior commitments made by previous Department projects to build NB K1-A, along I-15, a noise barrier survey was conducted for property owners affected by the construction of NB K1-A. Based on the surveys submitted by affected property owners, NB K1-A received a majority approval and will be constructed as part of the SR-91 CIP. If noise barriers along I-15 other than NB K1-A are not constructed as part of the separate I-15 Project within 5 years from the completion of the SR-91 CIP, RCTC will initiate a separate project to construct these noise barriers. Mitigation Measure N-4 in Section 3.5.4.3, Mitigation for Operational Noise on I-15, confirms RCTC’s commitment regarding these other noise barriers along I-15.

Refer also to Section O.5.3, Common Response Related to the Noise Process, on page O-8, for additional discussion regarding the process for identifying the need for sound walls and the minimum lifecycle requirement for that type of improvement along State highways.

O.5.7 Common Response Related to Alternatives
A number of comments were received related to the project alternatives, the process of developing those alternatives, additional alternatives, and other related comments. The following discussion explains the information included in various sections of the EIR/EIS that document and disclose the previous studies and project definition processes that have been developed over the past 20 years related to the proposed SR-91 improvements.

It is clear through these previous studies that the proposed SR-91 CIP is not the only solution to the transportation problem between Riverside and Orange Counties. The SR-91 CIP is part of the solution and has been prioritized by the RCTC and the Department to move forward as the first major project defined by the Locally Preferred Strategy (LPS) developed from the Major Investment Study (MIS) in 2005, as described later in this section.

The comments that relate to the range of Build Alternatives studied, the effectiveness of the Build Alternatives to meet purpose and need, the feasibility of the alternatives, etc., are responded to in the following sections. It is RCTC and the Department’s
contention that, given the planning history within the corridor, the SR-91 CIP Build Alternatives are reasonable, feasible, and constructible alternatives that are only one step in reducing vehicle congestion between Riverside and Orange Counties.

O.5.7.1 **History of the Project/Development of the SR-91 CIP Build Alternatives**

Refer to Section 1.1.3, Planning History of the Project, which describes the history of regional planning efforts to address east-west travel in this area in detail, including the following key studies:

- **Route Concept Report (California Department of Transportation [Caltrans] 1989):** The ultimate SR-91 facility anticipated in this Route Concept Report proposed eight general-purpose (GP) lanes and two high-occupancy vehicle (HOV) lanes. The existing SR-91 facility meets or exceeds that ultimate facility but does not accommodate either existing or future demand in this corridor.

- **State Route 91 Congestion Relief Alternatives Analysis (Caltrans, January 2003):** This report identified short-, mid-, and long-term alternatives to relieve congestion on SR-91 between State Route 55 (SR-55) in Orange County and I-15 in Riverside County.

- **State Route 91 Implementation Plan (Orange County Transportation Authority [OCTA] 2003):** This Plan was prepared to comply with Assembly Bill (AB) 1010 (September 2002), which required OCTA, in consultation with the Department and RCTC, to issue a plan and a proposed completion schedule for improvements to SR-91 from I-15 to SR-55 to the State Legislature prior to July 1, 2003. The scope of this Plan reiterated the alternatives in the State Route 91 Congestion Relief Alternatives Analysis and provided additional approaches, including the development of an MIS to evaluate potential new corridors and multimodal alternatives. This Plan has been updated annually to the current State Route 91 Implementation Plan (OCTA 2010).

**O.5.7.2 Riverside County-Orange County Major Investment Study**

The *Riverside County-Orange County Major Investment Study* (OCTA 2005) was prepared by OCTA, in cooperation with RCTC and the Foothill-Eastern Transportation Corridor Agency. The MIS addressed planning, environmental, and transportation issues that would result from the anticipated doubling of population in Riverside County (from 1.5 million residents in the early 2000s to approximately 3.1 million residents by 2030) by developing an LPS to meet five key goals, to the extent feasible:
1. Provide improvements to SR-91 to improve mobility between counties.
2. Improve travel time and safety on existing facilities.
3. Improve goods movement capability through the corridor.
4. Reduce and manage the diversion of intercounty traffic from SR-91 to local streets.
5. Expand modal options throughout the corridor.

The MIS scope relied heavily on recommendations for improvements to SR-91 based on the earlier studies described above, examined a comprehensive range of capital and operational improvement alternatives to SR-91, and identified other intercounty multimodal transportation corridor opportunities. The MIS analyzed the potential benefits, costs, and consequences (economic, social, and environmental) of alternative transportation investment strategies in Orange and Riverside Counties.

The SR-91 CIP was identified as a key east-west transportation corridor improvement based on the environmental and transportation analyses conducted for the MIS. The MIS led to the development of the two Build Alternatives for the proposed SR-91 CIP.

The MIS considered a wide range of transportation options to address the need for improved mobility between Orange and Riverside Counties. Specifically, the MIS Policy Committee identified and approved four separate bands of broad east-west corridors between Riverside and Orange Counties as part of the LPS to address the demand for east-west travel between the two counties. The SR-91 CIP is one of those bands of improvement. Two new corridors (Corridors A and B) to meet the need for east-west travel between Riverside and Orange Counties were also identified in the MIS and are described in the following sections. A third corridor, Corridor D, focused on improvements to State Route 74 (SR-74) between Riverside and Orange Counties. As noted in the MIS, Corridors A and B, and the improvements to SR-74 would be needed in addition to the SR-91 CIP to address the forecasted demand for east-west travel between the two counties.

**O.5.7.3 Other Improvements Proposed in the Locally Preferred Strategy**

In addition to the improvements in the SR-91 CIP, the refined LPS includes the following projects on SR-91, other east-west corridors, and transit improvements:

- **Immediate Capacity Enhancements to SR-91**: Add one new lane in each direction between I-15 and SR-241 and make additional improvements.
• **Lower Toll on Foothill Transportation Corridor (SR-241):** Encourage more use of SR-241 by lowering the existing toll and adding new lanes.

• **Build 4-Lane or 6-Lane Elevated Highway (Corridor A):** Build an entirely new elevated highway (viaduct) parallel to SR-91 between I-15 and SR-241. Corridor A would have limited access/egress at only I-15, SR-71, and SR-241. Corridor A would have limited locations for access/egress and, therefore, would not address substantial amounts of the demand in this corridor. In addition, as noted above, the MIS identified the need for both the SR-91 CIP project and Corridor A, so Corridor A alone would not be consistent with the MIS and would not meet the defined purpose for the SR-91 CIP.

• **Build 4-Lane or 6-Lane Tunnel (Corridor B):** Build an entirely new tunnel highway between I-15 at Cajalco Road in Riverside County and the vicinity of the SR-241 and State Route 133 (SR-133) interchange in Orange County. Corridor B was defined as a full-length tunnel or partial surface road/tunnel alignment from Cajalco Road at I-15 in Riverside County west across the Santa Ana Mountains to the SR-241/SR-133 interchange in central Orange County. Corridor B would be substantially south of the SR-91 corridor and, as noted in the MIS, is considered a needed improvement in addition to the SR-91 CIP to address east-west demand but not as a project by itself.

• **Improvements to SR-74:** Improvements along existing SR-74 between Orange and Riverside Counties are included in the LPS. SR-74 is substantially south of the SR-91 corridor and, as noted in the MIS, is needed in addition to the SR-91 CIP to address east-west demand. SR-74 and the improvements to SR-74 were originally defined in the MIS as Corridor D.

• **Maximize Transit System:** Expand transit service by increasing MetroLink service through the corridor and evaluate the addition of express buses and high-speed trains such as Maglev. Incorporate a new Intermodal Transportation Center in Corona near Serfas Club Road with a park-and-ride facility (estimated at 3,000 parking spaces), shuttle/circulator feeder buses, local and express buses including bus rapid transit, preferential treatment for HOVs, and linkages to the proposed Maglev train if a station is developed in Corona along the Ontario-Anaheim segment. These transit enhancements are proposed in the LPS as separate projects and are not specifically included in any of the highway improvement projects in the LPS.

• **Operational Improvements to SR-74:** Identify specific operational improvements to SR-74 between Interstate 5 (I-5) and I-15.
Refer also to Section 2.3.5.3, Major Investment Study Build Alternatives, on page 2-122 in the EIR/EIS for additional discussion of the other corridor alternatives included in the MIS LPS.

O.5.7.4 Transportation Systems Management (TSM) and Traffic Demand Management (TDM)

Refer to Section 2.3.5, Transportation Systems Management and Traffic Demand Management, on page 2-120 in the EIR/EIS for a discussion of the elements of TSM and TDM included in the SR-91 CIP, although a separate TSM/TDM alternative was not considered in the EIR/EIS.

Refer also to Section 2.3.8.5, Multi-Modal Components, on page 2-142 in the EIR/EIS, which indicates the SR-91 CIP improvements are compatible with a wide range of multi-modal improvements proposed in Orange and Riverside Counties, including increased transit services in that corridor.

The existing public transit options between Riverside and Orange Counties are bus and commuter rail. MetroLink commuter rail services between Riverside and Orange Counties operate on railroad tracks owned by the BNSF Railway. MetroLink commuter rail service in this corridor is nearing capacity on existing equipment. MetroLink currently operates 16 trips daily on the Inland Empire-Orange County (IEOC) Line between downtown Riverside, Laguna Niguel/Mission Viejo, and Oceanside. It operates nine trips daily on the 91 Line between Riverside and Los Angeles via Corona, Fullerton, and Norwalk. The RCTC is planning to increase commuter rail services to Riverside County in the future by two additional trips on the IEOC Line and three additional trips on the 91 Line. With this enhanced service, there will be at least one train every 30 minutes in the peak direction (westbound during the a.m. peak hour and eastbound during the p.m. peak hour). Further service improvements to MetroLink are envisioned in the Southern California Regional Rail Authority (SCRRA) Strategic Assessment (MetroLink, January 19, 2007). It is anticipated there will be at least 40 daily trips each on the IEOC Line and 91 Line by 2030. This type of alternative was already identified in the MIS as needed improvements, in addition to the SR-91 CIP. As a result, it would not meet the project purpose and need and would compromise the SR-91 CIP to such a degree that it would be unreasonable to proceed.
O.5.7.5 Alternatives Considered But Not Carried Forward

Refer to Section 2.3.8, Alternatives Considered but Eliminated from Further Discussion in the Draft Environmental Document, on page 2-140 in the EIR/EIS, for a detailed discussion of a wide range of highway and other alternatives that were considered but not carried forward for detailed analysis in the EIR/EIS. As noted above, the SR-91 CIP was developed to satisfy specific initial components of the MIS LPS and to provide immediate capacity enhancements to SR-91. Other components of the MIS LPS, including alternative corridors/facilities and transit, are individual and separate projects being pursued separately by OCTA, RCTC, and/or the Department. As a result, the alternatives evaluated in the EIR/EIS were specifically designed to provide immediate capacity enhancements on SR-91 that would be consistent with the MIS LPS.

A number of other Build Alternatives were identified and briefly evaluated. Based on those evaluations, those alternatives were not carried forward for detailed evaluation in the project environmental technical studies or the EIR/EIS. Those alternatives are listed below and are described in detail in Section 2.3.8, including why they were not carried forward.

- **HOV/Express Lanes in Parallel:** Implementation of HOV and tolled express lanes on SR-91 in parallel was considered with two cross-section configurations.
- **Additional HOV Lanes:** Consideration was given to implementing two HOV lanes in each direction on SR-91 rather than two tolled express lanes.
- **Reversible Managed Lanes:** This alternative considered reversible lanes for HOVs.
- **Measure A HOV Widening with Corridor A (Value Analysis Alternative 1.3):** The Value Analysis Study Report (Value Management Strategies Inc., October 2008) proposed constructing the SR-91 CIP in conjunction with the Corridor A alignment identified in the LPS and the MIS.
- **Additional Express Lanes (Value Analysis Alternative 1.4):** The Value Analysis Study Report proposed an alternative that would construct three rather than two express lanes in each direction on SR-91.

O.5.7.6 No Build Alternative

In addition to the two SR-91 CIP Build Alternatives, the No Build Alternative was also evaluated in the EIR/EIS. The No Build Alternative:
• Would maintain the existing SR-91 and I-15 in the project area;
• Would not provide additional GP lanes or a change in the existing tolled express or HOV lanes on SR-91; and
• Provides a benchmark by which the public and decision-makers can compare the magnitude of the effects of the Build Alternatives.

O.5.8 Common Response Related to Billboard Relocation
Alternative 1 and its design variations will displace 9 commercial billboards. Alternative 2 and its design variations, including Alternative 2f, will displace 10 commercial billboards. All the displaced billboards are in the City of Corona. Table O.5 summarizes the billboard locations and which alternatives impact each billboard.

Table O.5 Billboards Affected by Alternatives 1 and 2

<table>
<thead>
<tr>
<th>APN</th>
<th>Location (Relative to SR-91)</th>
<th>Descriptions</th>
<th>Impacted by Alt 2</th>
<th>Impacted by Alt 1</th>
<th>Can the Billboard be Relocated?</th>
</tr>
</thead>
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<tr>
<td>101-290-023</td>
<td>North Side</td>
<td>Green River WB On-Ramp</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>101-290-021</td>
<td>North Side</td>
<td>Green River WB On-Ramp</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>102-050-013</td>
<td>South Side</td>
<td>Auto Center Drive EB Off-Ramp</td>
<td>Yes</td>
<td>Yes</td>
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<td>102-091-006</td>
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<td>Between I-15 and East Grand Avenue Digital Board</td>
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</tr>
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</table>

Source: Riverside County Transportation Commission (2011).

Note: The billboard on APN 101-140-013 would not be affected by either Build Alternative and, as a result, is not included in this table.

1 Based on preliminary plans for the Build Alternatives, it appears that the billboards displaced by the project can be relocated in the vicinity of their original locations. All billboard relocations must comply with the requirements in the City of Corona Municipal Code and the Outdoor Advertising Act and Regulations.

Alt = Alternative
APN = Assessor's Parcel Number
EB = eastbound
I-15 = Interstate 15
SR-71 = State Route 71
SR-91 = State Route 91
WB = westbound
Consistent with the requirements of the Uniform Act, the RCTC will work with each billboard owner to assist with the relocation of each billboard, which will preferably be on the same lot. The specific requirements applicable to the relocation of the billboards are documented in:

- **City of Corona Municipal Code, Title 17 Zoning, Chapter 17.73 Signs, Section 17.74.160 Off-premises and Outdoor Advertising Signs (Billboards) and Section 17.74.220(H):** Section 1.7.74.220(H) specifically prohibits outdoor advertising signs (billboards) unless considered and constructed as part of a relocation agreement between the City and the billboard and/or property owner. The 10 existing billboards are included in existing relocation agreements between the billboard/property owners and the City of Corona.

- **Outdoor Advertising Act and Regulations, 2011 Edition (Citations from the California Business and Professions Code, and Citations from the California Code of Regulations [CCR]) as Distributed by the Department:** This document details the requirements for all types of outdoor advertising based on the California Business and Professions Code and CCR Title 4, Business Regulations.

All billboards are required to comply with the applicable requirements detailed in these two sections. The relocation of billboards for the SR-91 CIP will be required to comply with the requirements for billboards relocated on the same property lot and billboards relocated to other property lots.

If the billboard cannot be relocated on the same property, then RCTC's Right-of-Way Agents will help locate other potential properties in proximity to the location of the existing billboard. Table O.5 indicates that it appears all the displaced billboards can be relocated in the vicinity but not necessarily on the same parcels where the existing billboards are located. However, as noted above, all billboard relocations must comply with the requirements in the City of Corona Municipal Code and the Outdoor Advertising Act and Regulations. All relocated billboards would also require a relocation agreement between the billboard/property owner and the City of Corona.

The following measure was added in Section 3.4.2.5, Avoidance, Minimization, and/or Mitigation Measures for Relocations and Real Property Acquisition, on page 3.4-52 regarding the billboard relocation process:

**CI-4** During final design and property acquisition, the RCTC Project Engineer and Right-of-Way Agents will work with
the billboard/property owners, the City of Corona, and the Department’s Outdoor Advertising Unit to find locations for relocating the affected billboards, within the existing sites where the billboards are currently located or other sites in the City where billboards are allowed. The Right-of-Way Agents will work with the City and the Department’s Outdoor Advertising Unit to ensure that the sites for the relocated billboards comply with the requirements in the City of Corona Municipal Code and the Outdoor Advertising Act and Regulations. The Right-of-Way Agents will also work with the billboard/property owners to develop Billboard Relocation Agreements with the City of Corona.

For billboards that cannot be relocated or relocated to a similar location with similar revenue production, the owner may be entitled to compensation under the Uniform Act as discussed in Appendix D, Summary of Relocation Benefits, in the EIR/EIS. Based on the relocation of billboards that can be relocated with similar revenue production or compensation under the Uniform Act, the impacts of the Build Alternatives related to the relocation/removal of billboards would not be substantial.

RCTC will take into consideration the existing relocation agreements the City of Corona has with billboard providers in the billboard relocation process. The agreements the City of Corona currently has with Lamar Central Outdoor and General Outdoor Advertising, and the revenue generated to the City as a result of those agreements, will be considered during the billboard relocation process. Every effort will be made to relocate all displaced billboards to other locations in the City. However, it is unknown if these billboards will be able to be relocated within the City limits. There may be a financial impact associated with the removal of these billboards from within the City limits, resulting in a loss of revenue to the City.

The total revenue lost cannot be calculated because it is not known how many, if any, of the affected existing billboards would not be relocated within the City limits. However, the potential economic impacts as a result of billboard relocations and displacements are not considered substantial. A subsection titled “Other Revenue” was added on page 3.4-49 in Section 3.4.2.4, Economics, in the EIR/EIS to discuss billboard displacements and relocations in the City of Corona and to indicate that no
substantial long-term economic impacts are anticipated as a result of changes in existing billboards.

O.5.9 Common Response Related to the Identification of the Preferred Alternative

The process for the identification of the Preferred Alternative is described in detail in the following sections in Chapter 2:

- **Section 2.3.7.1, Identification of the Preferred Alternative on page 2-124:**
  This is an introduction to the process for the identification of the Preferred Alternative by the Project Development Team (PDT).

- **Section 2.3.7.2, Identification of the Locally Preferred Alternative on page 2-128:**
  This section describes RCTC's identification of Alternative 2 as the locally preferred alternative.

- **Section 2.3.7.3, Development of the PDT Recommendation on page 2-128:**
  This section describes the criteria and evaluation process used by the PDT to identify Alternative 2 as its recommended alternative for the SR-91 CIP.

- **Section 2.3.7.4, PDT Recommendation for the SR-91 CIP Alternative on page 2-136:**
  This section discusses the criteria and evaluation process used by the PDT to compare the design variations for Alternative 2 and the identification of design variation f for inclusion in Alternative 2.

- **Section 2.3.7.5, Preferred Alternative on page 2-137:**
  This section describes the PDT recommendation of Alternative 2f as the Preferred Alternative.

Refer to those sections in Chapter 2 for the detailed discussion of the alternative identification process.

O.5.10 Common Response Related to the Biological Opinion

The Biological Opinion for the SR-91 CIP was received from the USFWS on November 30, 2011. A copy of the Biological Opinion is provided in Appendix N, Biological Opinion.

The Biological Opinion found that the SR-91 CIP is not likely to adversely affect Brauntion’s milk-vetch and its designated critical habitat, southwestern willow flycatcher, and Santa Ana Sucker based on the avoidance of occupied habitat, general construction avoidance, and minimization measures to avoid indirect effects from construction. Therefore, these species were not addressed by the formal consultation. Effects to California gnatcatcher (CAGN), least Bell’s vireo (LBV), and Stephens’ kangaroo rat (SKR) in Riverside County will be addressed through compliance with
the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP). There will be no effects to LBV and SKR in Orange County. As part of the Biological Opinion, the USFWS determined the SR-91 CIP is consistent with the Western Riverside County MSHCP and SKR HCP.

The USFWS determined that the SR-91 CIP may affect CAGN. The Biological Opinion has authorized an “incidental take” of CAGN for the SR-91 CIP as follows:

- Incidental take in the form of harm, as defined in 50 Code of Federal Regulations (CFR) Section 17.3, of one CAGN pair is authorized due to the permanent removal of 4.25 ac of coastal sage scrub (CSS) and 4.17 ac of vegetation communities used by CAGN for essential behaviors, including nesting, roosting, foraging, and dispersal, and the temporary removal of 1.29 ac of CSS and 1.72 ac of vegetation used by CAGN for foraging and dispersal. The take threshold will be exceeded if more than the amount of habitat identified above is graded or grubbed of if more than one pair of CAGN is killed or injured.

The USFWS has further determined that the level of anticipated take is not likely to result in jeopardy to the recovery of CAGN.

Refer to Section 3.21.3.4, Biological Opinion, starting on page 3.21-18 for additional information related to the Biological Opinion. Additional measures (TE-1 through TE-17) that were required by the Biological Opinion but not previously included in the EIR/EIS were added to Section 3.21.4, Avoidance, Minimization, and/or Mitigation Measures, beginning on page 3.21-20 (see Measures TE-1 through TE-17).

### O.6 Comments and Responses

The comments received on the Draft EIR/EIS during the public comment period and the responses to those comments are provided in the following sections. As stated previously in Section O.5, where there are multiple comments that raise the same or similar issue or concern, a common response was prepared to address the specific issue comprehensively. The common responses were used when applicable to respond to the comments provided in this section. The responses to the comments are provided following the last page of the coded letter in each category (i.e., federal agency letters are followed by their responses to those comments, State agency letters are followed by their responses to those comments, etc.).
O.6.1 Federal Agency Comments
This page intentionally left blank
United States Department of the Interior
OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Pacific Southwest Region
1111 Jackson Street, Suite 520
Oakland, California 94607

IN REPLY REFER TO:
ER# 110476

Electronically Filed

11 July 2011

Mr. Aaron Burton
California Department of Transportation, District 8
464 West 4th Street, 6th Floor
San Bernardino, CA 92401
Email: aaron_burton@dot.ca.gov

Subject: Review of Draft Environmental Impact Statement and Section 4(f) Evaluation for State Route 91 Corridor Improvement Project, Riverside and Orange Counties, CA

Dear Mr. Burton,

The Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement and Section 4(f) Evaluation for the State Route 91 Corridor Improvement Project, Riverside and Orange Counties, California, and offers the following comments.

SECTION 4(f) EVALUATION COMMENTS

The Department concurs that there is no feasible or prudent alternative to the preferred alternative identified in the document, and that all reasonable measures to minimize harm to Section 4(f) property have been identified.

Thank you for the opportunity to review this document. Should you have any questions about the Section 4(f) comments, please contact Alan Schmierer, National Park Service, Pacific West Regional Office, at 510-817-1441.

Thank you for the opportunity to review this project.

Sincerely,

[Signature]

Page 1 of 2
Patricia Sanderson Port  
Regional Environmental Officer

cc:  
Director, OEPC  
SHPO CA (mwdonaldson@parks.ca.gov)

bcc:  
• OEPC (Loretta_Sutton@ios.doi.gov)  
• NPS-WASO-EQD (waso_eqd_extrev@nps.gov)  
• NPS-PWR-O (alan_schmierer@nps.gov)
F-1-1
It is acknowledged that the Department of the Interior is the federal agency authorized to make decisions regarding whether there are prudent and feasible alternatives to the use of land from a Section 4(f) property. It is further acknowledged that the Department of the Interior has concurred there is no prudent and feasible alternative to the use of land from CHSP and that all reasonable measures to minimize harm to that Section 4(f) property have been identified. No further response is needed.
In Reply Refer To:
FWS/CDFG-08B0733-11CPA0256

JUL 11 2011

Mr. Aaron Burton
California Department of Transportation – District 8
464 West Fourth Street
San Bernardino, California 92401

Subject: Draft Environmental Impact Report/Environmental Impact Statement for State Route 91 Corridor Improvement Project, Riverside and Orange Counties, California

Dear Mr. Burton:

The California Department of Fish and Game (Department) and the U.S. Fish and Wildlife Service (Service), hereafter collectively referred to as the Wildlife Agencies, have reviewed the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) for the State Route 91 (SR-91) Corridor Improvement Project. The proposed project is the widening of SR-91 from the State Route 241 interchange in the cities of Anaheim and Yorba Linda in Orange County to Pierce Street in the city of Riverside in Riverside County. The project would also widen Interstate 15 between the Cajalco Road interchange in the city of Corona and the Hidden Valley interchange in the cities of Corona and Norco, in Riverside County, California.

The Department is a trustee agency under the California Environmental Quality Act and is responsible for ensuring appropriate conservation of fish and wildlife resources including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act, and administers the Natural Community Conservation Planning Program. The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et seq.).

On June 22, 2004, the Department issued Natural Community Conservation Plan Approval and Take Authorization for the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) as per Section 2800, et seq., of the California Fish and Game Code. Also, the Service issued a section 10(a)(1)(B) permit for the MSHCP. The MSHCP establishes a multiple species conservation program to minimize and mitigate habitat loss and the incidental take of covered species in association with activities covered under the permit.
Mr. Aaron Burton (FWS/CDFG-08B0733-11CPA0256)

The purpose of this letter is to provide some clarification in regards to information provided in the DEIR/EIS in regards to B Canyon in the section on Wildlife Corridors (Section 1.17.2.4). The DEIR/EIS states “...the RCA and the wildlife resource agencies would like to amend the Western Riverside County MSHCP to relocate Proposed Constrained Linkage 1 from its current location to B Canyon.” The DEIR/EIS also states that “RCTC [Riverside County Transportation Commission] has committed to developing a separate project to improve B Canyon to accommodate more wildlife movement by widening the crossing under SR-91. That project is dependent on the RCA’s ability to amend the Western Riverside County MSHCP and to obtain the necessary property rights to ensure the corridor will be successful in the long term.”

The RCA and Wildlife Agencies in cooperation with Caltrans and RCTC are working on providing an alternative linkage to Proposed Constrained Linkage 1 and an improved wildlife undercrossing at B Canyon to provide wildlife connectivity under the SR-91. The Wildlife Agencies would like to clarify that although achieving connectivity for Wildlife movement is dependent on RCA obtaining the property rights; an amendment to the MSHCP is not required. The alternative reserve assembly strategy is anticipated to be accomplished through the Criteria Refinement process.

We appreciate both Caltrans’ and RCTC’s ongoing commitment to the improvement of connectivity for wildlife movement in support of MSHCP goals and thank you for the opportunity to provide comments on the DEIR/EIS. If you have any questions pertaining to these comments, please contact Leslie MacNair (Department) at (949) 458-1754 or Karin Cleary-Rose (Service) at (760) 431-9440, extension 228.

Sincerely,

Kennon Corey
Assistant Field Supervisor
U.S. Fish and Wildlife Service

Leslie MacNair
Staff Environmental Scientist
California Department of Fish and Game

cc:
Charles Landry, Regional Conservation Authority, Riverside, California
F-2-1
It is acknowledged that this comment letter provides input from the California Department of Fish and Game (CDFG) and USFWS on CDFG's role as a trustee agency and CDFG's approval and take authorization for the Western Riverside County MSHCP. Because this comment does not ask any questions or provide a comment relative to the technical information or environmental analyses in the EIR/EIS, no further response is necessary. Refer to responses to comments F-2-2 and F-2-3, below.

F-2-2
Based on the Comprehensive Wildlife Corridor Analysis Report (May 2010) included in the Natural Environment Study (NES; June 2010), it was determined that the SR-91 CIP would not substantially reduce, but would contribute to the reduction of, wildlife movement at B Canyon. As discussed in Section 3.17, Natural Communities, in the EIR/EIS, the Build Alternatives would result in temporary, but not substantial, adverse impacts on wildlife movement during construction. Those temporary impacts would be substantially mitigated based on implementation of Measures NC-6 through NC-16. The Build Alternatives would not result in adverse impacts related to wildlife movement after the completion of construction.

Although not needed as mitigation for the SR-91 CIP, the RTC and several other agencies have committed to study and develop a separate project to improve B Canyon to accommodate more wildlife movement by widening that existing crossing under SR-91. That separate B Canyon project is dependent on the ability to obtain the necessary property rights to ensure the corridor will be a successful long-term solution. It is acknowledged that an amendment to the Western Riverside County MSHCP would not be required for that B Canyon project.

The improvement of a functional wildlife corridor at B Canyon will only be able to come to fruition through the cooperation and participation of many stakeholders. It is not reasonable for any one project such as the SR-91 CIP to carry the burden for the cumulative impacts of many projects on wildlife movement. The Department and RTC, who are two of the stakeholders, are committed to participating with the other stakeholders in an effort to facilitate wildlife movement and increase connectivity in the area. If the B Canyon project proceeds, RTC has agreed to contribute some funds toward the construction cost of that project.
F-2-3

No response is necessary because this comment does not ask a question or provide a comment relative to the technical information or environmental analyses in the EIR/EIS.
Mr. Aaron Burton
California Department of Transportation, District 8
464 West 4th Street, 6th floor
San Bernardino, CA 92401

Subject: EPA Comments on the Draft Environmental Impact Statement for State Route 91 Corridor Improvement Project in Riverside and Orange Counties, California (CEQ # 20110158)

Dear Mr. Burton:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the State Route (SR) 91 Corridor Improvement Project in Riverside and Orange Counties, California, pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. Based upon our review, we have rated the proposed action as Environmental Concerns-Insufficient Information (EC-2). See attached “Summary of the EPA Rating System” for a description of the rating. The basis for the rating and our recommendations are summarized below and further detailed in our enclosed comments.

Riverside County Transportation Commission (RCTC) and California Department of Transportation (Caltrans) propose to add a general purpose lane in each direction and convert existing express lanes to toll lanes on approximately 17 miles of State Route (SR) 91 from SR 241 in the Cities of Anaheim and Yorba Linda to just west of I-15 in the City of Riverside. The project also includes a toll lane in each direction for approximately six miles of Interstate 15 at the SR91 junction.

As identified in the DEIS, SR 91 is the major highway for commuting Riverside and San Bernardino residents working in Orange and Los Angeles Counties and sections of the corridor are reported to be used by more than 280,000 vehicles per day. Communities along the heavily travelled and congested SR 91 corridor are already experiencing poor air quality. EPA is concerned with possible increases in localized, or "hot spot" vehicle emissions and exposure to mobile source air toxics (MSAT) for a number of residents and sensitive receptors that are located near the existing SR 91 facility. EPA recommends performing MSAT hot spot analyses, and if significant hot spots are identified, implementing measures to reduce exposure to MSATs, such as targeted project alignment modifications or shifts or the use of buffers.

We also recommend that Caltrans identify specific locations of any impacts to waters of the U.S. in the Final Environmental Impact Statement (FEIS) and further discuss why these impacts are unavoidable. In addition, the FEIS should assess indirect impacts to wetlands and other waters and include a description of mitigation to replace affected wetland functions.
The above-listed concerns, along with additional comments on water quality and children’s health are further discussed in the attachment. Thank you for the opportunity to comment on the DEIS. When the FEIS is published for public review, please send one hard copy and, if available, two CD-ROMs to the address above (mail code: CED-2). If you have any questions, please contact Susan Sturges, the lead reviewer for this project. You may reach Susan at 415-947-4188 or sturges.susan@epa.gov.

Sincerely,

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

Attachments: Summary of Rating Definitions
EPA’s Detailed Comments

CC via email: John Chisholm, Caltrans District 11
Sally Brown, U.S. Fish and Wildlife Service
Stephanie Hall, U.S. Army Corps of Engineers
Mobile Source Air Toxics (MSAT)

Because the existing highway already accommodates a tremendous volume of traffic and a number of sensitive receptors and neighboring residential communities are likely currently exposed to substantial MSAT emissions, additional increases in MSATs may have significant impacts. The MSAT Analysis of Results (p. 3.14-33) is misleading because it does not discuss localized impacts as "hot spots" along the proposed alignments and does not assess proximity to sensitive receptors and residential areas. Changes in traffic density resulting from the project may lead to an increase in MSAT impacts at some locations (e.g., neighboring intersections, local roads) and potentially a decrease in MSAT impacts in other locations. The net result of this change may be either unacceptable or beneficial, and is especially dependent on the relative locations of sensitive receptors, but is difficult to determine without further analysis of changes in ambient concentration as a result of each alternative.

EPA recommends including additional quantitative analysis in the Final Environmental Impact Statement (FEIS) to determine if MSAT hotspots are a concern for the project and if so, to inform avoidance, minimization, and mitigation options. This is especially important, given the significant concerns about adverse health effects from mobile source pollutants and the project's potential to increase localized emissions in areas abutting residential communities and sensitive receptors along portions of the SR 91 and Interstate 15 corridors, intersections, and neighboring roads.

**Recommendations:**

- Identify projects segments and/or areas that may have potential for hot spot impacts, such as:
  1) Project segments with the closest sensitive receptors and residential areas,
  2) Project segments with the largest increases in vehicle miles traveled (VMT) or highest baseline emissions, and
  3) Project segments with the largest emissions changes and distance reductions to sensitive receptors and residential areas.

- Quantify emissions and assess whether the project will result in potential MSAT hotspots. Include dispersion modeling and an assessment of health risk for the six primary MSATs for areas above that appear to have potential hot spot concerns. This analysis is further described in the March 2007 report entitled “Analyzing, Documenting, and Communicating the Impacts of Mobile Source Air Toxic Emissions in the NEPA Process” conducted for the American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on the Environment and funded by the Transportation Research Board (http://www.trb.org/NotesDocs/25-25(18)_FR.pdf). Procedures for toxicity-weighting, which EPA has found to be especially useful for the targeting of mitigation, are described in EPA’s Air Toxics Risk Assessment Reference Library (Volume 3, Appendix B, beginning on page B-4, http://epa.gov/tnn/fera/data/risk/vol_3/Appendix_B_April_2006.pdf).
If significant impacts are identified, include appropriate mitigation or design changes to reduce potential operational impacts in the FEIS and Record of Decision (ROD).

Additionally, EPA disagrees with the claim in the DEIS on page 3.14-26 that "...the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how the potential health risks posed by MSAT exposure should be factored into project-level decision-making within the context of NEPA". EPA recommends eliminating incorrect statements regarding technical shortcomings and uncertain science in the FEIS. Tools and models are available that EPA (as well as other agencies) routinely use effectively. Both EPA and California Office of Environmental Health Hazard Assessment (OEHHA) have long-standing experience and published, peer-reviewed guidance for evaluating long-term health effects, including cancer risk. EPA has published an Air Toxics Risk Assessment Reference Library (http://www.cpa.gov/tnn/fera/risk_atra_main.html) that addresses how to develop appropriate exposure scenarios in a risk assessment. Similarly, California OEHHHA has hot spot risk assessment guidance published in support of California's Air Toxics "Hot Spots" Information and Assessment Act of 1987 (a.k.a. AB2588, http://www.oehha.ca.gov/air/hot_spots/pdf/HRAGuideFinal.pdf). The previously mentioned March 2007 AASHTO Report also discusses available methodologies and tools.

Construction Mitigation Measures
EPA recommends supplementing and/or if applicable, modifying the measures in Section 3.14.4.1 Standard Conditions with the following in the FEIS and ROD to reduce the impacts resulting from future construction associated with this project.

Recommendation:
In light of the serious health impacts associated with vehicle and diesel exhaust exposure, we recommend that the best available control measures for these pollutants be implemented at all times and recommend that a Construction Emissions Mitigation Plan is incorporated into the FEIS and committed to in the ROD. We recommend that the following measures be incorporated into a Construction Emissions Mitigation Plan, where feasible and appropriate, in order to reduce impacts associated with fugitive dust and vehicle emissions, diesel exhaust, and mobile source air toxics from construction-related activities:

Fugitive Dust Source Controls:
• Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
• When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:
• Minimize use, trips, and unnecessary idling of heavy equipment.
• Maintain and tune engines per manufacturer’s specifications to perform at EPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications. The California Air Resources Board has a number of mobile source anti-idling requirements which could be employed. See their website at: http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm
• Prohibit any tampering with engines and require continuing adherence to manufacturer’s recommendations.
• If practicable, lease new, clean equipment meeting the most stringent of applicable Federal\(^1\) or State Standards\(^2\). In general, commit to the best available emissions control technology. Tier 4 engines should be used for project construction equipment to the maximum extent feasible\(^3\). Lacking availability of non-road construction equipment that meets Tier 4 engine standards, Caltrans should commit to using the best available emissions control technologies on all equipment.
• Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.

Administrative controls:
• Specify the means by which impacts to sensitive receptors, such as children, elderly, infirm and others identified in the FEIS, will be minimized. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.
• Identify where implementation of mitigation measures is rejected based on economic infeasibility.
• Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.) Meet EPA diesel fuel requirements for off-road and on-highway, and, where appropriate, use alternative fuels such as natural gas and electric.

Clean Water Act Section 404

The DEIS does not clearly identify where specific impacts to jurisdictional and non-jurisdictional waters might occur, making it difficult to assess whether additional options for avoidance and minimization exist. Chapter 3.18 Wetlands and Other Waters in the DEIS includes a summary

\(^1\) EPA’s website for nonroad mobile sources is http://www.epa.gov/nonroad/.
\(^2\) For ARB emissions standards, see: http://www.arb.ca.gov/msprog/offroad/offroad.htm.
\(^3\) Diesel engines < 25 hp rated power started phasing in Tier 4 Model Years in 2008. Larger Tier 4 diesel engines will be phased in depending on the rated power (e.g., 25 hp - <75 hp: 2013; 75 hp - < 175 hp: 2012-2013; 175 hp - < 750 hp: 2011 - 2013; and > 750 hp 2011-2015).
of permanent and temporary impacts, by alternative, to wetlands and other waters under jurisdiction of the US Army Corps of Engineers (Corps), California Department of Fish and Game and the Regional Water Quality Control Board, but does not provide information pertaining to the specific impact locations. Instead, the DEIS refers to Appendix B of the November 2009 Jurisdictional Delineation Report (Report) that was submitted to the Corps for verification. The Report is not included in the DEIS, but EPA obtained a copy from Riverside County Transportation Commission’s website for the SR 91 Corridor Improvement Project\(^4\). While the Report maps wetlands and other waters by potential jurisdiction type, it does not superimpose the proposed project alignments and impacts on the mapped waters.

Caltrans should identify specific locations of the project’s impacts to wetlands and other waters in the FEIS and further discuss why these impacts are unavoidable. At a minimum, EPA anticipates the alternatives analysis for Corps authorization under Section 404 of the Clean Water Act will contain this level of detail based on the Corps verified jurisdictional delineation. This information is necessary to demonstrate compliance with the Guidelines found in Clean Water Act Section 404(b)(1) which prohibits the discharge of dredged or fill material if there is a practicable alternative which would have less adverse impact on the aquatic ecosystem.

**Recommendation:**
Caltrans should include additional detail in the FEIS on the potential impact sites to wetlands and other waters for both Alternatives 1 and 2, including specific impact locations that would result from proposed project alignments. Include a description of why proposed impacts are unavoidable consistent with the Guidelines.

**Indirect Impacts**
While permanent and temporary impacts to federal and state jurisdictional waters are quantified, it’s unclear if the estimated impacts include indirect effects. The DEIS does not specifically discuss or quantify indirect effects of the project to waters of the U.S. These impacts would include: (1) corresponding increases in the volume and velocity of polluted stormwater from increased impervious surfaces; (2) hydrologic and sediment transportation effects influenced by placement of new permanent fill and structures, (3) vegetative changes and disturbance to wetlands habitat which results in a reduction in the functional capacity of adjacent wetlands; (4) additional noise, glare, and other similar human-related disturbances to aquatic resources; (5) additional shading of wetland habitat from roads and crossings; and (6) decreases in biodiversity and ecosystem stability.

**Recommendations:**
- Assess and report in the FEIS the changes in ecosystem functions as a result of the proposed project associated with permanent direct and indirect effects.
- Update tables in Chapter 3.18 to identify what the estimated indirect impacts to jurisdictional waters will be.
- Provide a description of the proposed mitigation to offset indirect impacts (see comment below).

\(^4\) Available on-line at: [http://sr91project.info/environmental/draft_eir_eis.php](http://sr91project.info/environmental/draft_eir_eis.php)
Avoidance, Minimization, and Compensatory Mitigation

The DEIS does not include a description of mitigation to replace lost wetland functions. Section 3.18.4 Avoidance, Minimization and Mitigation Measures in the Wetlands and Other Waters chapter states that compensatory mitigation is as described in Section 3.17.4.1 but this section only mentions mitigation for riparian communities and other native vegetation communities. Caltrans should identify in the FEIS available and reasonable means of mitigation to alleviate the environmental effects of the proposed action (see 19. Mitigation Measures of Forty Most Asked Questions Concerning the Council of Environmental Quality's National Environmental Policy Act Regulations\(^5\)).

Recommendations:

- The FEIS should include a more detailed discussion of available compensatory mitigation measures for wetlands and other waters consistent with the Corps and EPA 2008 Compensatory Mitigation Rule\(^6\). These regulations were designed to improve the effectiveness of compensatory mitigation to replace lost aquatic resource functions and area and include a mitigation hierarchy with an inherent preference for mitigation banks and in-lieu fee programs before the use of an on-site mitigation site.
- Discuss mitigation for temporary and unavoidable indirect impacts. Temporary impact mitigation should consider additional compensatory mitigation for temporal loss of functions as well as establishing numeric criteria and monitoring of the temporary impact site to ensure that aquatic functions are fully restored. Indirect impact mitigation should consider opportunities to reduce any potential effects from shading and to compensate for possible wetland habitat fragmentation.

Water Quality

Stormwater capture and treatment should be designed to maximize treatment of the existing roadway footprint in addition to new project-related impervious surface areas directly connected to waters. The current MS4 permit requires Caltrans to “seek opportunities to retrofit the Storm Water Drainage System for water quality improvement whenever a section of the rights-of-way undergoes significant construction or reconstruction” (Order 99-06). EPA recognizes that Caltrans proposes to meet stormwater treatment sizing criteria in the statewide MS4 permit that is currently up for renewal, which states that “Where redevelopment results in an increase in less than 50% of the total impervious area of a previously existing development, the numeric sizing criteria apply only to the addition and not to the entire development” (Section 2, Stormwater Program Implementation Requirements). The proposed project would result in a total impervious surface area increase of 27.5 percent for Alternative 1 and 39.2 percent for Alternative 2, which is significant but well below the 50 percent threshold.

The DEIS indicates proposed best management practices would treat runoff from an area equivalent to the impervious surface area added by the project as well as runoff from part of the existing freeway facility (i.e., approximately 125 percent of impervious surface area for Segment A, 116 percent for Segment B, and 102 percent for Section C.) (p. 3.10-23). While these percentages represent potential increases in treated impervious surface area, they leave a


significant portion of stormwater runoff from existing roadway untreated. Measures to expand treatment would improve water quality in the Santa Ana River watershed and could help address current CWA Section 303(d) listed water quality impairments for lead, copper and other pollutants along the Santa Anna River and tributaries.

**Recommendation:**
Caltrans should commit to additional opportunities to maximize treatment of stormwater runoff from both new and existing roadway like expanding existing and planned treatment BMPs during project construction in the FEIS and RCD.

**Children’s Health and Safety**

While Section 3.4 of the DEIS (Community Impacts) provides basic demographic information on children and locations of schools, the DEIS does not assess the project’s potential to affect the health and safety of children. Executive Order (EO) 13045 “Protection of Children from Environmental Health Risks and Safety Risks” requires federal agencies to ensure that their policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.

Given the behaviors of children, such as more active time spent outdoors and closer to the ground during play, and their developing systems, children are more vulnerable due to higher relative doses of air pollution and smaller diameter airways. In addition, traffic-related pollutants have been repeatedly associated with increased prevalence of asthma-related respiratory symptoms in children. Given that the proposal is a proposed expansion of an existing large capacity freeway in an area with existing poor air quality, EPA recommends that Caltrans demonstrate compliance with the EO and specifically identify and assess in the FEIS any potential environmental health risks and safety risks that may disproportionately affect children.

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SUMMARY OF EPA RATING DEFINITIONS*

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

ENVIRONMENTAL IMPACT OF THE ACTION

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

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

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

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

ADEQUACY OF THE IMPACT STATEMENT

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

Category "2" (Insufficient Information)
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category "3" (Inadequate)
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

F-3-1
The EIR/EIS provides a complete and full analysis of the potential impacts of the SR-91 CIP. Refer to responses to comments F-3-2 to F-3-11, below.

F-3-2
Refer to responses to comments F-3-5 to F-3-6, below.

F-3-3
Refer to responses to comments F-3-7 to F-3-10, below.

F-3-4
Refer to response to comment F-3-11, below.

F-3-5
The EIR/EIS discloses the potential for impacts from mobile source air toxics (MSATs) to the extent that current scientific information allows. Sensitive receptors are identified, and a qualitative assessment of impacts to the sensitive receptors, including low-income and minority communities, was performed. Quantitative analysis for MSATs was conducted for the project as described starting on page 3.14-28 in Section 3.14.3.2, Permanent Impacts, in the EIR/EIS. As discussed in that section and shown in Tables 3.14.20 to 3.14.24 in that section,

“...implementation of the Build Alternatives would result in a slight increase in the MSAT emissions compared to the No Build Alternative. However, the emissions from the No Build and Build Alternatives would be lower than the Existing (2007) emissions for all MSAT pollutants. As shown in Table 3.14.24, Alternative 2 would reduce MSAT emissions in 2035.

In summary, while the Build Alternatives would result in a small increase in localized MSAT emissions in 2015, the EPA’s vehicle and fuel regulations, coupled with fleet turnover, will cause substantial reductions over time that would cause regionwide MSAT levels to be substantially lower than they are today.”

As a result, a dispersion analysis to calculate the local MSAT emission concentration is not necessary.

The primary pollutant of concern for long-term health risk is diesel particulate matter plus diesel exhaust organic gases (DPM). As shown in Tables 3.14.20 to 3.14.24 in
Section 3.14, Air Quality, the project would reduce the DPM emissions when compared to the No Build Alternative and Baseline/Existing (2007) conditions. Those emissions were modeled using traffic volumes for the project corridor. By reducing the DPM emissions along the project segments of SR-91 and I-15, the project would reduce the long-term health risk along SR-91 and I-15.

The FHWA has indicated that quantitative analysis (i.e., dispersion modeling) cannot provide any meaningful comparison of alternatives and, in fact, may provide misleading information as to the current understanding of MSATs and the capabilities of current tools. As part of the development of the FHWA interim MSAT guidance, FHWA conducted a thorough review of the scientific information related to MSATs from transportation sources. The results of this review are discussed in Appendix C of the MSAT guidance. As a result of that review, FHWA concluded that the available technical tools do not enable us to reliably estimate pollutant exposure concentrations or predict the project-specific health impacts of the emissions changes associated with transportation project alternatives. Therefore, at this time, FHWA does not support dispersion modeling.

As noted in its Standard Environmental Reference (SER), Environmental Handbook Volume I, Chapter 11 – Air Quality, the Department has adopted the FHWA guidance for evaluating MSAT emissions.

**F-3-6**

The measures addressing short-term air quality impacts were refined in response to this comment. Original Measures SC-1 and SC-2 specifically addressed particulate and other emissions in the context of the recommended Construction Emissions Mitigation Plan. These refined measures are consistent with the intent of the majority of the measures recommended in this comment. The refined short-term air quality measures, which fully replace the existing measures on page 3.14-39 in Section 3.14.4.1, Standard Conditions, in the EIR/EIS are:

**SC-1 Construction Emissions Mitigation Plan.** Prior to any site preparation, grading and/or construction activities, the RCTC Project Engineer will require the design/build contractor to finalize the project-specific Construction Emissions Mitigation

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Plan. That plan will specifically incorporate measures for controlling particulate and other emissions during construction from the following sources:

- Department’s Standard Specifications Sections 10 and 18 (Dust Control)
- Department’s Standard Specifications Section 39-3.06 (Asphalt Concrete Plant Emissions)
- South Coast Air Quality Management District (SCAQMD) Rule 403, including control measures from Tables 1, 2, and 3 in that rule

The plan will also include the following measures:

- Control of ozone precursor emissions from construction equipment vehicles by maintaining equipment engines in good condition and in proper tune per the manufacturers’ specifications.
- Control of material on all trucks hauling excavated or graded material from the site by compliance with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.

**SC-2**  
**Implementation of the Construction Emissions Mitigation Plan.** During all site preparation, grading, construction, clean-up, and other activities during construction, RCTC’s Resident Engineer will require the design/build contractor to comply with the measures in the Construction Emissions Mitigation Plan. RCTC’s Resident Engineer will conduct site inspections at least once a month to ensure that the design/build contractor is complying with the provisions of the Construction Emissions Mitigation Plan.

**SC-3**  
Prior to any construction activities, RCTC’s Project Engineer will ensure that the grading plans and project specifications show the anticipated duration of construction in individual construction areas along the project alignment.
During the final design and prior to any ground disturbance, RRTC’s Project Geologist will conduct appropriate testing to determine whether there are asbestos-containing materials (ACMs) present in the project disturbance limits.

If RRTC’s Project Geologist determines that ACMs are present in the project disturbance limits during final design, RRTC’s Resident Engineer will require the design/build contractor to properly remove and dispose of those ACMs.

Most of the recommended measures in this comment are measures included in one or more of the three sources listed above in refined Measure SC-1. Although all the recommended measures are not included in the refined measures above, it should be noted that the EIR/EIS concluded that compliance with the original Measures SC-1 through SC-5 would reduce the short-term project impacts during construction to below a level of significance under CEQA. Therefore, the requested measures not incorporated into the project or the Final EIR/EIS were not incorporated because neither NEPA nor CEQA requires the imposition of mitigation for impacts that are already less than significant.

No mitigation is required for long-term impacts because, as discussed in Section 3.14 in the EIR/EIS, the Build Alternatives will not result in adverse long-term air quality impacts.

**F-3-7**

Figures 3.18-2 and 3.18-3 were added on pages 3.18-33 and 3.18-49, and are discussed in Section 3.18.3.1, Summary of Impacts, to show the permanent and temporary project impacts to protected waters under Alternatives 1 and 2, respectively. The temporary and permanent impacts of Alternatives 1 and 2 to the United States Army Corps of Engineers (Corps), CDFG, and the Regional Water Quality Control Board (RWQCB) jurisdictional waters, shown on those figures, are quantified starting on page 3.18-6 in the EIR/EIS in Section 3.18.3.1. Text referring to those new figures was also added to Section 3.18.3.1 starting on page 3.18-6.

As shown in Table 3.18.2 on page 3.18-8 and the new figures in Section 3.18, Wetlands and Other Waters, permanent impacts to protected waters that are potentially jurisdictional range from 2.18 to 2.69 ac for the Corps, 1.31 to 4.41 ac for the CDFG, and 0.42 to 2.69 ac for the RWQCB, depending on the alternative and design variation. As shown in Table 3.18.3 on page 3.18-9 in the EIR/EIS, temporary...
impacts to protected waters that are potentially jurisdictional range from 1.66 to 1.98 for the Corps, 2.01 to 3.85 ac for the CDFG, and 1.90 to 2.07 ac for the RWQCB, again depending on the alternative and design variation.

On September 20, 2011, the PDT identified Alternative 2f as the Preferred Alternative. Since that time, design refinements to Alternative 2f have substantially reduced project impacts to wetlands and other waters. Previously, the project impacts were determined based on the entire project footprint, which showed full disturbance at many drainage features. The more detailed engineering now shows that full disturbance at many drainage features is no longer warranted (e.g., a drainage will be bridged instead of disturbed).

Alternative 2f would result in permanent impacts to protected waters as follows:

- Corps Jurisdictional Waters: 0.42 ac
- CDFG Jurisdictional Areas: 1.31 ac
- RWQCB Jurisdictional Areas: 0.42 ac

Because the permanent impact to Corps jurisdictional waters is less than 0.50 ac, the project can be authorized under a Section 404 Nationwide Permit.

The purpose of the proposed project is to relieve congestion along SR-91 and I-15 through the addition of lanes to these existing facilities. Because the proposed project adds new highway lanes to an existing freeway, the project is constrained in terms of the location of those new highway lanes. The existing geometric configuration of the freeway determines the location of the new highway lanes, as new lanes would have to be sited adjacent to the existing highway lanes. Therefore, implementation of the project would have to occur adjacent to existing highway lanes and would require the disturbance and extension of existing culverts along the project segments of those freeways. Because the placement of new highway lanes is dependent on the location of the existing highway lanes, an avoidance alternative is not possible because the new lanes cannot be separated from the existing highway lanes. The project impacts to waters shown on Figures 3.18-2 and 3.18-3 in the EIR/EIS are unavoidable due to the location of the existing SR-91. As discussed in Section 3.18, Wetlands and Other Waters, in the EIR/EIS, the temporary and permanent impacts of the SR-91 CIP Build Alternatives to waters are unavoidable but can be substantially mitigated.

The approved and preliminary determinations for the project were received from the Corps on November 22, 2011; they represent Corps acceptance of the drainage
features considered jurisdictional by the Corps but not Corps acceptance of the project impacts. Corps acceptance of the project impacts will be confirmed upon Corps approval of the Section 404 Nationwide Permit. The permit will not be received prior to the Record of Decision (ROD), but will be obtained prior to the initiation of construction.

During the design/build phase of the project, more refinements may be made to further reduce impacts to jurisdictional waters. Those refinements would be developed and further described in conjunction with the Corps Section 404 Nationwide Permit process.

**F-3-8**
Alternatives 1 and 2 were evaluated to assess whether they could result in the following types of indirect effects to waters:

- Increase in runoff volumes
- Impacts to water quality
- Invasive species
- Noise, glare and other human disturbance
- Shading, ecosystems stability, and biodiversity

The potential for those types of indirect effects are described briefly in the following sections.

**Increase in Runoff Volumes.** As discussed in Section 3.10.3.2, Permanent Impacts, compared with existing conditions, there would be a slight increase in runoff volumes due to the addition of new impervious areas from the freeway improvements under Alternatives 1 and 2. Such increases would generally shorten the time of concentrations and runoff travel time to the Santa Ana River. However, because the flow increase to the Santa Ana River is expected to be minimal, this hydrologic impact on the River and other waters is considered negligible.

**Sediment Transport.** Best management practices (BMPs) are included in the project design to address indirect impacts from volume, velocity, hydrologic, sediment transport, and other water quality issues to federal and State jurisdictional waters. As described starting on page 3.10-23 in Section 3.10.3.2, Permanent Impacts, drainage from the newly added freeway facilities would be treated by biofiltration swales, infiltration basins, detention basins, and/or media filters. These methods work in various ways to treat storm water runoff. Pollutants are removed by slowing down the
flow enough for sedimentation to occur, vegetation uptake, ionic attraction around plant root structures, etc. The BMPs would also reduce the velocity of the runoff.

All runoff from the new net impervious surface areas would be treated by the BMPs. The BMPs would treat runoff from an area equivalent to the impervious surface area added by the project as well as runoff from part of the existing freeway facility. The percentage of runoff from the new net impervious surface area and some of the currently untreated existing impervious surface areas that would be treated ranges from 102 to 125 percent depending on the location along the project alignment. Because the BMPs will treat over 100 percent of all the new impervious surfaces and some existing runoff, water quality from the existing facility is likely to improve, limiting the potential for indirect effects.

**Invasive Species.** Indirect project impacts from vegetative changes occur through the import of highly invasive, nonnative vegetation. Indirect impacts from vegetative changes are not expected to occur, primarily because the Build Alternatives are located in an existing highway corridor that is highly disturbed. Measure IS-1 on page 3.22-4 in Section 3.22.4, Avoidance, Minimization, and/or Mitigation Measures, addresses the potential for indirect impacts from vegetative changes and disturbance through the implementation of a weed abatement program.

**Noise, Glare, and Other Human Disturbances.** Permanent indirect impacts to natural communities from the SR-91 CIP due to the increase in noise, glare, and other similar human-related disturbances are not expected to occur as described starting on page 3.17-17 in Section 3.17.3.2, Permanent Impacts. Measure NC-9 on page 3.17-33 in Section 3.17.4.2, Other Measures, addresses the potential for temporary indirect impacts during construction.

**Shading, Ecosystem Stability, and Biodiversity.** Permanent indirect impacts due to shading, decreases in biodiversity, and ecosystem stability are not expected to occur because the Build Alternatives are located in an existing highway corridor that is highly disturbed.

The following text was inserted in the discussion of the permanent project impacts in the subsection titled “Alternatives 1 and 2” on page 3.18-11 in Section 3.18.3.2, Permanent Impacts, in the EIR/EIS:

The Build Alternatives are not expected to increase permanent indirect effects (such as increased impervious surfaces, water quality, human-
related disturbances, vegetative changes, or decrease in biodiversity or ecosystem stability) to protected waters due to the implementation of BMPs and other project features (e.g., revegetation of temporarily disturbed areas with plant species not on the California Invasive Plant Council [Cal-IPC] list). Although permanent indirect impacts are not expected to increase as a result of the SR-91 CIP, permanent impacts are expected to extend into the surrounding natural habitat by approximately the same distance that SR-91 is being widened.

The following text was inserted in the discussion of temporary project impacts in the subsection titled “Alternatives 1 and 2” on page 3.18-12 in Section 3.18.3.3, Temporary Impacts, in the EIR/EIS:

The Build Alternatives may result in temporary indirect effects to protected waters including construction-related effects such as dust and potential fuel spills from construction equipment or disruption by personnel outside designated construction areas.

In summary, the SR-91 CIP will not result in substantial indirect effects to waters. Because the Build Alternatives will not result in substantial indirect effects on waters, no figures showing areas potentially affected by indirect project effects is provided in the EIR/EIS. Extensive mitigation included in the Build Alternatives, as described in Appendix E, Environmental Commitments Record, would address effects on the natural environmental, including direct and indirect effects to waters.

**F-3-9**

Measure WET-1 on page 3.18-15 in Section 3.18.4 requires that the project receive the appropriate Section 404 Clean Water Act permit. That permit will require compensatory mitigation for the project effects. The compensatory mitigation for the project impacts to waters under the jurisdiction of the Corps will be developed in detail in consultation with the Corps as part of the 404 permit. Refer also to the response to comment F-4-9, later in this report, which indicates that the identification of opportunities for compensatory mitigation is ongoing and that the compensatory mitigation for the project will comply with the 2008 Mitigation Rule and Guidelines.

Section 3.17, Natural Communities, acknowledges this as discussed in the mitigation requirements for riverine and wetland habitats are specifically cited in the subsection titled Compensatory Mitigation on page 3.17-27 as follows: “Compensatory mitigation for riparian communities in both counties will be required for Corps
for Corps Section 404 and CDFG Section 1600 permitting. Typically, riparian habitat subject to Corps and CDFG jurisdiction is mitigated at a minimum mitigation-to-effect ratio of 2:1 for permanent effects and 1:1 for temporary effects, which is consistent with Corps and CDFG policies for no net loss of riparian/riverine habitat (e.g., wetlands). Mitigation for permanent effects of both the Initial Phase and Ultimate Project will be conducted in advance during the Initial Phase in the form of habitat restoration and/or enhancement in on- or off-site areas where similar riparian habitat exists. Temporary effects to riparian communities will be mitigated at a minimum mitigation ratio of 1:1 to be replaced on site in kind after the temporary impact has occurred. Final details for compensatory mitigation will be coordinated among RCTC, the Department, the resource agencies, and third-party landowners (where needed for any off-site mitigation).”

The compensatory mitigation described on page 3.17-27 in Section 3.17.4.1, Compensatory Mitigation, in the EIR/EIS for riparian communities includes all areas of potential Corps, CDFG, and RWQCB jurisdictions. The success criteria outlined in that section will ensure that the mitigation will be functionally equal or superior to the present disturbed conditions along the existing highway corridor. Annual monitoring and oversight by the resource agencies will ensure the success of the mitigation site. Because the mitigation will result in a net increase in riparian/riverine resources, it is expected to fully mitigate permanent project impacts to these resources.

All the areas available for compensatory mitigation are being analyzed and discussed with Corps, CDFG, and RWQCB representatives as part of the permitting process. The Corps has an extensive internal process they go through before accepting a mitigation bank or in-lieu fee program and it becomes available for use. During that process, success criteria, reporting requirements, and other limitations (e.g., type of project able to use the bank/fee program) are determined. At this time, there are no mitigation banks or in-lieu fee programs for use by the SR-91 CIP that are available and/or acceptable to the Corps. This has been confirmed through on-going coordination with the Corps Regulatory Division. In addition, it is unlikely that a mitigation bank or in-lieu fee program will become available and/or acceptable to the Corps in time to be used by the SR-91 CIP.

As described in Section 3.17.4.1, temporary impacts will be mitigated at a minimum mitigation ratio of 1:1 to be replaced on site in kind after the temporary impact has occurred. In addition, Mitigation Measures WQ-1 (page 3.10-34), NC-1, NC-2, NC-5, NC-8, NC-9, NC-12 (starting on page 3.17-29), and IS-1 (on page 3.22-4) avoid,
minimize, and/or mitigate temporary and/or indirect loss of functions during construction.

F-3-10

Runoff from the existing freeway facilities is part of the existing baseline condition for which no mitigation is required to be provided by the proposed project. The BMPs identified in the Project Report (September 2010) address the water quality needs of the SR-91 CIP Build Alternatives. The increase in impervious surfaces as a result of the Build Alternatives is less than the 50 percent threshold identified in the Municipal Separate Storm Sewer System (MS4) Permit. Those BMPs not only meet but exceed the intent of that Permit provision. The analysis for the Project Report included a study of the corridor, including approved and alternative BMPs wherever technically feasible and using all available right-of-way.

Existing topographic (mountainous) features along the project alignment and regional features associated with highly urbanized land uses along parts of the project alignment are physical constraints that limit areas available for the placement of BMPs.

Whenever possible, runoff from the entire road surface, not just the new road surfaces, is included for treatment by the BMPs included in the project. As such, the project would treat a part of the runoff from the existing roadway that is currently untreated. Because there is no requirement for the proposed project to treat all the runoff from the existing facility, the water quality analysis and the EIR/EIS did not calculate how much of the existing runoff would remain untreated. As noted in the fifth paragraph in the subsection titled Water Quality/Erosion Control on page 2-20, the amount of runoff from the existing facilities that would be treated by the project BMPs would be determined during the final design of those BMPs. The proposed treatment BMPs would include biofiltration swales, infiltration basins, detention basins, and/or media filters. These BMPs would target pollutants of concern from freeway facilities as well as other pollutants, including lead, copper, and pathogens. Reach 3 of the Santa Ana River is listed as impaired on the 303(d) list for lead, copper, and pathogens. The Treatment BMPs would target constituents of concern from transportation facilities (sediments, trash, petroleum products, metals, and chemicals). Because the Treatment BMPs would target lead and copper, the SR-91 CIP would not contribute to the existing impairment.

Coordination efforts with all applicable regional and local agencies were conducted at the discretion and direction of the Department. As a result, the project team met with
and received approval from the Santa Ana RWQCB and the City of Corona
Department of Power and Water during the development of the BMP program for the
*Project Report*.

The recommendation provided by the United States Environmental Protection
Agency (EPA) to expand water quality treatment to help address current CWA
Section 303 water quality impairments is acknowledged. However, the SR-91 CIP
design does not include and does not propose treating 100 percent of the existing
runoff from the existing freeways, consistent with the requirements of the existing
Department MS-4 Permit as noted in this comment. The Department participates in
the development of project BMPs, and the maximum BMPs for the SR-91 CIP have
been developed in accordance with their responsibilities for FHWA in compliance
with the Clean Water Act.

**F-3-11**

Section 3.14, Air Quality, starting on page 3.14-1 in the EIR/EIS identified the short-
and long-term air quality effects of the proposed project. DPM is the primary
pollutant of concern when determining a project’s long-term health effects. Tables
3.14.20 through 3.14.24 in Section 3.14 list the MSAT emissions generated by traffic
on SR-91 and I-15 in the project area in 2015 and 2035. As shown, the proposed
project would reduce the traffic-related DPM emissions on these freeways in the
project area in those forecast years compared to Baseline/Existing (2007) and No
Build (2015 and 2035) conditions. As a result, everyone living, going to school,
and/or working in the project vicinity would benefit as a result of the reduction in
DPM emissions in 2015 and 2035. By reducing the DPM emissions along the project
segments of SR-91 and I-15, the project would reduce the long-term health risk.
Therefore, the proposed project would not require additional analysis of the potential
effect of the proposed project on the health and safety of children as required under
Executive Order (EO) 13045.

The Department evaluated the potential for children to be exposed to health risks due
to exposure to hazardous materials or waste during construction based on the
information provided in Section 3.13, Hazardous Waste. Eighteen hazardous
materials/waste sites of potential concern were noted in Table 3.13.2 and shown on
Figure 3.13.2. Three sites (Sites 1, 4, and 18) would not pose a health risk to children
because they would not be affected by the Preferred Alternative (Alternative 2f). Nine
sites (Sites 2, 3, 6, 7, 8, 9, 12, 13, and 15) would not pose a health risk to children
because they are within commercial/industrial areas and/or are over 300 feet from
schools, homes, or other areas frequented by children. Six sites (Sites 5, 10, 11, 14, 16, and 17) require acquisition and removal and/or relocation of ASTs or USTs at locations that are within 300 feet of homes. Area residents (including children) will be protected from exposure to any release of hazardous materials from these six sites through implementation of Measure HW-9 which requires preparation and implementation of a site specific Health and Safety Plan and Measure HW-10 which requires preparation and implementation of a Contaminant Management Plan. In addition, the SR-91 CIP will provide a long-term benefit related to public exposure (including children) to hazardous wastes/materials from these sites because the sites will be fully remediated and free of hazardous wastes prior to acquisition for the project. Therefore, children living or playing near the project limits would not have any direct exposure to potential hazards or hazardous materials on site, and no adverse health-related impacts to children as a result of hazardous materials and wastes are anticipated.

Based on Figure 3.6, Public and Community Facilities from the SR-91 CIP Community Impact Assessment Report, the following schools are located within approximately 0.25 mile (mi) of the SR-91 and I-15 freeway centerlines:

- **Heritage Christian Elementary and High School, Corona**: Approximately 1,565 ft from the SR-91 centerline
- **Orange Grove High School, Corona**: Approximately 840 ft from the SR-91 centerline
- **Parkridge School for the Arts, Corona**: Approximately 1,488 ft from the I-15 centerline
- **El Cerrito Middle School and Elementary Schools, Corona**: Approximately 1,320 ft from the I-15 centerline

EO 13045 requires all federal agencies to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children and ensure that their policies, programs, activities, and standards address disproportionate risks to children that result from environmental health or safety risks. Because the SR-91 Build Alternatives would result in a reduction in DPM emissions and would not result in direct exposure of children to potential hazards or hazardous materials on the project site, and because the project would, therefore, not affect the long-term health and safety of children, the project is consistent with the requirements and intent of EO 13405.
F-3-12
The Department and RCTC do not believe the EC-2 rating for the project, as noted in comment F-3-1, is appropriate for the project. The EIR/EIS includes all the cited information as follows:

“...sufficient information for EPA to fully assess environmental effects that should be avoided in order to protect the environment...”

The EIR/EIS includes extensive analyses related to air quality, water quality, jurisdictional resources, and other environmental parameters as documented in Chapter 3, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and Mitigation Measures. The project includes specific mitigation measures to address adverse impacts to the project. For example, impacts to jurisdictional waters are quantified in Section 3.18.3.1, Summary of Impacts, starting on page 3.18-6 in the EIR/EIS, and figures showing the detailed locations of those effects were added to that section.

“...EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the Draft EIS which could reduce the environmental impacts of the action...”

The EPA did not identify alternatives to the proposed project in its comments so this part of the EC-2 rating of Insufficient Information would not appear to apply to the SR-91 CIP EIR/EIS.
July 21, 2011

Attention:

Regulatory Division

David Bricker
Deputy District Director
C/O Aaron Burton
Senior Environmental Planner
Caltrans District 8
464 West 4th Street
San Bernardino, California 92401-1400

Dear Mr. Bricker:

This letter transmits our comments on the Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) prepared for the State Route 91 (SR-91) Corridor Improvement Project located in Orange and Riverside Counties, California.

On September 5, 2008, the Corps accepted Caltrans' invitation to become a cooperating agency in accordance with 40 C.F.R. 1501.6 and Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). We are reviewing and commenting pursuant to the NEPA Regulations at 40 C.F.R. Parts 1500-1508 and the CWA section 404(b)(1) Guidelines (Guidelines) at 40 C.F.R. Part 230. Only after independent review of the final environmental document to ensure that the project satisfies NEPA and other Corps requirements, can the Corps adopt the final environmental document.

Upon review of the Draft EIR/EIS, our comments and concerns with the project are provided as follows:

Proposed Project: Purpose of the Proposed Project Section

The project purpose should be broad enough to allow for consideration of a range of reasonable (satisfying NEPA) and practicable (satisfying the Guidelines) alternatives that are
commensurate with the level of environmental impacts, but specific enough that the range of alternatives can be appropriately focused. The needs of the project should take scoping comments into account and be presented in terms of quantified deficiencies (i.e., existing deficiencies, future without-project deficiencies, or both) as compared to some relevant local, regional, state, or national standard or goal. The purpose and need should be sufficiently clear and detailed for the Corps to formulate the basic and overall project purpose pursuant to the CWA section 404(b)(1) Guidelines, and so that it can be used to develop an appropriate range of alternatives.

A concise purpose statement should be developed with the objectives, if necessary. Identifying the purpose of the project as: to provide improvements on SR-91 and I-15 as well as to related local roads, (Purpose 2) limits the reasonable range of alternatives. Please clarify the phrase “to more effectively serve existing and future travel demand between and within Riverside and Orange Counties” and how this would be measured and maintained. How can the reduction of local traffic be measured and maintained given that the regional traffic also utilizes the local community roadways? Would Caltrans/RCTC be able to enforce alternatives that restrict regional traffic from diverting to the surrounding communities? The purpose statement should be clearly written so that it can be used to identify or screen alternatives.

The Corps suggests the purpose statement be rewritten to: “The proposed SR-91 Corridor Improvement Project purpose is to maintain or improve the existing and future traffic operations in the SR 91 corridor, between and within Riverside and Orange Counties, in order to improve the safe and efficient local and regional movement of people and goods, while minimizing environmental and community impacts for the planning design year of 2035.”

Proposed Project: Need for the Proposed Project Section

State Route 60 and State Route 74 are existing major east-west facilities in western Riverside County that have the potential to serve Orange County. Would improvements along these corridors address the regional traffic concerns? Other route improvements may be practicable off-site alternatives. The Draft EIR/EIS does not address whether these routes could be improved as different alternatives or in conjunction with improvements to the SR-91 corridor to address the regional traffic concerns.

The Travel Time and Travel Speeds Section describe the travel times and speeds on the SR-91. Please clarify what is the deficiency and why it is important. Please provide a comparison to acceptable standards or other freeways in the region. Please provide justification for why increase in travel time or decrease in speed is a problem. Data are also provided on the build alternatives in this section. The Purpose and Need should focus on identifying the
underlying problems and the reasons a project is being considered and should not be written in a way that includes the potential solution itself.

**Project Alternatives**

Appropriate screening criteria should be discussed in the Alternatives Considered and Eliminated From Further Discussion Section in order to appropriately eliminate any alternative from further consideration. If an alternative is proposed for elimination because it is not "practicable" as defined by the Section 404(b)(1) Guidelines, include a brief rationale of why an alternative is eliminated from further consideration. Please, submit any supporting information to the Corps for review. Alternatives should be developed in coordination with the Corps.

According to the Guidelines at 40 C.F.R. 230.10(a)(1), practicable alternatives can include, but are not limited to: (i) Activities which do not involve a discharge of dredged or fill material into waters of the U.S. or ocean waters and (ii) Discharges of dredged or fill material at other locations in waters of the U.S. or ocean waters. The analysis of a "no fill (i.e., no 404 permit required)" is required and provides the baseline for evaluating impacts to aquatic resources for purposes of documenting compliance with the Guidelines. Please provide a complete description and analysis of a "no fill" alternative (i.e., the most likely scenario if a Corps permit is not granted). Off-site alternatives within and outside of the study corridor should be considered (see comment above). Compliance with the Guidelines is required for all standard individual permits.

The Guidelines and Section 404 of the Clean Water Act also require the analysis of alternatives that have less adverse impact on the aquatic ecosystem, including avoidance of special aquatic sites. Please consider span culverts, bottomless culverts, bridges with minimal piers, and other types of drainage features that avoid and/or minimize impacts to waters of the U.S. Additionally, the Guidelines specify where the activity associated with a discharge that is proposed for a special aquatic site does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose, practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise (i.e., you would have to rebut this presumption that practicable alternatives exist that would not discharge fill into special aquatic sites such as wetlands). Please provide a complete description and analysis of a "wetland avoidance" alternative. Avoidance and minimization of impacts to the aquatic ecosystem are required for standard individual permits and general permits.
Mitigation Measures

According to Chapter 2, Project Alternatives, **Alternative 2: Add General-Purpose Lanes and extend Tolled Express Lanes (GP + Tolled Express Lanes) Alternative** is the RCTC's preferred alternative. According to Table 3.18.2, Alternative 1 would have fewer environmental impacts than Alternative 2 (applicant's preferred alternative). In order for the project to comply with the Guidelines, the Corps must determine that the proposed project is the Least Environmentally Damaging Practicable Alternative (LEDPA). Based on the information presented in the Draft EIS/EIR, Alternative 1 would be the LEDPA when compared to Alternative 2. The Corps will require further information and analysis regarding the alternatives. Please note that the wetland impacts detailed in Table 3.18.2 are inconsistent with the Natural Environment Study (May 2010). It is unclear where and how aquatic resources would be permanently or temporarily impacted. Figures and/or descriptions of aquatic resources impacted should be included in the EIS/EIR. In addition, secondary and indirect impacts were not discussed and should be disclosed in the EIS/EIR.

The Jurisdictional Delineation report (November 2009) included Appendix C, analysis of functions and values of wetlands and other waters of the U.S. Appropriate functional or condition assessment methods must be aquatic resource-based, standardized, comparable from site to site, peer-reviewed, and must receive prior project-specific approval from the Corps (e.g. CRAM, HGM, IBI, etc.). If a functional/condition assessment methodology is available, the Corps will determine if its use for a project is required. It is appropriate and recommended to include the results of the functional/condition assessment in the EIS/EIR. The functional/condition assessment can be an important tool in understanding the impacts to functions/condition and services and therefore is an important tool for evaluating alternatives in terms of their aquatic resource impacts to the determine the range of alternatives, the LEDPA, and the amount of compensatory mitigation required. Pursuant to NEPA and Corps regulations, seeking public input is necessary to evaluate the likely impact of the proposed activity, if any, on public interest factors. For the SR-91 Corridor Improvement Project, the length, complexity, and amount of resource impacts justify that a functional/condition assessment be conducted. The functional/condition assessment should be disclosed in the Final EIS/EIR in the appropriate chapter(s) or technical report(s). The EIS/EIR should also identify and discuss the cause-and-effect relationships between the project activity and the functions/condition and services of the aquatic resources.

A draft mitigation plan and location of mitigation should be disclosed or included in the Final EIS/EIR and submitted as part of the permit application. An approved final mitigation plan is required before a standard individual permit is issued. Any proposed mitigation shall comply with the 2008 Mitigation Rule (33 C.F.R. Part 332) and the Guidelines (40 C.F.R. Part 230). Please be aware of the compensatory mitigation requirements such as the use of the
watershed approach for identifying mitigation projects, and the required conservation easements and financial assurances for Permittee-responsible mitigation, among other requirements.

A quantitative and qualitative impacts analysis of past, present, and reasonably foreseeable projects should be sufficiently detailed in Chapter 3.25.5.10. The resource study area for wetlands and other waters of the U.S. was not defined. The appropriate resource study area to analyze cumulative impacts to wetlands and other waters of the U.S. would be the Santa Ana River watershed or appropriate sub-watershed. Supporting data and analysis should be based on the watershed approach and should include detail from available watershed studies, if any. The Corps can provide data on previously authorized and in-process Section 404 permits to appropriately analyze cumulative impacts to aquatic resources in the Santa Ana River watershed.

In our DA permit evaluation process, once the project has been determined to comply with the Guidelines, the project must also be evaluated to ensure that it is not contrary to the public interest. The public benefits and detriments of all factors relevant to this transportation project will be carefully reviewed and considered. Relevant factors may include, but are not limited to, conservation, economics, aesthetics, wetlands, cultural values, fish and wildlife values, water quality, and any other factors judged to be important to the needs and welfare of the people. The following general criteria will be considered by the Corps in evaluating the SR-91 Corridor Improvement Project application:

- The relevant extent of public and private needs;
- Where unresolved conflicts of resource use exist, the practicability of using reasonable alternative locations and methods to accomplish project purposes; and
- The extent and permanence of the beneficial and/or detrimental effects the proposed project may have on the public and private uses to which the area is suited.

No DA permit can be granted if the project is found to be contrary to the public interest or is not the LEDPA. We anticipate working with Caltrans and others in the documentation of our public interest review.

We appreciate your coordination efforts and the opportunity to submit comments on the Draft EIS/EIR. Our agency looks forward to continuing an open dialogue with your respective offices to ensure this environmental review process remains comprehensive, technically sufficient, and transparent for the purposes of public disclosure and informed agency decision-
making. If you have any questions, please contact Veronica Chan at 213-452-3292 or via e-mail at Veronica.C.Chan@usace.army.mil. Please refer to this letter and SPL-2008-00798-VCC in your reply.

Sincerely,

[Signature]

Spencer D. MacNeil, D.Env.
Chief, Transportation & Special Projects Branch
F-4-1

It should be noted that this comment letter was submitted after the close of the public comment period. The Corps requested an extension of the review period from the Department, and the Department agreed to accept the Corps' comment letter after the formal closure of the public review period for the EIR/EIS. Complete responses are provided to these comments for the purpose of providing a complete and accurate record and satisfying the requirements of NEPA and CEQA.

A primary focus of this comment letter was the Corps' concerns regarding the SR-91 CIP's compliance with Section 404 requirements for an Individual Permit. Subsequent to the receipt of this comment letter, the Department and the RCTC engaged in extensive consultation with the Corps regarding the jurisdictional determinations, the extent of project impacts to protected waters, and the appropriate type of Section 404 permit. As a result of these consultations and the submittal of a supplement to the jurisdictional delineation, the Corps approved Preliminary and Approved Jurisdictional Determinations on November 22, 2011. Based on the approved Jurisdictional Determinations and review of the refined design of the SR-91 CIP Preferred Alternative, the Corps concurred that the permanent impacts to protected waters would be less than 0.5 ac and that the SR-91 CIP could be approved with a Section 404 Nationwide Permit (verbal communication between Veronica Chan [Corps] and David Thomas [RCTC], November 17, 2011). Therefore, an individual Section 404 Permit and a Section 404(b)(1) alternatives analysis would not be required. These conclusions are consistent with the points of agreement reached at the August 22, 2011, meeting among representatives of the Corps, RCTC, and the Department. That meeting is discussed further in Table 5.2 and on page 5-6 in Section 5.2.2.1, Biological Resources Meetings.

Refer to responses to comments F-4-2 through F-4-11, below.

F-4-2

Section 1.2, Purpose of the Proposed Project, on page 1-11 in the EIR/EIS identifies the project purpose as:

1. Improve the vehicle, person, and goods movement within the SR-91 corridor to more effectively serve existing and future travel demand between and within Riverside and Orange Counties.
2. Provide improvements along the SR-91 and I-15 transportation corridors as well as to related local roads, and to reduce diversion of regional traffic from the freeways into the surrounding communities.
This purpose statement was developed as a collaborative effort among the RCTC, the Department, and the PDT, with consideration of input provided during scoping and during the Section 6002 consultation process. As explained in detail in Chapter 1, Proposed Project, starting on page 1-1 in the EIR/EIS, the SR-91 CIP is one of the projects identified in the LPS developed in the 2005 Riverside County-Orange County Corridor MIS to improve east-west travel between Riverside and Orange Counties. In addition, as a result of very high levels of congestion on SR-91, some travelers use local streets in the City of Corona to bypass congestion on SR-91. As a result, the purpose of the SR-91 CIP was specifically defined to be consistent with the intent of the LPS from the MIS (listed as 1 and 2, above) and to address the issue of diversion of traffic into the City of Corona (listed as 2 above).

The comment requested that the needs of the project be presented in terms of quantified deficiencies (i.e., existing deficiencies, future without-project deficiencies, or both) as compared to some relevant local, regional, state, or national standard or goal. As discussed in Section 1.3.1, Capacity, Transportation Demand, and Safety, on page 1-14 in the EIR/EIS, the deficiencies of SR-91 are quantified in terms of level of service (LOS), which is the nationally recognized metric for highway system performance as documented in the Highway Capacity Manual (Transportation Research Board, 2010). LOS is defined in Section 1.3.1.3, Level of Service, on page 1-14, and the different LOS are shown graphically on Figure 1-3 on page 1-15 in the EIR/EIS. The Department identifies LOS F as being a deficient LOS due to the lower speeds resulting from high levels of traffic congestion. The quantified LOS deficiencies are presented in the EIR/EIS for existing conditions (Table 1.4 on page 1-20), 2015 without project conditions (Table 1.6 on page 1-23), and 2035 without project conditions (Table 1.9 on page 1-27). The project purpose statement was written to address this quantified need for improvements to SR-91 in response to these identified operational deficiencies.

As suggested in this comment, the project purpose statement does provide the following specific objectives: (1) “to more effectively serve existing and future travel demand between and within Riverside and Orange Counties,” and (2) “to reduce diversion of regional traffic from the freeways into the surrounding communities.” The comment then requests clarification on the first objective and how it would be measured and maintained. The objective would be measured by quantifying the LOS under the “with project” conditions. The Department does not establish specific maintenance requirements for maintaining improved LOS; however, State highway projects such as the SR-91 CIP are developed to provide improvements for a design
life of at least 20 years (e.g., through 2035 in the case of the SR-91 CIP). With regard to the objective to reduce diversion of regional traffic from the freeways into the surrounding communities, the comment asks how reduction of local traffic would be measured. It is expected that with the improved LOS on the SR-91 mainline and the availability of additional shared ride capacity on that freeway, fewer drivers will use local streets to traverse the study area, particularly in the City of Corona. Refer to Section 1.3.1.7, Traffic Diversion, for additional discussion regarding potential reductions of traffic diversion off the freeway under Alternatives 1 and 2.

The suggested changes to the purpose statement provided in this comment eliminate key components of the project purpose statement, particularly related to local streets and reducing diversion of traffic into local communities, as compared below.

<table>
<thead>
<tr>
<th>Project Purpose from the EIR/EIS</th>
<th>Proposed Corps Revisions to the Project Purpose</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve the vehicle, person, and goods movement within the SR-91 corridor to more effectively serve existing and future travel demand between and within Riverside and Orange Counties ....</td>
<td>...maintain or improve the existing and future traffic operations in the SR-91 Corridor, between and within Riverside and Orange Counties, to improve the safe and efficient local and regional movement of people and goods...</td>
<td>Both statements address improving operating conditions in the corridor.</td>
</tr>
<tr>
<td>Provide improvements along the SR-91 and I-15 transportation corridors as well as related local roads, ...</td>
<td>--</td>
<td>Corps has no comparable purpose statement.</td>
</tr>
<tr>
<td>...and to reduce diversion of regional traffic from the freeways into the surrounding communities.</td>
<td>--</td>
<td>Corps has no comparable purpose statement.</td>
</tr>
<tr>
<td>No comparable purpose statement.</td>
<td>...while minimizing environmental and community impacts for the planning year of 2035.</td>
<td>It is not necessary to have a purpose to reduce impacts because that is already a requirement under CEQA, NEPA, and other State and federal laws and regulations. It is not necessary to identify the planning year in the purpose statement because that year is set as part of the planning for a project (minimum 20-year study period).</td>
</tr>
</tbody>
</table>

CEQA = California Environmental Quality Act
Corps = United States Army Corps of Engineers
EIR = Environmental Impact Report
EIS = Environmental Impact Statement
I-15 = Interstate 15
NEPA = National Environmental Policy Act
SR-91 = State Route 91

Therefore, the purpose of the project as identified in Section 1.2 on page 1-11 in the EIR/EIS was not modified.
It is acknowledged that the Corps may use the suggested purpose statement they provided in this comment to formulate the basic and overall project purpose pursuant to Section 404(b)(1) Guidelines. This was discussed and agreed to at a meeting of August 22, 2011 among representatives of the Corps, RTCI, and the Department. However, because the SR-91 CIP can be covered under a Section 404 Nationwide Permit, a Section 404(b)(1) alternatives analysis is not required. Therefore, a separate project purpose statement is not needed for the Section 404 permit process.

**F-4-3**

Refer to Section O.5.7, Common Response Related to Alternatives, on page O-30 in Section O.5, Common Responses, for a discussion of alternative routes and why they are not evaluated in the current EIR/EIS. Section O.5.7 explains that, as documented in the 2005 MIS, improvements to SR-74 are needed in addition to improvements in Corridors A and B, and the SR-91 corridor. Those improvements to SR-74 do not replace the need for improvements in the SR-91 corridor.

State Route 60 (SR-60) is a major east-west freeway approximately 10 mi north of and generally parallel to the segment of SR-91 between I-15 in Riverside County and SR-241 in Orange County. SR-60 does not provide a direct connection from Riverside County to Orange County and does not cross the western part of Riverside County from the Orange County line to the City of Riverside. As a result, the SR-60 corridor would not effectively meet the demand for east-west travel between western Riverside County and Orange County. For those reasons, the SR-60 corridor was not considered as an alternative to the proposed SR-91 CIP.

Because there is a clearly quantified need for improving the movement of vehicles, people, and goods between and within Riverside and Orange Counties, “off-site” alternatives such as improving SR-60 are not practicable alternatives.

**F-4-4**

The desirable and projected LOS are presented in detail in the Executive Summary in the EIR/EIS and in Section 4 in the Traffic Study Report (July 2010). They are also discussed in Sections 1.3, Need for the Proposed Project, on page 1-11, and 3.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, starting on page 3.6-1 in the EIR/EIS. Based on Department highway design criteria, the minimum acceptable LOS for an urban freeway is LOS E as described in Section 1.3. The corresponding operating speed for LOS E is 53 mph.
Failure to achieve LOS E would mean failure to meet the Department's cited design criteria. As discussed in Chapter 1 in the EIR/EIS, the approved Riverside County Congestion Management Program sets LOS E as the minimum standard for regional highways in Riverside County. As shown earlier in Figure 1-3, LOS F conditions result in very congested traffic, especially in areas where vehicles have to merge. Furthermore, under LOS F conditions, speeds fall to such low levels that the actual capacity of the freeway lanes is decreased, resulting in even greater congestion and potential stop-and-go conditions.

Based on an operating speed of 53 mph, the corresponding travel time for the comparable 11.5 mi long project segment on SR-91 would be 13 minutes. As discussed in Section 1.3, SR-91 does not currently provide that LOS on most of the length of the project segment in the peak hours and will not provide that LOS under the No Build Alternative in 2015 and 2035; that is the operating deficiency the proposed project would alleviate. Low travel speeds result in longer travel times, which reflect LOS F conditions (lower than LOS E, which as noted above is the Department Guideline and the County Standard). Decreases in travel speeds and increases in travel times reflect continuing degradation of operating conditions in a corridor to unacceptable LOS F conditions. Trip travel times and speeds are key considerations in evaluating and assessing traffic operations because these characteristics are important to travelers as they plan and make trips.

This comment also states that the project purpose statement should not be written in such a way that includes the potential solution itself. The Department does not believe that the phrase “Provide improvements along the SR-91 and I-15 transportation corridors as well as to related local roads” limits the range of alternatives of what improvements could be considered. As discussed in response to comment F-4-2, above, the SR-91 CIP was a project recommended as a result of the 2005 MIS, which itself considered a much broader geographic and modal range of alternatives.

F-4-5
As discussed in an inter-agency consultation meeting with the Corps on August 22, 2011, a Draft Section 404(b)(1) alternatives analysis that includes consideration of alternatives to the project was to be provided as an appendix to the EIR/EIS. However, as a result of refinement to the project design, the SR-91 CIP now meets the criteria for a Section 404 Nationwide Permit; therefore, a Section 404(b)(1) alternatives analysis is no longer required.
**Screening of the Alternatives.** Appropriate screening criteria were used in both the selection of the original alternatives for evaluation in the EIR/EIS and the identification and selection of the Preferred Alternative. Section 2.3.8, Alternatives Considered but Eliminated from Further Discussion, starting on page 2-140 in the EIR/EIS describes the analysis and screening of 23 alternatives and design variations with the specific reasons why they were screened out.

The evaluation of alternatives and identification of the Preferred Alternative were based on the following screening criteria:

- Best meets the project purpose
- Provides the best travel time savings
- Considers substantially differentiating environmental impacts
- Public comments and preferences
- Consistent with system planning

Refer to Section 2.3.7.1, Identification of the Preferred Alternative, on page 2-124 for additional discussion regarding the screening for the Preferred Alternative.

**Section 404(b)(1) Alternatives Analysis.** Several Corps comments were based on the impact estimates for Alternatives 1 and 2, as described in the Draft EIR/EIS. That data showed project impacts in the 1–3 ac range, which would have required an Individual Permit. Subsequent to circulation of the Draft EIR/EIS, the project design was further refined in consultation with the Corps, with an objective of reducing wetland impacts. In addition, updated Jurisdictional Determinations were developed that reflected the changes that had occurred in the biological study area (BSA) since the original delineation. Those include impacts from the Corps’ Santa Ana River project and the Eastbound SR-91 Lane Addition.

The critical change from the perspective of the Corps is that permanent project impacts to waters under Corps jurisdiction for Alternative 2f, the Preferred Alternative, are now estimated at 0.42 ac, which is under the threshold requirement (0.50 ac) for an Individual Permit. This represents a more than 80 percent reduction in the project effects on Corps jurisdictional waters. As a result, the project now qualifies for a Nationwide Permit, as was discussed in an inter-agency consultation meeting with the Corps on August 22, 2011, and as reflected in modified Measure WET-1 in the EIR/EIS.
Qualifying for a Nationwide Permit changes the permitting requirements for the project. In particular, a Nationwide Permit does not require a Section 404(b)(1) Alternatives Analysis. As noted above, a Draft Section 404(b)(1) alternatives analysis that included consideration of alternatives to the project was to be provided as an appendix to the EIR/EIS. However, as a result of refinement to the project design, the SR-91 CIP now meets the criteria for a Section 404 Nationwide Permit and no Section 404(b)(1) alternatives analysis is included in the final EIR/EIS. In addition, a Nationwide Permit does not require the identification of selection of a least environmentally damaging practicable alternative (LEDPA), comparison to a no-fill alternative, or a functional/condition assessment.

**F-4-6**

It is acknowledged that the SR-91 CIP will need to comply with the Guidelines and Section 404 of the federal Clean Water Act. Refer to response to comment F-4-5, above, on how avoidance and minimization of impacts to the aquatic ecosystem have been addressed through project design refinements, reducing the project impacts to 0.42 ac, and indicating that the project now qualifies for a Nationwide Permit.

**F-4-7**

The project impacts to potential waters shown in the NES and in Table 3.18.2 on page 3.18-8 in the EIR/EIS are consistent with each other. The impacts shown in the NES are separated by county and in Table 3.18.2 the impacts are the combined impacts of both counties. As described earlier in response to comment F-3-7, above, Figures 3.18-2 and 3.18-3 were added to and are discussed in Section 3.18.3.1, Summary of Impacts, in the EIR/EIS to show the permanent and temporary project impacts to jurisdictional waters under Alternatives 1 and 2, respectively. As discussed at the meeting on August 22, 2011 among the Corps, the Department, and RTCI, although the acreage of impacts to aquatic resources under Alternative 1 is slightly less (about 0.5 ac) than Alternative 2, this difference is negligible when considered in the context of the overall aquatic ecosystem given the limited functions and values of the impacted acreage. As discussed above in response to comment F-4-5, impacts to waters of the United States have been reduced to a total of less than 0.5 ac.

Refer to the response to comment F-4-5 above, which indicates the project now qualifies for a Nationwide Permit and no LEDPA determination by the Corps is required.
**F-4-8**

As referenced in Section 3.18.2.1, Corps Jurisdiction, on page 3.18-3 in the EIR/EIS, a qualitative functions and values assessment was included in Appendix C of the *Jurisdictional Delineation Report*. The functions of wetlands and other waters are defined as physical and biological benefits (e.g., habitat for protected species, sediment sorting, groundwater recharge, and biogeochemical cycling). The values of these features are defined as the worth that society places on a specific function such as aesthetics, recreation, or protection of wildlife. In this case, a qualitative functions and values assessment is appropriate, because the project consists of widening an existing highway within an urbanized and highly disturbed area.

As noted in the *Jurisdictional Delineation Report*, the qualitative assessment indicated that the affected wetlands are of low function and value because of their isolated nature in an urbanized setting. In addition, the analysis notes that most of the impacts to other waters are associated with the extension of culverts and relocation of concrete channels. These features mainly function as part of conveyance systems that will treat storm water runoff before being discharged into downstream waters as required under the National Pollutant Discharge Elimination System (NPDES) or as flood control facilities to minimize the flooding risk to the highway and surrounding developments. In addition, these man-made drainage features do not provide substantial value, as defined above, to downstream relatively permanent waters (RPWs) and traditional navigable waters (TNWs). In summary, the qualitative assessment supports the conclusion that the project will have minimal effects on the functions and values of wetlands and others waters in the project area because they are either isolated or have been modified as storm water/floodwater conveyance systems.

**F-4-9**

Opportunities for compensatory mitigation have been and are currently still being identified. Special attention is being paid to opportunities in the Santa Ana River Watershed, but opportunities in that watershed are limited. The specific location of compensatory mitigation will be determined and developed with the Corps, CDFG, and RWQCB as part of those agencies’ permit, authorization, and notification processes. A detailed habitat mitigation and monitoring plan, to be approved by those agencies, will be developed during that process. The compensatory mitigation will comply with the 2008 Mitigation Rule and Guidelines. This mitigation will be conducted outside of the project area but within the Santa Ana River Watershed and near the project area. Options currently under evaluation include CHSP, and
properties owned by the Orange County Water District and the Riverside County Resource Conservation District.

**F-4-10**
A detailed cumulative impacts analysis is provided in Section 3.25, Cumulative Impacts, starting on page 3.25-1 in the EIR/EIS. Table 3.25.1, Summary of Transportation Projects in the SR-91 CIP Study Area on page 3.25-43, and Table 3.25.2, Summary of Land Development and Nontransportation Infrastructure Projects in the SR-91 CIP Study Area, on page 3.25-55 in the EIR/EIS list and describe the cumulative projects included in the analysis and summarize the environmental impacts expected from each of those projects. Figure 3.25-1 in the EIR/EIS shows the locations of the cumulative projects included in that analysis. Section 3.25.4.10, Wetlands and Other Waters of the United States, on page 3.25-37 specifically discusses cumulative impacts to wetlands and other waters of the United States. Text was added to that section explaining that the resource study area is the Santa Ana River Watershed. A quantitative analysis of cumulative impacts to aquatic resources using a watershed based approach is not warranted given the low quality and amount of the aquatic resources impacted by the SR-91 CIP. In addition, as discussed on page 3.17-27 in the EIR/EIS, compensatory mitigation for riparian communities will be required for the Corps Section 404 at a minimum mitigation-to-effect ratio of 2:1 for permanent effects and 1:1 for temporary effects, which is consistent with Corps policies, for no net loss of riparian/riverine habitat (e.g., wetlands).

**F-4-11**
Based on the evaluation of the project in the EIR/EIS and the public comments received on the Draft EIR/EIS, the SR-91 CIP Build Alternatives are not likely to be contrary to the public interest. Because the SR-91 CIP qualifies for a Section 404 Nationwide Permit, the Corps will not need to issue a public interest finding for the permit.

**F-4-12**
The Department and RCTC also appreciate the Corps' active involvement in the development of the Draft and Final EISs as a Cooperating Agency under NEPA, and we look forward to working together through the Section 404 permit process as well.
O.6.2 State Agency Comments
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June 2, 2011

Mr. Aaron Burton, Environmental Planner

California Department of Transportation – District 8
464 West Fourth Street, Sixth Floor
San Bernardino, CA 92401

Re: SCH#2008071075; NEPA/CEQA Notice of Completion; draft Environmental Impact Report/and Environmental Impact Statement (EIR/EIS) for the: “ORA-91-R14.4/18.91; RIV 91-R0.00/R13.04; RIV-15-36.64/45.14; EA 08-0F5400; PN 0800000001.36; State Route 91 Corridor Improvement Project: Widening S.R. 91 from S.R. 241 Interchange in the cities of Anaheim and Yorba Linda in Orange County to Pierce Street in the City of Riverside and Interstate 15 in Hidden Valley Parkway Interchange in the cities of Corona and Norco.” Orange and Riverside Counties, California

Dear Mr. Burton:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources. The NAHC wishes to comment on the above-referenced proposed Project.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including...objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted in; Native American cultural resources were not identified within the 'area of potential effect (APE), based on the USGS coordinates of the project location provided. The NAHC 'Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254.10.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural
significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to C' A Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e).

Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends avoidance as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

Furthermore we recommend, also, that you contact the California Historic Resources Information System (CHRIS) California Office of Historic Preservation for pertinent archaeological data within or near the APE, at (916) 445-7000 for the nearest Information Center in order to learn what archaeological fixtures may have been recorded in the APE.

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C. 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 et seq), 36 CFR Part 800.3 (f), (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 et seq. and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 Secretary of the Interiors Standards for the Treatment of Historic Properties were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

The response to this search for Native American cultural resources is conducted in the NAHC Sacred Lands Inventory, established by the California Legislature (CA Public Resources Code 5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code 6254.10) although Native Americans on the attached contact list may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of the NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places and there may be sites within the APE eligible for listing on the California Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious
and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

[Signature]
Dave Singleton
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List
California Native American Contact List
Orange and Riverside Counties
June 2, 2011

Pechanga Band of Mission Indians
Paul Macarro, Cultural Resource Center
P.O. Box 1477
Teremcual, CA 92593
(951) 770-8100
pmacarro@pechanga-nsn.gov
(951) 506-9491 Fax

Soboba Band of Mission Indians
Scott Cozaet, Chairperson
P.O. Box 487
San Jacinto, CA 92581
dhill@soboba-nsn.gov
(951) 654-2765
(951) 654-4198 - Fax

Ti'At Society/Inter-Tribal Council of Pimu
Cindi M. Alvitre, Chairwoman-Manisar
3098 Mace Avenue, Aapt. D
Costa Mesa, CA 92626
calvitre@yahoo.com
(714) 504-2468 Cell

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

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

Santa Rosa Band of Mission Indians
Mayme Estrada, Chairwoman
P.O. Box 609
Hemet, CA 92546
srbciooffice@yahoo.com
(951) 658-5311
(951) 658-6733 Fax

Gabrieleno Tongva Nation
Sam Dunlap, Chairperson
P.O. Box 86908
Los Angeles, CA 90066
samdunlap@earthlink.net
(909) 262-9351 - cell

Juaneno Band of Mission Indians Acjachemen Nation
Anthony Rivera, Chairman
31411-A La Matanza Street
San Juan Capistran, CA 92675-2674
arivera@juaneno.com
(949) 488-3484
(949) 488-3294 - FAX
(530) 354-5876 - cell

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.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2008071075; NEPA/CEQA Notice of Completion; draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the State Route 91 Corridor Improvement Project; located in Orange and Riverside Counties, California.
Juaneno Band of Mission Indians
Alfred Cruz, Cultural Resources Coordinator
P.O. Box 25628                      Juaneno
Santa Ana, CA 92799
alfredcruz@sbcglobal.net
714-998-0721
714-998-0721 - FAX
714-321-1944 - cell

Pechanga Band of Mission Indians
Mark Macarro, Chairperson
P.O. Box 1477                      Luiseno
Temecula, CA 92593
tbrown@pechanga-nsn.gov
(951) 770-6100
(951) 695-1778 Fax

Juaneño Band of Mission Indians
Sonia Johnston, Tribal Chairperson
P.O. Box 25628                     Juaneno
Santa Ana, CA 92799
sonia.johnston@sbcglobal.net
(714) 323-8312

Juaneno Band of Mission Indians
Anita Espinoza
1740 Concerto Drive                Juaneno
Anaheim, CA 92807
(714) 779-8832

Pechanga Cultural Resources Department
Anna Hoover, Cultural Analyst
P.O. Box 2183                      Luiseno
Temecula, CA 92593
ahoover@pechanga-nsn.gov
951-770-8100
(951) 694-0446 - FAX

SOBOBA BAND OF LUISENO INDIANS
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487                        Luiseno
San Jacinto, CA 92581
jontiveros@soboba-nsn.gov
(951) 663-5279
(951) 654-5544, ext 4137

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.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2008071075; NEPA/CEQA Notice of Completion; draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the State Route 91 Corridor Improvement Project; located in Orange and Riverside Counties, California.
A Sacred Lands File (SLF) search was conducted for the project Area of Potential Effects by the Native American Heritage Commission (NAHC) on May 21, 2008. The results of that search were positive for the immediate project area as described in Section 3.8.2.4, Native American Consultation, in the EIR/EIS. The NAHC provides information from the SLF on Native American cultural resources using United States Geological Survey (USGS) topographic map coordinates provided by the requester. The intent is to keep the specific locations of sensitive areas confidential. No specific locations were revealed during subsequent consultation with the Native Americans on the NAHC list of recommended contacts. Therefore, no mitigation measures addressing identified sensitive sites are necessary.

Note that the NAHC’s June 2, 2011 letter (provided over 2 years after the original SLF Search) now indicates that an SLF search resulted in: “... Native American cultural resources were not identified...” within the APE.

The Native American contact list used for this project, which was current at the time it was provided by the NAHC, recommended that 9 Native American individuals representing various Juaneño, Luiseño, Cahuilla, Gabrielleno, and Gabrieleno/Tongva groups and Tribes be contacted. As part of the consultation process, LSA Associates, Inc. initially contacted all of those individuals on behalf of the Department by letter, dated June 3, 2008. The letter discussed the project and requested information on Native American cultural resources. Two rounds of follow-up communication (phone calls and/or emails) were attempted. The results of the Native American consultation are provided in detail in Attachment E in the Historic Property Survey Report (HPSR) and are described in Section 3.8.2.4, Native American Consultation, on page 3.8-5 and 5.5, Native American Consultation and Coordination, on page 5-27 in the EIR/EIS.

The following Native American Tribes, groups, and individuals were contacted during that consultation based on the contact list provided by the NAHC in 2008:

- Augustine Band of Cahuilla Mission Indians: Mary Ann Green
- Juaneño Band of Cahuilla Mission Indians: Anita Espinoza
- Juaneño Band of Cahuilla Mission Indians: Joe Ocampo
- Juaneño Band of Cahuilla Mission Indians, Acjachemen Nation: David Belardes
- Juaneño Band of Cahuilla Mission Indians: Sonia Johnston
• Gabrieleno/Tongva San Gabriel Band of Mission Indians: Anthony Morales
• Pechanga Band of Mission Indians: Paul Macarro
• Soboba Band of Luiseño Indians: Erica Helms (received a response requesting additional information on Native American resources; none were documented in the APE, so no material was provided)
• Ti’At Society: Cindi Alvitre

The NAHC comment letter dated June 2, 2011, suggests contacting the following:

• Pechanga Band of Mission Indians (Paul Macarro)*
• Soboba Band of Mission Indians (Scott Cozaet)*
• Ti’At Society/Inter-Tribal Council of Pimu (Cindi Alvitre)*
• Juaneño Band of Mission Indians, Acjachemen Nation (David Belardes, Anthony Rivera)*
• Gabrieleno/Tongva San Gabriel Band of Mission Indians (Anthony Morales)*
• Santa Rosa Band of Mission Indians (Mayme Estrada)
• Gabrieleno/Tongva Nation (Sam Dunlap)*

As shown by asterisks, all but one of the new tribal contacts (Santa Rosa Band of Mission Indians) were included in the consultation conducted based on the original contact list provided by the NAHC. The original list did include four contacts representing the Cahuilla group. Because the Santa Rosa Band is also a Cahuilla group, adequate contact is considered to have been made with that group during the original consultation.

As discussed in Section 3.8, Cultural Resources, starting on page 3.8-1 in the EIR/EIS, the project will not result in permanent or temporary impacts to known cultural resources. As a result, avoidance of cultural sites was not identified as a mitigation measure for the project. Measures CR-3 and CR-4, provided in Section 3.8.4.3, Mitigation for Native American Monitoring, on page 3.8-23, require a Native American monitor during construction in areas identified as sensitive by the Pechanga Band of Mission Indians.

S-1-3
It was not necessary to contact the California Historical Resources Information System (CHRIS) in the California Office of Historic Preservation to identify the information centers nearest the project site. Based on extensive experience in this part of southern California, the cultural resources consultants were familiar with the three
nearest information centers. As a result, records searches for the project were conducted at the San Bernardino Archaeological Information Center (February 11, 2008); the South Central Coastal Information Center (February 12 and 13, 2008); and the Eastern Information Center (February 21 and 22, 2008). The findings of those searches and other research on cultural sources conducted for the project are described in Section 3.8.2, Affected Environment, on page 3.8-2 in the EIR/EIS.

S-1-4
Consultation was conducted in compliance with all applicable State and federal laws. Refer also to response to comment S-1-2, above.

S-1-5
As discussed in Section 3.8.2.7, Discovery of Cultural Materials or Human Remains, on page 3.8-16 in the EIR/EIS, if human remains are discovered during construction, the applicable provisions of State Health and Safety Code Section 7050.5 and Public Resources Code (PRC) Section 5097.98 will be followed. As noted in this comment and as described in Section 3.8.2.7, the project must comply with mandatory laws such as the regulations regarding the discovery of human remains. Measures CR-2 and CR-3, on page 3.8-23, provide those provisions related to the discovery of cultural material and human remains.

S-1-6
Refer to response to comment S-1-2, above regarding Native American consultation.

S-1-7
Consistent with professional standards and practices, only limited information regarding individual archaeological sites is included in documents such as the EIR/EIS that would be available to the general public. As demonstrated in Table 3.8.2 on page 3.8-9 in the EIR/EIS, the information provided on the cited archeological sites is limited.
June 29, 2011

Aaron Burton  
Caltrans – District 8  
464 W 4th Street, MS 821  
San Bernardino, CA 92401

Dear Aaron Burton:

Re: SCH 2011061008; State Route 91 Corridor Improvement Project

The Commission’s Rail Crossings Engineering Section (RCES) is in receipt of the Notice of Completion & Environmental Document Transmittal-Draft Environmental Impact Report from the State Clearinghouse for the State Route 91 Corridor Improvement Project.

RCES staff noted in the project’s document on Table S.5 Permits and Approvals Needed, of the executive summary, the Commission is a listed agency. The RCES thanks you for including the Commission.

RCES looks forward to working with Caltrans in the future as the State Route 91 project progresses and Caltrans seeks authorization for any crossing work.

If you have any questions, please contact Bill Lay at 213-576-1399, email at bill.lay@cpuc.ca.gov, or myself at rxm@cpuc.ca.gov, 213-576-7078.

Sincerely,

Rosa Munoz, PE  
Senior Utilities Engineer  
Rail Crossings Engineering Section  
Consumer Protection & Safety Division
S-2-1
The Public Utilities Commission’s role as a permit approval authority is acknowledged. No response is necessary because this comment does not ask a question or provide a comment relative to the technical information in the EIR/EIS.
July 11, 2011

Aaron Burton
Caltrans, District 8
464 West 4th Street
San Bernardino, CA 92401

Re: Draft Environmental Impact Report/Draft Environmental Impact Statement (DEIR/DEIS) for the State Route 91 Corridor Improvement Project. SCH# 2008071075

Dear Mr. Burton:

The Inland Empire District of the California Department of Parks and Recreation (State Parks) appreciates the opportunity to comment on the State Route-91 Corridor Improvement Project (SR-91 CIP).

State Parks is a Trustee Agency as defined by the California Environmental Quality Act (CEQA). State Parks is also a Responsible Agency as defined by CEQA because the proposed project will require permanent and temporary use of Chino Hills SP (CHSP). State Parks’ mission in part is to provide for the health, inspiration, and education of the people of California by preserving the state’s extraordinary biodiversity and creating opportunities for high quality outdoor recreation.

In general, the DEIR/EIS is deficient because of the lack of serious consideration given to park resources and to recreation. It is not possible to evaluate the effectiveness of the project’s consequential impacts without weighing the proponent’s mitigation measures. In this case, Caltrans does not offer sufficient concrete mitigation strategies for the direct and indirect significant impacts to CHSP and its resources. As indicated in our October 23, 2009 Section 4 (F) Consultation response, very comprehensive review studies are needed to properly evaluate all potential impacts and mitigation measures which the DEIR/EIS as written is deficient in addressing. That being said we have the following comments to offer on the document as it has been released at this time; they are as follows.

Chapter 3.17 Natural Communities
- NC-3 - The dates identified for vegetation removal and tree trimming restrictions are different in Orange County than they are in Riverside County. Please explain and justify this difference.
- NC-4 - Due to fire danger no mechanized equipment operation or operation of other equipment that may throw sparks or potentially start a fire is to take place within the limits of CHSP during days when the national weather service has issued a Red Flag Warning for the area. We recommend this provision for all work adjacent to natural open space.
- NC-7 - Areas of habitat to be disturbed at Coal Canyon are described however it is unclear exactly where and the extent of these areas. Please identify and describe the nature of the disturbance that will take place within the CHSP at Coal Canyon.
• NC-9 & 12 – State Parks is strongly opposed to any work taking place at night within CHSP except in the case of emergency.
• NC-14 – All staging areas at Coal Canyon or at other areas of CHSP should be delineated with silt fence to prevent lizards and rodents from entering the staging area. The San Diego horned lizard, a California species of special concern has been observed in the area around Coal Canyon by State Parks staff recently.

Chapter 3.19 Plant Species
• Coulter's Matilija poppy is known to occur within the BSA in CHSP at Coal Canyon. Please indicate whether this population will be disturbed by the project.

Chapter 3.20 Animal Species
• AS-7 – This Avoidance and Minimization and/or Mitigation Measure repeatedly refers to roosting habitat but does not specify whether it is referring to bat habitat as is described in several of the previous measure or bird habitat. Please clarify.

Chapter 3.21 Threatened and Endangered Species
• Coastal Sage Scrub habitat adjacent to the project is known to be occupied by California gnatcatchers within CHSP at Coal Canyon. It is unclear what the anticipated impacts to gnatcatchers are at this location. Please clarify and describe plans to avoid and/or mitigate these impacts.

Additionally, we have not received the application for formal consultation with the National Park Service as required by the Land and Water Conservation Fund provisions. Once we receive your application, we will have additional comments that will affect our position on the appropriateness of the DEIR. We will also have further comments and conditions when applying for the Right of Entry permit for the areas marked out for temporary construction easement.

We are concerned with impacts to any sensitive species. The DEIR/EIS references several times that impacts will be mitigated consistent with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). However the DIER/EIS fails to identify the specific mitigation measures that would be implemented. Additionally, the DEIR/EIS is vague or does not clarify how mitigation consistent with the MSHCP will apply to the Orange County portion of the project.

Coal Canyon Wildlife Under-Crossing is a critical and very significant link to sustain the biodiversity of wildlife resources regionally. As stated, the DEIR/EIS is deficient in analyzing potential impacts to sensitive species and wildlife movement at this location and other identified wildlife crossings to the east, thus preventing a proper evaluation and weighing of the proposed mitigation measures. For instance, types of sound walls should be studied and evaluated on the eastbound and westbound sides of SR-91 at Coal Canyon and throughout the Santa Ana Canyon for the following reasons. Widening the freeway will move traffic closer to open space where increased noise pollution and the strobe light effect of headlights on the freeway will impact wildlife movement which takes place primarily at night. The sound walls would also help prevent vehicle fires, exhaust pipe emissions or discarded burning materials from igniting wildfires in open space. Widening of the freeway toward the south will reduce the height of the open area between the freeway and ground thereby reducing the "openness" of the
undercrossing making it less attractive to wildlife. Also, as a mitigation measure, we strongly advocate the addition of native plant habitat on the north/south approaches and under the SR-91 Bridge to facilitate wildlife movement.

We recommend further consideration of the reversible lane alternative and the elevated structure within the SR-91 right-of-way alternative, both of which were discussed as possible solutions during the Major Investment Study process, and included in a Locally Preferred Strategy, Project Development Team Meeting on December 7, 2005. The DEIR/EIS fails short of serious consideration of minimal-build alternatives.

State Parks will continue to work with RCTC and Caltrans to minimize the project impacts and identify appropriate mitigation to address impacts to CHSP.

Thank you again for the opportunity to comment. For further discussion, please contact me or Enrique Arroyo at (951) 453-6848.

Sincerely,

Ron Krueper
District Superintendent

Exhibit A: State Parks October 23, 2009 Section 4 (F) Consultation Response Letter

cc: Jay Chamberlin, State Parks Natural Resources Chief
    Judi Tamasi, Wildlife Corridor Conservation Authority
October 23, 2009

Khalid Bazmi
Toll Project Manager
3850 Vine Street, #210
Riverside, CA 92507

Re: Section 4(f) Consultation regarding the State Route 91 Riverside to Orange County Corridor Improvement Project

Dear Mr. Bazmi:

The Inland Empire District of the Department of Parks and Recreation (State Parks) appreciates the opportunity to participate in the Section 4(F) Consultation process regarding the State Route-91 Riverside to Orange County Corridor Improvement Project (SR-91 CIP).

State Parks is a trustee agency as defined by the California Environmental Quality Act (CEQA). State Parks' mission in part is to provide for the health, inspiration, and education of the people of California by preserving the state's extraordinary biodiversity and creating opportunities for high quality outdoor recreation. As the office responsible for the stewardship of Chino Hills State Park (Chino Hills SP), we have an interest and concern about contemplated alterations of land use adjacent to the park. The long-term health of CHSP is dependent on the health of the regional ecosystems because the biotic boundaries of the park extend beyond its jurisdictional boundaries.

Consistent with the requirements of Section 4(f), the Riverside County Transportation Commission (RCTC) and the California Department of Transportation (Caltrans) have consulted with State Parks regarding the proposed SR-91 CIP and its potential effects on Chino Hills SP. State Parks has reviewed the information regarding Chino Hills SP provided in the Draft Section 4(f) and 6(f) Evaluation for the project and the list of questions State Parks was requested to consider in its review of the information regarding Chino Hills SP. Based on the questions provided by RCTC/Caltrans and the additional information provided at and after the consultation meeting in the June 2009 project consultation, State Parks is providing the following additional information for possible inclusion in the Draft Section 4(f) and 6(f) Evaluation for the SR-91 CIP:

- **Summary of Section 4(f) Analysis for Chino Hills State Park** - see attachment for suggested edits.

- **Coal Canyon Wildlife Under-Crossing** — Even though construction in the wildlife crossing will be limited to daylight hours and the construction impacts are considered temporary with the widening of the bridge structures, wildlife movement will still be undeniably impacted over an extensive period of time. Previous bridge widening projects at Coal Canyon coupled to this bridge widening project will have incrementally increased the shade area under the...
bridges effecting wildlife without the benefit of any native plant cover improvement to facilitate movement directly under or near the under-crossing approaches. This should be considered as a permanent impact and should be mitigated as such for the long term. We strongly encourage a very comprehensive review and study of all permanent and temporary impacts with appropriate mitigation such as native plant improvements other than only returning the present wildlife crossing to its original condition which is currently bare ground where the previous road material was removed.

- **Prado Road and Green River** - The proposed permanent aerial easement for the new bridge over Prado Road at Green River Road impacts and crosses over the parks only existing public access point for hikers and vehicles in this southern portion of Chino Hills SP. Extensive consultation and planning coordination and possible mitigation will need to be conducted with State Parks to ensure future public access.

In summary:

- State Parks appreciates the continuing coordination and consultation with RCTC and Caltrans regarding the proposed project.
- State Parks will continue to work with RCTC and Caltrans to minimize the project impacts to Chino Hills SP and identify appropriate mitigation to address impacts to Chino Hills SP.

Thank you again for the opportunity to comment. For further discussion, please contact me or Enrique Arroyo at (951) 453-6848.

Sincerely,

Ron Krueper  
District Superintendent

cc: Rick Rayburn, California State Parks  
John Rowe, California State Parks  
Judi Tamasi, WCCA  
Jim Donovan, National Park Service  
Daniel Ciaccomella, Caltrans  
Michael Amling, LSA Associates, Inc.
Appendix O Responses to Comments

S-3-1
No response is necessary because this comment simply identifies State Parks as a trustee and responsible agency under CEQA for the project.

S-3-2
The EIR/EIS fully analyzes the project impacts and imposes all feasible mitigation. Refer to Chapter 3, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures, in the EIR/EIS.

The State Parks letter dated October 23, 2009, referenced in this comment, was in response to a specific request that State Parks respond to questions regarding the potential for Section 4(f) impacts at CHSP. The comments in that letter were addressed in Appendix B, Resources Evaluated Relative to the Requirements of Section 4(f), in the EIR/EIS and in ongoing consultation with State Parks regarding the project effects at CHSP. Refer to Appendix B in the Final EIR/EIS for detailed discussion of, and mitigation for, project effects at CHSP.

Refer also to responses to comments S-3-3 through S-3-18, below.

S-3-3
The nesting bird season is based on a time frame typically accepted by the resource agencies in the region. A shorter nesting season is provided in the Western Riverside County MSHCP. However, Measure NC-3 on page 3.17-30 in the EIR/EIS was changed in response to a request from the Regional Conservation Authority as follows (changes shown in *italics*) to include the longer time frame than that provided in the Western Riverside County MSHCP. This revised measure assures a consistent period during which vegetation cannot be removed in both Orange and Riverside Counties and is a longer length of time than that provided in the Western Riverside County MSHCP. Because the project segment in Orange County is not within a Natural Communities Conservation Plan (NCCP) or Habitat Conservation Plan (HCP), it is appropriate to use the same time period during which vegetation cannot be removed for both counties.

NC-3 To avoid effects to nesting birds, RCTC’s Resident Engineer will require the design/build contractor to conduct any native or exotic vegetation removal or tree trimming activities outside of the nesting bird season (*i.e.*, February 15–September 15). In the event that vegetation clearing is necessary during the nesting season, RCTC’s Resident Engineer will require the design/build contractor to have the
Designated Qualified Biologist conduct a preconstruction survey within 300 ft of construction areas no more than 7 days prior to construction to identify the locations of nests. Should nesting birds be found, an exclusionary buffer of 300 ft will be established by the Designated Biologist around each nest site. This buffer will be clearly marked in the field by construction personnel under guidance of the design/build contractor’s Designated Qualified Biologist, and construction or clearing will not be conducted within this zone until the Designated Qualified Biologist determines that the young have fledged or the nest is no longer active. In the event that construction must occur within the 300 ft buffer, the Designated Biologist will take steps to ensure that construction activities do not disturb or disrupt nesting activities. If the Designated Biologist determines that construction activities are disturbing or disrupting nesting activities, the Designated Biologist will notify the RTC Resident Engineer, who has the authority to halt construction to reduce the noise and/or disturbance to the nests. Responses may include, but are not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest and the construction activities, and/or working in other areas until the young have fledged.

S-3-4
All State Parks requirements and restrictions regarding fire prevention during periods of Red Flag Warnings within and in the vicinity of CHSP will be followed. That requirement was added to Measure NC-4 on page 3.17-31 in the EIR/EIS (the changes are shown in italics).

NC-4
When work is conducted during the fire season (as identified by the OCFA, RCFD, City of Norco Fire Department, and/or the City of Corona Fire Department) adjacent to any vegetated open space, RTC’s Resident Engineer will require the design/build contractor to ensure that appropriate firefighting equipment (e.g., extinguishers, shovels, water tankers) is available on site during all phases of project construction to help minimize the potential for human-caused wildfires. Shields, protective mats, and/or other fire-preventive methods will be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventive
actions, and responses to fires will advise contractors regarding fire risk from all construction-related activities.

If a responsible fire agency (OCFA, RCFD, City of Norco Fire Department or City of Corona Fire Department) requires the RCTC to clear defensible spaces during construction, the RCTC’s Resident Engineer, the design/build contractor, and the design/build contractor’s Designated Qualified Biologist will coordinate with the USFWS prior to this clearing effort. In the event there are resources in the areas identified for defensible clearing, RCTC’s Resident Engineer and the Designated Qualified Biologist will coordinate with any applicable permitting agencies regarding possible effects to those resources prior to approving the defensible clearing of any areas by the design/build contractor.

_During all Red Flag Warning periods as issued by the National Weather Service, the design/build contractor will not be allowed to operate mechanized equipment or equipment which could throw off sparks or potentially start fires in any areas of natural open space in CHSP or other areas._

**S-3-5**

As shown on Sheet 1 on Figure B.3 in Appendix B in the EIR/EIS, there will be no permanent removal of habitat in CHSP at Coal Canyon. Permanent project impacts at Coal Canyon will occur as a result of the widening of the existing bridge structure. These impacts will occur above the grade of the wildlife crossing in developed and/or disturbed areas not considered habitat to special-status species, as shown on Figure B.3. In addition, there is a TCE just west of Coal Canyon that will be disturbed for utility relocation; that TCE is shown on Figure B.3. Measure NC-7 on page 3.17-32 in the EIR/EIS specifically addresses the areas disturbed during construction. Because there is no permanent removal of vegetation in this area, no mitigation for that type of impact at Coal Canyon is needed.

**S-3-6**

Note that Measures NC-9 and NC-10 on page 3.17-33 in the EIR/EIS are relevant to all wildlife corridors and not specifically work being conducted in CHSP. The following new measure was added on page 3.1-92 in the EIR/EIS to address State Parks’ stated desire to avoid construction at night in CHSP:
PR-3 RCTC’s Resident Engineer will require the design/build contractor to limit the hours of construction in Chino Hills State Park to daylight hours (7:00 a.m.–7:00 p.m.), with the exception of limited periods when evening or night construction is necessary for operations reasons. Operational reasons may include the desire to conduct certain construction activities, such as closing multiple ramps or travel lanes, during evening and night time hours to minimize delays to the traveling public. Any night construction must be approved in writing by the RCTC Resident Engineer and coordinated with the District 8 and 12 biologists, the USFWS, and CDFG.

The entry gates at Coal Canyon must remain closed at all times except to provide access to and from the construction site for construction workers, materials delivery, and construction equipment, to prevent wildlife from inadvertently entering the freeway area.

S-3-7 The following new measure was added on page 3.20-17 in the EIR/EIS as requested.

AS-8 RCTC’s Resident Engineer will require the design/build contractor to install and maintain silt fence barriers at all staging or construction areas at Coal Canyon and areas within CHSP to prevent small animals from entering those areas.

S-3-8 As noted in Table 3.20.1 on page 3.20-3 in the EIR/EIS, the San Diego horned lizard was not observed in the BSA during surveys conducted for the project. This lizard is a covered species in the Western Riverside County MSHCP as discussed in Section 3.20.2.2, Western Riverside County MSHCP-Covered Species, on page 3.20-8 in the EIR/EIS. However, Coal Canyon is in Orange County and is not covered by the Western Riverside County MSHCP.

Refer also to response to comment S-3-7, above, for mitigation to address special-status species in the Coal Canyon area.

S-3-9 The SR-91 CIP would not disturb any Coulter’s matilija poppy in CHSP. Refer to Figure 3.19-2 on page 3.19-13 in the EIR/EIS, which indicates that the Coulter’s matilija poppies that will be impacted are within the existing right-of-way for SR-91
and not in CHSP. The poppies south of the SR-91 right-of-way will not be impacted by the project.

S-3-10
Measure AS-7 on page 3.20-16 in the EIR/EIS was changed at the request of the Regional Conservation Authority as follows (changes shown in italics):

AS-7 During final design, RCTC’s Project Manager, the Department District 8 Biologist, the District 12 Biologist, and the Designated Qualified Biologist will determine whether structural features providing existing bat roosting habitat cannot be permanently retained following construction. If that is the case, RCTC’s Project Manager, RCTC’s Project Engineer, the Department District 8 Biologist, the District 12 Biologist, and the Designated Qualified Biologist will identify alternative roosting habitat to be installed during project construction. The project specifications will include suitable designs and specifications for bat exclusion and habitat replacement structures.

Prior to and during construction, RCTC’s Resident Engineer will require the design/build contractor to properly implement the designs and specifications for bat exclusion and habitat replacement structures included in the project specifications. The installation and maintenance of those structures will be monitored by the Designated Qualified Biologist.

S-3-11
As discussed in the bullet titled “Coastal California Gnatcatcher” on page 3.21-7 in Section 3.21.2.2, Threatened and/or Endangered Animal Species, in the EIR/EIS, CAGN were observed in the BSA during focused surveys in 2008, but none were observed in the locations in CHSP that will be impacted by the project. As shown in Table 3.17.2 on page 3.17-13 in the EIR/EIS, the Build Alternatives will result in the permanent removal of CSS and temporary removal of CSS during construction. CAGN-occupied CSS vegetation at Coal Canyon in CHSP will not be impacted by the SR-91 CIP because CAGN were not observed at the locations in CHSP that will be impacted by the SR-91 CIP. Because there will be no acquisition of CAGN-occupied habitat, temporarily impacted CSS will be replaced, and permanently impacted CSS will be mitigated in the amount required by the Biological Opinion received from the USFWS on November 30, 2011. The Biological Opinion is
provided in Appendix N, Biological Opinion. The project impacts to CAGN are not significant under CEQA.

S-3-12
Refer to Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18, for discussion regarding the project effects at CHSP, the measures included in Alternatives 1 and 2 and provided in the EIR/EIS to address those effects, and the de minimis determination under Section 4(f) for the project effects at CHSP.

In its consultation letter dated January 26, 2012, the NPS indicated that two previous L&WCF Act grants were used for the acquisition of land for CHSP. The Build Alternatives would require acquisition of a small amount of land in parcel #31 in CHSP, which was not acquired with those grant monies. The NPS letter goes on to say “...we have determined that LWCFA §6(f)(3) does not now apply to parcel #31, and that the proposed project, were it to be built today, would not cause a LWCFA conversion of parkland on parcel #31.” As a result, at this time, the requirements for the protection and mitigation of the acquisition of land from parcel #31 for the proposed project under Section 6(f) do not apply.

However, the NPS also indicated in its consultation letter that the timing of the closing of an approved third major L&WCF Act grant to State Parks for CHSP is not known. When that grant is closed, it will modify the Section 6(f) boundary for CHSP to include all the existing land in the park, including all of parcel #31. Because of the uncertainty of the timing of the closing of that approved L&WCF Act grant to CHSP, the NPS consultation letter also recommends “…that CEQA and NEPA environmental compliance treat the property as if §6f applied now, in terms of potential impacts assessment and mitigation measures.”

Because parcel #31 is not currently subject to the requirements of protection and mitigation under Section 6(f), RCTC and the Department are proceeding without treating parcel #31 as if Section 6(f) applies now and will continue to monitor the status of the L&WCF Act grant closing. However, in the event that the grant is closed prior to construction of the SR-91 CIP, the requirements for the protection under Section 6(f) will need to be analyzed and addressed with CHSP and CDPR, Office of Grants and Local Services.

The NPS consultation letter is provided in Appendix B of the EIR/EIS.
S-3-13

The part of the SR-91 CIP in Riverside County is a covered project under the Western Riverside County MSHCP. As a regional plan, the Western Riverside County MSHCP serves to provide mitigation for impacts to covered species and their habitats. Project consistency with the Western Riverside County MSHCP ensures that impacts to those species covered by the Western Riverside County MSHCP are effectively mitigated. As a permittee under the Western Riverside County MSHCP, RCTC received a consistency conclusion from Western Riverside County RCA on April 4, 2011, that the SR-91 CIP demonstrates consistency with the requirements for covered road projects and with other requirements of the Western Riverside County MSHCP. Mitigation for impacts to sensitive species under the MSHCP is achieved through the payment of funds by MSHCP permittees as stipulated under the MSHCP Implementation Agreement. These funds are used by the RCA to purchase lands that become part of the MSHCP Reserve. Section 13.7.B of the MSHCP Implementation Agreement specifies RCTC’s MSHCP funding obligation as follows: “Contribute mitigation in the amount of $153 million from Measure "A" funds for mitigation of its Covered Activities as described in Section 8.5.1 of the MSHCP. Such contribution shall occur proportionately prior to impacts to Covered Species or their habitats.”

RCTC has accelerated its payment of MSHCP funds well in advance of project impacts to covered species and their habitats. As of June 30, 2012, RCTC has paid $122 million in Measure “A” funds to the RCA, which represents 80 percent of its total MSHCP funding obligation.

In addition to providing mitigation through complying with MSHCP funding obligations, the measures provided in Sections 3.17 (starting on page 3.17-27), 3.18 (starting on page 3.18-14), 3.20 (starting on page 3.20-13), 3.21 (starting on page 3.21-20), and 3.22 (starting on page 3.22-4) in the EIR/EIS are designed to protect special-status species and other biological resources and will be implemented throughout the entire project alignment, unless otherwise specified. Specifically, Measures NC-17, NC-18, and NC-19 (starting on page 3.17-35) are required by the Western Riverside County MSHCP. Refer to Section 3.17.4.1, Compensatory Mitigation, in the EIR/EIS for discussion regarding the detailed compensatory mitigation that will be required for the project under the Western Riverside County MSHCP and the Biological Opinion, including development and implementation of a Habitat Mitigation and Monitoring Plan. The compensatory mitigation described in Section 3.17.4.1 is in addition to the measures provided in Section 3.17.4.2, Other Measures.
Mitigation for impacts in Orange County is not required to be consistent with the Western Riverside County MSHCP, and mitigation for Riverside County will not necessarily apply to the Orange County part of the project. The measures provided in Sections 3.17 (Natural Communities), 3.18 (Wetlands), 3.19 (Plant Species), 3.20 (Animal Species), 3.21 (Threatened and Endangered Species), and 3.22 (Invasive Species) in the EIR/EIS will be implemented throughout the entire project alignment in both Orange and Riverside Counties, unless otherwise specified. In addition, as described in Section 3.17.4.1, Compensatory Mitigation, on page 3.17-27 in the EIR/EIS, impacts in Orange County to CSS in CAGN-designated critical habitat will be mitigated in accordance with the Biological Opinion received from the USFWS on November 30, 2011. The Biological Opinion is provided in Appendix N, Biological Opinion, of the EIR/EIS. The compensatory mitigation, the requirements of the Biological Opinion, and the other measures listed in Section 3.17.4.2, Other Measures, are general measures included in the project to address the project effects on biological resources in Orange County.

Specific measures for impacts to sensitive species in Orange County are provided as follows in the EIR/EIS:

- Measure PS-1 in Section 3.19, Plant Species, provides for replacement planting of Southern California black walnut and Coulter’s matilija poppy.
- Measure TE-8 in Section 3.21, Threatened and Endangered Species, provides a conservation measure for Braunton’s Milk-vetch.
- Measures TE-9-13 in Section 3.21, Threatened and Endangered Species, provides conservation measures for CAGN, including restoration of over 19 acres of CAGN habitat.

A thorough analysis of specific potential project impacts to sensitive species and wildlife movement was conducted and is discussed in the NES, the Determination of Biologically Equivalent or Superior Preservation Report, and the Biological Assessment (BA) for the project. These reports were used as the basis for the information presented in the EIR/EIS. Existing wildlife corridors along SR-91 are described in Section 3.17.2.4, Wildlife Corridors, on page 3.17-13 in the EIR/EIS. As discussed in the subsection titled “Coal Canyon” on page 3.17-13 in Section 3.17.2.4, Coal Canyon is the most important remaining wildlife connection between the Santa Ana Mountains and the Puente-Chino Hills. The permanent project effects at those
wildlife corridors (which range from no effect to changes in the structures and/or openness ratios, although those effects would not be substantial) are described in the subsection titled “Wildlife Corridors” on page 3.17-21 in Section 3.17.3.2, Permanent Impacts, in the EIR/EIS. As described in that subsection, the Coal Canyon undercrossing is expected to be widened, but will still have a openness ratio that will allow large mammals to move between the regions. Since the close of the public comment period on the Draft EIR/EIS, the Department and RCTC have engaged in extensive consultation with State Parks regarding impacts to CHSP and Coal Canyon in particular. As a result of this consultation, the agencies reached agreement on avoidance measures, minimization measures, and other environmental commitments regarding potential impacts at Coal Canyon, including:

- Measure P-3, which restricts the hours of construction in the vicinity of Coal Canyon (see Section 3.1.4.3).
- Measure AS-8, which provides for fencing during construction to protect small animals (see Section 3.20.4)

Refer also to Section O.5.5.7, Other Commitments by RCTC Relevant to Chino Hills State Park, on page O-28 for discussion regarding the separate project that will provide a noise and glare barrier on both sides of SR-91, in the vicinity of the Coal Canyon crossing (this commitment is also discussed in Section 3.1.4.3).

Temporary project effects are described in the subsection titled “Wildlife Corridors” on page 3.17-26 in Section 3.17.3.3, Temporary Impacts. As described in that subsection, the proposed project is expected to result in temporary effects to wildlife movement at Coal Canyon. However, because wildlife primarily moves at night and construction will be limited to daylight hours except for limited periods for operational reasons, those temporary project effects would be limited to those periods during which evening or night construction cannot be avoided. Operational reasons may include the desire to conduct certain construction activities, such as closing multiple ramps or travel lanes, during evening and night hours to minimize delays to the traveling public. Any night construction must be approved in writing by the RCTC Resident Engineer, and coordinated with the District 8 and 12 biologists, the USFWS, and CDFG.

**S-3-16**

Based on the *Final Noise Study Report* (NSR; April 2010) and the NADR (July 2010), the noise levels nearest to open space areas are expected to be relatively the
same with or without the SR-91 CIP. Although noise levels will not increase noticeably as a result of the SR-91 CIP, noise impacts are expected to extend into the surrounding natural habitat by approximately the same distance that SR-91 is being widened. Refer also to Section O.5.5.2, Constructive Use Effects, on page O-21, which discusses why Alternatives 1 and 2 would not result in a constructive use impact at CHSP as a result of indirect impacts such as noise effects. Refer also to Section O.5.5.7, Other Commitments by RCTC Relevant to Chino Hills State Park, on page O-28 for discussion regarding the separate project that will provide a noise and glare barrier on both sides of SR-91, in the vicinity of the Coal Canyon crossing.

As discussed in detail in Section 3.15, Noise, starting on page 3.15-1 in the EIR/EIS, sound walls are provided only in specific circumstances based on future with-project noise levels. In addition, sound walls must be determined to be both feasible and reasonable. NB E-1 is proposed on the westbound on-ramp from Green River Road, continuing on the westbound SR-91 mainline. The estimated length of that barrier is 9,284 ft. The barrier is proposed to benefit the homes at Green River Village and the Green River Golf Club. The Department’s noise protocol requires that if noise impacts are identified for an area of frequent human use, including recreational facilities, noise mitigation must be studied for those areas. No noise barrier is proposed on the eastbound side of the freeway between SR-241 and Green River Road. The area within 500 ft of SR-91 is undeveloped open space, and Department noise protocol states that noise mitigation only addresses noise impacts to areas with frequent human activity. No sound walls are identified in the EIR/EIS as needed, feasible, and reasonable along SR-91 adjacent to CHSP.

The purpose of sound walls is not to prevent materials from blowing out of the freeway right-of-way and onto adjacent properties or to prevent ignition sources in the freeway right-of-way from starting fires on adjacent properties. It is acknowledged that a secondary benefit of sound walls may be to reduce material blowing out of the freeway right-of-way and onto adjacent properties and may reduce the potential for wildfires started by ignition sources within the freeway right-of-way. However, in accordance with one of the conditions in the November 30, 2011, Biological Opinion issued by the USFWS (provided in Appendix N of the EIR/EIS), RCTC and the Department will work with the USFWS to investigate features that could be added in the vicinity of the SR-91 Coal Canyon wildlife undercrossing to minimize adverse effects from the potential threat of increased fire risk. Refer to Section O.5.5.6, Measures for Other Effects at Chino Hills State Park, on page O-25, for Measure UES-4 which specifically requires a barrier, or equivalent, along the
north and south sides of SR-91 between approximately SR-71 and SR-241, including areas adjacent to CHSP.

In addition, Measure TE-15 was added on page 3.21-24 in Section 3.21.4, Avoidance, Minimization, and/or Mitigation Measures, to address potential indirect impacts due to fire risk.

**S-3-17**

The openness of all wildlife crossings was evaluated in detail in the *Comprehensive Wildlife Corridor Analysis Report* in the NES. An openness ratio of at least 1.96 (calculated in feet) is generally accepted as the standard for large mammals. Because the openness ratio after the freeway widening (5.98) will still be sufficient to allow large mammals to move between areas north and south of the freeway at Coal Canyon, it was determined that the reduction in openness at Coal Canyon is not expected to substantially affect the use of that crossing by wildlife. Measure NC-7, on page 3.17-30 in Section 3.17 in the EIR/EIS, requires that habitat adjacent to Coal Canyon (and other wildlife crossings) removed by the project be restored with native vegetation.

As a project independent of, and separate from, the SR-91 CIP, the Department is proposing to install some planting in State right-of-way at Coal Canyon. This project is not part of the SR-91 CIP and information on that project is provided for information purposes only. The planting project is funded with federal Transportation Enhancement Activity (TEA) funds and is programmed for construction in FY 2012–2013 in the 2011 Federal Transportation Improvement Program (FTIP). Should this planting occur prior to construction of the SR-91 CIP, any disturbance to those planted areas would be restored.

**S-3-18**

The use of reversible lanes was studied and determined not to be a feasible solution for the present problem. This is because although there is currently strong directionality in peak-hour traffic (i.e., a.m. peak-hour traffic is predominantly headed west on SR-91, and p.m. peak-hour traffic is predominantly headed east), that strong peak-hour directionality will decrease over time. As a result, the *Traffic Study Report* (July 2010) forecast that, by 2035, peak-hour traffic in the a.m. and p.m. will not exhibit strong directionality in one direction or another. Therefore, reversible lanes would not be an effective alternative to serve traffic needs in the SR-91 corridor by 2035. In addition, a reversible facility would require substantial construction for: (a) reconfiguration of existing barriers, (b) construction of fail-safe entry barrier systems,
and (c) possible installation and operation of a moveable barrier system. Refer to Table 2.39 on page 2-143 in the EIR/EIS for additional discussion regarding reversible lanes.

As shown in Table 2.39, reversible lanes were considered and rejected during the alternative scoping process. The reasons reversible lanes were rejected included:

1. The lack of a substantial direction split in 2035;
2. The proposal for reversible lanes (two in one direction, one in the other) would require more right-of-way than the proposed Build Alternatives; and
3. The long-term maintenance costs associated with reversible lanes.

Improvement of SR-91 to the maximum feasible cross section, as proposed for Alternative 2, is consistent with the priorities established in the Major Investment Study Report. Refer to Section O.5.7, Common Response Related to Alternatives, on page O-30 in Section O.5, Common Responses, for additional discussion regarding the range of alternatives considered during and after the MIS. Refer also to Section O.5.9, Common Response Related to the Identification of the Preferred Alternative, on page O-39 for discussion regarding the evaluation of the Build Alternatives and the identification of Alternative 2f as the Preferred Alternative.

S-3-19

Since the distribution of the Draft EIR/EIS, the Department and RCTC have continued to coordinate and consult with State Parks to further minimize the project effects at CHSP based on design refinements and to refine specific mitigation measures to avoid, or substantially reduce, the permanent and temporary effects of the project on CHSP and resources within the park. Refer to Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18, for additional discussion regarding the consultation with State Parks, the project effects at CHSP, and mitigation included in Alternatives 1 and 2 and provided in the EIR/EIS to address those impacts.
July 8, 2011

Mr. Aaron Burton  
California Department of Transportation, District 8  
464 West 4th Street, 6th Floor  
San Bernardino, CA 92401  

NOTICE OF COMPLETION & ENVIRONMENTAL IMPACT REPORT (EIR) FOR STATE ROUTE 91 CORRIDOR IMPROVEMENT PROJECT (SCH # 2008071075)

Dear Mr. Burton:

The Department of Toxic Substances Control (DTSC) has received your submitted Notice of Availability of the Environmental Impact Report for the above-mentioned project. The following project description is stated in your document: “The proposed project is in Orange and Riverside Counties, within the jurisdiction of California Department of Transportation (Department) Districts 8 and 12. Facility improvements are proposed along State Route 91 (SR-91) and Interstate 15 (I-IS), spanning the Cities of Anaheim and Yorba Linda in Orange County, and the Cities of Corona, Norco, and Riverside in Riverside County. The project includes two Build Alternatives extending SR-91 from State Route 241 (SR-241) (in the Cities of Anaheim and Yorba Linda) to Pierce Street (in the City of Riverside), a distance of approximately 14 miles (mi), and on I-IS from the Hidden Valley Parkway interchange in the Cities of Corona and Norco to the Cajalco Road interchange in the City of Corona, a distance of approximately 6 mi. SR-91 is continuing to experience increased congestion as a result of population growth in Riverside County and the increase in jobs in Orange County”.

Based on the review of the submitted document DTSC has the following comments:

1) The EIR should evaluate whether conditions within the project area may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:

   • National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).
- Envirostor (formerly CalSites): A Database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).

- Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.

- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S. EPA.

- Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.

- GeoTracker: A List that is maintained by Regional Water Quality Control Boards.

- Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.

- The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).

2) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents.

3) Any environmental investigations, sampling and/or remediation for a site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in which hazardous substances were found above regulatory standards should be clearly summarized in a table. All closure, certification or remediation approval reports by regulatory agencies should be included in the EIR.

4) If buildings, other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should also be conducted for the presence of other hazardous chemicals, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints (LBPs) or
products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.

5) Future project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.

6) Human health and the environment of sensitive receptors should be protected during any construction or demolition activities. If necessary, a health risk assessment overseen and approved by the appropriate government agency should be conducted by a qualified health risk assessor to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.

7) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.

8) DTSC can provide cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC’s Voluntary Cleanup Coordinator, at (714) 484-5489.
If you have any questions regarding this letter, please contact me at ashami@dtsc.ca.gov, or by phone at (714) 484-5472.

Sincerely,

Al Shami
Project Manager
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
P.O. Box 806
Sacramento, California 95812
nritter@dtsc.ca.gov

CEQA # 3234
Comments noted. Refer to responses to comments S-4-2 to S-4-9, below.

Conditions in the project area that may pose a potential threat to human health and the environment are discussed in Section 3.13, Hazards and Hazardous Materials, in the EIR/EIS. Specifically, Section 3.13.2.2, Sites of Environmental Concern, includes a summary of the database search findings, the search for which was conducted as part of the Initial Site Assessment (ISA). As discussed in Section 3.13.2.2, the databases searched for the ISA included, but were not limited to, the National Priorities List, Resource Conservation and Recovery Information System, Comprehensive Environmental Response Compensation and Liability Information System, Solid Waste Information System, Corps, GeoTracker, Envirotor, and local county and city agency databases.

As discussed in Section 3.13.2.3, Potential Environmental Concerns, in the EIR/EIS, there are potential risks associated with a number of environmental conditions, including potential soil and/or groundwater contamination at two hazardous waste/ materials sites that would be used as a trichloroethylene and/or a full or partial acquisition; the potential presence of hazardous wastes routinely stored or generated at multiple industrial and automotive facilities within the disturbance limits of the Build Alternatives; asbestos in rails, bearing pads, support piers, expansion joint material in bridges, asphalt, and concrete and road building materials, and other building materials; lead-based paint on building structures and lead in yellow paint and tape used for pavement marking; polychlorinated biphenyls (PCBs) in pole-mounted or pad-mounted transformers and/or light ballasts; potential soil and/or groundwater contamination in soils adjacent to the railroad right-of-way; potential soil contamination in agricultural soils that have remained undisturbed; and relocation of the Southern California Edison (SCE) substation under Alternative 2 with Design Variations 2c, 2d, 2g, and 2h. Measures HW-1 through HW-15, provided in Section 3.13.4, Avoidance, Minimization, and/or Mitigation Measures, address the potential impacts from these types of hazards that would potentially occur under Alternatives 1 and 2. Most of these measures are standard procedures and/or regulations controlling these types of hazardous materials. Measure HW-15 would address impacts from hazards that could potentially result from the relocation of the SCE substation under Alternative 2 with Design Variations 2c, 2d, 2g, and 2h. All impacts related to hazardous materials would be substantially mitigated based on implementation of Measures HW-1 through HW-15.
S-4-3
Mechanisms to initiate required investigation of, and/or remediation for, sites known to have contamination and that have had releases that may pose a potential concern during project construction are summarized in Measures HW-1 through HW-15 in Section 3.13.4, Avoidance, Minimization, and Mitigation Measures, in the EIR/EIS. The measures include general citations to federal, State, and/or local regulatory agencies as appropriate for each measure.

In the event that unknown hazards are encountered during grading activities, Measure HW-11 requires the design/build contractor to prepare a Construction Contingency Plan (CCP) prior to the start of construction, in accordance with Caltrans Unknown Hazards Procedures for Construction. The CCP will include provisions for emergency response in the event that unidentified underground storage tanks (USTs), hazardous materials, petroleum hydrocarbons, or other hazardous or solid wastes are discovered during construction activities. The CCP will address UST decommissioning, field screening, contaminant materials testing methods, mitigation and contaminant management requirements, and health and safety requirements for construction workers. The CCP will require the design/build contractor to cease work immediately if an unexpected release of hazardous substances occurs in reportable quantities. If such a release were to occur, the National Response Center would be contacted, and the appropriate clean-up action would be initiated with the appropriate federal, State, and/or local agency oversight.

S-4-4
Environmental investigations, sampling, and/or remediation for sites of potential concern that were recommended will be completed prior to the completion of the design of the Initial Phases and Ultimate Projects under Alternatives 1 and 2. As described in Section 4.2.3.5, Hazards and Hazardous Materials, on page 4-30 in the EIR/EIS, with the implementation of Measures HW-1 through HW-15, impacts related to hazardous waste/materials are considered not to be substantial. In addition, if work plans are required as part of the proposed project, such work will be overseen by the local regulatory agency responsible for oversight.

S-4-5
Measure HW-4 in Section 3.13.4, Avoidance, Minimization, and Mitigation Measures, in the EIR/EIS requires that preconstruction surveys be performed on all building structures that will be renovated or demolished as part of the project. The preconstruction surveys will include sampling and testing for asbestos-containing
materials, lead-based paints, mercury, and PCBs. In addition, Measure HW-4 states that all materials from these structures that exceed California Health and Safety Code criteria for hazardous waste must be properly disposed of at a State-certified landfill facility.

**S-4-6**

Measures HW-1, HW-2, HW-3, HW-7, HW-8, and HW-10, provided in Section 3.13.4, Avoidance, Minimization, and Mitigation Measures, starting on page 3.13-26 in the EIR/EIS, specifically address potential effects associated with potential on-site contaminated soil and/or groundwater. Any contaminated materials will be properly disposed of consistent with applicable federal, State, regional, and local laws and regulations. Imported soil for on-site fill will require testing prior to use. Refer to Measure HW-3 for additional detail on the requirements for testing off-site fill.

**S-4-7**

As discussed in Section 3.14.3.2, Permanent Impacts, starting on page 3.14-28 in the EIR/EIS, the MSAT emissions under the No Build and Build Alternatives would be substantially lower than Existing (2007) conditions. Therefore, because the SR-91 Build Alternatives would reduce MSAT emissions locally and regionally, a detailed HRA was not needed or conducted for the project.

Measures are included in the project to address the potential for hazardous material releases/risks during project construction. In addition to the measures described above in response to comment S-4-6, Measures HW-4, HW-5, and HW-6 address the potential for hazardous material issues associated with demolition and other construction activities. Measure HW-11 requires the preparation and implementation of a CCP, and Measure HW-9 requires the preparation and implementation of a Health and Safety Plan. Measure HW-9 addresses the request by the DTSC that a Health Risk Assessment (HRA) be prepared addressing releases of hazardous materials that may pose a risk to human health or the environment during construction and demolition activities. Specifically, Measure MW-9 requires that a site-specific Health and Safety Plan (HASP) be prepared by a certified industrial hygienist. The HASP will be based on evaluation of proposed construction activities, the potential hazards identified in the Phase I ESA and Phase II testing, and any future assessments prepared for the project. The HASP will outline specific procedures for encountering expected and unexpected contaminants. It will include safe work practices, contaminant monitoring, the need for personal protective
equipment, emergency response procedures, and safety training requirements to protect construction workers and third parties working on site.

**S-4-8**
As discussed in Section 3.13.2, Permanent Impacts, in the EIR/EIS, operation and maintenance of the facilities proposed under the Build Alternatives would not introduce new sources of hazardous materials and wastes, but would instead continue existing exposures related to the transport of hazardous materials and wastes associated with vehicles currently using the project segments of SR-91 and I-15. Routine maintenance activities would continue after the completion of Alternatives 1 and 2 and their design variations, and those maintenance activities would be required to follow applicable regulations with respect to handling and disposal of potentially hazardous materials.

No new permanent impacts related to hazardous wastes/materials (direct or indirect) would occur during operation of Alternatives 1 and 2 and their design variations beyond the types of effects currently occurring as part of the Department’s existing maintenance activities on the project segments of SR-91 and I-15. Therefore, implementation of Alternatives 1 and 2 and their design variations would not result in permanent adverse impacts related to hazardous materials and wastes.

**S-4-9**
The availability of Department of Toxic Substances Control (DTSC) staff to provide clean up oversight is acknowledged.
July 8, 2011

Aaron Burton
California Department of Transportation District 8
464 W. 4th Street, 11th Floor, MS 1163
San Bernardino, CA 92401-1400

DRAFT ENVIRONMENTAL IMPACT REPORT, CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS), STATE ROUTE 91 BETWEEN SR-241 AND PIERCE STREET, INCLUDING THE SR-91 / INTERSTATE 15 INTERCHANGE, RIVERSIDE COUNTY SCH# 2008071075

Dear Mr. Burton:

Regional Board staff have reviewed the Draft Environmental Impact Report (DEIR) for the project that includes widening and adding lanes to State Route (SR) 91 from SR-241 (Santa Ana Canyon) to Pierce Street, and to Interstate 15 between Cajalcc Road and Hidden Valley Parkway. Regional Board staff attended a scoping meeting for the Project and commented at that time.

We believe that the final EIR should incorporate the following comments, in order for the project to best protect the water quality standards (water quality objectives and beneficial uses) contained in the Water Quality Control Plan for the Santa Ana River Basin (Region 8 Basin Plan):

Alternative 1 impacts less area of waters of the state and the United States than does Alternative 2 (Table S.3, Summary of Impacts, Executive Summary), and therefore we prefer Alternative 1. We also understand that Alternative 1 will have fewer water quality standards-related impacts to riparian vegetation and habitat than Alternative 2. Board staff is aware that it will be difficult for this project to provide nearby mitigation that is appropriate to compensate for the project’s impacts to water quality standards, particularly to beneficial uses related to wetlands, streambed and riparian habitat. Appropriate mitigation will be necessary to obtain Clean Water Act Section 401 water quality standards certification for the project. Projects that enhance and preserve the beneficial uses of wetlands, streambeds and riparian areas within and between the Puente-Chino Hills and the Santa Ana Mountains could be important components of this mitigation.

If you have any questions, please contact Glenn Robertson of my staff at (951) 782-3259, or grobertson@waterboards.ca.gov, or me at (951) 782-3234, madelson@waterboards.ca.gov
Sincerely,

Mark Adelson, Chief
Regional Planning Programs Section

cc: State Clearinghouse
    California Department of Fish and Game, Ontario — Jeff Brandt

X:Groberts on Magnolia/Data/CEQA/CEQA Responses/ DEIR-CALTRANS I-15 to SR-241, 91 Freeway Widening
S-5-1
The comment is an introductory statement and does not raise any specific concerns regarding the analysis conducted for the EIR/EIS. Refer to response to comment S-5-2, below.

S-5-2
The agency's preference for Alternative 1 is acknowledged. In general, as noted in this comment, Alternative 1 has fewer impacts than Alternative 2. Tables S-3 and S-4, starting on page S-27 in the EIR/EIS summarize the impacts of those alternatives. However, as noted on page 3.18-7 in Section 3.18, Wetlands and Other Waters, the impacts of Alternative 2f have been reduced to less than 0.5 ac of waters of the United States as a result of design refinements.

In addition to compensatory mitigation, the following measures are included in the SR-91 CIP Build Alternatives to avoid, minimize, and/or mitigate potential project impacts to waters of the United States and the State: Measures WQ-1, WQ-2, WQ-3, and WQ-4 in Section 3.10, Water Quality and Storm Water Runoff, starting on page 3.10-34 in the EIR/EIS; Measures NC-1, NC-2, and NC-5 starting on page 3.17-29 in Section 3.17, Natural Communities; and Measures WET-1, WET-2, and WET-3 starting on page 3.18-15 in Section 3.18, Wetlands and Other Waters.

Multiple factors were considered during the process to identify the Preferred Alternative, including impacts to waters of the United States and the State. Refer to Section O.5.9, Common Response Related to the Identification of the Preferred Alternative, on page O-39 in Section O.5, Common Responses, for additional discussion regarding the evaluation of the alternatives and the identification of the Preferred Alternative.

The approved and preliminary determinations received from the Corps on November 22, 2011, are Corps acceptance of the drainage features considered jurisdictional by the Corps and not Corps acceptance of the project impacts. Corps acceptance of the project impacts will be confirmed on the authorization of the project under the Section 404 Nationwide Permit. The application for the Section 404 Nationwide Permit for filling or dredging waters of the United States was submitted to the Corps in July 2011. The permit will not be received prior to the ROD (the Corps will not provide Section 404 permit approval until the NEPA process is complete), but will be obtained prior to the initiation of construction.
O.6.3 Regional Agency Comments
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June 28, 2011

Mr. Aaron Burton  
Senior Environmental Planner  
Environmental Studies “B”  
Department of Transportation  
464 West 4th Street, 6th Floor  
San Bernardino, CA 92401-1400

RE: RCFD comments regarding the Draft EIR/EIS for the SR 91 Corridor Improvement Project

Mr. Burton,

Per your written public notice for a public hearing for review and commentary regarding the Draft EIR/EIS for the above referenced project, RCFD offers the below comments specific to impacts to fire and emergency services:

The RCFD has reviewed the Project for that portion existing within Riverside County and agrees with the findings of the Final Initial Study that no significant impacts to Public Services are posed. Specifically, RCFD agrees with the finding of “Less Than Significant” for Fire Protection. RCFD agrees with those findings that movement along the corridor will be improved and that emergency response efforts will benefit from that improved mobility. Further, RCFD agrees with findings that wildland fire dangers will be further minimized as the increased expanse of the freeway only improves as a buffer. Lastly, RCFD agrees with findings that mitigation efforts for mobility impacts during construction have been adequately addressed to reach a level of “less than significant”.

If I can be of further assistance, please contact me at 951.940.6308 or ben.johnson@fire.ca.gov.

Thank you,

Ben R. Johnson, AICP  
Planning & Development Supervisor  
Strategic Planning Bureau
R-1-1

No response is necessary because this comment does not ask a question or provide a comment relative to the technical information or the environmental analyses in the EIR/EIS.

This comment from the RCFD supports the conclusion presented in the Draft EIR/EIS that the SR-91 CIP would not result in significant impacts related to fire protection. Since the circulation of the Draft EIR/EIS, the following have occurred that may reduce potential fire threats:

1. The approved Biological Opinion (November 30, 2011) includes General Conservation Measure No. 3, which requires the Department and RCTC to work with USFWS to investigate the possibility of adding features such as concrete walls, k-rails, or other hardscape barriers along SR-91 in the vicinity of the Coal Canyon wildlife crossing to address potential fire threats.

2. Measure UES-4, which would provide a continuous 30- to 36-inch-high barrier on the shoulder on both the westbound and eastbound sides of SR-91 generally between SR-71 and SR-91 was added to the EIR/EIS. Refer to Section O.5.5.6, Measures for Other Effects at Chino Hills State Park, on page O-25 for the specific language of Measure UES-4.
June 15, 2011

Via Electronic & U.S. Mail

Mr. Aaron Burton
California Department of Transportation, District 8
Environmental Planning
464 W. 4th Street, Mail Station 1162
San Bernardino, California 92401

Dear Mr. Burton:

Notice of Public Hearing and Notice of Availability of the
Draft Environmental Impact Report / Environmental Impact Statement
for the State Route 91 (SR-91) Corridor Improvement Project

The Metropolitan Water District of Southern California (Metropolitan) has received the Notice of Public Hearing and Notice of Availability of the Draft Environmental Impact Report / Environmental Impact Statement for the State Route 91 (SR-91) Corridor Improvement Project (Project), and is pleased to provide comments as a potentially affected agency. The Project proposes to widen a 14-mile stretch of the SR-91 between the State Route 241 Toll Road (SR-241) interchange in Yorba Linda to the Pierce Street interchange in the City of Riverside. The Project also proposes to widen a 6-mile stretch of Interstate 15 (I-15) between the Cajalco Road interchange in the City of Corona and the Hidden Valley Parkway interchange in the Cities of Corona and Norco.

We have reviewed the Project description and have determined that the Lower Feeder pipeline, owned and operated by Metropolitan, is within the Project area. More specifically, the Lower Feeder pipeline intersects the Project’s boundaries at two locations (see enclosed maps). The first location is at the South Weir Canyon Road intersection with SR-91 and is a 109-inch-inside-diameter welded steel pipeline. The second location is just south of the El Cerrito Road intersection with the I-15 and is a 108-inch-inside-diameter precast concrete pipeline.

In order to avoid potential conflicts with Metropolitan's facilities and rights-of-way, we require that any design plans for any activity in the area of Metropolitan's pipelines or facilities be submitted for our review and written approval. Approval of the Project should be contingent upon Metropolitan's approval of design plans for portions of the Project that could impact our facilities.
Mr. Aaron Burton  
Page 2  
May 25, 2011

Detailed prints of drawings of Metropolitan's pipelines and rights-of-way may be obtained by calling Metropolitan's Substructures Information Line at (213) 217-6564. To assist the applicant in preparing plans that are compatible with Metropolitan's facilities and easements, we have enclosed a copy of the "Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easement of The Metropolitan Water District of Southern California."

Metropolitan encourages projects within its service area to include water conservation measures. Water conservation, reclaimed water use, and groundwater recharge programs are integral components to regional water supply planning. Metropolitan supports mitigation measures such as using water efficient fixtures, drought-tolerant landscaping, and reclaimed water to offset any increase in water use associated with the proposed project.

Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way. We appreciate the opportunity to provide input to your planning process and we look forward to receiving future plans and documentation for this project. If I can be of further assistance, please contact me at (213) 217-6409.

Very truly yours,

[Signature]

Deirdre West  
Team Manager, Environmental Planning Team

RM/rm  
Enclosure: Maps

Note: Pages 3 to 26 of this comment letter, which are facilities maps and guidelines, are provided in Attachment 3, Metropolitan Water District Comment Letter Attachments
SR-91 CORRIDOR IMPROVEMENT PROJECT:
View Showing Project Boundaries and the Lower Feeder Pipeline

SR-91 CORRIDOR IMPROVEMENT PROJECT:
View Showing the SR-91 Intersecting the MWD Lower Feeder Pipeline at South Weir Canyon Road
Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of the Metropolitan Water District of Southern California

1. Introduction
   a. The following general guidelines should be followed for the design of proposed developments in the area of Metropolitan's facilities, fee properties, and/or easements.
   b. We require that 3 copies of your tentative and final record maps, grading plans, paving, street improvement, landscape, storm drain, and utility plans be submitted for our review and written approval as they pertain to Metropolitan's facilities, fee properties and/or easements, prior to the commencement of any construction work.

2. Plans, Parcel and Tract Maps
   The following are Metropolitan's requirements for identification of its facilities, fee properties, and/or easements on your plans, parcel maps, and tract maps:
   a. Metropolitan's fee properties and/or easements and its pipelines and other facilities must be fully shown and identified on the parcel map.
   b. Metropolitan's fee properties and/or easements must be shown and identified on Metropolitan's with the official recording data on all applicable parcel and tract maps.
   c. Metropolitan's fee properties and/or easements and existing survey monuments must be dimensionally tied to the parcel or tract boundaries.
   d. Metropolitan's records of surveys must be referenced on the parcel and tract maps.

   a. Proposed cut or fill slopes exceeding 10 percent are normally not allowed within Metropolitan's fee properties or easements. This is required to facilitate the use of construction and maintenance equipment, and provide access to its aboveground and belowground facilities.
   b. We require that 10-foot-wide commercial-type driveway approaches be constructed on both sides of all streets across Metropolitan's rights-of-way. Selections are required in any median island. Access ramps, if necessary, must be at least 16-feet-wide. Grades of ramps are normally not allowed to exceed 10 percent. If the slope of an access ramp must exceed 10 percent due to the topography, the ramp must be paved. We require a 40-foot-long level area on the driveway approach to access ramps where the ramp meets the street. At Metropolitan's fee properties, we may require fences and gates.
   c. The terms of Metropolitan's permanent easement deeds normally preclude the building or maintenance of structures of any nature or kind within its easements, to ensure safety and avoid interference with operation and maintenance of Metropolitan's pipelines or other facilities. Metropolitan must have vehicular access along the easements at all times for inspection, patrolling, and for maintenance of the pipelines and other facilities on a routine basis. We require a 20-foot-wide clear zone around all above-ground facilities for this routine access. This clear zone should slope away from our facility on a grade not to exceed 2 percent. We must also have access along the easements with construction equipment. An example of this is shown on Figure 1.
   d. The footings of any proposed buildings adjacent to Metropolitan's fee properties and/or easements must not encroach into the fee property or easement or impose additional loading on Metropolitan's pipelines or other facilities therein. A typical situation is shown on Figure 2. Prints of the detail plans of the footings for any building or structure adjacent to the fee property or easement must be submitted for our review and written approval as they pertain to the pipeline or other facilities therein. Also, roof eaves of buildings adjacent to the easement or fee property must not overhang into the fee property or easement area.
4. Easements on Metropolitan's Property

a. We encourage the use of Metropolitan's fee property and other easements, e.g., structures, manholes, equipment, survey monuments, etc. within its fee properties and/or easements must be protected from damage by the easement holder on Metropolitan's property or the property owner where Metropolitan has an easement, at no expense to Metropolitan. If the facility is a cathodic protection station it shall be located prior to any grading or excavation. The exact location, description, and way of protection shall be shown on the related plans for the easement area.

b. Easements on Metropolitan's property . Easements on Metropolitan's property shall be accepted into the agency's public street system and fair market value is paid for such use of the right-of-way.

c. Absolutely no trees will be allowed within 15 feet of the centerline of Metropolitan's existing or future pipelines and facilities.

d. Deep-rooted trees are prohibited within Metropolitan's fee properties and/or easements. Shallow-rooted trees are the only trees allowed. The shallow-rooted trees will not be permitted any closer than 15 feet from the centerline of the pipeline, and such trees shall not be taller than 10 feet with a root spread no greater than 20 feet in diameter at maturity. Shrubs, bushes, vines, and ground cover are permitted, but larger shrubs and bushes should not be planted directly over our pipeline. Turf is acceptable. We require submittal of landscape plans for Metropolitan's prior review and written approval. (See Figure 3).

e. The landscape plans must contain provisions for Metropolitan's vehicular access at all times along its rightsof-way to its pipelines or facilities therein. Gates capable of accepting Metropolitan's trucks are required in any fences across its rightsof-way. Also, any walks or drainage facilities across its access route must be constructed to ANSI E-20 loading standards.

f. Rights to landscape any of Metropolitan's fee properties must be acquired from its Right of Way and Land Division. Appropriate entry permits must be obtained prior to any entry on its property. There will be a charge for any entry permit or easements required.

6. Fencing

Metropolitan requires that perimeter fencing of its fee properties and facilities be constructed of universal chain link, 6 feet in height and topped with 3 strands of barbed wire angled upward and outward at a 45-degree angle or an approved equal for a total fence height of 7 feet. Suitable substitute fencing may be considered by Metropolitan. (Please see Figure 3 for details).

7. Utilities in Metropolitan's Fee Properties and/or Easements or Adjacent to Its Pipeline in Public Streets

Metropolitan's policy for the alignment of utilities permitted within its fee properties and/or easements and street rights-of-way is as follows:
a. Permanent structures, including catch basins, manholes, power poles, telephone riser boxes, etc., shall not be located within its fee properties and/or easements.

b. We request that permanent utility structures within public streets, in which Metropolitan's facilities are constructed under the Metropolitan Water District Act, be placed as far from our pipeline as possible, but not closer than 5 feet from the outside of our pipeline.

c. The installation of utilities over or under Metropolitan's pipeline(s) must be in accordance with the requirements shown on the enclosed prints of Drawings Nos. C-11632 and C-9547. Whenever possible, we request a minimum of one foot clearance between Metropolitan's pipe and your facility. Temporary support of Metropolitan's pipe may also be required at undercrossings of its pipe in an open trench. The temporary support plans must be reviewed and approved by Metropolitan.

d. Lateral utility crossings of Metropolitan's pipelines must be as perpendicular to its pipeline alignment as practical. Prior to any excavation our pipeline shall be located manually and any excavation within two feet of our pipeline must be done by hand. This shall be noted on the appropriate drawings.

e. Utilities constructed longitudinally within Metropolitan's rights-of-way must be located outside the theoretical trench prism for uncovering its pipeline and must be located parallel to and as close to its rights-of-way lines as practical.

f. When piping is jacked or installed in jacked casing or tunnel under Metropolitan's pipe, there must be at least two feet of vertical clearance between the bottom of Metropolitan's pipe and the top of the jacked pipe, jacked casing or tunnel. We also require that detail drawings of the shoring for the jacking or tunnelling pits be submitted for our review and approval. Provisions must be made to grout any voids around the exterior of the jacked pipe, jacked casing or tunnel. If the piping is installed in a jacked casing or tunnel the smaller space between the piping and the jacked casing or tunnel must be filled with grout.

g. Overhead electrical and telephone line requirements:

1) Conductor clearances are to conform to the California State Public Utilities Commission, General Order 95, for Overhead Electrical Line Construction or at a greater clearance if required by Metropolitan. Under no circumstances shall clearance be less than 10 feet.

2) A marker must be attached to the power pole showing the ground clearance and line voltage, to help prevent damage to your facilities during maintenance or other work being done in the area.

3) Line clearance over Metropolitan's fee properties and/or easements shall be shown on the drawing to indicate the lowest point of the line under the most adverse conditions including consideration of sag, wind load, temperature change, and support type. We require that overhead lines be located at least 30 feet laterally away from all above-ground structures on the pipelines.

4) When underground electrical conduits, 120 volts or greater, are installed within Metropolitan's fee property and/or easement, the conduits must be incased in a minimum of three inches of red concrete. Where possible, above ground warning signs must also be placed at the right-of-way lines where the conduits enter and exit the right-of-way.

h. The construction of sewer lines in Metropolitan's fee properties and/or easements must conform to the California Department of Health Services Resolution 79-1506, the Separation of Water Mains and Sanitary Services and the local City or County Health Code Ordinance as it relates to installation of sewers in the vicinity of pressure waterlines. The construction of sewer lines should also conform to these standards in street rights-of-way.

i. Cross sections shall be provided for all pipeline crossings showing Metropolitan's fee property and/or easement limits and the location of our pipeline(s). The exact locations of the crossings pipelines and their elevations shall be marked on as-built drawings for our information.
1. Potholing of Metropolitan's pipeline is required if the vertical clearance between a utility and Metropolitan's pipeline is indicated on the plan to be one foot or less. If the indicated clearance is between one and two feet, potholing is suggested. Metropolitan will provide a representative to assist others in locating and identifying its pipeline. Two working days notice is requested. 

2. Adequate shoring and bracing is required for the full depth of the trench when the excavation encroaches within the zone shown on Figure 4.

1. The location of utilities within Metropolitan's fee property and/or easement shall be plainly marked to help prevent damage during maintenance or other work done in the area. Detectable tape over buried utilities should be placed a minimum of 12 inches above the utility and shall conform to the following requirements:

1) Water pipeline: A two-inch blue warning tape shall be imprinted with:
"CAUTION BURIED WATER PIPELINE"

2) Gas, oil, or chemical pipeline: A two-inch yellow warning tape shall be imprinted with:
"CAUTION BURIED ______ PIPELINE"

3) Sewer or storm drain pipeline: A two-inch green warning tape shall be imprinted with:
"CAUTION BURIED ______ PIPELINE"

4) Electric, street lighting, or traffic signals conduit: A two-inch red warning tape shall be imprinted with:
"CAUTION BURIED ______ CONDUIT"

5) Telephone, or television conduit: A two-inch orange warning tape shall be imprinted with:
"CAUTION BURIED ______ CONDUIT"

m. Cathodic Protection requirements:

1) If there is a cathodic protection station for Metropolitan's pipeline in the area of the proposed work, it shall be located prior to any grading or excavation. The exact location, description and manner of protection shall be shown on all applicable plans. Please contact Metropolitan's Corrosion Engineering Section, located at Metropolitan's F. D. Wemyss Softening and Filtration Plant, 700 North Moreno Avenue, La Verne, California 91750. Telephone (714) 593-7474, for the locations of Metropolitan's cathodic protection stations.

2) If an induced-current cathodic protection system is to be installed on any pipeline crossing Metropolitan's pipeline, please contact Mr. Wayne E. Rice at (714) 593-7474. He will review the proposed system and determine if any conflicts will arise with the existing cathodic protection system installed by Metropolitan.

3) Within Metropolitan's rights-of-way, pipelines and carrier pipes (casings) shall be coated with an approved protective coating to conform to Metropolitan's requirements, and shall be maintained in a neat and orderly condition as directed by Metropolitan. The application and monitoring of cathodic protection on the pipeline and casing shall conform to Title 49 of the Code of Federal Regulations, Part 195.

4) If a steel carrier pipe (casing) is used:

(a) Cathodic protection shall be provided by use of a sacrificial magnesium anode (a sketch showing the cathodic protection details can be provided for the designer's information).

(b) The steel carrier pipe shall be protected with a coal tar enamel coating inside and out in accordance with ANSI C203 specification.

n. All trenches shall be excavated to comply with the CAL/OSHA Construction Safety Orders, Article 6, beginning with Sections 1539 through 1547. Trench backfill shall be placed in 8-inch lifts and shall be compacted to 95 percent relative compaction (ASTM D698) across roadways and through protective dikes. Trench backfill elsewhere will be compacted to 90 percent relative compaction (ASTM D698).
9. Control cables connected with the operation of Metropolitan's system are buried within streets, its fes properties and/or easements. The locations and elevations of these cables shall be shown on the drawings. The drawings shall note that prior to any excavation in the area, the control cables shall be located and measured shall be taken by the contractor to protect the cables in place.

10. Metropolitan, a member of Underground Services Alert (USA), shall contact USA at 1-800-422-4133 (Southern California) at least 48 hours prior to starting any excavation work. The contractor will be liable for any damage to Metropolitan's facilities as a result of the construction.

8. Paramount Right

Facilities constructed within Metropolitan's fes properties and/or easements shall be subject to the paramount right of Metropolitan to use its fes properties and/or easements for the purpose for which they were acquired. If at any time Metropolitan or its assign should, in the exercise of its rights, find it necessary to remove any of the facilities from the fes properties and/or easements, such removal and replacement shall be at the expense of the owner of the facility.

9. Modification of Metropolitan's Facilities

When a manhole or other of Metropolitan's facilities must be modified to accommodate your construction or reconstruction, Metropolitan will modify the facilities with its force. This should be noted on the construction plans. The estimated cost to perform this modification will be given to you and we will require a deposit for this amount before the work is performed. Once the deposit is received, we will schedule the work. Our forces will coordinate the work with your contractor. Our final billing will be based on actual cost incurred, and will include materials, construction, engineering plan review, inspection, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice will be forwarded for payment of the additional amount.

11. Construction Coordination

During construction, Metropolitan's field representative will make periodic inspections. We request that a stipulation be added to the plans or specifications for notification of Mr. of Metropolitan's Operations Services Branch, telephone (213) 250- , at least two working days prior to any work in the vicinity of our facilities.

12. Pipeline Loading Restrictions

a. Metropolitan's pipelines and conduits vary in structural strength, and some are not adequate for ASHTO H-20 loading. Therefore, specific loads over the specific sections of pipe or conduit must be reviewed and approved by Metropolitan. However, Metropolitan's pipelines are typically adequate for ASHTO H-20 loading provided that the cover over the pipeline is not less than four feet or the cover is not substantially increased. If the temporary cover over the pipeline during construction is between three and four feet, equipment must be restricted to that which
imposes loads no greater than AASHTO H-10. If the cover is
between two and three feet, equipment must be restricted to
that of a Caterpillar D-4 tract-type tractor. If the cover is
less than two feet, only hand equipment may be used.
Also, if the contractor plans to use any equipment over
Metropolitan's pipeline which will impose loads greater than
AASHTO H-20, it will be necessary to submit the specifications
of such equipment for our review and approval at least one
week prior to its use. More restrictive requirements may
apply to the loading of a pipeline over the San Diego Pipeline,
1 and 2, Portions of the Orange County Feeder, and the
Colorado River Aqueduct. Please contact us for loading
restrictions on all of Metropolitan's pipelines and
conduits.

b. The existing cover over the pipeline shall be
maintained unless Metropolitan determines that proposed
changes do not pose a hazard to the integrity of the
pipeline or an impediment to its maintenance.

13. Blasting
a. At least 20 days prior to the start of any
drilling for rock excavation blasting, or any blasting, in
the vicinity of Metropolitan's facilities, a two-part
preliminary conceptual plan shall be submitted to
Metropolitan as follows:
b. Part 1 of the conceptual plan shall include a
complete summary of proposed transportation, handling,
storage, and use of explosives.

c. Part 2 shall include the proposed general concept
for blasting, including controlled blasting techniques and
controls of noise, fly rock, airblast, and ground vibration.

14. CEQA Requirements
a. When Environmental Documents Have Not Been
Prepared

1) Regulations implementing the California
Environmental Quality Act (CEQA) require that
Metropolitan have an opportunity to consult with the
agency or consultants preparing any environmental
documentation. We are required to review and consider
the environmental effects of the project as shown in
the Negative Declaration or Environmental Impact Report
(EIR) prepared for your project before committing
Metropolitan to approve your request.

2) In order to ensure compliance with the
regulations implementing CEQA where Metropolitan is not
the Lead Agency, the following minimum procedures to
ensure compliance with the Act have been established:

a) Metropolitan shall be timely advised of
any determination that a Categorical Exemption
applies to the project. The Lead Agency is to
advise Metropolitan that it and other agencies
participating in the project have complied with
the requirements of CEQA prior to Metropolitan's
participation.

b) Metropolitan is to be consulted during
the preparation of the Negative Declaration or
EIR.

c) Metropolitan is to review and submit any
necessary comments on the Negative Declaration or
draft EIR.

d) Metropolitan is to be indemnified for
any costs or liability arising out of any
violation of any laws or regulations including but
not limited to the California Environmental
Quality Act and its implementing regulations.

b. When Environmental Documents Have Been Prepared
If environmental documents have been prepared for your
project, please furnish us a copy for our review and files
in a timely manner so that we may have sufficient time to
review and comment. The following steps must also be
accomplished:

1) The Lead Agency is to advise Metropolitan
that it and other agencies participating in the project
have complied with the requirements of CEQA prior to
Metropolitan's participation.

2) You must agree to indemnify Metropolitan, its
officers, engineers, and agents for any costs or
liability arising out of any violation of any laws or
regulations including but not limited to the California
Environmental Quality Act and its implementing regulations.

15. Metropolitan's Plan-Review Cost
a. An engineering review of your proposed facilities
and developments and the preparation of a letter response
giving Metropolitan's comments, requirements and/or approval that will require 8 man-hours or less of effort is typically performed at no cost to the developer, unless a facility must be modified where Metropolitan has superior rights. If an engineering review and letter response requires more than 8 man-hours of effort by Metropolitan to determine if the proposed facility or development is compatible with its facilities, or if modifications to Metropolitan's manhole(s) or other facilities will be required, then all costs Metropolitan's costs associated with the project must be paid by the developer, unless the developer has superior rights.

b. A deposit of funds will be required from the developer before Metropolitan can begin its detailed engineering plan review that will exceed 8 hours. The amount of the required deposit will be determined after a cursory review of the plans for the proposed development.

c. Metropolitan's final billing will be based on actual cost incurred, and will include engineering plan review, inspection, materials, construction, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice will be forwarded for payment of the additional amount. Additional deposits may be required if the cost of Metropolitan's review exceeds the amount of the initial deposit.

16. Caution

We advise you that Metropolitan's plan reviews and responses are based upon information available to Metropolitan which was prepared by or on behalf of Metropolitan for general record purposes only. Such information may not be sufficiently detailed or accurate for your purposes. No warranty of any kind, either express or implied, is attached to the information therein conveyed as to its accuracy, and no inference should be drawn from Metropolitan's failure to comment on any aspect of your project. You are therefore cautioned to make such surveys and other field investigations as you deem prudent to assure yourself that any plans for your project are correct.
1. Supporting wall shall have firm bearing on the subgrade and against the side of the excavation.

2. Premolded expandable joint filler per ASTM D-1751-73 to be used in support for steel pipe only.

3. If trench width is 4 feet or greater, measured along centerline of M.W.D. pipe, concrete support must be constructed.

4. If trench width is less than 4 feet, clean sand backfill, compacted to 90% density in accordance with the provisions of ASTM Standard D-3557-70 may be used in lieu of the concrete support wall.
3" Preformed expansion joint filler

NOTES

1. This method to be used where the utility line is 24" or greater in diameter and the clearance between the utility line and M.W.D. pipe is 12" or less.

2. Special protection may be required if the utility line diameter is greater than M.W.D. pipe or if the cover over the utility line to the street surface is minimal and there is 12" or less clearance between M.W.D. pipe and the utility line.

3. Preformed expansion joint filler to comply with ASTN designation D-1751-73.

4. M.W.D. requests 12" minimum clearance whenever possible.
\textbf{R-2-1}

No response is necessary because this comment does not ask a question or provide a comment relative to the technical information or the environmental analyses in the EIR/EIS.

\textbf{R-2-2}

As part of the preliminary engineering effort conducted for preparation of the \textit{Project Report} and the EIR/EIS, the RCTC obtained as-built drawings of the Metropolitan facilities (Metropolitan Lower Feeder Pipeline) within the SR-91 CIP limits. The two locations cited in this letter (crossing SR-91 adjacent to Prado Road and crossing I-15 near El Cerrito Road as shown on the maps provided by Metropolitan and included in Attachment 1) are shown on the preliminary engineering drawings for the SR-91 CIP. Based on RCTC’s preliminary investigation, the Metropolitan facilities are not directly impacted by the proposed SR-91 CIP improvements. Relocation of those facilities is not anticipated as a result of the SR-91 CIP.

During the design-build phase of the project, it will be necessary to coordinate with and obtain clearance letters from Metropolitan. The Project Construction Manager, RCTC, and/or their designated representatives will contact Metropolitan as requested and provide appropriate project information and final design plans of the two locations where the Lower Feeder Pipeline crosses SR-91 and I-15.

\textbf{R-2-3}

It is acknowledged that, if necessary because Metropolitan facilities are in or immediately adjacent to the project limits, the Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of the Metropolitan Water District of Southern California, included in Attachment 1, would be referred to during the design/build phase of the project. Refer also to response to comment R-2-2, above.

\textbf{R-2-4}

Although not required as mitigation for any project related effects, the project design will consider incorporation of drought tolerant plant materials and the use of reclaimed water for irrigation in the project as appropriate, based on the project landscaping and revegetation requirements. The other measures cited in this comment would likely not be incorporated in the project design because the project does not propose any uses that would support groundwater recharge and, with the exception of irrigation fixtures, would not use any other types of fixtures.
The City of Corona has already actively implemented many of these measures throughout the project limits, including the use of reclaimed water, installation of drought-tolerant landscaping, and water wells.

**R-2-5**

As noted above, if during the design-build phase of the project, it is necessary to obtain information from Metropolitan, the Project Construction Manager, RCTC, and/or their designated representatives will contact Metropolitan as requested and appropriate project information and design plans would be provided to Metropolitan at that time. Any project design plans submitted to Metropolitan will properly identify all Metropolitan facilities and rights-of-way within and immediately adjacent to the project disturbance/right-of-way limits.
June 21, 2011

Mr. Aaron Burton
Caltrans District 8
464 West Fourth Street, Sixth Floor
San Bernardino, California 925401

SUBJECT: Draft Environmental Impact Report/Environmental Impact Statement Available for Route 91

Dear Mr. Burton:

The County of Orange has reviewed the Draft Environmental Impact Report/Environmental Impact Statement Available for Route 91 located in the City of Corona and offers the following comments:

Flood/SAR/Trails

The Santa Ana River Regional Riding and Hiking (dirt) Trail and the Santa Ana River Regional Class I (paved, off-road) Bikeway are planned to parallel portions of the project from Gypsum Canyon Road to just east of the Corona Expressway. Trails are used by walkers, joggers, hikers, mountain bicyclists and equestrian riders. Bikeways are used mostly by commuter and recreational cyclists and pedestrians. Trails provide important recreational opportunities often connecting to other regional and local trails. Similarly Class I Bikeways are planned as part of a large network of interconnecting routes that join residential, business, commercial and institutional destinations. The Santa Ana River Trail and the Bikeway were designed as National Recreational Trails in 1976 by the Secretary of the Interior.

The Trail and Bikeway are aligned along the north side of SR-91 from Gypsum Canyon Road to a point just upstream of the new entrance bridge to the Green River Golf Club. Existing and proposed lengths of the trail and bikeway will parallel portions of freeway right-of-way from Gypsum Canyon Road to the entrance to the golf club and to a point above Prado Dam.
The master-planned Santa Ana River Regional Riding and Hiking Trail is built and open from Pacific Coast Highway upstream to Gypsum Canyon Road. The County of Orange is currently working on Phase II of its Santa Ana River Parkway project to extend the Trail from Gypsum Canyon Road to the County boundary to eventually connect with future upstream lengths of this route in Riverside County. The Santa Ana River Class I Bikeway is complete from Pacific Coast Highway to the County boundary. It is possible that the Class I Bikeway may continue east of the County boundary on the south side of the river under the Corona Expressway (SR-71) to a point above Prado Dam.

The Counties of Orange, Riverside and San Bernardino along with SAWPA, The Wildlands Conservancy and each of the Santa Ana River-adjoining cities are working together to complete the Trail and the Bikeway from Orange County to the foothills of the San Bernardino Mountains. The combined effort is known as the Santa Ana River Parkway Partnership. This multi-year effort has the additional cooperation of the U.S. Army Corps of Engineer’s and the State of California.

As the highway widening project moves forward the County requests that CalTrans accommodate the Trail and the Bikeway, as necessary, to insure that these important regional routes can be fully implemented.

Should you need additional information please contact Jeff Dickman at (714) 834-2774.

Flood Programs/SAR

Thank you for the opportunity to comment on the above referenced document. OC Public Works/Flood Control Section/Santa Ana River Unit has reviewed the SR-91 Corridor Improvement Project Draft EIR/EIS and offers the following comments:

1. Plan Sheets 2 thru 8 of Appendix L (Project Features) do not show the Right-of-Way Relinquishments from Caltrans to Orange County Flood Control District (OCFCD) for the SARI Line Project. The mentioned right-of-way transfer was approved by the California Transportation Commission on May 20, 2010.

2. Plan Sheets 8 thru 11 of Appendix L (Project Features) do not show the proposed Right-of-Way Relinquishment from Caltrans to OCFCD for the Santa Ana River Reach 9 Phase 2B Project (SAR R9Ph2B Project) bank protection sponsored by the US Army Corps of Engineers (Corps). This right-of-way just south of the Green River Golf Club is anticipated to be relinquished by Caltrans to OCFCD once the right-of-way requirements for the SR-91 widening are established.
3. Plan Sheets 8 thru 10 of Appendix L2 (Project Features) show Temporary Construction Easement (TCE) areas for the proposed CIP Project which may conflict with the improvements currently being constructed on OCFCD’s Green River Golf Club (GRGC) property as part of the SAR R9Ph2B Project. It is unclear what impacts, if any, the CIP construction activities within these TCE areas will have on the SAR R9Ph2B Project improvements and/or on the GRGC property and its golf business operations. We recommend that subsequent plans or exhibits show the SAR R9Ph2B Project improvements so that any potential impacts to this project can be more easily evaluated. As far as acquisition of any temporary and/or permanent rights from the GRGC property may be concerned, OCFCD staff are available to meet and further discuss this issue once Caltrans and/or the City of Corona are ready.

4. Plan Sheet 10 of Alternative 2 appears to show a proposed retaining wall on the south slope of the SAR R9Ph2B levee. Please clarify the purpose of this retaining wall. Any structural modification to the SAR R9Ph2B levee needs to obtain approval from the Corps and OCFCD.

5. The last paragraph of page 2-21 indicates that the “centerline of SR-91 is proposed to be shifted so that all of the widening would occur on the north side of SR-91...” This shift would potentially impact the GRGC property and/or its business operations. Please note that OCFCD intends to continue operating the golf course; thus, construction of SR-91 CIP needs coordination with the GRGC management to minimize any impacts. Further, it is unclear whether the centerline shown on Sheets 8 thru 10 is the existing centerline or the shifted centerline. The mentioned plan sheets should show existing/proposed centerline and the control line on the south side of the freeway. A cross-section of this segment also needs to be included in future plans and exhibits to show the impact of the SR-91 CIP Project on the GRGC and the Green River Road.

6. Auxiliary Dike improvements at Prado Dam sponsored by the Corps are currently under construction. This project is located just east of Prado Dam on Auto Center Drive. Please note that, due to its proximity to the SR-91 CIP Project, there may be potential impacts to this project as far construction traffic is concerned. The estimated completion of this project is end of 2013.

7. A 1,200-foot long bank protection project is being proposed by the Corps just north of SR-91 between Gypsum Canyon Road and Coal Canyon Road where the river low flow is just north of and adjacent to the existing bikeway. This project will protect the bikeway and SR-91 from erosion due to flood releases from Prado Dam. Due to its proximity, the SR-91 CIP Project may potentially impact this project. Please note that the need for this project was established after our
comment letter (OC Public Works letter to Caltrans dated August 21, 2008) was sent in response to Caltrans’ Notice of Preparation for the SR-91 CIP.

8. A bikeway/trail improvement (also known as SAR Parkway Project) is being proposed by the County of Orange from Gypsum Canyon to the Orange/Riverside county boundary. This project will be located primarily on the existing bikeway just north of and adjacent to SR-91. Due to its proximity, the SR-91 CIP Project may potentially impact this project. Please note that that planning for this project was developed after our comment letter (OC Public Works letter to Caltrans dated August 21, 2008) was sent in response to Caltrans’ Notice of Preparation for the SR-91 CIP.

9. Please note that the estimated date of completion for the SARI Line Project is mid-2013. Please update this information on the Draft EIR/EIS as appropriate.

10. Any work within federal right-of-way or affecting the Santa Ana River Mainstem Project needs approval from the US Army Corps of Engineers.

11. Downstream of Prado Dam, the Riverside County Flood Control and Water Conservation District is the local sponsor of the Santa Ana River Mainstem Project within Riverside County. Any work related to the SR-91 CIP Project within this reach of the Santa Ana River must be coordinated with this agency.

12. Any work that proposes to widen the B Canyon undercrossing needs to be coordinated with the GRG LC management.

Should you need additional information please contact Ariel Corpuz at (714) 834-4329.

Flood Programs:

In response to your request dated May 25, 2011 Flood Programs/Hydrology reviewed the Draft Environmental Impact Report/Environmental Impact Statement for State Highway 91 and offers the following comments for your consideration:

1. Any proposed improvements in the Lower Santa Ana River will need to be reviewed and approved by the Orange County Flood Control District (OCFCD) and the US Army Corps of Engineers.

2. All work within or adjacent to OCFCD’s right-of-way should be conducted so as not to adversely impact OCFCD’s facility, access and/or maintenance capabilities. Furthermore, all work within, over, and under OCFCD’s right of way should be conducted only after an encroachment permit for the proposed work
has been obtained from the County of Orange. For information regarding permit application, please visit our web site http://www.ocplanning.net/.

3. The California Department of Transportation should ensure that FEMA regulations and floodplain requirements are satisfied for the project.

If you have any questions regarding these comments, please contact Editha Llanes at 834-2534.

Sincerely,

Michael Balsamo
Manager, OC Communities Planning
OC Public Works/OC Planning
300 North Flower Street
Santa Ana, California 92702-4048
Michael.Balsamo@ocpw.ocgov.com

MB/mmC

cc: Mehdi Sobhani, Flood Programs
R-3-1
Refer to Section 3.1.3, Parks and Recreational Facilities, starting on page 3.1-52 in the EIR/EIS, which discusses the existing Santa Ana River Trail/Bike Lane on the north side of SR-91 in Orange County. An approximately 200-foot-long segment of this Trail/Bike Lane will be relocated farther north, within the right-of-way for Green River Road, to accommodate the widening of SR-91 and to move the Trail/Bike Lane farther away from the freeway facilities. RCTC will coordinate closely with Orange County Public Works during the design/build phase of the project to ensure that the relocated Trail/Bike Lane is designed and constructed to the appropriate County standards, that any detours of the Trail/Bike Lane during project construction for the safety of the Trail/Bike Lane users and the construction workers are minimized, and that alternative routes through the area are provided. The following was inserted as the sentence in the bulleted subsection titled “Santa Ana River Trail/Bike Lane” on page 4-38 in Section 4.2.3.9, Public Services, in the EIR/EIS to describe the level of significance of the project effects on the Santa Ana River Trail/Bike Lane under CEQA: “As a result, the impacts of Alternatives 1 and 2 on the Santa Ana River Trail/Bike Lane will be below a level of significance and would not be substantial.”

RCTC is committed to continuing to coordinate closely with Orange County Public Works during the design/build project phase to minimize impacts to the Trail/Bike Lane and its users.

R-3-2
The May 20, 2010 right-of-way relinquishment from the Department to Orange County Public Works for the Santa Ana River Interceptor (SARI) line project accommodates the SR-91 CIP. Specifically, based on the agreements of that relinquishment, the relinquished right-of-way would be used during construction of the SR-91 CIP. The preparation of the plans in Appendix L in the EIR/EIS was initiated well before this right-of-way relinquishment. Specifically, the base air photo and property information on those plans are from 2009. The final design plans developed during the project design/build phase will include this existing right-of-way relinquishment.

R-3-3
This proposed right-of-way relinquishment for the Santa Ana River project is being coordinated by the County and the Department with consideration of the future right-of-way limits for the SR-91 CIP. As a result, it is acknowledged that this proposed relinquishment will not be finalized until the final right-of-way limits for SR-91 are
confirmed. This is to ensure that the Department does not relinquish existing State right-of-way to the County until the right-of-way needs for an approved SR-91 Build Alternative are finalized. At that time, the relinquishment of land from the Department to the Orange County Flood Control District (OCFCD) will be finalized and shown as appropriate on the final SR-91 CIP plans. The proposed relinquishment will not be shown on the project exhibits until it is finalized and recorded, which will occur during the design/build phase of the SR-91 CIP.

R-3-4
The project improvements on the north side of SR-91 will all be outside the right-of-way for the Green River Golf Club property, generally south of the area being used by the Corps as part of its improvements in that area (south of the Santa Ana River and north of SR-91). The SR-91 CIP Build Alternatives will not require the temporary use or permanent acquisition of any land from the Green River Golf Club. The design plans for the project components in this area will include appropriate information on the Santa Ana River project and the County-owned property in this area.

R-3-5
The SR-91 CIP includes realigning Green River Road adjacent to the north side of the freeway. The Corps Santa Ana River Reach 9 Phase 2B project includes constructing a new private access road/driveway to the Green River Golf Club that would intersect with the cul-de-sac shown on Sheet 10 of Appendix L2. The proposed retaining wall would retain the southerly slope of the Reach 9 Phase 2B embankment. The private driveway and cul-de-sac adjacent to the existing Green River Golf Club access are being designed and constructed as part of the Corps project in this area. That Corps project is relocating the golf course access bridge over the Santa Ana River as well as realigning part of the Santa Ana River. The SR-91 CIP team has been coordinating, and will continue to coordinate, the design and construction of the SR-91 CIP facilities with the Corps and OCFCD during the design/build phase of the SR-91 CIP. The Green River Golf Club access road will be constructed in a T-intersection with the existing Green River Road as part of a separate Corps project. The design of the SR-91 CIP is being coordinated with the design and construction of the Corps project, including the access road for the Green River Golf Club. The realignment of Green River Road, the cul-de-sac, and a public access road to the Star Ranch driveway in this area will be constructed as part of the SR-91 CIP. Where the SR-91 CIP requires modifications to Corps’ facilities at this location and elsewhere within the SR-91 CIP
project limits, RCTC and the Department will obtain a Section 408 permit from the Corps prior to start of construction.

**R-3-6**

As described earlier, the project improvements on the north side of SR-91 will all be outside the right-of-way for the Green River Golf Club property, generally south of the area being used by the Corps as part of its improvements in that area (south of the Santa Ana River and north of SR-91). The SR-91 CIP would not impact the operations of the Green River Golf Club and it would remain open during construction. As discussed in Section 3.15.3.3, Temporary Impacts, on page 3.15-15 in the EIR/EIS, there will be construction-related noise along and adjacent to SR-91 during construction of the project improvements south of the Green River Golf Club that could represent a short-term impact on sensitive receivers. However, golf typically is not considered to require extreme quiet, and golfers at this location already hear noise from traffic operations on SR-91. Because these impacts would be short term and golf is not dependent on extreme quiet, those impacts would not substantively affect operations at the golf club. In addition, all construction activities will conform to the provisions in Section 14-8.02 of the Department’s “Sound Control Requirements.” Refer to Section 3.15.3.3, Temporary Impacts, on page 3.15-15 in the EIR/EIS for additional discussion of temporary noise impacts. Therefore, the Build Alternatives would not impact activities on Green River Golf Club property.

**R-3-7**

The centerline shown represents the proposed shifted centerline and control line for SR-91.

As discussed in responses to comments R-3-5 and R-3-6, above, the SR-91 CIP will not impact the Green River Golf Club or its operations.

**R-3-8**

Construction of the SR-91 CIP is expected to begin in mid-2013. The Prado Auxiliary Dike Improvements Project and Auto Center Grade Separation Project are expected to be completed sometime in 2013 so there would be minimal overlap in construction activities for those projects. However, should there be an overlap in the construction schedules of these projects with the SR-91 CIP, the stage construction and traffic management for the SR-91 CIP will be coordinated with the plans for those other projects to minimize impacts to local traffic circulation. As shown on Table O.3, on
page O-15, construction of the SR-91 CIP is expected to begin in spring to summer 2013.

The Prado Auxiliary Dike Improvements Project, as part of the Santa Ana River Mainstem Project, and the Auto Center Grade Separation Project are discussed in Tables 3.25.1 and 3.25.2 of Section 3.25, Cumulative Impacts, in the EIR/EIS. As discussed in Section 3.25.5.3, Short-Term Impacts on Traffic Circulation, in the EIR/EIS in Tables 3.25.1 (on page 3.25-43) and 3.25.2 (on page 3.25-55), the appropriate mitigation for short-term traffic impacts is a Transportation Management Plan (TMP). If the construction of the selected SR-91 CIP Build Alternative occurs concurrently with the construction of other projects in the vicinity of SR-91, the TMPs for those projects would need to be coordinated among the local, State, and/or federal agencies that have jurisdiction over those projects. Appropriate coordination with local jurisdictions and area emergency service providers would ensure that short-term traffic effects during construction are minimized by keeping those parties and the public informed as to the status of street, ramp, freeway, and lane closures, detours, and other short-term changes in traffic conditions in the study area.

**R-3-9**
The Corps Santa Ana River Reach 9 Phase 2B embankment project is north of the SARI project and outside existing Department right-of-way. The SR-91 CIP improvements in this area would be entirely within the existing State right-of-way for SR-91. That project would not be impacted by the SR-91 CIP because no SR-91 CIP features would extend north to or into this embankment project, and no construction activities would occur in the vicinity of the embankment project.

**R-3-10**
It is acknowledged that the County has initiated planning for a proposed Santa Ana River Parkway Project from approximately Gypsum Canyon Road east to the Orange/Riverside County boundary, generally along the existing Santa Ana River Trail/Bike Lane. Refer to response to comment R-3-1, above, which describes the temporary impacts of the SR-91 CIP Build Alternatives on the Santa Ana River Trail/Bike Lane (i.e., Trail/Bike Lane relocation and temporary detours). Because this proposed project would be generally along the existing Trail/Bike Lane, impacts to that trail during construction of the SR-91 CIP, should the parkway project be installed prior to construction of SR-91 CIP, would be similar to the temporary impacts to the Trail/Bike Lane described in response to comment R-3-1, above. A short segment of the Trail/Bike Lane will be relocated farther north, farther from the
SR-91 freeway facilities, as part of the SR-91 Build Alternatives. As a result, the SR-91 CIP would not conflict with the proposed Santa Ana River Parkway Project. As noted in other responses to comment letter R-3, RCTC will continue to coordinate the SR-91 CIP with Orange County Public Works through the design/build process. As a result, the plans for the Santa Ana River Parkway Project can be appropriately coordinated with the construction of the SR-91 CIP.

**R-3-11**

References to the SARI project in the EIR/EIS were updated to reflect the new estimated date of completion of mid-2013. Revisions were made in Table 2.1, Other Related Major Projects on page 2-8; in the last paragraph of Section 2.3.9.1, Approved or In-Process Projects starting on page 2-151; in Table 3.25.2, Summary of Land Development and Nontransportation Infrastructure Projects in the SR-91 CIP Study Area, on page 3.25-60; and in Table 5.2, SR-91 CIP Meeting Summaries, on page 5-6.

**R-3-12**

The SR-91 CIP has been, and will continue to be, coordinated with the Corps in areas near the Corps Reach 9 Phase 2B and 2A projects, which are components of the Santa Ana River Mainstem bank protection program. The Reach 9 Phase 2B project is currently under construction, and the Reach 9 Phase 2A project is in design. The Santa Ana River Mainstem project components do not overlap with or extend into the disturbance limits for the SR-91 CIP.

**R-3-13**

Refer to response to comment R-3-12, above.

**R-3-14**

The SR-91 CIP will extend and flare the existing box culvert at the B Canyon undercrossing. These improvements will be coordinated with Orange County Public Works and the Green River Golf Club during the project design/build phase, as appropriate.

**R-3-15**

Any improvements to the Lower Santa Ana River will be reviewed and approved by the OCFCDF and the Corps during the project design/build phase. Refer to Table S.5 on page S-57 in the EIR/EIS for a list of permits and approvals needed for the SR-91 CIP, which was expanded to specifically cite coordination with Riverside and Orange Counties for any encroachments into property owned by those agencies, such as land.
under the control of the OCFCD. Refer also to Section 3.9, Hydrology and Floodplains, starting on page 3.9-1 in the EIR/EIS for discussion of flood control facilities in the project area and potential project effects related to floodplains and flood control facilities.

**R-3-16**

The final design will be coordinated with the OCFCD, and any necessary encroachment permits will be obtained prior to the start of any work on land under the control of the OCFCD, as noted in Table S.5 on page S-57 in the EIR/EIS.

**R-3-17**

As discussed in Section 3.9.3, Environmental Consequences, on page 3.9-6 in the EIR/EIS, the SR-91 Build Alternatives will encroach into and modify the 100-year floodplains at the Santa Ana River at Wardlow Wash, Country Club Creek, and West Grand Boulevard. However, those encroachments are too minor to result in a substantial change in the 100-year water surface elevation at these locations in the floodplains. As documented in the *Location Hydraulic Study* (May 2010), the water surface elevation calculated to the nearest 0.01 ft and the water velocity calculated to the nearest 0.01 ft per second are the same for the existing condition and the with-project condition. As a result, there would be no substantial change in the 100-year water surface elevations at these locations. The *Location Hydraulic Study* and the *Summary Floodplain Encroachment* for the SR-91 CIP improvements on these study areas document that the project would not introduce additional risk to the existing environment and surrounding infrastructure. There are no impacts to the natural and beneficial floodplain values in any of the study areas due to the encroachment of the proposed improvements for the SR-91 CIP.

Therefore, as discussed in the subsection titled "Agency Coordination" on page 3.9-21 in Section 3.9.3, Environmental Consequences, coordination with Federal Emergency Management Agency (FEMA) for modifications to the 100-year floodplain maps is not required because the encroachments would not result in an appreciable increase of the 100-year water surface elevation or change the boundaries of the 100-year floodplain. All the SR-91 CIP improvements, including project features in and near the 100-year floodplain, will be designed consistent with all applicable Department design standards, including design standards related to facilities in and near floodplains.
July 5, 2011

Mr. Aaron Burton  
California Department of Transportation, District 8  
464 West 4th Street, 6th Floor  
San Bernardino, CA 92401  

RE: STATE ROUTE 91 CORRIDOR IMPROVEMENT PROJECT EIR/EIS  
EA 08-0F5400  

Dear Mr. Burton,

The Regional Conservation Authority (RCA) has reviewed the draft environmental document for the State Route 91 CIP project dated May 2011. The RCA is a joint powers authority created to administer the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), protecting the 146 native species of plants and animals within a half million acres of their habitat in Western Riverside County. The California Department of Transportation is one of twenty four member agencies (Permittees) comprising the RCA.

The RCA considers the linkage between the Santa Ana Mountains and the Puente-Chino Hill/Prado Basin to be critical for this area and appreciates Caltrans and RCTC efforts to assess the wildlife corridors within the project limits (SR 91 NES). We also appreciate both agencies continued willingness to work with us in arriving at a wildlife connectivity solution under SR 91 given the lack of viability of Linkage 1 and 2 due to public and private development subsequent to MSHCP approval. The document correctly identifies B Canyon as the proposed linkage replacement.

We have the following comments:

1. B Canyon, pg 3.17-13 – Amendment of the MSHCP to accommodate B Canyon as a linkage is not necessary for the actions needed to implement it to proceed. The RCA is actively working on land acquisition for the linkage and continues to coordinate with the Army Corps, Orange County Water District and Riverside County Flood Control regarding projects on the north side of SR 91 that may affect the B Canyon linkage or further affect Linkage 1 or 2. Please include a measure/environmental commitment to develop a separate project to improve the existing structure under SR 91 at B Canyon.
2. West Prado Road Undercrossing (Linkage 1), pg 3.17-14 – Linkage 1 is constrained by
development approved on the south and improvements recently made to the Green River
Road/SR 91 Interchange. The linkage is not considered functional for large mammals as
the EIR/EIS asserts.

3. Measure NC-3, Table E-1 – While the MSHCP only specifically restricts vegetation
   clearance from March 1-June 30, the Migratory Bird Treaty Act still applies within the
   boundaries of the MSHCP and restrictions on vegetation removal should take into account
   specific vegetation and potential species occurrence within the project footprint. We
   recommend using the same seasonal date range in Riverside County as referenced for
   Orange County (Feb.15-Aug.31).

4. Measures NC-7, NC-12, NC-13, Table E-1- We request that these measures also include
   B Canyon.

5. Measures NC-6, NC-8, NC-9, NC-10 and NC-11, Table E-1 – We request that all
   measures to identify and protect wildlife corridors include B Canyon.

We appreciate the opportunity to work with Caltrans and RCTC on the State Route 91 CIP
project and look forward to further joint efforts to improve wildlife movement in the area.

Sincerely,

Charles V. Landry
Executive Director

cc: Steve Keel, RCTC
    Laurie Dobson Correa, RCA
R-4-1
Refer to responses to comments R-4-2 through R-4-6, below.

R-4-2
Refer to response to comment F-2-2 provided on page O-48 earlier in this appendix. As stated in that earlier response, the B Canyon proposal is a separate project. The B Canyon project has separate and independent utilities, is not a requirement for the SR-91 CIP, and is not itself dependent on the implementation of the SR-91 CIP. It is a project for which RCTC and the Department have made commitments independent of and separate from the SR-91 CIP. The B Canyon project is not needed as mitigation for the SR-91 CIP and, therefore, is not an SR-91 CIP project commitment or project component.

R-4-3
The text in the part of Section 3.17.2.4 on page 3.17-14 in the EIR/EIS discussing the West Prado Road Undercrossing (Western Riverside County MSHCP Proposed Constrained Linkage 1) was revised to clarify that this linkage currently provides for large mammal movement although it is not expected to continue to function for large mammal movement in the future due to continuing land development, Green River Road, West Prado Road, existing fencing, and railroad lines. The resource agencies and other agencies are evaluating alternatives for this linkage independent of the SR-91 CIP. The SR-91 CIP will not result in adverse impacts at this linkage.

R-4-4
Refer to response to comment S-3-3 earlier in this report, which explains that the language in Measure NC-3 in Section 3.17.4.2, Other Measures, was revised to indicate that all vegetation removal will be conducted outside a single time period (February 15 to September 15). As explained in the response to comment S-3-3, because of differing time frames for vegetation removal, Measure NC-3 uses the longest period to ensure compliance with applicable requirements in both Riverside and Orange Counties. In addition, the period for the removal of vegetation in the Biological Opinion is February to September. As a result, the end date for vegetation removal was not changed to August 31, as recommended in this comment.

R-4-5
Measures NC-7, NC-12, and NC-13 in Section 3.17.4.2, Other Measures, on pages 3.17-32 through 3.17-34 in the EIR/EIS were revised to include B Canyon as requested. Those changes in those measures are shown in italics below:
NC-7  During final design, RCTC’s Project Engineer will coordinate with the Designated Qualified Biologist to identify the habitat adjacent to Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash that is anticipated to be disturbed by construction activities and will delineate those areas on the project specifications.

As detailed in the project specifications, RCTC’s Resident Engineer will require the design/build contractor to restore habitat adjacent to Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash that was disturbed during construction as construction in the affected areas is completed. That restoration will be provided on a 1:1 ratio, using native vegetation as determined by RCTC and the Department in coordination with the resource agencies.

NC-12  Within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash, RCTC’s Resident Engineer will require the design/build contractor to limit the hours of construction within 1,000 ft of the centerline of each of these crossings to daylight hours (7:00 a.m. to 7:00 p.m.) to ensure continued use of these wildlife corridors during construction, with the exception of limited periods when evening or night work is required for operational reasons. Operational reasons may include the desire to conduct certain construction activities, such as closing multiple ramps or travel lanes, during evening and night hours to minimize delays to the traveling public. Any night construction must be approved in writing by the RCTC Resident Engineer and coordinated with the District 8 and 12 biologists, the USFWS, and CDFG.

NC-13  During final design, RCTC’s Project Engineer will ensure that the design and construction process for all structures required for bridge and/or culvert work within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash, will not block the main underpass at these
locations during construction. RCTC’s Project Engineer will ensure that the design of the scaffolding and false work is restricted to the sides of the underpass and limits of the existing exclusionary chain-link fence to maintain the existing width of the wildlife corridor during construction activities.

During construction within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash, RCTC’s Resident Engineer will require the design/build contractor to ensure that all structures required for bridgework are installed and constructed consistent with the final design specifically to avoid blocking the main underpass during construction and to restrict all scaffolding and false work to the sides of the underpass and limits of the existing exclusionary chain-link fence to maintain the existing width of the wildlife corridor during construction activities.

**R-4-6**
Measures NC-6, NC-8, NC-9, NC-10, and NC-11 in Section 3.17.4.2, Other Measures, on pages 3.17-32 and 3.17-33 in the EIR/EIS apply to the entire length of the project, not just at wildlife crossings. As a result, these measures will apply to B Canyon.
South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

E-mailed: July 15, 2011
shawn_oriaz@dot.ca.gov

Mr. Aaron Burton
Caltrans District 8
464 W. 4th Street
San Bernardino, CA 92401

Review of the Draft Environmental Impact Report (EIR) for the
State Route (SR) 91 Corridor Improvement Project

The South Coast Air Quality Management District (AQMD) staff appreciates the opportunity to comment on the above mentioned document including the lead agency's willingness to consider late comments. AQMD staff is concerned that the draft EIR provides an inadequate air quality analysis for the proposed project. As a result, the air quality impacts may be understated in the draft EIR 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. AQMD staff recognizes and strongly supports the benefits of increased traffic flow and decreased traffic congestion that can reduce exhaust emissions from cars and trucks. However, AQMD staff is concerned that the proposed project could increase health risk impacts to residents in close proximity to the State Route (SR) 91 Corridor and provide growth inducing impacts. The project will add one general purpose lane to SR 91 (within the project area) and maintain existing high occupancy vehicle (HOV) lanes or provide two additional tol express lanes in each direction. As a result, additional freeway lanes will be placed closer to residences potentially increasing health risk impacts to residents adjacent to the project area. Further, the addition of lanes will increase freeway capacity and could have potential growth inducing impacts.

There are four primary areas in which the draft EIR has not addressed the potential for air quality impacts. These include the determination of localized air quality impacts, the growth inducing potential of the project, the use of an inappropriate CEQA baseline for existing conditions, and the lack of quantification of mitigation measure effectiveness. Because of the technical inadequacies of the draft EIR the AQMD staff strongly recommends that the lead agency revise the air quality analysis based on the comments contained within this letter and include the revised analysis in the final EIR.
Pursuant to Public Resources Code Section 21092.5, we request that the lead agency provide the AQMD with written responses to all comments contained herein prior to the adoption of the final EIR. Additional detailed comments on this project are attached to this letter. Should you have any questions, please contact me at (909) 396-3105.

Sincerely,

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

Attachment

SN:DG

ORC110520-02
Control Number
Local Air Quality Impacts

1. 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 adjacent to the SR 91 Corridor. According to the project description (Chapter One) of the draft EIR, up to 129,100 additional vehicles per day will travel on this segment of SR 91. The lead agency did not analyze the potential impacts to local ambient air quality standards from this activity, nor did it evaluate potential health risks.

Further, the lead agency determined that the proposed project will have short term air quality impacts from construction related activities, but did not present the peak daily emissions that are expected from the project in the draft EIR. Therefore, AQMD staff recommends that the lead agency quantify the construction emissions from the proposed project and use the AQMD’s construction emissions thresholds to make a significance determination.¹

The lead agency relied on guidance from the Federal Highway Administration to determine that a quantitative analysis of toxic impacts is not possible due to potential uncertainties and that only a qualitative analysis is possible. This approach ignores section 15064 of the CEQA Guidelines that requires substantial evidence to determine the significance of an impact. Furthermore, Caltrans has relied on a HRA for other CEQA documents including the Schuyler Heims Bridge project and has agreed to conduct an HRA for the I-710 corridor expansion project. Therefore, AQMD staff recommends that the lead agency revise the air quality analysis to include a HRA for the proposed project. Further, the lead agency is strongly encouraged to use the SCAQMD regional and local significance thresholds for any project carried out within its jurisdiction.

Growth Inducing Potential and Cumulative Impacts

2. The lead agency claims that the SR 91 currently serves 280,000 vehicles per day, and that by 2035, the project could serve up to 409,100 vehicles per day. Further, the lead agency states that construction of this project will not generate new vehicle trips because 1) the project is intended to alleviate existing and future traffic congestion along SR 91 during peak hours and 2) the project would not generate new vehicular trips because it will not construct new homes or businesses. This argument ignores the requirements (Section 15126 and 15126.2 of the CEQA Guidelines) to assess growth inducing potential and cumulative impacts from the project.

The project will construct additional freeway lanes. Despite the argument that the proposed project will not generate additional trips, no enforceable measures have been included that will ensure that no additional trips occur. For example, if traffic increases beyond what is projected in this draft EIR, and more vehicles use this segment of SR 91, then the additional capacity that this project provides may result in additional air quality impacts. This scenario would lessen any potential regional benefits that the draft EIR is claiming. If the lead agency chooses not to assess this impact, than an enforceable measure is needed to ensure less than significant air quality impacts.

¹ http://www.aqmd.gov/ceqa/hdbk.html
Further, while this project may not directly generate traffic, it accommodates and potentially encourages growth. This indirect impact is “cumulatively considerable” under CEQA and must be analyzed by comparing existing conditions with future project conditions.

Effectiveness of Mitigation Measures

3. The lead agency states in the Air Quality Analysis that the project will reduce its construction emissions by utilizing mitigation measures SC-1 through SC-5. However, because the lead agency did provide a quantitative analysis of construction emissions or construction mitigation measures it has not demonstrated that there will be any reduction in emissions through the implementation of these mitigation measures or that the project will not pose a significant impact on the environment.

CEQA Baseline

4. 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 compare a hypothetical and speculative future scenario without the project to one with the project. This speculative approach is contrary to CEQA requirements and serves to underestimate potential impacts. Further, in Table 3.14.4 of the Air Quality Analysis, the lead agency states that the project will have a net benefit by reducing regional PM10 emissions by seven pounds per day.
R-5-1
This comment letter was submitted after the close of the public comment period, and the commenting agency did not request an extension of the review period from the Department. In compliance with the requirements of NEPA, responses to the comments in this comment letter are provided below. Refer to responses to comments R-5-2 through R-5-9, below. Refer also to Table O.2 on page O-11, which indicates the Final EIR/EIS will be available to commenting agencies in mid-2012. Although for CEQA purposes, no response to the comments in this letter is required (refer to Section 15088 in the State CEQA Guidelines), they are provided here as noted above.

R-5-2
The analysis of air quality impacts for the proposed project were conducted consistent with the Department-adopted protocols and guidance and address both construction and operational impacts of the proposed project. As described in Section 3.14, Air Quality, starting on page 3.14-1 in the EIR/EIS, local analyses were conducted for criteria air pollutants and MSATs following the October 2009 FHWA MSAT guidance. As noted in its SER, the Department has adopted the FHWA guidance for evaluating MSAT emissions. It was determined that the project would reduce criteria air pollutant and MSAT emissions locally and regionally. As discussed in Section 3.14.3.2, Permanent Impacts, starting on page 3.14-28 in the EIR/EIS, the MSAT emissions under the No Build and Build Alternatives would be substantially lower than Existing (2007) conditions. Therefore, because the SR-91 Build Alternatives would reduce MSAT emissions locally and regionally, a detailed HRA was not needed or conducted for the project.

Tables in Chapter 1, Project, show that traffic volumes on SR-91 and I-15 will increase in the future, with or without the Build Alternatives. As shown in Table 1.7, 2035 No Build Alternative Average Daily Traffic Growth, the increase in traffic demand on SR-91 is forecast as a result of regional growth that would occur with or without the project based on adopted Southern California Association of Governments (SCAG) regional demographic projections. As discussed in Section 3.2.3, Environmental Consequences, on page 3.2-9 in the EIR/EIS, the proposed SR-91 CIP would not result in any reasonably foreseeable project-related growth impacts. Refer also to responses to comments R-5-5 and R-5-6 below.

The primary pollutant of concern for health risk is DPM. As shown in Tables 3.14.20 through 3.14.24 in Section 3.14, Air Quality, when compared to the Baseline/Existing (2007) and No Build Conditions, the project would reduce the DPM emissions along
the project segments of SR-91 and I-15. Therefore, the project would reduce the long-
term health risk along SR-91 ad I-15. Refer also to response to comments F-3-5 and 
F-3-11 on pages O-59 and O-69, respectively, for the MSAT-related effect of the 
project.

Health effects of diesel vehicles and equipment are evaluated over a 70-year period. 
As stated in Section 3.14.3.2, on page 3.14-17 of the EIR/EIS, no phase of 
construction would last more than 5 years. In addition, the on-site equipment would 
not be located in the vicinity of any one location for the entire duration of a phase. 
Therefore, the short-term exposure to the construction activities would not result in 
any long-term health risks.

R-5-3
The air quality analyses were prepared using Department-adopted protocols and 
guidance (SER July 2011). The Department has not adopted the SCAQMD or any 
other numeric thresholds for determining significance of air quality effects under 
CEQA because as a State agency, there is no one set of numeric thresholds that would 
be applicable statewide for Department projects. In addition, the SCAQMD’s 
significance thresholds for construction emissions do not apply to the SR-91 CIP 
because no construction permit is required for this project from the SCAQMD. 
Nonetheless, additional quantitative analysis of construction emissions was prepared 
using the Sacramento Metropolitan Air Quality Management District’s (SMAQMD) 
emissions model. The results of that analysis are provided starting on page 4-48 of 
Chapter 4.0.

Following SCAQMD Rule 403 and the other control measures that are provided in 
Section 3.14.4, Avoidance, Minimization, and/or Mitigation Measures, starting on 
page 3.14-39 in the EIR/EIS will substantially reduce construction emissions.

The comment states that the failure to prepare a quantitative MSAT analysis ignores 
Section 15064 of the CEQA Guidelines that requires substantial evidence to 
determine the significance of an impact. The FHWA’s Interim Guidance Update on 
Mobile Source Air Toxic Analysis in NEPA Documents\(^1\) provides substantial 
evidence documenting the basis for not conducting a quantitative MSAT analysis.
SCAQMD may disagree with this conclusion, but Section 15151 of the CEQA

\(^1\) http://www.fhwa.dot.gov/environment/airtoxic/100109guidmem.htm.
Guidelines clearly states that disagreement among experts does not make an EIR inadequate.

R-5-4
Refer to response to comment R-5-2, above. Because the SR-91 Build Alternatives would reduce MSAT emissions locally and regionally, a detailed HRA was not conducted for the project. Refer also to response to comment F-3-11, on page O-69, regarding discussion of schools in the vicinity of the project segment of SR-91.

The comment states that the failure to prepare a quantitative MSAT analysis ignores Section 15064 of the CEQA Guidelines, which requires substantial evidence to determine the significance of an impact. As discussed in the response to comment R-5-3, above, FHWA’s Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents provides substantial evidence documenting the basis for not conducting a quantitative MSAT analysis.

The comment goes on to suggest that the Department should perform a quantitative MSAT analysis for the SR-91 CIP because the Department relied on another agency’s HRA for the Schuyler Heim Bridge project in Los Angeles County and the Department also conducted an HRA for the Interstate 710 (I-710) expansion project in Los Angeles County. The Department agreed to use the HRA for the Schuyler Heim Bridge project and conduct an HRA for the I-710 expansion project because of the high volume of diesel truck traffic at these two locations (over 30 percent trucks near the San Pedro Bay Ports) and because of the documented high levels of public health risk due to DPM in the vicinity of those two projects. Neither of those conditions apply to the SR-91 CIP, where truck volumes are close to the regional average of 6.9 percent; therefore, the Department conducted only the qualitative MSAT analysis as recommended in FHWA’s Interim Guidance Update.

Finally, the comment encourages the Department to use the SCAQMD local and regional significance thresholds for making significance determinations under CEQA. As a statewide agency covering diverse geographic areas, the Department has, as a matter of policy, left the determination of significance to the District PDT. For the SR-91 CIP, the PDT made determinations of significance based on the results of the technical studies and did not use the SCAQMD thresholds.

R-5-5
Refer to Table 1.7 on page 1-25 in the EIR/EIS, which indicates the average daily traffic (ADT) in 2007 (Baseline/Existing) was 280,000 vehicles at the Orange/
Riverside County boundary and that the ADT at that location in 2035 under the No Build Alternative is forecast to be 409,100 vehicles. The two Build Alternatives were developed to address the 2035 traffic volumes because the 409,100 ADT represents substantially more demand in the SR-91 corridor than can be met by the existing SR-91 facility.

As required in Section 15126 in the CEQA Guidelines, Section 3.2, Growth, starting on page 3.2-1 in the EIR/EIS, evaluates the potential for the Build Alternatives to result in growth-inducing impacts. The analysis in that section concluded that:

- Alternatives 1 and 2 would result in operational improvements on SR-91 and I-15 but would not substantially modify local, intra-regional, or inter-regional accessibility to/from SR-91 and I-15.
- Alternatives 1 and 2 are consistent with the Regional Transportation Plan (RTP) and the goals and policies of regional and local agencies.
- Alternatives 1 and 2 would accommodate existing, approved, and planned growth in the area, but are not expected to influence the amount, timing, or location of growth in the area.
- There are no reasonably foreseeable project-related growth impacts under Alternatives 1 and 2.

As required in Section 15126 in the CEQA Guidelines, Section 3.25, Cumulative Impacts, starting on page 3.25-1 in the EIR/EIS, provides a detailed analysis of the potential for the SR-91 CIP to contribute to cumulative impacts.

**R-5-6**

Refer to response to comment R-5-5, above. By adding capacity to SR-91, the SR-91 CIP may result in more trips using SR-91 (e.g., as a result of diversion from other parallel routes such as SR-60), but it will not create new trips in the region; only new residential and employment-related land uses can generate new trips. As concluded in the EIR/EIS and noted in response to comment R-5-5, there is no anticipated growth in trips in the region due to implementation of the SR-91 CIP. Therefore, no additional mitigation to reduce air quality impacts is required.

The traffic projections indicate that the facility will operate at capacity during peak hours under the Build and No Build Alternatives. That analysis indicates that the SR-91 CIP Build Alternatives will not result in desirable peak-hour LOS (LOS E or better); therefore, there will not be surplus capacity on SR-91. Because there will be no surplus capacity on SR-91 under the Build Alternatives, it is not expected that the
peak-hour traffic volumes would exceed the 2035 traffic forecasts for the Build Alternatives.

The traffic modeling does not attempt to predict upper and/or lower limits of expected traffic volumes. The traffic volumes reported in Section 3.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, in the EIR/EIS are best estimates consistent with accepted planning practices and are based on the RCTC regional traffic forecasting model and the Orange County Traffic Analysis Model.

This comment does not present any substantial evidence that the forecasted traffic volumes underestimate future traffic volumes on SR-91. Further, there is no enforceable mitigation to prohibit more trips on a freeway than that forecasted in a traffic model as such a measure would violate the Interstate Commerce Act.

R-5-7
Refer to response to comment R-5-5, above, which indicates that the growth-inducing impact analysis for the project determined there are no reasonably foreseeable project-related growth impacts under Alternatives 1 and 2. Therefore, Alternatives 1 and 2 would not contribute, directly or indirectly, to cumulatively considerable growth effects in the area.

R-5-8
Because the Department does not quantify short-term construction emissions (per the Department’s SER at: http://www.dot.ca.gov/ser/vol1/sec3/physical/ch11air/chap11.htm#Ch11RecomMethods), quantifying the reductions in those types of emissions provided by Measures SC-1 through SC-5 was not possible.

R-5-9
Section 3.14, Air Quality, starting on page 3.14-1 in the EIR/EIS, and the Air Quality Assessment Report include the existing conditions for carbon dioxide (CO₂) and MSAT emissions. In addition, Section 4.3, Climate Change, starting on page 4.43 in the EIR/EIS and Table 4.2 were updated to include the existing CO₂ emissions. The MSAT analysis was prepared following the FHWA MSAT Guidelines (October 2009), which has been adopted by the Department. The differences between the existing and 2015/2035 conditions for the criteria pollutants would be similar to the increase in regional vehicle miles traveled (VMT), which is approximately 30 to 60 percent. However, this projected growth in regional VMT and its associated increase in regional emissions is due to the projected growth in vehicle operations that is independent of the proposed project and will occur whether the project is constructed
or not. Tables 3.14.20 through 3.14.24 in Section 3.14, Air Quality, were updated to include the Baseline/Existing (2007) MSAT emissions. Refer to response to comment R-5-5, above, which explains that the proposed project is not growth inducing. As a result, the project's impacts were evaluated based on the change between the no build and build conditions. Refer also to Section 3.14.3.2, Permanent Impacts, on page 3.14-13 in the EIR/EIS, which indicates that Baseline/Existing (2007) traffic data were provided in the impacts discussion to allow for comparison of project effects with Baseline/Existing (2007) conditions.
O.6.4  Local Agency Comments
July 5, 2011

CAL TRANS
464 W. Fourth Street
San Bernardino, CA 92401

RE: Public Notice – SR 91 Draft EIR

This letter is in response to your Public Notice request for comments concerning the SR 91 Draft EIR. There were three areas specific to fire and they are as follows with our suggested changes denoted in italicized font and underlined:

3.5 Utilities/Emergency Services

- 3.5.1.3 - This section is incorrect when stating that the Riverside County Fire Department provides fire and emergency medical services for the City of Norco. Norco Fire Department provides fire and emergency medical services.

- Table 3.5.3 - Corona Regional Medical Center’s address does not have #2, 800 S. Main is the only hospital address.

- 3.5.2.2 - Permanent Impacts

Alternative 1 - Expresses beneficial effects for law enforcement, fire protection, and emergency service providers because Alternative 1 and its design variations may improve response times for emergency services using the project segments of SR-91 and I-15. In addition, emergency service providers would be able to use the HOV lanes in Alternative 1 when the other travel lanes are experiencing heavy traffic volumes and slow travel speeds.

Alternative 2 - The beneficial effects on emergency services under Alternative 2 and its design variations would be the same under Alternative 1. In addition emergency service providers would be able to use the express lanes in Alternative 2 when the other travel lanes are experiencing heavy

"EVERYONE GOES HOME"
traffic volumes and slow travel speeds. The new express lane configuration under Alternative 2 and its design variations would include a continuous 10 foot wide median shoulder that would provide emergency refuge.

- Table 3.5.4 - Discusses relocation of water lines throughout the City - *The Fire Department is currently working with Public Works as these locations arise to be sure that our fire flow and hydrant spacing still meets our minimum standards.*

### 3.17.4.2 - Other Measures

States that while working during fire season the Resident Engineer will require the design/build contractor to ensure that appropriate firefighting equipment is available on site during all phases of project construction to help minimize the potential for human caused wildfires. Fire preventive methods will be used while grinding and welding and other spark inducing activities. Personnel trained in fire hazards, preventive actions, and responses to fires will advise contractors regarding fire risk from all construction-related activities. It goes on to mention that if OCFA requires defensible space to be cleared during construction then the Resident Engineer will meet with the biologist prior to clearing. *We want to add if Corona by changing OCFA to RESPONSIBLE FIRE AGENCY.*

Should you have additional questions please contact Fire Marshal Michael Gutierrez at 951 736-2459.

Sincerely,

David E. Waltemeyer,
Fire Chief

cc: Aaron Burton, CAL TRANS District 8

*"EVERYONE GOES HOME"*
L-1-1
Refer to responses to comments L-1-2 through L-1-6, below.

L-1-2
The text in Section 3.5.1.3, Fire Protection and Emergency Medical Services, on page 3.5-3 in the EIR/EIS was revised to indicate that the RCFD provides fire and emergency medical services for unincorporated areas in Riverside County, deleting the reference in that sentence to the City of Norco. The following was added after that revised sentence "The City of Norco Fire Department provides fire and emergency medical services in that city." Table 3.5.2, Local Fire Stations in the Study Area on page 3.5-4, in Section 3.5, Utilities/Emergency Services, in the EIR/EIS correctly shows the fire agencies that provide service in the City of Norco and in unincorporated Riverside County. The potential temporary and permanent impacts of the SR-91 Build Alternatives related to fire services are addressed in Section 3.5.2 Environmental Consequences, on page 3.5-5 in the EIR/EIS.

L-1-3
The "#2" in the address for the Corona Regional Medical Center in Table 3.5.3, Hospitals and Medical Facilities in the Study Area, on page 3.5-4 in Section 3.5.1.4, Emergency Medical Facilities, in the EIR/EIS was deleted.

L-1-4
No response is necessary because this comment repeats material from the Draft EIR/EIS and does not ask a question or provide a comment relative to the technical information in the EIR/EIS.

L-1-5
It is acknowledged that the City of Corona is actively implementing improvements to the City’s water lines. It is further acknowledged that RCTC will coordinate closely with the City of Corona during final design to ensure that all the City water lines are properly addressed in final design and properly shown on the project plans.

L-1-6
Refer to Measure NC-4 in Section 3.17.4.2, Other Measures, on page 3.17-31 in the EIR/EIS, which was revised to define “responsible fire agencies” as the OCFA, RCFD, the City of Norco Fire Department, and the City of Corona Fire Department.
July 5, 2011

Aaron Burton
State of California Department of Transportation
464 W. 4th Street
San Bernardino, CA 92401

SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT FOR SR-91 CORRIDOR IMPROVEMENT PROJECT

Dear Mr. Burton:

Thank you for the opportunity to review and comment on the above-referenced DEIR. Below are comments from the City of Corona Public Works Department, Community Development Department, and Finance Department.

The Community Development Department offers the following comments:

- Section 3.4 discusses community impacts relating to residential and nonresidential relocation. The City's concern is the fact that the digital billboards affected by the freeway widening are not discussed as business displacements under Alternatives 1 and 2. The City is specifically concerned with this because of its relocation agreements with Lamar Central Outdoor and General Outdoor Advertising. The removal of these signs will have a fiscal impact to the City as the City currently receives annual revenue from the billboard companies for each digital panel. Based on the SR 91 widening design, three billboard locations are affected which will impact five digital billboard panels. First, the City would like to see these digital billboards relocated to another location within the City upon final design of the SR 91 widening. Second, the potential economic impacts regarding the displacement of these billboards should be discussed under Section 3.4.2.4. Finally, the City's billboard relocation agreements with Lamar and General Outdoor do not have a term limit; therefore, the longstanding economic impact this would have on community programs funded by this revenue source should be addressed.

- Section 3.7 discusses visual and aesthetics related to the SR 91 widening design. The City recognizes the aesthetic treatments being offered for the project and does not object to those options. However, in the discussion concerning aesthetics there was no mention that the proposed treatments are intended to deter graffiti, which is
considered by the City an aesthetic impact due to new retaining walls and sound walls being constructed for the project. Also, the draft EIR does not mention mitigation for graffiti that can potentially occur on these walls. Caltrans' program for dealing with graffiti along state highways should be mentioned in the draft EIR.

The City is not opposed to the off-site landscaping being proposed in mitigation measure V-3. However, the City’s concern is with the lack of vertical landscaping for the retaining wall at Bollero Place (Key View 4). The City recognizes that the space between the wall and the right-of-way is limited; however, vine planting in addition to the additional street trees should be implemented for this wall. The height and appearance of this wall will be overwhelming to the adjacent residential properties; therefore, every effort should be made to soften the appearance of this wall.

- Section 3.4 quantifies and discusses the loss of housing and refers to mitigation measures C-1 through C-3. Furthermore, the conclusion is drawn on page 3.4-27 that “…there would be ample relocation sites, residential units, and business units for all owner and tenant displacees, both residential and commercial. Recent research indicates that housing would be widely available at the time the acquisition process begins.” However, there is no discussion about the affordability of the residential units to be removed and the availability of comparable affordability for the replacement housing.

Sections 3.2 and 4.2 make reference to the applicability of CEQA and the review of this project within the context of CEQA. CEQA Guidelines Checklist Number VIII.b calls for evaluation of the loss of housing. The State of California Department of Housing and Community Development holds the City accountable for the provision of affordable housing, and the loss of affordable housing can ultimately affect the Regional Housing Needs Allocation (RNHA) for the City. The DEIR needs to discuss in more detail the affordability of the homes to be removed and the availability of comparably affordable replacement housing.

The Public Works Department offers the following comments:

- Attachment 22 – Structure Advanced Planning Studies – was an exhibit for the East Grand UC –Widening and it shows the (once planned) WB SR-91 off ramp connecting into Grand (sheet 2 of 3). This exhibit needs to be changed.

The Finance Department offers the following comments:

- The document states that construction is expected to begin in 2013, and conclude in 2017. Alternative #2, the local preferred alternative, is the most likely option to be the approved.

The report’s estimated property acquisitions in alternative #2 would have the following revenue impacts on the City of Corona, depending on which design variation is selected:
- Property tax revenue loss of $274,216 - $399,372
- Sales tax revenue loss of $277,402 - $299,894
- Total revenue loss $551,618 - $699,266

Based on the information provided in the report, the Finance Department was unable to confirm the revenue estimates. Actual parcel numbers are needed to confirm the estimated revenue losses.

- Other potential revenue impacts, both positive and negative, may include:
  - Temporary business closures related to construction
  - Limited access to businesses due to construction (road closures, ramp closures, detours, etc.)
  - Displaced businesses relocating within the City of Corona
  - Creation of 30,563 - 32,154 direct and indirect jobs for the project

If you have questions or require any additional information, please contact Bob Morin, Principal Civil Engineer at (951) 736-2446.

Sincerely,

[Signature]

Kip D. Field, P.E.
Public Works Director
L-2-1
Refer to responses to comments L-1-2 through L-1-12, below.

L-2-2
The following was inserted as a new subsection titled “Other Revenue” in Section 3.4.2.4, on page 3.4-49 in the EIR/EIS:

“Alternative 1 would require relocation of 9 billboards and Alternative 2, including Alternative 2f, would require relocation of 10 billboards within the project limits in the City of Corona. These billboards generate revenue for the City. To minimize impacts associated with the relocation of digital and static billboards, the RCTC Project Engineer and Right-of-Way Agents will work with the billboard owners and the City of Corona to assist with the relocations within the City in accordance with the City of Corona municipal code and the Department’s Outdoor Advertising Unit for appropriate permits and approvals. Existing agreements between the City and billboard owners will be considered during the process. Every effort will be made to relocate all affected billboards on the same parcels or elsewhere in the City. The relocations of the billboards would be completed prior to the removal of the existing billboards. Although there is a potential that the City may experience economic impacts from the relocation of these billboards, those impacts are not considered substantial, and therefore are not discussed further in this EIR/EIS.”

The following measure was added in Section 3.4.2.5, Avoidance, Minimization, and/or Mitigation Measures for Relocations and Real Property Acquisition, on page 3.4-52 in the EIR/EIS:

CI-4 During final design and property acquisition, the RCTC Project Engineer and Right-of-Way Agents will work with billboard/property owners, the City of Corona, and the Department’s Outdoor Advertising Unit to find locations for relocating the affected billboards within the existing sites where the billboards are currently located or other sites in the City where billboards are allowed. The Right-of-Way Agents will work with the City and the Department’s Outdoor Advertising Unit to ensure that the
sites for the relocated billboards comply with the requirements in the City of Corona Municipal Code and the Outdoor Advertising Act and Regulations. The Right-of-Way Agents will also work with the billboard/property owners to develop Billboard Relocation Agreements with the City of Corona.

Refer also to Section O.5.8, Common Response Related to Billboard Relocation, on page O-36 in Section O.5, Common Responses for additional discussion regarding project impacts on billboards. Loss of revenue to the City if billboards cannot be relocated in the City limits may be eligible for compensation under the Uniform Act.

**L-2-3**

Refer to response to comment L-2-2, above.

**L-2-4**

Refer to response to Comment L-2-2, above, and Section O.5.8, Common Response Related to Billboard Relocation, on page O-36 in Section O.5, Common Responses.

**L-2-5**

Discussion of graffiti control was inserted as the last section in Section 2.3.2.2, Permanent Project Features, on page 2-31 in the EIR/EIS.

Discussions related to graffiti were added in Section 3.7, Visual/Aesthetics, as follows:

- New Section 3.7.3.8, Affected Environment, on page 3.7-12
- Just before the subsection titled “Summary of Visual Impact of Alternatives” in Section 3.7.4.2, Permanent Impacts, on page 3.7-27
- At the end of the subsection titled “Summary of Visual Impacts for Alternative 1” in Section 3.7.4.2, Permanent Impacts, on page 3.7-28
- At the end of the subsection titled “Summary of Visual Impacts for Alternative 2” in Section 3.7.4.2, Permanent Impacts, on page 3.7-28
- At the end of the subsection titled “Alternatives 1 and 2” in Section 3.7.4.3, Temporary Impacts, on page 3.7-29
- New Measure V-4 was inserted after Measure V-3 on page 3.7-33 in Section 3.7.5, Avoidance, Minimization, and Mitigation Measures
Discussion of graffiti impacts, control, and removal was inserted as the second paragraph in Section 4.2.3.1, Aesthetics, on page 4-21.

**L-2-6**

As discussed in Section 3.7, Visual/Aesthetics, starting on page 3.7-1 in the EIR/EIS aesthetic and design features for retaining walls, including the retaining wall at Bollero Place, will be included in the design of the retaining walls consistent with the potential aesthetic treatments for retaining walls shown on Figure 3.7-18 in the EIR/EIS. RTC’s Resident Engineer will ensure that those aesthetic and design features are constructed during the construction phase when the impact occurs. Measure V-1 on page 3.7-30 in Section 3.7 describes the landscaping that will be provided as part of the project. The simulation shown for Key View 4 was not intended to show specific aesthetic and design features because those features will not be determined for individual locations, including Key View 4, until final design. As a result, a collage of potential aesthetic treatments for retaining walls consistent with the 215/91 Corridor Master Plan was provided instead as shown on Figure 3.7-18 on page 3.7-55 in the EIR/EIS.

During final design, RTC’s Project Engineer will coordinate with the City of Corona to identify specific aesthetic and design features consistent with those shown on Figure 3.7-18, including landscaping, for all project structures, including the retaining wall at Bollero Place. At a minimum, vine planting at this retaining wall is included as a project feature.

**L-2-7**

According to the Final Relocation Impact Report (FRIR; November 2011, page 54, Section V.13, Low Income [30 percent] and Poverty) for the proposed project, 6 percent of the total households in the City of Corona are considered extremely low income, which is defined as households with incomes below 30 percent of the Average Median Income (AMI); 7 percent are identified as low income, which is defined as households with incomes between 31 percent and 50 percent of the AMI; and 8.6 percent were below the poverty line. Therefore, it is likely that residents displaced by, and require relocation as a result of, the project will be low income.

As discussed in the FRIR, individuals with low incomes typically require higher relocation payments of last resort and greater assistance in finding replacement housing due to their financial limitations. In addition, there are large minority, elderly, and disability populations in the displacement area who may also have financial constraints associated with securing replacement housing for themselves.
Appendix O Responses to Comments

Extra measures as discussed in Section D.4.5, Last Resort Housing, in Appendix D, Summary of Relocation Benefits, would be required to adequately address challenges associated with relocation assistance for those who are facing serious financial hardships as a result of the current economic climate.

Research conducted for the FRIR was based on market conditions as of July 2011 and showed that there are many affordable replacement properties available in the vicinity of the project segment of SR-91. This is due in part to the real estate slump over the last several years. A detailed list of single-family and multifamily residential units for rent and for sale and their respective dollar values are provided in Attachments 3.4.A through 3.4.1 to Section 3.4, Community Impacts, in the EIR/EIS. Of the population in Corona, 8 percent is elderly and 6 percent is considered extremely low income; therefore, it is likely that elderly and low-income residents will be affected by the acquisition of residential properties and the removal of the homes on those properties for the SR-91 CIP. Special considerations to address financial limitations and the affordability of replacement housing for these types of displacees will be addressed by RCTC based on compliance with the Uniform Act. Refer also to Appendix D, Summary of Relocation Benefits, for additional information regarding benefits available to residential displacees, including elderly and low-income residents.

The recent economic and housing market declines have contributed to an ample supply of replacement housing, and also allow for lower housing prices and room for negotiation. It is believed the current relocation resources are affordable with the provision of replacement housing and rental assistance payments. RCTC will provide relocation assistance payments and counseling to displacees in accordance with the Uniform Act, as amended, and RCTC’s Relocation Assistance Program (RAP), as discussed in Measure CI-2 on page 3.4-51 in the EIR/EIS. This program assures relocation advisory assistance and availability of comparable replacement housing for displaced residents. Additionally, the RCTC RAP provides for replacement housing payments to assist with increased housing costs.

Homeowners may qualify to receive a price differential payment, reimbursement for nonrecurring costs incidental to the purchase of the replacement property, and an interest rate for the loan on the replacement dwelling, subject to certain eligibility requirements. The statutory maximum combination of these three supplemental payments that an owner can receive is $22,500. If the total expected payment exceeds $22,500, the Last Resort Housing Program will be used.
Tenants may qualify to receive a rental assistance payment. This payment is made if the cost to rent a comparable decent, safe, and sanitary replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, if the tenant is eligible for a rental assistance payment, the tenant can elect to use it for down payment assistance to purchase a replacement home and/or payment of certain costs incidental to the purchase of the replacement property.

All benefits and services will be provided equitably to all residential and business displacees without regard to race, color, religion, age, national origin, and disability as specified under Title VI of the Civil Rights Act of 1964.

Text was added to subsection titled “Permanent Impacts” on page 3.4-27 in Section 3.4.1.3, in the EIR/EIS to clarify the availability of comparable affordable housing. In the event that such housing does not exist, the alternative measures included in the project ensure that all displacees will be properly relocated and compensated.

Refer to response to comment L-2-8, below, for additional discussion regarding affordable housing.

L-2-8

As discussed in Section 4.2.3.7, Land Use and Planning, Population and Housing, on page 4-34 in the EIR/EIS, because of Corona’s demographics and the residential resources available in the immediate areas surrounding the project limits, it is anticipated there will be ample resources to relocate the affected residents (owners and tenants) elsewhere in the City. Refer to Attachments 3.4.A through 3.4.1 to Section 3.4, Community Impacts, in the EIR/EIS, which list available housing and business replacement opportunities in the SR-91 study area, including the City of Corona. As described later in this response, only an estimated 30 low-income replacement units are expected to be needed. Therefore, it should be possible to relocate all the affected residents, including low-income residents, to other housing based on the overall availability of housing (listed in Attachments 3.4.A to 3.4.1 in Section 3.4) and, as described below, new housing anticipated to be constructed in the City.

Measures CI-1 through CI-3 starting on page 3.4-51 would partially mitigate the effects of Alternative 2f related to community character and cohesion. The remaining impacts would be adverse but not significant after mitigation under CEQA.
It is not possible at this time to assess whether the affected housing units are considered affordable housing as defined by the State of California Department of Housing and Community Development. Further, it is not possible at this time to assess how many of the displaced residents would need or qualify for some form of affordable housing. This information would not be available until the right-of-way acquisition process is initiated. During that process, personal interviews will be conducted with affected residents, in compliance with the Uniform Act, and the financial viability, living conditions, specific occupancy situations, and other factors that will influence the relocation of affected residents will be identified. Based on information collected during the right-of-way acquisition process, it is possible that some of the residential units in the City of Corona acquired and removed for the project will be identified as affordable and, therefore, the project could contribute to an overall reduction in the amount of affordable housing in the City. This could ultimately affect the Regional Housing Needs Allocation for the City. Nonetheless, with the mitigation identified above, the impacts on displaced residents (including residents displaced from single- and multiple-family homes for properties fully or partially acquired for the project) would be reduced but still be adverse. Refer also to response to comment L-2-7, above, for additional information regarding the relocation efforts for low-income, minority, elderly, and disabled residents.

Available survey data indicate that up to 20 percent of residents displaced by the project could be considered low income. These data are derived from City of Corona housing statistics and field research conducted since the preparation of the Draft Relocation Impact Report (DRIR). This could represent up to approximately 30 of the homes removed by the project. For those affected residents who qualify for Section 8 Housing, the analysis derived from the FRIR identified 89 homes in the replacement area that could accommodate that need.

According to the City of Corona Final Housing Element 2008 to 2014 Housing Cycle (August 2009), the Regional Housing Needs Assessment (RHNA) for the City of Corona is 3,307 units. During the period of January 1, 2006, through June 30, 2007, a total of 2,209 units out of the 3,307 units were either constructed or approved for construction. Another 1,473 units are anticipated to be either constructed or have received approval for construction between July 1, 2007, and June 30, 2014. Based on the units anticipated to be constructed by June 30, 2014, it is unlikely that the removal of 30 units of low-income housing units by the project will substantially impact the number of available RHNA housing units in the City of Corona. Only an estimated 30 low-income replacement units are expected to be needed. In an email dated July 3,
2012, the City of Corona indicated that the removal of 30 low-income units in connection with the widening of SR-91 will be subject to relocation requirements under State law (and Uniform Relocation Assistance if federal funds are used). Furthermore, the City maintains an inventory of available high-density residential and mixed-use sites (through its various specific plans and General Plan) that offer a combined capacity for over 2,000 additional units. This capacity is adequate to meet the City’s projected housing needs for all income levels and allows for replenishment of the affordable housing inventory as the market dictates. Therefore, it should be possible to relocate all the affected residents, including low-income residents, to other housing based on the overall availability of housing (listed in Attachments 3.4.A to 3.4.I in Section 3.4) and, as described below, new housing anticipated to be constructed in the City.

L-2-9
Sheet 2 of the Planning Study for the West Grand Boulevard Undercrossing Widening, in Attachment 22 in the Project Report, was revised to reflect the changes to this undercrossing.

L-2-10
The property that will be acquired as part of the Preferred Alternative (Alternative 2f) is described in Section 3.4.1.3, Environmental Consequences, in the EIR/EIS. Based on information in that section, the estimated annual property tax revenue loss under Alternative 2f is approximately $300,000, and the estimated annual sales tax loss due to business displacements is $660,000. Therefore, the total revenue loss to the City under Alternative 2f would be approximately $960,000.

This loss in sales tax and property tax revenues as a result of the proposed project would not be offset by Development Impact Fees (DIF). This is because the property will be acquired by a public agency (RCTC) for use in a public project (widening an existing public freeway) and public agencies do not pay any sort of DIF or other fees to offset reductions in property or sales tax revenues as a result of the removal of land from the tax rolls. In addition, as discussed in Section 3.4.2.4, Economics, on page 3.4-47 in the EIR/EIS, these losses in City revenue are not considered substantial at 0.18 percent in total property taxes accrued to the City and 2.2 percent total sales taxes generated in the City under Alternative 2f. In addition, these impacts are not considered substantial because it is expected that the majority of the displaced residents and businesses would likely be relocated in the City of Corona, and some part of the lost sales and property tax revenues would be generated at the new
locations of those residents and businesses. The basis for this conclusion is the availability of suitable relocation properties within the City of Corona, as documented in Attachments 3.4.A through 3.4.I in Section 3.4, Community Impacts.

Refer to Section O.5.8, Common Response Related to Billboard Relocation, on page O-36 in Section O.5, Common Responses, for additional discussion regarding revenue loss resulting from billboard relocations.

**L-2-11**
The City is actively engaged with RCTC in evaluating measures to minimize the loss of parking and other potential impacts to businesses. RCTC will make every effort to provide access to businesses during construction. In addition, RCTC will monitor any problems related to construction, including dust, dirt, noise, and access to businesses, and will make every effort to reduce construction impacts and promote access to businesses during construction. In addition, as noted in this comment, the project will provide a substantial number of direct and indirect jobs during project construction, which is a substantial benefit to the City and surrounding areas.

**L-2-12**
Comment noted. No response is necessary because this comment does not ask a question or provide a comment relative to the technical information in the EIR/EIS.
O.6.5 Organizations, Groups, and Utility Provider Comments
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June 16, 2011

TO: Aaron Burton  
Senior Environmental Planner  
Caltrans District 8  
464 West Fourth Street, Sixth Floor  
San Bernardino, CA 92401

RE: State Route 91 Corridor Improvement Project

Mr. Burton,

On behalf of Countrywood Estates, I would like to inform you of the negative effects the “State Route 91 Corridor Improvement Project” will cause upon our park and its residents, if the second alternative were to be chosen. We ask that you choose alternative one for it will not affect the park.

According to information provided at the Public Hearing, it is understood that the widening of Smith Avenue; the location of Countrywood Estates main entrance may be required. Entering and exiting the park is difficult as it is, therefore widening Smith Ave. would cause safety issues for our residents.

The mobilehome unit at space 90 and the surrounding parking stalls may have to be removed. This not only will reduce the size of our park, and loss of rent, but inability to accommodate sufficient parking for our residents and their guest. Also, the resident residing in mobilehome space 90 would have to relocate to another park; causing an inconvenience to him and his family.

The 10 + mobilehomes located near the existing freeway wall are going to be impacted by alternative two as well. The reduction or complete loss of backyards, disruption of peaceful enjoyment that will be created due to the construction of a sound barrier wall and the offset of being even closer to a busy freeway are our concerns.

There is also the question of what is going to happen to the Recreational Vehicle area adjacent the freeway wall. This area is used by our residents to store their RV’s. If this area is lost due to the expansion of the freeway, we also lose rent revenue and residents will have to relocate their RV’s.

Thank you for your time and consideration.

Sincerely,

Sandra Sierra  
General Partner  
Countrywood Estates MHP
O-1-1
Refer to responses to comments O-1-2 through O-1-5, below, which discuss potential project effects at this mobile home park.

O-1-2
Alternative 2f was identified as the preferred project for implementation. Refer to Section O.5.9, Common Response Related to the Identification of the Preferred Alternative, on page O-39 in Section O.5, Common Responses, for additional information on the Preferred Alternative. As a result, widening of Smith Avenue will not be required for the project; therefore, there will be no impact to the cited property or at the driveways at this property.

O-1-3
Alternatives 1 and 2 will not require the acquisition of property or removal of any homes from this mobile home park.

O-1-4
Alternatives 1 and 2 would not result in the acquisition of property or removal of any homes from this mobile home park; therefore, there would be no reduction in the yard sizes adjacent to SR-91. However, residences in the mobile home park located near SR-91 would experience a temporary noise increase during the construction of the sound barrier, when the existing sound wall is removed. The construction of the sound barrier would occur before the construction of the proposed project and would last less than 5 months. Although the proposed project would move traffic lanes slightly closer to the mobile home park, the completion of the new sound barrier would provide a noise level reduction of 2 to 3 dBA compared to the current traffic noise levels.

During construction, the contractors will be required to comply with all local noise ordinances. In the long term, the sound barrier provided at this location will result in lower noise levels from the freeway in this area.

O-1-5
Alternatives 1 and 2 would not result in the acquisition of property or removal of any homes from this mobile home park. Therefore, no property would be acquired from the recreational vehicle parking area.
July 5, 2011

Mr. Aaron Burton
Caltrans District 8
464 W. 4th Street, 6th Floor
San Bernardino, CA 92401

Re: Comments for the State Route Corridor Improvement Project EIR

Dear Mr. Burton,

My client the owners of Frontage Properties, LLC has asked my firm to review the draft EIR for the SR91 expansion in regards to impacts to their property from the proposed construction envisioned by alternatives outlined in the document. Our concerns can be categorized in three areas: loss of freeway view, patron access and change to the right of way. Below are some of these concerns in detail.

Visual

1. **Impact:** The freeway frontage views of Miguel's building and the pole sign will be lost because the East Bound Off ramp will block the sight lines for the motorists.
   **Mitigation:** The pole sign that exists should be raised to 75 feet above the existing finish grade where it is mounted so that it may be viewed from the East Bound Off Ramp. Wayfinding measures should be implemented that would direct patrons to the obscured frontage road businesses.

2. **Impact:** The rerouting of the frontage road will disrupt the historical traffic patterns, we believe that it will be more difficult for existing and new patrons to find the businesses along the frontage road.
   **Mitigation:** Short term and long term Wayfinding solutions to direct traffic from the freeway exits to the Frontage Road businesses.

3. **Impact:** The installation of the proposed sound walls would further obscure the existing businesses on the Frontage Road.
   **Mitigation:** The sound walls in front of the Miguel's property are deemed 'feasible' but not 'reasonable' in the EIR, so they should not be built.

4. **Impact:** The proposed East Bound Off Ramp will pose a significant opportunity for graffiti if it is not obscured by landscape screening or enhanced by theme graphics.
   **Mitigation:** City identity graphics should be incorporated on the walls or bridge structure to discourage graffiti. Where space is available, screen planting should be used to reduce the visual impact of the off ramp structure in view of Frontage Road businesses.

Phasing and Access Impacts

1. **Impact:** The Public access to Miguel's is vital for business viability during construction.
   **Mitigation:** Phasing plans should prioritize public access to businesses along Frontage Road. Closures must be avoided as these businesses are freeway patron dependant.
2. **Impact:** As presented the Alternative 2 will encroach on the property at Frontage Road, we are concerned that construction will block access to the restaurant parking lot, this is unacceptable during business hours. 

   **Mitigation:** Measures must be taken to provide obstruction free access to the businesses adjacent to the frontage road during business hours.

**Physical Site Concerns**

1. **Impact:** Alternative 2 as proposed will encroach on Miguel’s property with the plan to realign the Frontage Road and the taking of additional right of way. As proposed the existing garden walls, patio structures paving and pole and monument signs on private property will be negatively effected. 

   **Mitigation:** The project will need to be required to repair and replace the impacted features in a manner that is suitable to the property owner and his representatives.

2. **Impact:** Alternative 2 will impact an existing catch basin at the corner of Frontage and Via Josefa. 

   **Mitigation:** Any alterations will need to consider temporary impacts to Miguel’s property and local stormwater impacts if it changes or does not function for a period.

Respectfully submitted,

BMLA, INC

Baxter E. Miller ASLA, President, License #2136
O-2-1
Refer to responses to comments O-2-2 through O-2-9, below.

O-2-2
The project will pay to adjust or replace the existing pole sign consistent with City code. The project would not physically affect the pole sign, but the new Maple Street elevated off-ramp would partially block views of the sign from the freeway. Any sign relocation or an increase in height of any sign to 75 ft would be subject to City of Corona approval in conformance with its established sign regulations and ordinance, and would also require coordination with the Department’s Outdoor Advertising Unit.

The State of California does not permit posting of informational signs for specific businesses on freeways, but a recommendation will be made to post “Roadside Business” signage in advance of the exit. Acceptance of that recommendation will be dependent on a determination during final design that the signage would not conflict with required regulatory, directional, and safety signs. Any such signage would need to be coordinated with the Department’s Outdoor Advertising Unit.

O-2-3
As noted, a recommendation will be made to post “Roadside Business” signage at the exit ramp intersection and along the local streets at Sixth Street and Paseo Grande. The frontage road in this area will be shifted to the south; the driveways to this business would be in the same locations. Drivers in the area will need to adjust to the new intersection of Paseo Grande and Frontage Road, but the improved intersection configurations should ultimately result in easier access to businesses and other properties. The Frontage Road will still be on the south side of SR-91 between Auto Center Drive and Maple Street.

Refer to response to comment O-2-8, below, for additional discussion of the project effects on this property.

O-2-4
Sound walls determined to be not reasonable would ordinarily not be included in the final design. Additionally, businesses that object to construction of sound walls will be given the opportunity to “opt out” as long as that option is not in conflict with other noise mitigation requirements. The wall at this location (NB M-3) was determined to be feasible but not reasonable based on the results of the noise survey; therefore, it is no longer included in the SR-91 CIP.
O-2-5
As discussed starting on page 3.7-1 in Section 3.7, Visual/Aesthetics, in the EIR/EIS, aesthetic and design features for sound walls, retaining walls, and bridge elements, including the eastbound off-ramp at the cited location will be incorporated in the design and construction of the SR-91 CIP Build Alternatives. Measures V-1 and V-2 starting on page 3.7-30 in Section 3.7.5, Avoidance, Minimization, and/or Mitigation Measures, specifically address the visual/aesthetic treatments and landscaping that will be incorporated in the project features.

Refer also to response to comment L-2-5 on page O-184, earlier in this report, for descriptions of the Department and City of Corona graffiti control and management projects.

O-2-6
Efforts will be made during the design/construction phase to minimize disruption of access to existing properties. The project will include a Construction Liaison to work with local property owners so that construction activities that affect those properties can be scheduled to minimize disruptions. A public outreach campaign will also be used to assist businesses and their patrons in minimizing inconveniences that arise during construction. The TMP required in Measure T-1 starting on page 3.6-32 in Section 3.6.4, Avoidance, Minimization, and/or Mitigation Measures, in the EIR/EIS, includes measures to inform travelers of conditions in the construction area, including directions to access adjacent land uses and “businesses are open” during construction signage.

Access to businesses will be provided at all times during business hours. If the business has multiple driveway locations, one will remain open while construction occurs at the other access points. If there is only one driveway, then one-half the driveway will be constructed at a time to allow access.

O-2-7
Refer to response to comment O-2-6, above.

O-2-8
The project will require acquisition of part of the parcel occupied by this business and will remove some parking and landscaping on that parcel. The project will provide right-of-way funds for reconstruction, replacement, and/or compensation with respect to property improvements on this parcel removed for the project. As a result, this business is expected to be able to continue operating at this location.
Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, for information regarding the RCTC's property acquisition process.

**O-2-9**

It is standard practice that when a proposed project affects storm drains, catch basins, utilities, and other facilities within public street rights-of-way, those facilities are replaced, relocated, or removed if requested by the responsible agency as part of the project. As a result, any needed modifications to existing storm drains and catch basins in the public street rights-of-way will be included in the project improvements for the frontage road. Any modified storm drains and catch basins in the existing or proposed public street rights-of-way will be designed and constructed to collect and transport runoff from the existing and any new road surfaces. Those improvements will not address drainage concerns on private properties. The project improvements to the frontage road will be designed to not create a drainage issue on private property, either during construction or after the project construction is complete. During construction, temporary erosion and storm water control features such as berms will be used to direct any rain water collected within the public street right-of-way to the nearest functioning storm water drain or catch basin. In the long term, the street profiles, cross-slopes, and driveway and sidewalk grades will be designed to allow drainage to flow into public storm drain systems.
To: Aaron Burton, Shawn Oriay, Chris Benz-Blumbog

RE: SR-91 Corridor Improvement Project on Lincoln Ave.

We are located on 401 S. Lincoln Ave. Corona, CA 92882. According to June 9th public hearing for SR-91 corridor improvement project, if they select plan 1B, 1D, 2B, 2D, 2F, and 2H the parking lot in front of the businesses will be gone. By taking away the parking lot, you are leaving our customers without parking. This will cause financial hardship on our business. There is no parking on the rear side of the building either, there for we may go out of business.

We have the following questions and concerns:

1) When will we know your decision on which plan you have selected?
2) What about our business loss?
3) Will parking be rearranged in front of the business for the convenience of our customers? Will you obtain permits from the city?
4) Will we receive compensation for the losses during construction?
5) Will the street be open? Will traffic be diverted? Will the freeway on and off ramp be open during construction? If closed, when will it be closed?
6) How long will the construction last on Lincoln Street? Will it be 3, 6, 9, 12 months...?
7) It's also noted that this building may be demolished and we may need to relocate. If we are relocated then our business good-will may be mined.

We understand that the city may see this improvement as necessary and our goal with this is not to stop it, but as a business, we have to look out for what is best for our business as well as our employees.

1) Lincoln Smoke Shop, Suite # F
2) Mr. Blue Donut, Suite # F
3) N-H Beauty Supply, Suite # E
4) Leenens Chiropractic, Inc, Suite D
5) Taco Lucas, Suite # G
6) Check Into Cash, Suite # J
7) Signarama, Suite M
8) Joy Massage
9) Gala Nails
10) City Best Insurance Services, Inc.
O-3-1
The property at 401 South Lincoln Avenue would be a full acquisition under Alternatives 1b, 1d, 2b, 2d, 2h, and 2f, the Preferred Alternative. The businesses that will be removed from this property by the project are entitled to relocation benefits. Refer to Appendix D, Summary of Relocation Benefits, in the EIR/EIS for discussion of relocation benefits available to displaced businesses. Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 and to Section O.5.2, Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses, on page O-7 in Section O.5, Common Responses, for detailed discussion regarding the RCTC’s property acquisition process and potential compensation for project impacts on individual businesses.

Refer to Attachments 3.4.A through 3.4.I in Section 3.4, Community Impacts, in this EIR/EIS for a list of commercial replacement properties available for lease and/or purchase in the general vicinity of the alignment of the SR-91 CIP Build Alternatives. The information in Attachments 3.4.A through 3.4.I is current as of July 2011, when the survey for available relocation properties was conducted. That survey identified 576 commercial properties available for lease and 295 commercial properties available for purchase in the project area.

O-3-2
Alternative 2f was identified by the PDT as the Preferred Alternative on September 20, 2011. Refer to Section O.5.4.1, Schedule, on page O-14 in Section O.5, Common Responses, which discusses the schedule for the completion of the environmental process and the identification of the Preferred Alternative for implementation.

O-3-3
Refer to response to comment O-3-1, above.

O-3-4
Refer to response to comment O-3-1, above.

O-3-5
Refer to response to comment O-3-1, above.

O-3-6
It is planned that Lincoln Street will remain open throughout construction, except for minor periods of less than 24 hours when traffic may be switched from one side of the street to another. Freeway ramps are also planned to be open during construction.
except for some closures affecting each ramp for not more than two weekends. The actual timing of any closures will be determined during construction and will involve coordination among the design/build contractor, the Department, and the Construction Liaison who will work with business owners to minimize inconveniences.

**O-3-7**
The duration of construction on Lincoln Street will be determined primarily by the contractor but it is planned that the freeway bridge will be widened first, along with construction of the approach road widening. The approach road work is expected to require 3 to 6 months, while the bridge widening will require a longer duration, typically 12 months. After the widened road is opened, some short duration work may occur to match the existing roads and intersections to the new construction. The total length of the project construction activities on Lincoln Avenue would be expected to be 18 to 24 months.

**O-3-8**
Refer to response to comment O-3-1, above.
July 7, 2011

Mr. Aaron Burton  
CALTRANS District 8  
484 West Fourth Street  
San Bernardino, CA 92401

RE: Draft Environmental Impact Report/Environmental Impact Statement  
(DEIR/DEIS) for State Route (SR) 91

Dear Mr. Burton:

Southern California Edison (SCE) appreciates the opportunity to provide comment on the DEIR/DEIS for the SR 91 Project. The project is described as a proposal to improve the 91 Freeway from the State Route 241 interchange in the cities of Anaheim and Yorba Linda, to Pierce Street in the City of Riverside, and along the I-15 between Hidden Valley Parkway and Cajalco Road between the cities of Norco and Corona. Major features include either adding two high occupancy vehicle lanes connectors from SR 91 to I-15 and one high occupancy vehicle lane in each direction on I-15, or converting the existing high occupancy vehicle lanes on SR 91 to two tolled express lanes in each direction and express lane connectors to I-15, and adding one tolled express lane in each direction on I-15. The project description also includes the relocation of SCE electrical facilities along the route, including the potential relocation of 2-66 kilovolt (kV) subtransmission lines.

SCE Company right-of-ways and fee-owned properties are purchased for the exclusive use of SCE to operate and maintain its present and future facilities. Any proposed use will be reviewed on a case-by-case basis by SCE. Approvals or denials will be in writing based upon review of the maps provided and compatibility with SCE right-of-way constraints and rights. In the event the project impacts SCE facilities or its land related rights, please forward six (6) sets of plans depicting SCE’s facilities and associated land rights to the following location:

Real Properties Department  
Southern California Edison Company  
2131 Walnut Grove Avenue  
G.O.3 – Second Floor  
Rancho Cucamonga, CA 91730
Also, please note, when development plans result in the need to build new or relocate existing SCE electrical facilities that operate at or above 50 kV, the SCE construction may have environmental consequences subject to CEQA review as required by the California Public Utilities Commission (CPUC). If those environmental consequences are identified and addressed by the lead agency in the CEQA process for the larger project, SCE may not be required to pursue a later, separate, mandatory CEQA review through the CPUC’s General Order 131-D (GO 131-D) process. If the SCE facilities are not adequately addressed in the CEQA review for the larger project, and the new facilities could result in significant environmental impacts, the required additional CEQA review at the CPUC could delay approval of the SCE power line portion of the project for two years or longer.

SCE understands Caltrans is aware of general GO 131-D issues, as noted in the DEIS/DEIR. In the event, however, further engineering and design for SCE’s 50+ kV relocations anticipate potential GO 131-D issues, SCE may need to meet with Caltrans to discuss and determine additional GO 131-D and permitting concerns as appropriate.

If you have any questions regarding this letter, please do not hesitate to contact me at (951) 249-8468.

Sincerely,

Louis Davis  
Local Public Affairs Region Manager  
Southern California Edison Company

cc Reed Reisner
O-4-1
No response is necessary because this text describes the project but does not ask a question or provide a comment related to the technical information or the analysis of environmental impacts in the EIR/EIS.

O-4-2
Negotiations with SCE for any impacted SCE utility facilities will be handled by the Project Construction Management Team, the RCTC, and the design/build contractor. Information on any potential effects in SCE rights-of-way and fee-owned properties will be provided to SCE during the project design/build phase.

O-4-3
Impacts to SCE overhead facilities of 50 kilovolts (kV) and greater are identified in Section 3.5.2, Environmental Consequences, on page 3.5-5 in the EIR/EIS. The estimated total length of overhead relocations of SCE facilities of 50 kV or greater is less than 2,000 ft. These overhead relocations will be “in-line” relocations. As a result, they will meet the criteria in Section III.B.1(c).f Public Utilities Commission (PUC) General Order 131-D, which states that compliance with Section IX.B of the General Order 131-D (which describes facilities requiring PUC approval) is not required for “the minor relocation of existing powerline facilities up to 2,000 feet in length, or the intersecting of additional support structures between existing support structures.” Therefore, the PUC General Order 131-D process will not be required for the relocations of SCE facilities for this project.

Refer to Section 3.5, Utilities/Emergency Services, starting on page 3.5-1 in the EIR/EIS for descriptions of the existing utilities in the project study area (including SCE lines), the potential effects of the SR-91 CIP on those utilities, and mitigation to substantially reduce those impacts.

As discussed in Section 2.3.7.1, Identification of the Preferred Alternative, on page 2-124 in the EIR/EIS, Alternative 2f was identified as the SR-91 project for implementation. As discussed in Section 3.5.2.1, Summary of Impacts, on page 3.5-5 and as shown in Table 2.36 on page 2-125 in the EIR/EIS, Alternative 2f will not require the relocation of the existing SCE substation. As a result, no further CEQA analysis for the relocation of the SCE substation will be required. RCTC will continue to coordinate with SCE on the identification, protection in place, relocation, and/or removal of SCE facilities in the right-of-way limits for Alternative 2f as project implementation proceeds.
July 8, 2011

Aaron Burton  
Senior Environmental Planner  
CALTRANS DISTRICT 8  
464 West Fourth Street, Sixth Floor  
San Bernardino, CA 92401

Re: Lincoln Commercenter – 1141 thru 1159 Pomona Road, Corona  
Maple Business Park – 1785/87 Pomona Rd. & 125/27 Bus. Ctr. Dr., Corona  
June 9, 2011 Public Meeting Regarding Draft EIR/EIS  
SR-91 Corridor Improvement Project (SR-91 CIP)

Dear Mr. Burton:

In follow up to the Public Meeting held on June 9, 2011 at the Corona Civic Center Gymnasium and on behalf of the owners of Lincoln Commercenter and the many business owners/tenants within the center, we wish to document the following concerns we have to the SR-91 Corridor Improvement Project and Draft Environmental Impact Report/Statement:

1. We are of the opinion the construction of the SR-91 CIP will cause a negative impact to both Lincoln Commercenter and Maple Business Park by obstructing traffic and reducing accessibility into the center, not to mention the congestion, dirt, debris and noise that would be created during the construction period. Problems will certainly exist for customers accessing the center that will cause business revenue to drop and a hardship for the 41 business owners/tenants at Lincoln Commercenter and the 29 business owners/tenants at Maple Business Park. Are there compensatory damages available to the property owners and/or tenants of both properties for this particular concern?

2. The removal of the existing freeway on/off ramp from in front of Lincoln Commercenter will cause a negative impact relative to less visibility and less accessibility into center. The existing freeway on/off ramp offers a great amount of visibility (exposure) for prospective tenants and customers coming into the center. One major contributing factor toward buying Lincoln Commercenter as an investor and toward leasing space and conducting a business as a potential tenant was the visibility/accessibility provided by the freeway on/off ramp. Unfortunately, the freeway visibility/accessibility that has been experienced for
the past thirty (30) years will never be recoverable with the new proposed construction. One option that may help with continuing visibility to the center would be the installation of a high pylon sign identifying Lincoln Commercenter from the freeway. Are there compensatory damages available to the property owner for this particular concern?

3. A Temporary Construction Easement is being considered along the front landscape berm of Lincoln Commercenter to help as a staging area for heavy equipment and supplies. We are concerned this would be very detrimental and an unsightly nuisance to the 41 business owners/tenants. Our tenants should not be burdened with a staging area of equipment and supplies when they will already be burdened with the heavy construction that will be taking place. Can this Temporary Construction Easement be avoided?

4. The realignment of Pomona Road in front of Lincoln Commercenter is also a part of the SR-91 CIP that results in the partial acquisition of a section of land 2-foot square along the front landscape berm of our property. Can you please advise us specifically where this section of land is located and what it will be used for? What are the “Right-of-Way” procedures in this matter?

We understand the necessity and benefits of the SR-91 CIP, unfortunately, in the case of Lincoln Commercenter and Maple Business Park, it causes a high emotion of fear not knowing what the future outcome will be when construction of this project is started and several years later completed.

Thank you for your consideration in this matter. Please accept this letter in-lieu of the Public Comment Card. Should you have any questions, please do not hesitate to call.

Yours truly,

S & D ASSOCIATES

Douglas A. Ferrieri
Property Manager

Encl.

cc: File, Eliza Echevarria/RCTC, Cheryl Donahue/Arellano Associates
Current view of 91 Freeway on/off ramps at Lincoln Communacenter
O-5-1
No response is necessary because this text describes the owners and tenants in the cited business complex but does not ask a question or provide a comment related to the technical information or the analysis of environmental impacts in the EIR/EIS.

O-5-2
Compensation may be available for lost business during construction consistent with the Uniform Act. However, the Uniform Act does not generally provide compensation for loss of business during construction as long as reasonable access is maintained. A determination of whether the businesses are eligible for such compensation will be made once the specific access plan is developed as part of the Final TMP described below. The EIR/EIS includes a substantial number of mitigation measures to address short-term project impacts on adjacent land uses during construction. Measure T-1 specifically requires the preparation and implementation of a Final TMP to address specific short-term traffic impacts during project construction. The TMP includes a number of elements specifically intended to maintain access to/from businesses in the vicinity of project construction areas. Those elements include a public information/public awareness campaign; traveler information strategies (including fixed and portable changeable message signs); signage to indicate “businesses are open during construction;” incident management to minimize travel delays in and around construction areas; coordination with TMPs for other projects under construction concurrently with the SR-91 CIP; and a wide range of other elements. Refer to Measure T-1 on page 3.6-32 in the EIR/EIS for a detailed description of the elements included in the TMP.

Appendix E, Environmental Commitments Record, in the EIR/EIS indicates which measures will be implemented during construction and who will implement those measures. In addition, the RCTC Project Manager and Project Engineer will monitor the design/build contractor activities to ensure that the measures are properly implemented. The intent of these measures is to minimize the effects of project construction related to dust, noise, and access to area businesses during construction.

O-5-3
The traffic volumes on Pomona Road will not be reduced as a result of the reconfiguration of the Lincoln Avenue westbound on- and off-ramps. In the existing condition, Pomona Road and the freeway ramps use the same traffic signal at Lincoln Avenue. The project proposes separating those two ramp connections to Pomona Road with the accessibility to Pomona Road maintained from all directions. With the
proposed ramps placed on fill material, the visibility of properties from the mainline freeway will be reduced for approximately 1,000 ft, but will not impact decision points on the freeway for anyone exiting at Lincoln Avenue.

In addition, the visibility of businesses and accessibility are generally not considered environmental concerns under CEQA or NEPA. Therefore, no response related to these topics is required as part of the environmental concerns considered under CEQA or NEPA. However, RCTC will work with the business owners and tenants during the design/build phase of the project to attempt to reach a resolution for these types of issues that would be acceptable to all parties.

**O-5-4**
The realignment of Pomona Road adjacent to this business will require extending/modify the existing driveways to this site to reach the new alignment of Pomona Road. The purpose of the TCE at this location is for construction of this driveway; that TCE would not be used as a staging area for supplies or equipment. Staging yards will be located on available public spaces or private vacant lands with rental agreements between the contractor and property owner.

**O-5-5**
Refer to response to comment O-5-4, above.

**O-5-6**
The Department and RCTC appreciate your comments, input, and questions on this important transportation project.
July 8, 2011

Mr. Aaron Burton
California Department of Transportation
District 8
464 West Street, Sixth Floor
San Bernardino, California 92401

RE: Comments on State Route 91 Corridor Improvement Project Draft Environmental Impact Report/Environmental Impact Statement

The following comments are submitted on behalf of the Puente-Chino Hills Task Force of the Sierra Club, Angeles Chapter, in response to the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/S) prepared for the State Route 91 Corridor Improvement Project (Project).

The mission of the Puente-Chino Hills Task Force is to work towards the preservation and biological integrity of Chino Hills State Park and the Puente-Chino Hills Wildlife Corridor, which extends from the Whittier Narrows to the Santa Ana Mountains, as well as providing open-space and recreational activities within the Puente-Chino Hills.

After review of the DEIR/S we believe that this document is inadequate to meet CEQA and NEPA requirements, as it fails to analyze the significant environmental impacts of the Project and detail mitigation measures to address those impacts. This document does not adequately explain the project description so as to be able to meaningfully be able to respond in an appropriate way. Therefore, we feel that the DEIR/S must be revised and recirculated in order to be able to fully understand the issues at stake. This environmental document does not allow for that review. The detailed reasons are discussed below.

- In a number of instances, the proposed mitigation for a Project impact is put off until a future date. This does not allow for the determination of whether the proposed mitigation is adequate for the impact. This goes against the primary purpose of CEQA which is to allow for a full airing of all the proposed environmental impacts and mitigations for a project. Without this full information, a full review is impossible and therefore the DEIR/S is inadequate and must be revised and recirculated.

- Once the true impacts on Chino Hills State Park (CHSP) from the project are identified, what will the mitigation be? The current DEIR/S does not even identify specific mitigations for the minimal amount of taking that is identified. Are we just to hope that the mitigation identified at some later date is adequate? Specific mitigations need to be identified in the revised and recirculated DEIR/S.
- One of the more fantastical items in the DEIR/S is that this project that will allow more cars to move between counties will not be growth inducing because it is “not expected to influence the amount, timing, or location of growth in the project area” (3.2-11). Is this unsubstantiated statement because the region has grown in the past without the Project? Evidently, growth just happens. This is one of the many conclusions in the DEIR/S, albeit the most outrageous one, that has no analysis behind it. If Caltrans insists on making this statement then the revised and recirculated DEIR/S must have actual analysis to support those conclusions.

- Even though the Noise Study Report has a picture of Coal Canyon on the cover, there is no actual noise analysis performed at the Coal Canyon wildlife undercrossing. The next closest measurement point, at the Green River Golf Course, is further away and 30 feet below the freeway grade. Therefore it is impossible to determine what the noise levels are for the animals trying to use the undercrossing, and therefore, impossible to determine the impact to those animals. How much louder will it be for the animals? Will this impact their use of the undercrossing? What can be done to mitigate the impact? In fact, there is no mention of the noise impact on wildlife movement in the Noise Study Report. This must be analyzed and mitigated in the revised and recirculated DEIR/S.

- There is also no mention of the cumulative noise impacts on the movement of animals through any of the wildlife undercrossings, but especially at Coal Canyon. The existence of a crossing has an impact already on the use of the wildlife undercrossing. What is the cumulative impact of the noise of the extra traffic due to the extra lanes going to be? This analysis still needs to be performed in the revised and recirculated EIR/S.

- The DEIR/S concedes that it was not able to directly review the entire Biological Survey Area (BSA) due to access issues and had to rely on the use of binoculars to complete the survey. In at least one case, the Braunton's milk-vetch was “believed” to have been washed away based on communications with Department biologists (3.21-6). It is impossible to determine what the biological setting for the Project is in this manner. An actual survey of the biological setting, not an unscientific pseudo-poll, is required.

- Many species were not observed during surveys even though the BSA is a potential habitat. Without a full survey, there is no confidence that the results actually represent conditions on the ground.

- This same type of analysis was used in the treatment of the impacts to the Santa Ana Sucker, a federally threatened species. This lack of analysis is attributed to a “belief” that the species was extirpated below the Prado Dam, even though an 8 inch sucker was seen in 2010 (3.21-4). This species needs a detailed analysis of how it will be impacted by this Project.

- This method of analysis infects the entire Plant and Animal Species sections. The use of the MSHCP does not remove Caltrans's responsibility to actually analyze the impacts of this Project on all plant and animal species. It is impossible to determine the true impact until the full analysis is performed.

- There is some mention of the other cumulative effects of the project on the Coal Canyon Wildlife undercrossing but very little actual analysis. The DEIR/S states, “Because many wildlife corridor improvements have already been implemented at Coal Canyon, the Build Alternatives are not expected to result in substantial temporary adverse effects on wildlife movement during
construction" (3.17-21). The only "improvements" have been the actual acquisition of both sides of the undercrossing and the removal of the asphalt. Indeed, Caltrans failed to clean out the two culverts under the freeway for many years and they have never re-vegetated the underpass. In addition, the underpass has absorbed the construction impacts of recent freeway construction projects. So what corridor improvements is the report referring to? Without knowing what corridor improvements are being referred to it is impossible to analyze if this statement is in fact true and therefore, if the conclusions about the impacts are appropriate.

- The DEIR/S underestimates the amount of Parkland that will be impacted by the Project. It only identifies 0.06 acres that will be used by the footings for the new Green River westbound exit. But it fails to take into account how the ramp on top of those footings will impact Chino Hills State Park (CHSP) trailhead and trails. But what will be the actual impact to CHSP users from having a huge freeway off-ramp above their heads? Will this make that portion of the Park essentially useless for park uses? Any mitigation measures must take into account the actual impact to CHSP and the users of CHSP from the project. The current absurdly small footprint does not reflect reality and once again does not provide the full information on the true impacts of the Project.

Due to the above concerns, we believe that the DEIR/S is unacceptable. The current DEIR/S does not provide adequate information about the Project setting, its impacts, or the appropriate mitigation of those impacts. Therefore, a revised DEIR/S must be prepared and recirculated that addresses the above issues and fully meets CEQA and NEPA requirements.

Respectfully submitted,

Eric Johnson, Chair
Puente-Chino Hills Task Force
Angeles Chapter of the Sierra Club
O-6-1
Refer to responses to comments O-6-3 through O-6-14, below.

O-6-2
Refer to responses to comments O-6-3 through O-6-14, below.

O-6-3
This comment states that the Draft EIR/EIS has “In a number of instances, proposed mitigation for a Project impact is put off until a future date.” Avoidance, minimization, and mitigation measures and other conditions for the SR-91 CIP are described in detail in Chapter 3 and Appendix E in the EIR/EIS. These measures and conditions identify specific avoidance, minimization, and/or mitigation activities and compensatory measures for the environmental topic, the responsible party to complete the activity, the phase in which the activity is to be done, and the timing on when the activity will take place and be completed.

Specifically, the measures and conditions required for and included in the project, as listed in Appendix E, are sufficiently detailed to indicate the actions that will be necessary to avoid, minimize, and/or mitigate for the adverse environmental impacts of the project. For example, refer to Section O.5.10, Common Response Related to the Biological Opinion, on page O-39, for discussion regarding the Biological Opinion for the project received from the USFWS on November 30, 2011, and the conditions placed on the project in the Biological Opinion project mitigation obligations. The mitigation for the use of land at CHSP was developed in consultation with State Parks before and after the Draft EIR/EIS. As indicated in the revised measures in Section 3.1.4.3, Measures for Parks and Recreational Facilities, on page 3.1-92 in the EIR/EIS, the original measures were refined to reflect the consultation with State Parks on mitigation for the use of land from CHSP.

Refer also to Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18 in Section O.5, Common Responses, for project effects at CHSP, mitigation for those effects, and the consultation with State Parks regarding the project effects and refining the mitigation at CHSP.

O-6-4
Refer to Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18 in Section O.5, Common Responses, for discussion of the project effects at CHSP, the refined mitigation for those effects, and the consultation with State Parks regarding the project effects and refining the mitigation at CHSP.
Refer also to Section O.5.4.3, Recirculation, in Section O.5.4, Common Response Related to the Environmental Process and Schedule, on page O-15, for discussion regarding why RCTC and the Department did not prepare or circulate a revised Draft EIR/EIS because such recirculation was not required under either CEQA or NEPA.

O-6-5
As discussed starting on page 3.2-1 in Section 3.2, Growth, in the EIR/EIS, extensive growth and development have historically occurred in the project study area and Orange and Riverside Counties in advance of, or even in the absence of, planned transportation improvements. These areas have experienced rapid population, housing, and employment growth over the last couple of decades. This growth is associated with planned regional and local growth in population and employment. Orange and Riverside Counties are projected to continue to experience growth in population and jobs even in the local jurisdictions that are relatively constrained by limited land available for development. The improved travel times expected to be achieved as a result of Build Alternatives could have a slight influence on demand for residential and nonresidential uses in the project area or nearby cities; however, it would not be expected to be sufficient to result in the need to modify adopted General Plans to allow for greater levels of development (residential and nonresidential).

Refer also to the discussion of project type, project location, growth pressure, and constraints to growth starting on page 3.2-10 in Section 3.2, Growth. The analysis in Section 3.2 answers the following specific question related to growth: Is project-related growth reasonably foreseeable? As discussed above, the SR-91 CIP is not expected to influence the amount, timing, or location of growth in the project area as a result of the type or location of the project. Therefore, the SR-91 CIP Build Alternatives will not result in reasonably foreseeable project-related growth in the study area.

O-6-6
The noise study conducted for the SR-91 CIP followed the Department’s standard protocols for assessing noise impacts, which are based on FHWA guidelines. Those protocols and guidelines are based on assessing noise effects on sensitive human receptors and not animal species because the Department and FHWA have not adopted any standards for assessing noise impacts to animal species. As a result, measurements of existing noise levels or estimated future with and without project noise levels at Coal Canyon were not developed in the noise study.
As noted, noise data were not available for the Coal Canyon undercrossing area. Noise data from other nearby similarly situated monitoring locations (refer to Receivers 2M, 3M, and 124M in Table 3.15.13 in Section 3.15, Noise, in the EIR/EIS) for the design year with and without project traffic data were reviewed and compared to existing noise levels to identify the potential for increased noise from traffic volumes in this area. Receiver 124M is the closest to the Coal Canyon wildlife crossing, at approximately 1,000 ft east of that crossing. Traffic volumes will be the same at Receiver 124M as at Coal Canyon because there are no intervening ramps where volumes traffic could change. As a result, changes in noise volumes at Coal Canyon are expected to be the same as at Receiver 124M.

The forecasts in Table 3.15.13 indicate that noise levels are anticipated to be approximately the same in the future with or without the project, and that those future noise levels will be approximately 1–2 decibels (dB) greater than existing conditions. The actual noise contour lines would shift out, corresponding to the widening of the freeway (approximately one lane in each direction at Coal Canyon). Such a shift would be less than 1 dB at any ground location. Discussion was added to the Coal Canyon text in Section 3.17.3, Environmental Consequences, on page 3.17-16 in the EIR/EIS to describe this analysis.

RCTC has made additional commitments relevant to CHSP that directly benefit the Coal Canyon wildlife crossing. A stand-alone project will be developed to construct barriers on the south and north sides of SR-91 to shield headlight glare and freeway noise at Coal Canyon. These barriers are estimated to be approximately 1,500 ft and 1,300 ft long on the south and north sides of SR-91, respectively. That project will follow environmental process requirements and engage subject area experts to establish the specific requirements and effectiveness of the proposed barriers to meet the project purpose. In consideration of and reliance on the needs of State Parks and other open space plans that depend on CHSP, and subject to environmental review, RCTC commits to build this barrier in tandem with the completion of the SR-91 Ultimate Project in this area, which is planned for completion in 2035. RCTC will work with the Department and other agencies to fund and implement this project. RCTC has committed to provide this noise and glare mitigation at the time the impact would occur. The future noise estimates in the vicinity of Coal Canyon provided in Section 3.15 do not include any noise reduction that might occur as a result of this barrier.
As described in Section 3.17, Natural Communities, in the EIR/EIS, the Build Alternatives would result in temporary, but not substantial, adverse impacts on wildlife movement during construction. Those temporary impacts would be substantially mitigated based on implementation of Measures NC-6 through NC-16 provided starting on page 3.17-30.

The Build Alternatives would not result in adverse impacts related to wildlife movement after the completion of construction.

**O-6-7**

As discussed in response to comment O-6-6, above, noise levels at the Coal Canyon undercrossing are not expected to increase as a result of the SR-91 CIP. Therefore, the SR-91 CIP is not expected to contribute to cumulative adverse noise impacts in the Coal Canyon undercrossing.

**O-6-8**

Refer to response to comment O-8-18 on page O-385 for discussion related to Braunton's milk-vetch. Refer to Section O.5.10, Common Response Related to the Biological Opinion, on page O-39, for discussion regarding the Biological Opinion for the project received from the USFWS on November 30, 2011, and the project mitigation obligations.

**O-6-9**

All areas in the BSA were surveyed on foot for threatened, endangered, and sensitive species except for those areas where the property owners declined to provide right-of-entry. Areas unable to be surveyed on foot were surveyed with the aid of binoculars and evaluated from accessible areas. All areas, whether surveyed on foot or not, were evaluated at the same level of detail. Specifically, where suitable habitat was present, species were assumed present and the analysis was based on that assumed presence. There is no requirement to survey for all species. This ensured that the project mitigation measures will mitigate project effects on special-status species. Measures such as Measure NC-3 in Section 3.17.4, Avoidance, Minimization, and/or Mitigation Measures, starting on page 3.17-27 in the EIR/EIS are included in the project and will substantially mitigate the project impacts to special-status species. Refer to Section O.5.10, Common Response Related to the Biological Opinion, on page O-39, for discussion regarding the Biological Opinion for the project received from the USFWS on November 30, 2011, and the project mitigation obligations in that Biological Opinion.
To ensure that the SR-91 CIP EIR/EIS properly identifies and mitigates impacts to special-status species, extensive coordination was conducted with the resource agencies (USFWS, CDFG, State Parks, Corps, and the RCA) as described in Chapter 5, Comments and Coordination.

O-6-10
A focused survey was not conducted for the Santa Ana sucker because the proposed project will not directly impact this species. Information about the believed extirpation of the Santa Ana sucker below Prado Dam was provided by Sally Brown of the USFWS. However, as indicated in this comment, one Santa Ana sucker was observed below Prado Dam in 2010; therefore, its presence has been assumed. Based on that assumption, in analyzing the project impacts, it has been determined that the proposed project may indirectly impact this species. The following measures are included in the Build Alternatives to avoid, minimize, and/or mitigate potential project impacts to the Santa Ana sucker:

- Measures WQ-1, WQ-2, WQ-3, and WQ-4 in Section 3.10.4, Avoidance, Minimization, and/or Mitigation Measures, starting on page 3.10-34 in the EIR/EIS
- Measures NC-1, NC-2, and NC-3 in Section 3.17.4, Avoidance, Minimization, and/or Mitigation Measures, starting on page 3.17-27
- Measures WET-1, WET-2, and WET-3 in Section 3.18.4, Avoidance, Minimization, and/or Mitigation Measures, starting on page 3.18-14

Section 7 Consultation was conducted and a Biological Opinion was received from the USFWS on November 30, 2011. The Biological Opinion is provided in Appendix N, Biological Opinion. Refer to Section O.5.10, Common Response Related to the Biological Opinion, on page O-39 in Section O.5, Common Responses, for additional information regarding the Biological Opinion.

O-6-11
Refer to response to comment O-6-9, above, for discussion of the level of analysis of areas not surveyed on foot. With regard to the coverage of the project under the Western Riverside County MSHCP, the Western Riverside County MSHCP consistency determination was approved by the Regional Conservation Authority in April 2011. A discussion of this process is provided in Section 3.17. For impacts to sensitive species in Orange County, appropriate surveys in the Orange County part of the BSA were conducted.
A Section 7 Consultation was conducted and a Biological Opinion was received from the USFWS. Refer to Section O.5.10, Common Response Related to the Biological Opinion, on page O-39 in Section O.5, Common Responses, for additional information regarding the Biological Opinion.

**O-6-12**

As described in Section 3.17.3.3, Temporary Impacts, on page 3.17-24 in the EIR/EIS, the Build Alternatives would result in temporary, but not substantial, adverse impacts on wildlife movement during construction. Those temporary impacts would be substantially mitigated based on implementation of Measures NC-6 through NC-16, which are provided starting on page 3.17-27 in the EIR/EIS.

The Build Alternatives are not expected to result in substantial adverse impacts related to wildlife movement after the completion of construction. Therefore, no mitigation is required.

In addition to the closure of the Coal Canyon interchange by the Department in 2003, the acquisition of both sides of the undercrossing, and the removal of asphalt, biologists conducting field surveys for the SR-91 CIP noted repairs and improvements to wildlife fencing at this crossing and the maintenance of the Coal Canyon Wash culverts. In addition, Department District 12 is proposing to conduct some planting in State right-of-way at Coal Canyon as a separate, unrelated project. The purpose of this planting is to attract more wildlife to this crossing. Additional details regarding the Department plantings are provided in response to comment S-3-17 on page O-114.

**O-6-13**

Refer to Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18 in Section O.5, Common Responses, for project effects at CHSP, mitigation for those effects, and consultation with State Parks regarding the project effects and mitigation at CHSP. The amount of land permanently impacted by the project at CHSP has been refined and reduced to 0.48 ac as described in Section O.5.5. As described in Section O.5.5, the ramp will extend over only 0.48 ac of land within the boundary of CHSP; it will not affect or restrict access to the trailhead or Prado Road in this area. The off-ramp will not extend over any part of CHSP where park visitors will be and, as a result, the off-ramp will not be above park users. Extensive mitigation, including provision of a 30-space parking area for trail users, is included in the project as described in Section O.5.5.


O-6-14

As reflected in the responses to comments O-6-1 through O-6-13, above, in other responses to comments in this Appendix, and throughout the EIR/EIS, RCTC and the Department have confirmed that the Draft EIR/EIS as prepared and circulated to the public provides sufficient information to adequately identify and assess the potential impacts of the proposed project and includes mitigation that is sufficiently detailed to adequately address those potential impacts. As a result, RCTC and the Department did not prepare or circulate a revised Draft EIR/EIS. In addition, consistent with the requirements of NEPA, the Final EIS will be available prior to the ROD.
July 8, 2011

Via Electronic Mail and Certified Mail with CD of Attached Exhibits

Ms. Eliza Echevarria
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Re: Comments on SR-91 Corridor Improvement Project Draft EIR/EIS

Ms. Echevarria:

These comments are submitted on behalf of the Center for Biological Diversity (the "Center") on the SR-91 Corridor Improvement Project (the "Project") Draft Environmental Impact Report/Statement ("DEIR/S"). The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center's Climate Law Institute works to reduce greenhouse gas emissions to protect biological diversity, our environment, and public health. The Center has 44,000 members, throughout California and the United States, including in the County of Riverside. Center members will be directly impacted by the Project.

The Project contemplates adding an additional general purpose lane on SR-91 in each direction. Alternative 2 would add an additional general purpose lane in each direction and also extend the existing tolled express lanes and convert the existing HOV lanes to tolled express lanes. While the Project would have many significant impacts, these comments focus on the global warming impacts resulting from the Project. The DEIR/S is fundamentally flawed because it discounts induced travel generated by the contemplated freeway widening, improperly asserts Project greenhouse gas impacts are speculative, and fails to consider a reasonable range of alternatives, including investments in transit in lieu of road widening. As a result of the DEIR/S' numerous and serious inadequacies, there can be no meaningful public review of the Project. The California Department of Transportation ("Caltrans") must revise and recirculate the DEIR/S in order to permit an adequate understanding of the environmental issues at stake.
I. THE DEIR/S FAILS TO COMPLY WITH CEQA AND NEPA.

A. The DEIR/S Underestimates the Increase in Vehicular Traffic and Vehicle Miles Traveled That Would Occur Upon Implementation of the Proposed Project.

The proposed project would result in a substantial increase in freeway capacity and, as a result, would facilitate increased travel. The reduction in traffic congestion will result in increases in vehicle speeds, which will lead in turn to additional “induced” travel. Induced travel occurs when the cost of travel is reduced (i.e., travel time reduction due to additional capacity), causing an increase in demand (i.e., more travelers using the improved facility). The reduction in travel time causes various responses by travelers, including diversion from other routes, changes in destinations, changes in mode, departure time shifts, and the creation of new trips all together.

The phenomenon of induced travel has been extensively documented. One recent study, prepared by Todd Litman of the Victoria Transport Institute, described the effects of vehicle-generated traffic. Set forth below is a summary of this research:

- Using data on California freeway expansion, traffic volumes, and various demographic and economic factors between 1980 and 1994, Cervero (2003) found the long-term elasticity of VMT [vehicle miles traveled] with respect to traffic speed to be 0.64, meaning that a 10% increase in speed increases VMT 6.4%. Thus, about 80% of added road capacity is filled with additional peak-period traffic.

- Time-series data indicates an elasticity of vehicle travel with respect to lane miles of 0.5 in the short run, and 0.8 in the long run (Noland, 2001). This means that half of increased roadway capacity is filled with added travel within about 5 years, and 80% of the increased capacity eventually fills. Urban roads, which tend to be most congested, had higher elasticity values than rural roads, as expected due to their greater congestion and latent demand.

- The medium-term elasticity of highway traffic with respect to California state highway capacity was measured to be 0.6-0.7 at the county level and 0.9 at the municipal level (Hansen and Huang, 1997). This means that 60-90% of increased road capacity is filled with new traffic within five years. Each 1% increase in highway lane-miles increased VMT about 0.65%.

- A major study found the following elasticity values for vehicle travel with respect to travel time: urban roads, -0.27 in the short-term and -0.57 over the long term, rural roads, -0.67 in the short term and -1.33 in the long term (Goodwin, 1996). These values are used by the U.S. Federal Highway Administration for highway planning.
project evaluation. Because of these effects it is unsurprising that urban highway expansion provides modest congestion reduction (STPP 2001).

Southern California, including Riverside County, has continually attempted to build its way out of highway congestion. Riverside County is estimated to have induced travel increases between 14-62%. Other studies from California have supported the observation that an increase in available lanes will induce additional miles traveled by vehicles (A 1% increase in lane-miles yields an immediate (within the same year) VMT increase of around 0.2%, with the full long-run effect materializing over 2 years at the county level and 4 years at the metropolitan one.

As summarized in broader terms by Robert Cervero at the Department of City and Regional Planning at the University of California, Berkeley in a 2001 study:

Another study of 70 U.S. metropolitan areas over a 15-year time period concluded that areas investing heavily in road capacity fared no better in easing traffic congestion than areas that did not (Surface Transportation Policy Project, 1998). Based on a meta-analysis of more than 100 road expansion projects in the United Kingdom, Goodwin (1996) found that proportional savings in travel time were matched by proportional increases in traffic on almost a one to one basis, a finding that prompted the U.K. Government to jettison its long-standing policy, “predict and provide,” of responding to traffic-growth forecasts by building more motorways.

The DEIR/S barely acknowledges, much less accounts for, the potential for the Project to induce travel. Indeed, it is unclear what, if any adjustments the EIR made to Project impacts to account for induced travel. As a result, the DEIR/S overstates the need for, and the benefit of, the proposed Project and understates the environmental impacts of the Project. Because many of the environmental impact analyses (e.g., traffic, air quality, climate change and noise) are based on the Project’s trip generation, an underestimation in trip volumes necessarily results in an underestimation of the Project’s environmental effects. In addition, the DEIR/S fails to grapple with the fact that widening freeways are a temporary solution, at best, to the complex problems of traffic congestion.

A revised DEIR/S should evaluate the travel-inducing consequences of the proposed Project through proper travel-demand modeling. Only by modeling various land use, destination, mode choice and route choice scenarios is it possible to understand actual travel behavior. By failing to properly account for the induced travel generated by the Project, the DEIR/S misleads decisionmakers and the public on the full extent of Project impacts.

B. The DEIR/S Fails to Provide Any Analysis of Impacts to Public Transit Service or Systems.

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3 Mark Hansen & Yuanlin Huang, Road Supply and Traffic in California Urban Areas (1997) at 218.
4 Robert Cervero, Road Expansion, Urban Growth, and Induced Travel: A Path Analysis (2001) at 1.

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One of the locally preferred strategies identified in the Major Investment Study (MIS) is to maximize the transit system by increasing Metrolink service and evaluating the addition of express buses and high-speed trains such as Maglev. (DEIR/S at 1-11.) Despite this objective, the DEIR/S provides no discussion of any transit facilities in connection with the Project. Nor does the document provide any analysis of the effect the increase in freeway capacity would have on local and regional transit use. These omissions are glaring, as it is widely known that increases in freeway capacity, as this Project entails, tend to result in reductions in transit ridership. Unfortunately, with this Project, such impacts to transit would be expected to become more severe over time. If transit ridership continues to decline (because travelers are taking advantage of freed-up capacity on freeway lanes), regional transportation agencies earmark even less funding to transit systems and transit service. With less funding, transit agencies cut, or eliminate altogether, routes and transit headways, which in turn further reduces transit ridership.

Caltrans’ failure to analyze the relationship between freeway capacity and transit service demonstrates the agency’s antiquated approach to transportation planning. In fact, there has been a sea-change in transportation planning over the last several years. Whereas traditional transportation planners, such as Caltrans, tend to evaluate transport primarily in terms of motor vehicle traffic, using indicators such as roadway level of service ratings, average traffic speeds, and travel time indices, these evaluations pertain only to roadway travel conditions. By contrast, as Litman explains, modern planners use broader, more flexible methods for analyzing mobility, and place greater emphasis on improving public transit:

From this perspective, transit investments are only valuable to the degree that they reduce motorist delay. However, modern planning tends to use more comprehensive analysis methods that evaluate transport system quality based on mobility (the movement of people and goods) and accessibility (the ease of reaching desired goods, services and activities). Modern planning also tends to give more consideration to other planning objectives besides congestion reduction, and to a wider range of accessibility improvement strategies, including various mobility management strategies and smart growth land use policies. More comprehensive planning tends to place a higher value on public transit investments, particularly when implemented in conjunction with supportive policies such as road and parking pricing, commute trip reduction programs, and transit oriented land use development.

*Id.* (emphasis in original).

Consistent with this more contemporary approach to transportation planning, the Office of Planning and Research recently amended the CEQA Guidelines. The CEQA Environmental Checklist Form now deemphasizes the importance of accommodating the

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automobile to meet transportation mobility needs. Instead, the Checklist suggests that a lead agency should evaluate a Project’s potential to “conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.” See Appendix G section XVI (f).

Nevertheless, rather than plan for regional transportation mobility in this more holistic manner, Caltrans continues its myopic focus on accommodating the automobile. In keeping with contemporary planning norms, the DEIR/S must be revised to evaluate the Project’s interaction with and impact on transit use.

C. The DEIR/S Fails to Adequately Evaluate and Mitigate Impacts Related to Climate Change.

1. Analyzing Global Warming Impacts under CEQA and NEPA.

The law is clear that lead agencies must thoroughly evaluate a project’s impacts on climate change under CEQA. In 2007, the state Legislature passed Senate Bill 97, which required the Governor’s Office of Planning and Research to prepare guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by [CEQA], including, but not limited to, effects associated with transportation or energy consumption." SB 97 (2007), codified as Pub. Res. Code § 21063.05 (emphasis added). Consistent with this mandate, the state Natural Resources Agency adopted revisions to the CEQA Guidelines that require lead agencies to determine the significance of proposed project's greenhouse gas ("GHG") emissions. CEQA Guidelines § 15064.4 (“A lead agency should make a good-faith effort, based on the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of greenhouse gas emissions resulting from a project”). The agency may do this through one of two methods. First, it may perform a quantified analysis, which involves using a significance threshold based on a numeric standard, i.e., emissions over a certain level, constitute a significant impact. Id. at § 15064.4(a)(1). Alternatively, an agency may use a qualitative analysis which determines significance based on (1) a project’s compliance with performance standards for GHG reductions or (2) its consistency with GHG reduction plans or regulations put into place by other agencies (e.g., a Climate Action Plan). Id. at § 15064.4(a)(2).

Agencies must also analyze the cumulative impacts of a project’s GHG emissions in conjunction with other projects causing related impacts. CEQA Guidelines § 15130. Indeed, climate change is the classic example of a cumulative effects problem; emissions from numerous sources combine to create the most pressing environmental and societal problem of our time. Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin., 538 F.3d 1172, 1217 (9th Cir. 2008) (“the impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.”); Kings County Farm Bureau v. City of Hanford, 221 Cal.App.3d 602, 720 (1990) (“Perhaps the best example [of a cumulative impact] is air pollution, where thousands of relatively small sources of pollution cause serious a serious environmental health problem.”). If an agency’s analysis indicates that a proposed project will have a significant project-specific or cumulative impact on climate change,
the agency must identify and adopt feasible mitigation measures to address this impact. CEQA Guidelines § 15126.4(c).

The California Air Pollution Control Officers Association (“CAPCOA”)⁶ has issued a “CEQA & Climate Change” white paper to assist lead agencies in analyzing greenhouse gas impacts under CEQA.⁷ Although the paper was issued before the new CEQA Guidelines regarding GHGs became effective, its analysis and recommendations, which were reviewed by air quality specialists from numerous air districts and the California Air Resources Board, are still useful. Noting that “the absence of an adopted threshold does not relieve the agency from the obligation to determine significance” of a project’s impacts on climate change, CAPCOA explored various approaches to determining significance and then evaluated the effectiveness of each approach. In doing so, CAPCOA determined that only thresholds of zero emissions or of 900 tons of CO₂ equivalent (“CO₂ eq.”)⁸ emissions had “high” effectiveness in reducing GHG emissions and “high” consistency with the emission reduction targets set forth in AB 32 and Executive Order S-3-05. Id.

NEPA also requires Caltrans to analyze the Project’s GHG emissions. Ctr. for Biological Diversity, 538 F.3d at 1217 (NEPA requires agencies to assess impacts of project on GHG emissions); Earth Island Institute, 351 F.3d at 1300 (NEPA requires that federal agencies “consider every significant aspect of the environmental impact of a proposed action . . .”). (emphasis added) (citations omitted). The President’s Council on Environmental Quality recently issued draft guidance on analyzing this issue under NEPA.” This document recognizes that “the NEPA process should incorporate consideration of both the impact of an agency action on the environment through the mechanism of GHG emissions and the impact of changing climate on that agency action.”⁹ Specifically, the proposed regulations would require that agencies: (1) quantify the direct GHG emissions over the project’s life, (2) discuss measures to reduce GHG emissions, and (3) qualitatively discuss the link between GHG emissions and climate change. Agencies are not excused from analyzing impacts from GHG emissions just because these regulations are not yet in effect; instead, as the draft document states, the new regulations are “not intended as a ‘new’ component of NEPA analysis, but rather as a potentially important factor to be considered within the existing NEPA framework.”¹⁰

2. The DEIR/S¹¹ Perfunctory Climate Change Analysis Fails to Inform the Public and Decision-makers About the Project’s Greenhouse Gas Emissions.

⁶ CAPCOA is an association of air pollution control officers representing all local air quality agencies and air districts in California.
⁷ CAPCOA, CEQA and Climate Change (2008).
⁸ Carbon dioxide equivalents (CO₂ eq.) provide a universal standard of measurement against which the impacts of releasing different greenhouse gases can be evaluated. As the base unit, carbon dioxide’s numeric value is 1.0 while other more potent greenhouse gases have a higher numeric value.
¹⁰ Id. at 11.
¹¹ Id. at 11 (emphasis added).
The DEIR/S is seriously flawed because it trivializes the Project's contribution to climate change. The DEIR/S labels impacts due to climate change as "speculative" and then fails to conduct an adequate analysis of these potential impacts. However, the Project's GHG emissions from construction equipment, increased VMT, and energy use are far from speculative. As detailed below, the DEIR/S must be revised and recirculated to properly assess the Project's impacts on global climate change. The revised DEIR/S must also identify enforceable mitigation for the Project's significant climate change impacts.

The California Climate Action Team's 2009 Report to Governor Schwarzenegger details the science behind, and the environmental impacts of, global warming. The Climate Action Team report makes clear what the DEIR/S has grudgingly accepted: the release of greenhouse gases into the atmosphere leads to global warming, which in turn leads to a myriad of environmental impacts. As stated in the Climate Action Team's report, "[c]limate change poses serious risks to California's natural resources. California-specific impacts are expected to include changes in temperature, precipitation patterns, and water availability, as well as rising sea levels and altered coastal conditions." Moreover, climate change is already beginning to have significant impacts on natural resources in coastal areas.

As the Supreme Court noted, "[t]he harms associated with climate change are serious and well recognized." *Massachusetts v. EPA*, 127 S. Ct. 1438, 1455 (2007). Reducing greenhouse gas emissions in order to limit these harms is one of the most urgent challenges of our time, one recognized by the targets embodied in Governor Schwarzenegger's Executive Order S-3-05 and AB 32, California's Global Warming Solution Act of 2006, codified at Health and Safety Code § 38500, *et seq.* By these authorities, California has committed to reducing emissions to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

Despite all of this -- the scientific consensus, the potentially catastrophic impacts on the State, and California's well-founded commitment to reducing emissions -- the DEIR/S's climate change analysis is essentially perfunctory. It fails to determine a threshold of significance, it calculates only a portion of the GHG emissions for which the Project will be responsible, and then ignores its obligation to determine whether the impact is significant. The document even neglects to describe the expected impacts of climate change on the region: more drought, more severe weather, sea level rise, etc. It thus fails to satisfy the most basic purpose of an EIR/EIS: to disclose to decision makers and the public a project's significant environmental impacts. *See* Pub. Res. Code § 21061 ("The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect that a proposed project is likely to have on the environment"); 40 C.F.R. § 1500.1(b) ("NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken.").

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Having failed to make a significance determination, as CEQA requires, the DEIR/S then fails to identify mitigation measures to reduce or avoid the Project's project-specific and cumulative contributions to global warming. The DEIR/S further suggests that because there are no adopted thresholds or similar requirements on the federal level, it has no obligation to conduct the analysis of these impacts. This approach, which flies in the face of science and law, stands in stark contrast to the conscientious treatment of global warming impacts undertaken by other lead agencies throughout the state. Caltrans must make substantial modifications to the DEIR/S's climate change analysis to achieve compliance with CEQA and NEPA.

3. The DEIR/S's Refusal to Make a Significance Determination Regarding the Project's Contribution to Climate Change Is Unlawful.

The DEIR/S contains no thresholds of significance for the Project's potential impacts on climate change. Instead, the DEIR/S suggests that in the absence of specific regulations, development of a significance threshold would be "speculative." (DEIR/S at 4-51.) This approach is unlawful. First, the CEQA Guidelines expressly require agencies to "make a good faith effort . . . to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." CEQA Guidelines § 15064.4. Indeed, the Guidelines were recently updated with a new section entitled "Determining the Significance of Impacts from Greenhouse Gas Emissions." Id. In any event, there is nothing in CEQA that relieves a lead agency from its obligation to determine significant effects simply because the impact is related to a rapidly-evolving area of science and policy. See Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th 1099, 1106-12 (CEQA does not allow impact analysis to be labeled too "speculative" based on lack of threshold). Thus, there is no justification for Caltrans' refusal to make a significance finding for GHG emissions. See CEQA Guidelines § 15065 (entitled "Mandatory Findings of Significance") (emphasis added).

CEQA Guidelines section 15064.4(a)(1) & (2) provides two methods for making a significance determination related to GHG emissions. An agency may either:

(1) use "a model or methodology to quantify greenhouse gas emissions resulting from a project . . . [that] it considers most appropriate provided it supports its decision with substantial evidence," or

(2) "[r]ely on a qualitative analysis or performance based standard [.]"

Caltrans pursued neither approach here, opting to make no significance determination at all. Again, there is no justification for this intransigence. The Guidelines give direction for what an agency must do, and Caltrans must comply.

Determining whether a project may have a significant effect plays a critical role in the CEQA and NEPA processes, and this determination must be "based to the extent possible on scientific and factual data." CEQA Guideline § 15064(a) and (b). Accordingly, a significance threshold for greenhouse gases must reflect the grave threat...
posed by the cumulative impact of adding new sources of emissions into an environment when deep reductions from existing emission levels are necessary to avert the worst consequences of global warming. See Center for Biological Diversity, 508 F.3d at 550 ("we cannot afford to ignore even modest contributions to global warming.").

Although the CEQA Guidelines do not provide a particular methodology for making the significance determination, other agencies and groups have established methodologies, and their analyses may be useful for Caltrans. The "CEQA & Climate Change" paper by CAPCOA proposes a variety of potential thresholds of significance, and describes appropriate applications for each. According to CAPCOA's analysis, the only two thresholds that are highly effective at reducing emissions and consistent with AB 32 and Executive Order S-3-05 are a threshold of zero or a quantitative threshold of 900-ton CO2 Equivalent. The zero threshold is preferable in light of ongoing scientific advances showing that global warming is more significant than originally anticipated. For example, even the ambitious emissions reduction targets set by Executive Order S-3-05 in 2005, which were consistent with contemporaneous science indicating that reductions of 80% below 1990 levels by developed countries would be sufficient to stabilize the climate, are now believed to be insufficient.

Based on these and other recent climate change observations, leading scientists now agree that "humanity must aim for an even lower level of GHGs." Thus, the scientific and factual data now support a threshold of significance of zero in order to ensure that new projects do not have a cumulatively significant impact on global warming. Consistent with this data, many EIRs have adopted a zero threshold of significance because it is the most "scientifically supportable" threshold. See, e.g., DEIR, Venoco Ellwood Full Field Development Project at 4.3-33; SCH # 2006061146; Communities for a Better Env't v. City of Richmond, 184 Cal.App.4th 70, 92 (2010) (EIR using net-zero significance threshold).

Although the DEIR/S fails to make a significance determination, it does offer minimal, unsupported data that purports to demonstrate that the Project would actually reduce GHG emissions. (DEIR/S at 4-46.) Although Caltrans may have intended that this data show the Project would not result in significant impacts to climate change, the paltry analysis is insufficient for a true significance determination and, in any event, is faulty itself. For instance, the analysis compares emissions from the Project alternatives in the year 2030 to the "2030 no build" alternative and then concludes that the Project would decrease CO2 emissions relative to business as usual. However, for a significance determination, CEQA requires an agency to analyze "[t]he extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting ...." CEQA Guidelines § 15064.A(b)(1) (emphasis added). The Act does not allow comparison of future Project impacts to hypothetical future impacts from business as usual. Woodward Park Homeowners Assn. Inc. v. City of Fresno, 58 Cal.Rptr.3d 102, 119 (2007) (EIR may not compare proposed project to build-out of an existing plan). As Caltrans' chart shows, even using the agency's inadequate data, the

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Project alternatives would result in an increase in CO₂ emissions of approximately 3,000 tons per day over current emissions.

In short, Caltrans must revise the DEIR/S to make the required significance determination. Moreover, such a significance determination must "be based on substantial evidence in the record." Pub. Res. Code § 15064(f).


As the attached Sightline Institute article explains, under almost any set of plausible assumptions, widening a highway in a congested urban area will substantially increase long-term greenhouse gas emissions.¹⁴ Road-building proponents often suggest that adding lanes to a highway will reduce greenhouse gas emissions. By easing congestion, they argue, new lanes will reduce the amount of fuel that vehicles waste in stop-and-go traffic, leading to reduced emissions of climate-warming gases from cars and trucks. Over the short term—perhaps 5 to 10 years after new lanes are opened to traffic—this argument may hold some slim merit. Nevertheless, when one considers the full increase in emissions from highway construction and additional VMT, experts at Sightline conclude that adding one mile of new highway lane will increase CO₂ emissions by more than 100,000 tons over 50 years.¹⁵

A recent report shows how the nation’s increase in VMT is projected to overwhelm planned improvements in vehicle efficiency, thus making reductions in GHG emissions impossible without concomitant reductions in VMT.¹⁶ Recognizing the nation’s unsustainable growth in driving, the American Association of State Highway and Transportation Officials, representing state departments of transportation, is urging that the growth of VMT be cut in half.¹⁷ Under these circumstances, Caltrans’ contention that the Project will result in reduced GHG emissions is simply untenable.

5. The DEIR/S Omits Analysis Of Significant Sources of GHG Emissions.

The DEIR/S fails to recognize that the Project will contribute to GHG emissions through sources other than vehicles driving on the completed Project. To reflect the Project’s actual effect on climate change, the DEIR/S needs to inventory the carbon emissions generated through: (1) Project-related increases in VMT; (2) energy consumption; (3) electric generation for lighting of the Project; (4) construction activities (e.g., ground clearing and equipment operation);¹⁸ and (5) the manufacturing and lifecycle of the Project’s building materials. Without an inventory of these additional

¹⁵ Id.
¹⁶ Growing Cooler: Evidence on Urban Development and Climate Change" at 3.
¹⁷ Id.
¹⁸ For example, these activities will cause fugitive emissions such as methane.
emissions, the DEIR/S' analysis is incomplete, and the formulation of appropriate mitigation is impossible.

The DEIR/S fails to quantify emissions from Project construction. In addition, the DEIR/S omits analysis of emissions from sources other than fuel consumption of roadway users. Moreover, gases and pollutants other than carbon dioxide also contribute to the greenhouse effect. For instance, methane (CH4), Nitrous Oxide (N2O), and hydrofluorocarbons (HFCs) also contribute to climate change. See CEQA Guidelines § 15364.5 (defining “greenhouse gas” to include methane, Nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride). The DEIR/S must fully inventory the Project’s emissions of each of these gases and pollutants.19 The DEIR/S’ failure to account for the Project's full inventory of GHG emissions violates both NEPA and CEQA.

Equally troubling, the DEIR/S’ calculation of greenhouse gas emissions fails to account for the Project’s increase in black carbon emissions. Black carbon, which is a component of soot produced by incomplete combustion, is a significant contributor to global warming. Although combustion produces a mixture of black carbon and organic carbon, the proportion of black carbon produced by burning fossil fuels, such as diesel, is much greater than that produced by burning biomass.20

Black carbon heats the atmosphere through a variety of mechanisms. First, it is highly efficient at absorbing solar radiation and in turn heating the surrounding atmosphere. Second, atmospheric black carbon absorbs reflected radiation from the surface. Third, when black carbon lands on snow and ice, it reduces the reflectivity of the white surface, which causes increased atmospheric warming and accelerates the rate of snow and ice melt. Fourth, black carbon evaporates low clouds. Notably, black carbon is often complexed with other aerosols such as sulfates, which greatly increases its heating potential.

Due to black carbon's short atmospheric life span21 and high global warming potential, decreasing black carbon emissions offers an opportunity to mitigate the effects of global warming trends in the short term.22 At the same time, it is estimated that black carbon is the second greatest contributor to global warming behind carbon dioxide. In developed countries, diesel burning is the main source of black carbon.23

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19 Because carbon dioxide is the prevalent greenhouse gas, we frequently refer here to “carbon emissions.” This term should be taken to mean any greenhouse gas emissions from any source.

20 See Ramanathan and Carmichael, Global and Regional Climate Changes Due to Black Carbon, Scripps Institution of Oceanography, March 2008.

21 Black carbon is considered a “short lived pollutant” because it remains in the atmosphere for only about a week, in contrast to carbon dioxide, which remains in the atmosphere for over 100 years. Id.

22 Id.

23 Diesel emissions include a number of compounds such as sulfur oxides, nitrogen oxides, hydrocarbons, carbon monoxide, and particulate matter. Diesel particulate matter is approximately 75% elemental carbon. See EPA 2002 Diesel Health Assessment at http://www.scribd.com/doc/1011457/Health-Assessment-Document-for-Diesel-Engine-Exhaust-EPA-May-2002.

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Development of the Project will require the use of diesel-powered heavy duty trucks and construction equipment. Because diesel is the main source of black carbon and these emissions are a major contributor to global warming, the DEIR/S must analyze this issue in its assessment of Project impacts.

6. The DEIR/S Avoids Its Duty to Adopt All Feasible Mitigation and Alternatives to Reduce Project Emissions

Had the DEIR/S included all sources of GHG emissions in its analysis, it would have found that Project-generated emissions and cumulative emissions exceed all of the potential thresholds of significance discussed above. The Project’s contribution to global warming must therefore be considered significant. With this significance determination comes CEQA’s and NEPA’s mandate to identify and adopt feasible mitigation measures that would reduce or avoid the impact. CEQA Guidelines § 15126.3(s)(1); see also Woodward Park Homeowners Ass’n, Inc. v. City of Fresno (2007) 150 Cal. App. 4th 683, 724 (“The EIR also must describe feasible measures that could minimize significant impacts.”); South Fork Band Council v. U.S. Dept. of Interior, 588 F. 3d 718, 727 (9th Cir. 2009).

Under CEQA, “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects.” Berkeley Keep Jets Over the Bay Comm. v. Bd. of Port Comm’rs, 91 Cal. App. 4th 1344, 1354 (2001) (quoting Pub. Res. Code § 21002). Accordingly, CEQA requires lead agencies to identify and analyze all feasible mitigation, even if this mitigation will not reduce the impact to a level of insignificance. CEQA Guidelines § 15126.4(a)(1)(A) (discussion of mitigation “shall identify mitigation measures for each significant environmental effect identified in the EIR”); see also Woodward Park Homeowners Ass’n, Inc., 150 Cal. App. 4th at 724 (“The EIR also must describe feasible measures that could minimize significant impacts.”). NEPA, in turn, “require[s] that an EIS discuss mitigation measures, with sufficient detail to ensure that environmental consequences have been fairly evaluated.” An essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective. South Fork Band Council, 588 F. 3d at 727 (quoting Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352 (1989)).

Here, rather than identify feasible mitigation measures for climate change impacts, the DEIR/S points to a series of general strategies identified in Caltrans 2006 Climate Action Program. (DEIR/S at 4-52.) The DEIR/S omits an array of obvious mitigation measures that could reduce the Project’s greenhouse gas emissions. Numerous mitigation measures are detailed in Appendix B and C to the 2008 CAPCOA report, and Caltrans must consider all feasible, applicable measures therein. Most importantly, the DEIR/S must consider (1) measures to reduce VMT, such as contributing all of funds generated from the Project’s lane-pricing toward public transportation, and (2) measures to reduce the Project’s energy consumption. In addition, Caltrans must consider the following small sampling of feasible measures:

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• Requiring that off-road diesel-powered vehicles used for construction be new low-emission vehicles, or use retrofit emission control devices, such as diesel oxidation catalysts and diesel particulate filters verified by the California Air Resources Board.

• Requiring the Project to generate all or a portion of its own power through alternative means, such as photovoltaic arrays.

• Requiring use of a catalyzed diesel particulate filter on both new and existing diesel engines (because black carbon is a component of diesel particulate matter, strategies that reduce particulate matter will also reduce black carbon).

• Minimizing and recycling construction-related waste.

• Using salvaged and recycled-content materials for hard surfaces and non-plant landscaping materials.

• Maximizing water conservation measures in landscaping, using drought-tolerant plants in lieu of turf, planting shade trees.

• Landscaping to preserve natural vegetation and maintain watershed integrity.

• Utilizing the combination of construction materials with the lowest carbon footprint.

• Requiring the use of “cool pavement” that reflects more solar energy. Such measures, which can markedly reduce heat islands, have been used effectively in California and elsewhere. In fact, new building standards in California, called “CalGreen”, will require use of such pavement in certain instances. See http://www.arb.ca.gov/research/seminars/gilbert/gilbert.pdf for a complete description of cool pavement issues, technology and use.

All of these measures would result in direct reductions in emissions that would otherwise be attributable to the Project. In addition, through a combination of other on-site and off-site measures, the agency could require all aspects of the Project to be “carbon neutral.” Off-site measures to be adopted include energy efficient retrofits of existing structures and SCAQMD’s adopted protocols for replacement of inefficient boilers.24

D. The DEIR/S’ Analysis of Alternatives is Inadequate.

Under CEQA, a proper analysis of alternatives is essential to comply with the Act’s mandate that significant environmental damage be avoided or substantially lessened where feasible. Pub. Res. Code § 21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d); Citizens for Quality Growth v. City of Mount Shasta, 198

Cal.App.3d 433, 443-45 (1988). As stated in Laurel Heights Improvement Association v. Regents of University of California, “[w]ithout meaningful analysis of alternatives in the DEIR, neither the courts nor the public can fulfill their proper roles in the CEQA process . . . . [C]ourts will not countenance a result that would require blind trust by the public, especially in light of CEQA’s fundamental goal that the public be fully informed as to the consequences of action by their public officials.” 47 Cal.3d 376, 404 (1998). The discussion of alternatives must focus on those alternatives to the project or its location that 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, or would incur additional cost. CEQA Guidelines § 15126.6(b).

Similarly, the evaluation of alternatives is the “heart” of an EIS. 40 C.F.R. § 1502.14 (2004). It “guarantee[s] that agency decision makers have before them and take into proper account all possible approaches to a particular project . . . which would alter the environmental impact and the cost-benefit balance . . . .” Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1228 (9th Cir. 1988) (emphasis added, internal citations, quotations and alterations omitted). NEPA’s regulations and Ninth Circuit case law also require an agency to “[r]igorously explore and objectively evaluate all reasonable alternatives.” § 1502.14(a) (emphasis added); Citizens for a Better Henderson v. Hodel, 768 F.2d 1051, 1057 (9th Cir. 1985) (EIS must consider “every” reasonable alternative).

The courts, in the Ninth Circuit as elsewhere, have consistently held that a federal agency’s failure to consider a reasonable alternative is fatal to a NEPA analysis. See, e.g., Idaho Conservation League v. Mimiwa, 956 F.2d 1308, 1319-20 (9th Cir. 1992) (“The existence of a viable, but unexamined alternative renders an environmental impact statement inadequate.”); Forty Most Asked Questions Concerning CEQ’s NEPA Regulations, 48 Fed. Reg. 18,026 (March 16, 1981) (“In determining the scope of alternatives to be considered, the emphasis is on what is ‘reasonable’ rather than on whether the proponent or applicant likes or is itself capable of carrying out the particular alternative. Reasonable alternatives include those that are practical or feasible from a technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.”). “In order to be adequate, an environmental impact statement must consider not every possible alternative, but every reasonable alternative.” Friends of Endangered Species v. Jantzen, 760 F.2d 976, 989 (9th Cir.1985); California v. Block, 690 F.2d 753, 766-67 (9th Cir. 1982); Save Lake Washington, 641 F.2d at 1334 (9th Cir. 1981).

The DEIR’S for the Project fails to heed these basic mandates. First, while the document purports to identify four alternatives, these alternatives are so similar that they become identical for purposes of environmental review. Second, the DEIR’S perfunctory comparative analysis of the Project alternatives fails to adequately distinguish the environmental impacts of each option, to the extent there are differences. Indeed, each of the Project’s “build” alternatives would have virtually identical environmental impacts. Finally, because none of the proposed alternatives would come close to meeting the Project’s objectives, the entire alternatives analysis is ultimately meaningless.
1. The DEIR/S Fails to Consider a Reasonable Range of Alternatives.

Other than the “no build” alternative, the DEIR/S presents two “build” alternatives that are extraordinarily similar. This limited analysis is plainly insufficient. Offering only slight differences in freeway construction does not constitute an adequate alternatives analysis. See Sierra Club v. United States DOT, 962 F. Supp. 1037 (N.D. Ill. 1997). Indeed, as the courts have explained, presenting clear distinctions — and vigorously exploring all feasible alternatives — is particularly important when an agency is addressing complex or difficult issues, such as the appropriate manner to address transportation mobility in Riverside County. See Greenpeace v. National Marine Fisheries Service, 55 F. Supp. 2d 1248 (W.D. Wash. 1999) (alternatives analysis did not sharply define the issue and present a clear basis for choice); Mann v. Community Redevelopment Agency, 233 Cal. App. 3d 1143, 1151 (1991) (the alternatives discussed in an EIR must present “enough of a variation to allow informed decision making”).

Not surprisingly, because of the lack of clear distinctions among the alternatives, the “build” options pose similar environmental risks. Since the primary purpose of an alternatives analysis under CEQA and NEPA is to explore different options to proposed actions that will adversely affect the environment, analyzing only slight variations of the same proposal — all of which have essentially identical environmental affects — does not constitute an adequate alternatives analysis. Laurel Heights Improv. Ass’n, 47 Cal.3d at 403 (purpose of an EIR’s alternatives analysis is to identify ways to reduce or avoid significant environmental effects); CEQA Guidelines § 15126.6(c) (agency should analyze alternatives that "could avoid or substantially lessen one or more of the significant effects."); Pub. Res. Code § 21002 (same).

2. The DEIR/S Fails to Consider a Public Transportation Alternative.

Caltrans’ alternatives analysis is colored by the agency’s interest in maximizing traffic speeds and minimizing congestion along the existing S-91 freeway, rather than by a concern for improving regional transportation generally. Thus, the DEIR/S narrowly focuses on adding capacity to the existing freeway, and ignores a wide range of multi-modal transportation alternatives that could fulfill the Project goals, including the elevated structure/maglev alternatives that were considered in the Major Investment Study that preceded the current environmental review. Because the DEIR/S never evaluates a non-freeway alternative, it does not accomplish the rigorous exploration of all viable alternatives required by NEPA and CEQA.

A number of recent publications have proposed strategies for improving mobility through a variety of transportation modes. As the Victoria Transport Policy Institute explains, true “multi-modal” planning must consider various modes of transportation (public transit, automobile, cycling and walking) that reduce automobile dependency.26

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This perspective challenges conventional transportation planning, which tends to focus on a specific set of options (primarily automobile travel) that strive to maximize traffic speeds, and minimize congestion.\footnote{Id., at 2.} In one study, the Victoria Transport Policy Institute found that with a mature roadway system (such as the transportation system in southern California), it may be better to increase transport diversity and encourage efficiency rather than continuing to expand highway capacity.\footnote{Todd Litman, Victoria Transport Policy Institute, “Smart Congestion Reductions,” Feb. 2, 2010, at 3.}

Caltrans' failure to consider public transportation and other reduced road-building alternatives renders the DEIR/S inadequate. \textit{See Utahans for Better Transportation v. U.S. Dept. of Transportation}, 305 F.3d 1152, 1170 (10th Cir 2002) (rejecting U.S. DOT’s argument that it did not need to consider option of developing transit prior to proceeding with highway project because “[r]egional transit choices that may be made in the future are not reasonable alternatives to offset [sic] the need for new roadway construction now.”); CEQA Guidelines § 15126.6(b) (the alternatives discussion must focus on alternatives that will lessen any significant effects of a project). Because such an alternative is reasonable and viable, and because it would lessen the Project’s impacts, the agency must examine it in the DEIR/S.

Finally, the S-91 Project would be tremendously expensive. Considering that public transportation is likely the more sustainable approach to meeting the region's long-term mobility needs, Caltrans must evaluate whether shifting this investment to public transportation would ultimately be more cost-effective than increasing highway capacity.

3. The DEIR/S Fails to Analyze an Alternative That Assumes More Urbanized Land Uses and Increased Transit Use.

Over the last few years, the public has grown increasingly unwilling to endure lengthy commutes from the suburbs – and more willing to live closer to jobs. In 1900, about 13 percent of the global population lived in or near cities.\footnote{See Cherry, Nathan and Negle, Kurt. Essential Elements of Sustainable Design, Planning, The Magazine of the American Planning Association, March 2010, p. 25.} By 2050, that number is projected to rise to 70 percent.\footnote{Id.} Americans, in general, are beginning to embrace the concept of “smart growth.” Finding transit-oriented developments and new urbanist neighborhoods going up in many cities in the country, the Urban Land Institute sees such infill, compact development as a growing trend:

Next-generation projects will orient to infill, urbanizing suburbs, and transit-oriented development. Smaller housing units—close to mass transit, work, and 24-hour amenities—gain favor over large houses on big lots at the suburban edge. People will continue to seek greater convenience and want to reduce energy expenses. Shorter commutes and smaller heating bills make up for higher infill real estate costs.

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\footnote{Id., at 2.}
\footnote{Id.}
Road congestion, higher energy costs, and climate change concerns combine to alter people’s thinking about where they decide to live and work. ‘It’s a fundamental shift.’ The lifestyle cost-of-living equation starts to swing away more dramatically from bigger houses on bigger lots at the suburban edge to greater convenience and efficiencies gained from infill housing closer to work. These homes may be more expensive on a price-per-pound basis, but reduced driving costs and lower heating/cooling bills provide offsets . . . ‘near-in suburbs will do well especially if they link to business cores by mass transportation.’ Empty nesters and later-married boomers continue to flock to cities and urbanizing suburban areas. For aging baby boomers, infill apartment or townhouse living means less upkeep and proximity to cultural and entertainment attractions.  

This dramatic shift in land use, towards more compact mixed-use development, would reduce the “need” for expansion of SR-91. Moreover, there is a strong synergy between increased land use intensities and expanded public transit. Transit investments help to focus the attention of local communities and developers. The combination of more increased land use densities and public transportation is much stronger than either approach individually.

Caltrans might object that it has no authority over land use and thus is not obligated to consider a “smart growth” alternative. The objection is unfounded. Caltrans certainly has the ability to develop a transportation alternative that uses, as its foundation, this societal trend toward transit-oriented development and development-oriented transit. Caltrans should develop such an alternative and evaluate its environmental impacts in a revised DEIR/S.

4. The DEIR/S Fails to Evaluate An Alternative That Includes Modifications to the Existing SR-91 General Purpose Lanes.

The current SR-91 roadway could support operational modifications that would meet the goal of easing congestion without the construction or traffic-inducement of the proposed Project. For example, converting one or more of the present lanes to a reversible mode would improve flow in the appropriate direction, depending on the time of day. This approach would also allow flexibility to accommodate future demographic or land use changes, and would require no construction.

Alternatively, a moderate toll on all traffic (possibly only during peak periods) would be sufficient to maintain acceptable traffic flow. This scenario would also serve to avoid the problems of induced development and traffic, and the increased congestion on local roadways that would accompany the proposed Project.

30 Urban Land Institute, Emerging Trends in Real Estate, 2010.
While imposing a toll on existing interstate lanes is not currently permitted, federal and state governments are urgently seeking solutions to long-term transportation funding. Consequently, the tolling of interstate highways and the increased reliance on general revenue appropriations to support the federal surface transportation program has been a subject of an ongoing debate in the transportation community. The revised DEIR/S should identify and evaluate an alternative that imposes tolls on existing interstate lanes.

Once this, and the other alternatives discussed above are developed, Caltrans must use appropriate modeling (i.e., gravity model with a feedback process) to compare the effects of these non-freeway widening alternatives to those of the proposed SR-91 Project.

Thank you for considering these comments. If you have any questions, please contact Matt Vespa, mvespa@biologicaldiversity.org, (415) 436-9682 x309.

Please ensure that we are notified of any future action on this Project.

Sincerely,

Matthew Vespa
Senior Attorney

Encl.: The following references are included in the accompanying CD for your review and inclusion in the administrative record.

ENCLOSED REFERENCES

Exhibit A. CAPCOA, CEQA and Climate Change (2008)
Exhibit B. Robert Cervero, Road Expansion, Urban Growth, and Induced Travel: A Path Analysis (2001)
Exhibit C. Mark Hansen & Yuanlin Huang, Road Supply and Traffic in California Urban Areas (1997)
Exhibit D. Todd Litman, Victoria Transport Policy Institute, Smart Congestion Reductions: Reevaluating the Role of Highway Expansion for Improving Urban Transportation (February 2, 2010)
Exhibit E.  Todd Litman, Smart Congestion Reductions II: Reevaluating the Role of Public Transit for Improving Urban Transportation, Victoria Transport Policy Institute (September 9, 2010)


Exhibit G.  Robert B. Noland, Relationship Between Highway Capacity and Induced Travel, 35 Transportation Research 47 (2001).

Exhibit H.  Sightline Institute, "Increases in Greenhouse-gas Emissions From Highway-widening Projects," October 2007

Exhibit I.  SCAQMD, Boiler Protocol (2010)
O-7-1
Refer to responses to comments O-7-2 through O-7-14 below, which respond to the comments summarized in comment O-7-1 that are provided in detail in the comments provided on pages 2 through 19 of this comment letter.

A greenhouse gas (GHG) emissions analysis was performed in accordance with CEQA requirements. That analysis is provided in Section 4.3, Climate Change, on page 4-43 in the EIR/EIS.

Chapter 4.0, California Environmental Quality Act Evaluation, starting on page 4-1 in the EIR/EIS, provides a detailed analysis of the project impacts under CEQA, including assessment of the significance of those impacts. The comment asserts that the “…Project would have many significant impacts…”

As shown in Section 4.2.3, Significant Environmental Effects of the Project, the project will result in significant adverse impacts under CEQA related to the following environmental parameters that can be mitigated to below a level of significance under CEQA: aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, utility and service systems, land use and planning, population and housing, noise, public services, and transportation/traffic. As explained in detail in Section 4.2.3, those impacts would all be reduced to below a level of significance after implementation of the mitigation measures included in the project.

The standard under CEQA for assessing whether a project would or would not result in an unavoidable significant adverse impact is based on the impacts after implementation of mitigation. As shown in Section 4.2.4, Unavoidable Significant Environmental Effects of the Project, the project would result in unavoidable adverse impacts after mitigation in only four categories: short- and long-term noise, permanent impacts to oak woodland habitat, cumulative impacts, and adverse effects to human beings (as a result of the other significant unavoidable adverse impacts).

Refer also to Section O.5.4.3, Recirculation, in Section O.5.4, Common Response Related to the Environmental Process and Schedule, on page O-14, for discussion regarding why RCTC and the Department did not prepare or circulate a revised Draft EIR/EIS because such recirculation was not required under either CEQA or NEPA.
O-7-2
The comments provided in this letter regarding induced growth arising from capacity increases on highways do not provide conclusive evidence that growth observed in the cited studies is a direct result of increased capacity. Acceptable modeling procedures were used to project expected traffic growth. The model projections were based on SCAG approved population and employment estimates. In addition, refer to Section 3.2, Growth, starting on page 3.2-1 in the EIR/EIS, which provides analysis indicating that the Build Alternatives will not result in growth-inducing impacts. As a result, no analysis of induced growth or induced travel demand is necessary.

O-7-3
Refer to Section O.5.7, Common Response Related to Alternatives, on page O-30 in Section O.5, Common Responses. That section summarizes the transit alternatives considered in the SR-91 corridor and acknowledges that those types of transit improvements are needed in addition to the SR-91 CIP to meet the mobility needs in this corridor. Further, the SR-91 CIP and the transit alternatives are consistent and do not conflict with each other. The SR-91 Implementation Plan for 2011, approved by the RCTC and OCTA, provides implementation dates for the public transportation improvements/enhancements in the SR-91 CIP corridor study limits.

O-7-4
Section 3.14, Air Quality, starting on page 3.14-1 in the EIR/EIS, Section 4.3, Climate Change, starting on page 4-43 in the EIR/EIS, and the Final Air Quality Assessment Report quantify the project effects on regional GHG emissions and qualitatively discuss the short-term construction impacts.

The air quality analysis was prepared using Department-adopted protocols and guidance (Department SER, EIR/EIS Annotated Outline, July 2011). The Department has not adopted the SCAQMD thresholds or any other numeric thresholds for determining CEQA significance. The analysis determined that the proposed project would not result in any long-term global climate change (GCC) impacts. Therefore, no mitigation measures are required.

O-7-5
The climate change/GHG analysis in the EIR/EIS was prepared following the Department SER guidelines as noted in response to comment O-7-4, above. Nonetheless, additional quantitative analysis of construction emissions was prepared using the SMAQMD emissions model. The results of that analysis are provided starting on page 4-47 of Chapter 4.0. The construction emissions would be mitigated.
as discussed in Section 4.4, Mitigation Measures for Significant Impacts Under CEQA, on page 4-61 in the EIR/EIS. The CO₂ emissions generated during construction are summarized in Table 4.1 on page 4-48 in the EIR/EIS.

Table 4.2 on page 4-51 in the EIR/EIS lists the GHG emissions in the SR-91 area under Baseline/Existing (2007), 2015, and 2035 conditions. Section 4.3.1.5 on page 4-55 of the EIR/EIS states that the CO₂ emissions are projected to increase over existing levels in both the No Build and Build conditions. However, as shown in Table 4.3, when compared to the No Build conditions, the proposed project would reduce regional GHG emissions by 180 to 360 tons per day (tpd). Therefore, the proposed project would not contribute to a long-term increase in GHG emissions. The SR-91 CIP would not have any impact on long-term weather, drought, or sea level change. Section 4.3.1.7, Adaptation Strategies, on page 4-57 in the EIR/EIS evaluates the potential effect of the proposed project on sea level rise.

O-7-6
The CO₂ emissions analysis, discussed in Section 4.3, Air Quality, in the EIR/EIS, included existing, future no build, and future build conditions. Table 4.2 on page 4-53 in the EIR/EIS lists the existing GHG emissions in the SR-91 area. Section 4.3.1.5 on page 4-55 of the EIR/EIS states that the CO₂ emissions are projected to increase over existing levels in both the No Build and Build conditions. When the 2035 GHG emissions are compared to the existing conditions, there is a 3,000 tpd increase in regional GHG emissions. The referenced 3,000 tpd increase in CO₂ is due to regional growth that is independent of the project and that would, therefore, occur with or without the project. As a result, that increase will be the same under the future with and without project conditions. The 0.9 to 4.4 percent decrease in regional emissions, listed in Table 4.2, between the No Build and Build conditions demonstrates that the proposed project would not contribute to a long-term increase in GHG emissions.

O-7-7
The traffic analysis prepared for the SR-91 CIP evaluated the effect that the proposed project would have on regional VMT and vehicle hours traveled (VHT) under the Baseline/Existing (2007), 2015, and 2035 conditions. GHG emissions were calculated for the region under with and without project conditions using that traffic data. When the 2035 GHG emissions are compared to the existing conditions, there is a 3,000 tpd increase in regional GHG emissions. The referenced 3,000 tpd increase in CO₂ is due to regional growth that is independent of the project and that would, therefore, occur with or without the project. As a result, that increase will be the same under the future
with and without project conditions. It was determined that the proposed Build Alternatives would reduce the long-term GHG emissions compared to the No Build conditions. This comment asserts that, over a 50-year period, a highway widening project will increase CO₂ emissions by 100,000 tons per mile of new highway lane by encouraging growth. Refer to response to comment R-5-5 and to Section 3.2, Growth, in the EIR/EIS, which indicate the SR-91 CIP is not expected to encourage regional growth. Therefore, the additional lanes built by the proposed project would not result in a long-term increase in GHG emissions. Table 4.2 on page 4-51 in the EIR/EIS lists the existing GHG emissions in the SR-91 area. As shown on that table, in 2035 the proposed project would reduce the regional CO₂ emissions by 180 to 360 tpd or 65,000 to 130,000 tons per year when compared to the 2035 No Build conditions. Therefore, the proposed project would not contribute to a long-term increase in GHG emissions.

O-7-8
Refer to response to comment O-7-5, above. The EIR/EIS did not quantify the lifecycle GHG emissions. Lifecycle emissions associated with the manufacture of the building materials are the responsibility of the manufacturer (e.g., the cement plants and metal refineries).

According to the Center for Climate and Energy Solutions,¹ the incomplete combustion of fossil fuels, primarily from diesel vehicles, is the only transportation-related source of black carbon. As shown in Tables 3.14.20 through 3.14.24 starting on page 3.14-35 in the EIR/EIS, the proposed project would substantially reduce the emissions of diesel particulates in the project area. Diesel particulate matter was used as a surrogate for the analysis of black carbon. Therefore, as the project would decrease the regional diesel exhaust emissions it would also decrease the emissions of black carbon, and the impact of black carbon from the project on GCC would be less than significant under CEQA.

O-7-9
Refer to response to comment O-7-5, above. Because the SR-91 CIP would not result in adverse impacts related to GHG, no measures addressing that type of impact are required. A number of detailed measures are proposed for implementation during project construction to address short-term air quality emissions. Refer to Measures

SC-1 through SC-5 in Section 3.14.4.1, Standard Conditions, starting on page 3.14-39 in the EIR/EIS.

**O-7-10**

This comment raises specific issues regarding the alternatives considered in the EIR/EIS as follows:

- "...the document purports to identify four alternatives, these alternatives are so similar that they become identical for purposes of environmental review."

The EIR/EIS does not identify "four alternatives." Refer to Section 2.1, Project Description, on page 2-1 in the EIR/EIS, which clearly indicates that two Build Alternatives (1 and 2) are considered in the EIR/EIS. Refer to Section 2.3.4, Phasing Plans for the Build Alternatives, on page 2-85 which describes possible phasing of the construction of the improvements included in Alternatives 1 and 2. That phasing discussion does not present the individual phases as separate alternatives. As a result, as documented throughout the EIR/EIS, Alternatives 1 and 2 are the two Build Alternatives evaluated in the EIR/EIS; the phasing of the improvements in those Alternatives is discussed when that phasing could result in the project impacts occurring in a specific phase so the reader understands the implications and impacts of phased implementation of Alternatives 1 and 2 with the design variations discussed in Chapter 2, Project Alternatives.

NEPA requires that an EIS evaluate feasible alternatives that meet the defined project purpose and need and also a no action alternative. CEQA requires that an EIR evaluate a range of reasonable and feasible alternatives that would meet most of the basic objectives of the project, avoid or reduce impacts of the project, and also include a no project alternative. Alternatives 1 and 2 satisfy the requirements of NEPA and CEQA related to the range of alternatives because although they each provide the same number of GP lanes, the HOV facilities operate differently under the two Build Alternatives. They also meet the defined purpose and need for the project.

Refer to the following sections in the EIR/EIS for additional discussion regarding the alternatives evaluated in the EIR/EIS and other alternatives considered but not evaluated in detail in the EIR/EIS:

- Section 2.3, Range of Alternatives, starting on page 2-7, includes detailed descriptions of the two Build Alternatives and the No Build Alternative.
• Section 2.3.5, Transportation Systems Management and Traffic Demand Management, starting on page 2-120, describes these and explains why they are not included in the Build Alternatives or evaluated in the EIR/EIS.

• Section 2.3.5.3, Major Investment Study Alternatives, starting on page 2-122 explains the other corridors studied in the MIS and why they are not evaluated in the EIR/EIS.

• Section 2.3.6, No Build Alternative, starting on page 2-123, describes the No Build Alternative evaluated in the EIR/EIS.

• Table 2.36, Comparison of the Alternatives, on page 2-125, provides a comparison of the Build and No Build Alternatives evaluated in the EIR/EIS.

• Section 2.3.7.1, Identification of the Preferred Alternative, starting on page 2-124, explains the process used to identify Alternative 2f as the Preferred Alternative.

• Section 2.3.8, Alternatives Considered but Eliminated from Further Discussion Prior to the Draft Environmental Document, starting on page 2-140, describes a range of alternatives considered but not carried forward for evaluation in the Draft EIR/EIS because they would not operate as effectively as the Build Alternatives, were more costly than Alternative 1 without providing the same level of benefits as Alternative 2, would incur greater operational costs and activities to operate the facility, were inconsistent with the MIS recommendations, would result in greater environmental impacts including greater right-of-way needs, and other reasons as detailed in Section 2.3.8.

• “…the DEIR/S’ perfunctory comparative analysis of the Project alternatives fails to adequately distinguish the environmental impacts of each option, to the extent there are differences.”

Refer to Table S.3, Summary of Impacts for the No Build Alternative and Impacts with Differences in Impacts Between Alternatives 1 and 2 (starting on page S-27), and Table S.4, Summary of Impacts for the No Build Alternative and Impacts with No Substantial Difference Between Alternatives 1 and 2 (starting on page S-41) in the EIR/EIS, which clearly distinguish those impacts where there is a difference between Alternatives 1 and 2 (Table S.3) and among the design options in those Alternatives, and where there is only a minor or no difference between Alternatives 1 and 2 (Table S.4). It is not unreasonable to expect that the two Build Alternatives would often result in similar impacts because they both propose improvements in the same freeway corridor. Nonetheless, the
improvements they propose vary substantially, particularly in relation to the
differences in the HOV lane/tolled express lane features.

- "Finally, because none of the proposed alternatives would come close to meeting
the Project's objectives, the entire alternatives analysis is ultimately
meaningless."

As described in Section 1.2, Purpose of the Project, on page 1-11 in the EIR/EIS,
the proposed project is intended to achieve the following specific purposes:

1. Improve the vehicle, person, and goods movement within the SR-91 corridor
to more effectively serve existing and future travel demand between and
within Riverside and Orange Counties.
2. Provide improvements along the SR-91 and I-15 transportation corridors as
well as to related local roads, and to reduce diversion of regional traffic from
the freeways into the surrounding communities.

As discussed in detail in Chapter 2, Project Alternatives, in the EIR/EIS
Alternatives 1 and 2 both propose substantial improvements on SR-91 and I-15,
including GP lanes, HOV or tolled express lanes, HOV/tolled express lane
connectors between SR-91 and I-15, and improvements at most interchanges with
local streets. As documented in detail in Section 3.6, Traffic and Transportation/
Pedestrian and Bicycle Facilities, in the EIR/EIS the project segments of SR-91
and I-15 perform better under Alternatives 1 and 2 than under the No Build
Alternative, and the Build Alternatives are able to move more vehicles in these
corridors than under the No Build Alternative. As a result, RCTC and the
Department have determined that Alternatives 1 and 2 both meet the defined
project purposes and that the No Build Alternative does not meet those defined
purposes.

In summary, RCTC and the Department have determined that the two Build
Alternatives (with their design variations) described and evaluated in the EIR/EIS
meet the intent of CEQA and NEPA related to the range and definition of alternatives
for consideration in EIRs and EISs, respectively.

**O-7-11**

Refer to Section O.5.7, Common Response Related to Alternatives, on page O-30 in
Section O.5, Common Responses, and to response to comment O-7-10, above, for
discussions regarding the range of alternatives considered in the SR-91 corridor in a number of planning studies prior to and including studies for the SR-91 CIP.

**O-7-12**

As discussed in Section 2.3.5, Transportation Systems Management and Transportation Demand Management, the SR-91 Build Alternatives include and are supportive of alternative travel modes including transit and ride sharing, specifically associated with the HOV/tolled express lanes in those alternatives. Transit improvements independent of the SR-91 CIP are planned in the SR-91 corridor between Riverside and Orange Counties as shown in Table 2.40. As described in Table 2.37, the Build Alternatives best meet the defined project purpose. Transit only improvements would not meet the project purpose. For those reasons, a transit only alternative was not evaluated in detail in the EIR/EIS.

**O-7-13**

Section 15126.6(f)(3) of the CEQA Guidelines specifies that EIRs do not need to evaluate speculative alternatives, as follows: "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative. As a result, CEQA specifically allows the rejection of alternatives or analyses that are speculative. Any alternative that depends on substantive changes in land use densities and distributions is well outside the authority of RCTC or the Department to implement. Specifically, changes in land use densities and distributions would be the responsibility of the individual local agencies, and would likely include substantial modifications to the adopted General Plans in those local jurisdictions. Any local jurisdiction currently has the authority to modify its General Plan to include higher density and more centralized development, independent of any actions by RCTC, the Department, and/or any other local jurisdiction. However, there does not appear to be a trend toward higher density/more centralized land use planning in the project areas in Orange and Riverside Counties. Even if such an alternative were evaluated in this EIR/EIS, RCTC and the Department would be unable to implement that alternative and would have no authority to require local jurisdictions to amend their General Plans consistent with that alternative. As a result, this type of alternative is considered too speculative to consider as an alternative to the proposed project. For these reasons, an alternative based on substantive changes in land use densities was not considered in the EIR/EIS."
O-7-14
Refer to response to comment S-3-18, on page O-114 in this appendix, for discussion regarding reversible lanes.

As noted in the comment, imposing a toll on existing general-purpose lanes is not currently permitted. As a result, that type of alternative was not considered in the EIR/EIS.

The Council on Environmental Quality (CEQ) NEPA Regulations specifically state that an EIS shall “Rigorously explore and objectively evaluate all reasonable alternatives…” (NEPA Guidelines Section 1502.14, Alternatives including the proposed action). Federal courts have clearly stated that EISs do not have to evaluate alternatives that are of speculative feasibility (Natural Resources Defense Council v. Callaway, 524. F.2d (Second Circuit 1975)), that reasonable alternatives do not require a crystal ball inquiry, and that the alternatives must meet the rule of reason (Natural Resources Defense Council, Inc. v. Morton, 458 F.2d 827 (D.C. Circuit 1972)).

Section 15126.6 of the CEQA Guidelines specifies that an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives that are infeasible. Section 15126.6(f) provides that the range of alternatives considered be governed by a “rule of reason.” Section 15126.6(f) (1) provides the following definition of feasibility: “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…” Section 15126.6(f)(3) provides the following: “An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.”

The proposed conversion of existing free GP freeway travel lanes to toll lanes does not meet CEQA requirements for consideration as an alternative because this alternative is infeasible; current State law precludes the conversion of existing mixed-use free travel lanes to toll lanes. The imposition of tolls on existing travel lanes would require a change in state law. Because there is no current proposal to allow such conversion, the implementation of this type of alternative would be remote. Finally, the imposition of tolls on existing SR-91 travel lanes could result in additional environmental effects that have not and could not be analyzed without
speculation. Imposition of tolls could cause drivers to seek alternative routes that would minimize their toll exposure. For example, westbound motorists might seek to access SR-91 at Green River Drive (the last westbound surface street access before the point where a motorist reaches the segment between Green River Drive and SR-241 where no parallel routes exist), then exiting at Gypsum Canyon Road (where alternative routes are again available). Such an alternative would have potential indirect environmental effects, including impacts related to traffic, air quality, and noise, along the roads accessing and paralleling SR-91.

In summary, because such an alternative is inconsistent with current state law (i.e., the alternative is infeasible), the approval of such changes in State law are unlikely at this point (i.e., the alternative is remote), the requirements of any such conversion are unknown (i.e., the alternative is speculative), and that such an alternative could result in additional environmental effects that have not been considered, it was rejected from further consideration in the EIR/EIS.
July 8, 2011

Mr. Aaron Burton
California Department of Transportation,
District 8
464 West Street, 6th Floor
San Bernardino, CA 92401

Re: State Route 91 Corridor Improvement Project Draft
Environmental Impact Report/Environmental Impact Statement
and Section 4(F) Evaluation

Dear Mr. Burton:

This firm represents Hills For Everyone on matters relating to the proposed construction of the State Route 91 Corridor Improvement Project ("SR-91 Project" or "Project"). On behalf of our clients, we respectfully submit these comments to help ensure that agency decision-makers fully comply with the California Environmental Quality Act ("CEQA"), Public Resources Code § 21000 et seq., and the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 et seq., with respect to the proposed Project. Our clients are deeply concerned about the far-ranging environmental impacts the Project may have on Chino Hills State Park ("CHSP" or "Park").

After carefully reviewing the SR-91 Draft Environmental Impact Report/Statement ("DEIR/S") for the Project, we have concluded that it fails in numerous respects to comply with the requirements of CEQA and NEPA. As described below, the DEIR/S violates these laws because it fails to adequately describe the Project and fails to analyze the significant environmental impacts of the Project or propose adequate mitigation measures to address those impacts. The Project, as described in the DEIR/S, also violates section 4(f) of the Department of Transportation Act, section 6(f) of the Land and Water Conservation Fund Act, and the California Public Parks Preservation Act.

The environmental impact report is "the heart of CEQA." *Laurel Heights Improvement Ass'n v. Regents of University of California*, 47 Cal. 3d 376, 392 (1988)
(citations omitted). It “is an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return. The EIR is also intended ‘to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.’ Because the EIR must be certified or rejected by public officials, it is a document of accountability.” Id. (citations omitted). Likewise, NEPA requires that federal agencies “consider every significant aspect of the environmental impact of a proposed action . . . [and] inform the public that [they have] indeed considered environmental concerns in [their] decision-making process[es].” Earth Island Institute v. U.S. Forest Service, 351 F.3d 1291, 1300 (9th Cir. 2003) (citations omitted).

Where, as here, the environmental review document fails to fully and accurately inform decision-makers, and the public, of the environmental consequences of proposed actions, it does not satisfy the basic goals of either statute. See Pub. Res. Code § 21061 (“The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect that a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.”); 40 C.F.R. § 1500.1(b) (“NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken.”).

As a result of the DEIR/S’ numerous and serious inadequacies, there can be no meaningful public review of the Project. The California Department of Transportation (“Caltrans”) must revise and recirculate the DEIR/S in order to permit an adequate understanding of the environmental issues at stake. Further, Caltrans must develop feasible and prudent alternatives to using parklands that are protected under section 4(f) of the Department of Transportation Act, and must undertake further planning to minimize harm to any parkland that would be impacted.

I. The DEIR/S’ Flawed Project Description Does Not Permit Meaningful Public Review of the Project.

In order for an environmental document to adequately evaluate the environmental ramifications of a project, it must first provide a comprehensive description of the project itself. “An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR.” San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus, 27 Cal.App.4th 713, 730 (1994), quoting County of Inyo v. City of Los Angeles, 71 Cal.App.3d 185, 193 (1977). As a result, courts have found that, even if an EIR is adequate in all other respects, the use of a “truncated project concept” violates
CEQA and mandates the conclusion that the lead agency did not proceed in a manner required by law. *San Joaquin Raptor*, 27 Cal.App.4th at 730. Furthermore, “[a]n accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity.” *Id.* (citation omitted). Thus, an inaccurate or incomplete project description renders the analysis of significant environmental impacts inherently unreliable. While extensive detail is not necessary, the law mandates that EIRs should describe proposed projects with sufficient detail and accuracy to permit informed decision-making. See CEQA Guidelines, §15124 (requirements of an EIR). NEPA similarly requires an accurate and consistent project description in order to fulfill its purpose of facilitating informed decision-making. 43 U.S.C. § 4332(2)(C). As explained below, the SR-91 DEIR/S fails to meet this basic threshold.

A. The DEIR/S Does Not Adequately Describe Project Components.

1. Design Standards.

Perhaps one of the most perplexing flaws in the DEIR/S project description is the fact that the DEIR/S does not even clearly articulate the design standard for the Project itself. The document identifies the Project purpose as “[i]mprov[ing] the vehicle, person, and goods movement within the SR-91 corridor to more effectively serve existing and future travel demand between and within Riverside and Orange Counties” and “Provid[ing] improvements along the SR-91 and I-15 transportation corridors as well as to related local roads.” DEIR/S at S-2. While the DEIR/S identifies the existing level of service (“LOS”) for various Project segments (at 1-23), it does not identify the desirable operating condition or LOS that Caltrans intends to achieve upon implementation of the Project. In the absence of definitive, quantifiable objectives, it is not possible to measure the ability of the Project to meet its objectives or to effectively develop Project alternatives.

2. Local Circulation and Access Projects.

According to the DEIR/S, implementation of the SR-91 Project would include some level of improvements to local roads. *(See DEIR/S at S-5 referring to “collector-distributor roads” and “improved local connectivity.”). The document does not, however, identify and describe the necessary changes in the local road system. This is a massive project spanning two separate freeways and the amount of associated local roadway work will likely be enormous. Consequently, these local roadway modifications are not trivial, speculative, or optional—they are part of the Project, and therefore must be included in the project description. *See San Joaquin Raptor*, 27 Cal. App. 4th at 714-16 (holding EIR inadequate where project description failed to include sewer expansion which was
"required element of the development project"). Moreover, like the Project itself, construction and operation of these roadway modifications will undoubtedly have environmental impacts. Unless the details of these roadway improvements are clearly identified and described, it is impossible to evaluate impacts from the whole of the Project.

Nor does the DEIR/S include the necessary details pertaining to the Project’s drainage improvements. As the DEIR/S explains, the existing drainage system for SR-91 has been in place for many years, and in some places the system may be reaching the end of its expected service life. DEIR/S at 1-39. Repairing and/or replacing this system is a part of the Project. *Id.* Despite this fact, neither Caltrans nor the Riverside County Transportation Commission (“RCTC”) have identified the specific deficiencies in the existing drainage system or the structural integrity of the system. *Id.* Rather than fully investigate the locations of system failure and identify the appropriate corrective measures, the agencies propose to defer this important work to the design-build phase. *Id.* Culvert repair or installation can result in, among other potentially significant impacts, the loss of sensitive habitat, including wetland and riparian areas. Until the DEIR/S identifies the location and nature of these important Project components, it is not possible to evaluate the associated environmental impacts.

**B. The DEIR/S Improperly Segments the SR-91 Project From Other Related Actions.**

Agencies may not improperly “segment” projects in order to avoid preparing an EIS or EIR; instead, they must consider related actions in a single document. *Thomas v. Peterson*, 753 F.2d 754, 758 (9th Cir. 1985); *Laurel Heights*, 47 Cal.3d. 376-395 (1988). “Not to require this would permit dividing a project into multiple ‘actions,’ each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.” *Thomas*, 753 F.2d at 758. The Council on Environmental Quality’s NEPA regulations thus require agencies to consider “connected,” “cumulative,” and “similar” actions within a single EA or EIS. 40 C.F.R. § 1508.25; *Thomas*, 753 F.2d at 758-59. The use of the word “shall” in these regulations makes combined consideration of these three types of actions mandatory. These implementing regulations are mandatory and binding on federal agencies. *The Steamboaters v. FERC*, 759 F.2d 1382, 1393 n.4 (9th Cir. 1985). Similarly, CEQA regulations require that an EIR describe the entirety of a project, including reasonably foreseeable future actions that are part of a project, and must analyze those reasonably foreseeable actions. 14 Cal. Code Regs § 15378(a). As discussed below, at least five transportation projects proposed by Caltrans and/or RCTC meet the requirements for connected actions and therefore must be analyzed concurrently with the direct impacts of the SR-91 Project itself.
For purposes of NEPA, actions are “connected” if they are “interdependent parts of a larger action and depend on the larger action for their justification.” 40 C.F.R. § 1508.25(a)(1). Where it would be “irrational, or at least unwise” to undertake one action without other actions, the actions are connected. *Save the Yaak*, 840 F.2d at 720 (holding that road construction and timber sales had “clear nexus” and were thus “connected actions,” requiring expanded scope of review); *Thomas*, 753 F.2d at 759 (road and timber sales were “inextricably intertwined” where “[i]t is clear that the timber sales cannot proceed without a road, and the road would not be built but for the contemplated timber sales.”). An agency should analyze the impacts from two or more similar projects together “when the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement.” 40 C.F.R. § 1508.25(a)(3).

Under CEQA, an EIR need not include speculation about future environmental consequences of a project, but an “EIR must include an analysis of the environmental effects of future expansion or other action if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effect.” *Laurel Heights*, 47 Cal.3d at 394-396. Under the *Laurel Heights* standard, “the facts of each case will determine whether and to what extent an EIR must analyze future expansion or other action.” *Id.* at p. 396. However, there must be discussion “in at least general terms” of future activity in connection with a project, even if the project is contingent on uncertain occurrences. *Laurel Heights*, 47 Cal.3d at 398. *Laurel Heights* requires a project proponent to analyze future expansion and other such action in an EIR if there is “telling evidence” that the agency has either made decisions or formulated reasonably definite proposals as to expand a project in the future. *Id.* at 396-397.

From the SR-91 DEIR/S' text and maps, it is clear that several transportation projects are inextricably related to the SR-91 Project. These related projects include: (a) SR-71/SR-91 Interchange Improvement Project; (b) I-15 Corridor Improvement Project; (c) SR-241/SR-91 Direct Connectors; (d) SR-91 between SR-55 and SR-241; and (e) Future SR-91 Implementation Plan Improvements.¹ *See DEIR/S at 2-8 and 2-101

¹ In addition, a sixth project, SR-91 Eastbound Lane Addition Project Between SR-241 and SR-71 is either under construction or construction has recently been completed (the SR-91 DEIR/S provides conflicting status reports). *See DEIR/S at 2-8 and 2-105.
through 107. With the exception of the SR-91 between SR-55 and SR-241 project, all of these projects would be constructed within the SR-91 Project study area limits. See Id., Figure 2-16 (Approved and In-Process Projects in the SR-91 CIP Area), and Appendix L2 Index. In fact, certain of the projects, including the SR-91 Eastbound Lane Addition Between SR-241 and SR-71, the I-15 Corridor Improvement Project and possibly the future SR-91 Implementation Plan Improvements, all call for increased capacity on the exact alignments as the proposed Project. Id. The SR-91 between SR-55 and SR-241 project would appear to be the westward continuation of the current Project. Id.

Although the DEIR/S asserts that these projects would function independently (at 2-7), there is plenty of "telling evidence" regarding the intimate connection between these projects and the SR-91 Project. The DEIR/S, in fact, concedes that several of the projects "could affect the design of the [SR-91 Project]," and therefore may require design coordination. DEIR/S at 2-101. The DEIR/S further admits some of the projects would be constructed concurrently to minimize construction-related impacts to the traveling public. Id. at 2-7. Set forth below are the details of these related projects and their relationship to the SR-91 Project.

1. SR-71/SR-91 Interchange Improvement Project.

In November 2010, Caltrans released an initial study/mitigated negative declaration for the SR-91/SR-71 Interchange Improvement Project. See SR-91/SR-71 Interchange Improvement Project Initial Study and Proposed Mitigated Negative Declaration, attached as Exhibit A. This project would improve the SR-91/SR-71 interchange by constructing a new direct flyover connector from eastbound SR-91 to northbound SR-71. This interchange project is located within the boundaries of the SR-91 Project and includes, among other components, the restriping of SR-91 eastbound lanes. Id. at v. RCTC confirms that the interchange project is "part of a larger effort to improve mobility along the SR-91 Corridor in Riverside County and Orange County." See RCTC SR-91/SR-71 Interchange Improvement Project Information Sheet, attached as Exhibit B. RCTC's documentation also makes clear that the interchange project has goals almost identical to that of the SR-91 Project: "... this project is designed to reduce the congestion, enhance the safety of motorists, support the movement of goods, and improve mobility and connections between the two freeways and among the counties of Riverside, Orange and San Bernardino." Id.; see also RCTC SR-91/SR-71 Interchange Project Newsletter, attached as Exhibit C.
2. I-15 Corridor Improvement Project.

The I-15 Corridor Improvement Project would add either high occupancy vehicle ("HOV") lanes or tolled express lanes and a general purpose lane on I-15 in each direction from SR-74 to SR-60 and from I-215 to SR-74. See I-15 Corridor Improvement Project Overview, attached as Exhibit D. A map of the I-15 Corridor Improvement Project confirms that the alignment of this project includes the SR-91 Project. See Project Map, attached as Exhibit E. RCTC's documentation also makes clear that the objectives of the I-15 Corridor Improvement Project are almost identical to the SR-91 Project objectives: to “reduce traffic delays and travel time” and to “provide capacity and congestion relief.” See I-15 Corridor Improvement Project Overview Objectives, attached as Exhibit F.


The Orange County Transportation Agency ("OCTA") includes in its draft 2011 SR-91 Implementation Plan, the SR-241/SR-91 Express Lanes Connector. See draft 2011 SR-91 Implementation Plan, OCTA, attached as Exhibit G. This project, expected to be constructed in 2017, is located within the SR-91 Project's study area boundaries. As with the other related projects, the purpose of the Express Connector is to improve inter-county travel.


OCTA includes in its draft 2011 SR-91 Implementation Plan, a project referred to as the “widen SR-91 Between SR-55 and SR-241.” See Exhibit G. This project would appear to be the westward extension of the SR-91 Project. It would add a fifth general purpose lane in each direction along SR-91 and is scheduled for construction in 2013. Id.

5. Future SR-91 Implementation Plan Improvements

OCTA is scheduling additional improvements to the SR-91 corridor. This project, which is likely referred to as “Ultimate CIP: Widen SR-91 by One General Plan Lane in Each Direction from SR-241 to SR-71, I-15/SR-91 Direct North Connector, Extension of Express Lanes on I-15 and SR-91 Improvements East of I-15” would be constructed along the same alignment as the current SR-91 Project. See Exhibit G.

Taken together, there is clearly compelling evidence that these projects are intimately connected to the SR-91 Project. Accordingly, under CEQA and NEPA, Caltrans may not segment its study of the impacts of the other projects from the impacts of the SR-91 Project: they are actually one, single project. As such, the project described...
and analyzed in the DEIR/S should include each of these other projects, which are integral parts of the same overall project.

By omitting the other subsidiary projects, the DEIR/S vastly underestimates all of the Project’s impacts. Moreover, such segmentation would unlawfully foreclose Caltrans’ ability to analyze an adequate range of alternatives for the interchange and the connectors. The federal Court of Appeals for the Seventh Circuit held in *Swain v. Brinegar*, 542 F.2d 364 (7th Cir. 1976) (en banc) that the “division of a highway into segments such as here ‘precludes meaningful compliance with the statutory mandate to assess in detail environmental impacts, as each segment that is approved limits the alternatives for each succeeding segment.’” (Internal citation omitted.) *See also San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal. App. 4th 731-35 (two interdependent projects must be analyzed in same EIR).

Finally, under CEQA, even if the other projects were not integral parts of the SR-91 Project, Caltrans would still be required to discuss these other projects in far more detail than it does. *Laurel Heights I*, 47 Cal.3d at 398 (requiring discussion “in at least general terms” of future activity in connection with a project, even if the project is contingent on uncertain occurrences). Under these circumstances, CEQA and NEPA requires that Caltrans’ environmental review be revised to include all highway projects planned for the SR-91 and SR-15 corridors.

The DEIR/S thus fails to provide an “accurate project description” so that there can be an “intelligent evaluation of the potential environmental effects of a proposed activity.” *San Joaquin Raptor*, 27 Cal.App.4th at 730.

II. The DEIR/S’ Analysis of and Mitigation for the Impacts of the Proposed Project Are Inadequate.

CEQA requires that an EIR be detailed, complete, and reflect a good faith effort at full disclosure. CEQA Guidelines § 15151. The document should provide a sufficient degree of analysis to inform the public about the proposed project’s adverse environmental impacts and to allow decision-makers to make intelligent judgments. *Id.* Consistent with this requirement, the information regarding the project’s impacts must be “painstakingly ferreted out.” *Environmental Planning and Information Council of Western El Dorado County v. County of El Dorado*, 131 Cal.App.3d 350, 357 (1982).

Meaningful analysis of impacts effectuates one of CEQA’s and NEPA’s fundamental purposes: to “inform the public and responsible officials of the environmental consequences of their decisions before they are made.” *Laurel Heights II*,
6 Cal.4th at 1123. Similarly, "NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality." 40 C.F.R. § 1500.1 (b). To accomplish this purpose, an EIR must contain facts and analysis, not just an agency's bare conclusions. Santiago County Water Dist. v. County of Orange, 118 Cal.App.3d 818, 831 (1990). An agency may not defer its assessment of important environmental impacts until after the project is approved. Sundstrom, 202 Cal.App.3d at 306-07. As documented below, the DEIR/S fails to identify, analyze, or support with substantial evidence its conclusions regarding the Project's significant environmental impacts. Moreover, where impacts are identified as significant, the DEIR/S fails to evaluate how adverse these impacts will be. Santiago County Water Dist., 118 Cal.App.3d at 831.

"Once a significant effect has been identified, the EIR must propose and describe mitigation measures that will minimize the significant environmental effects that the EIR has identified." Napa Citizens for Honest Gov't v. Napa County Bd. of Supervisors, 91 Cal.App.4th 347, 360 (2001); Robertson v. Methow Valley Citizens Council, 490 U.S. 332 (1989) (requirement that agency discuss mitigation measures is implicit in "NEPA's demand" and CEQA regulations). CEQA requires that agencies "mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so." Pub. Resources Code § 21002.1(b). Mitigation of a project's significant environmental impacts is one of the "most important" functions of CEQA. Sierra Club v. Gilroy City Council, 222 Cal.App.3d 30, 41 (1990). Therefore, it is the "policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects." Pub. Res. Code § 21002; Laurel Heights Improvement Ass’n v. Regents, 47 Cal.3d 376, 400-401 (1988) (Laurel Heights I).

A. The DEIR/S' Analysis of and Mitigation for the Project's Impacts on Biological Resources are Inadequate.

The DEIR/S' treatment of impacts to biological resources suffers from substantial deficiencies and fails to meet CEQA's and NEPA's well-established standards. The document's analysis both understates the severity of the potential harm to biological resources within and adjacent to the proposed Project's right-of-way, and neglects to identify sufficient mitigation to minimize these impacts. Given that analysis and mitigation of such impacts are at the heart of CEQA and NEPA, the DEIR/S will not comply with these laws until these serious deficiencies are remedied. See Sundstrom v. County of Mendocino, 202 Cal.App.3d 296, 311 (1988) ("CEQA places the burden of
environmental investigation on government rather than the public.”); see also Natural Res. Defense Council v. U.S. Forest Service, 421 F.3d 797 (9th Cir. 2005). The most egregious deficiencies in the DEIR/S’ analysis of biological resources are discussed below.

1. The DEIR/S Fails to Adequately Describe the Project’s Biological Setting.

An EIR’s description of a project’s environmental setting plays a critical part in all of the subsequent parts of the EIR because it provides “the baseline physical conditions by which a lead agency determines whether an impact is significant.” CEQA Guidelines § 15125(a). “Knowledge of the regional setting is critical to the assessment of environmental impacts.” CEQA Guidelines § 15125 (c). Similarly, under NEPA, an EIS must “describe the environment of the area(s) to be affected or created by the alternatives under consideration.” 40 C.F.R. §1502.15. Here, the DEIR/S concedes that the surveys of the Project’s biological survey area (“BSA”) were restricted due to lack of access permission: “Where access was not available (e.g., no permission granted by property owners, inaccessibly steep slopes, or locked gate), areas were analyzed from accessible areas with the aid of binoculars.” Natural Environment Study (“NES”) at 35. Surveys of the BSA using binoculars rather than on-site inspection by foot are likely to provide inadequate observation of species and cannot support the DEIR/S’s conclusions.

Moreover, the DEIR/S identifies neither how much of the survey area was merely surveyed with binoculars, nor the specific locations that were subject of this inadequate data-gathering procedure. As a result of these survey constraints, the DEIR/S’ preparers should have erred on the side of caution when determining whether the proposed Project would adversely impact sensitive resources. In several instances, however, they failed to take this cautionary approach. For example, the United States Fish & Wildlife Service (“USFWS”) has designated critical habitat for Brauton’s milk-vetch, a federally endangered species, in Coal Canyon. DEIR/S at 3.21-3. In fact, a known population of Brauton’s milk-vetch has been identified along SR-91 within the BSA. Id. at 3.21-6 and NES at 99.

Despite the presence of critical habitat along the Project alignment, the DEIR/S inappropriately and incorrectly assumes this endangered species is absent from the BSA, because surveys in the area were negative. Id. at 3.21-6, 3.21-9 and NES at 99. Yet, even the experts conducting the surveys concede that it is difficult to determine the complete distribution of Brauton’s milk-vetch. Id. Binocular surveys cannot provide sufficient evidence of that distribution.
Clearly, Braunton's milk-vetch could occur within the Project's study area, yet the DEIR/S concludes that the Project would not impact this species. The document relies on the disingenuous claim that critical habitat for this species is located outside the "disturbance limits" for the Project. DEIR/S at 3.21-9. Yet, as the DEIR/S explains, the very purpose of the BSA is intended to establish the conservative boundaries of the Project areas that would be directly affected by the Project:

The study area for this analysis is the BSA. The BSA for the proposed project was determined by incorporating electronic data provided by the design engineer into a GIS layout, which included areas of potential direct effect. The BSA is shown on Figure 3.17-1. The limits of the BSA were extended beyond the maximum extent of potential direct effect where necessary to identify sensitive biological resources within and adjacent to the project area. In general, this provided for a survey area that was larger than the area of potential direct effect. The BSA was then used as the study limit boundaries for all biological studies conducted during 2008 and 2009 DEIR/S at 3.17-1.

The DEIR/S cannot have it both ways. It cannot establish a study area of impact and then assume -- when a species' habitat occurs in that area -- that the species would not be impacted. Moreover, given the imprecise nature of the surveys, the fact that the Project will traverse habitat for an endangered plant species, and the unclear distribution of Braunton's milk-vetch, the DEIR/S certainly should have concluded impacts to this species would be significant.

This approach is consistent with CEQA's requirement that special emphasis "be placed on environmental resources that are rare or unique to that region and would be affected by the project." Guidelines § 15125(b). Here, the DEIR/S fails to place special emphasis on Braunton's milk-vetch. For the reasons described above, the Project has the potential to significantly impact this endangered species. Consequently, the DEIR/S should be revised to provide a thorough analysis of these impacts and identify mitigation if the impacts are deemed to be significant.
2. The DEIR/S’s Analysis of the Project’s Impacts on Numerous Sensitive Species is Incomplete and Conclusory.

Consistent with the DEIR/S’s misleading approach discussed above in the context of Braunton’s milk-vetch, the document repeatedly seeks to minimize other significant impacts associated with the proposed Project. For example, the DEIR/S fails to adequately analyze or mitigate impacts to the Least Bell’s Vireo, a federal and state endangered species. DEIR/S at 3.21-5. The document asserts that even with the implementation of avoidance and minimization measures prior to and during construction, “potential impacts to occupied habitat may occur.” Id. at 3.21-11. The DEIR/S states that Section 7 Consultation under the Federal Endangered Species Act would be required (at 3.21-12), but it never bothers to explain what additional mitigation measures would or could be implemented within the Section 7 process that would further minimize impacts to this endangered species.

The document then suggests that Least Bell’s Vireo’s impacts would be mitigated through the Project’s consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (“MSHCP”). Id. At 3.21-17. Yet the DEIR fails to describe how the Project would be consistent with the MSHCP, nor does it identify the specific mitigation measures that would be implemented in association with the MSHCP. Further, Orange County is not a signatory to the MSHCP, and the DEIR/S fails to describe how consistency with the plan will mitigate impacts to the portion of the Project in Orange County. The DEIR/S must be revised to clarify whether impacts to Least Bell’s Vireo would be significant. If so, the document must identify appropriate mitigation measures or Project alternatives capable of minimizing or eliminating the impact altogether.

The DEIR/S fares no better in its analysis of indirect impacts to listed and non-listed species that may rely on habitat in areas adjacent to the Project footprint. The document vaguely references potential impacts relating to habitat loss, fragmentation and edge effects such as noise, vibration, dust, and human presence during construction could potentially impact these species. DEIR/S at 3.20-10 through 13. But, other than a passing reference to the burrowing owl, the document never specifically identifies the species that could be impacted. Id. Nor does it describe the actual and specific

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2 This is particularly important, as state wildlife scientists have stated that there has been an explosion of Least Bell’s Vireos this season. Given this new information, there should be new studies as part of the DEIR/S.
consequences to each of the potentially affected species from these various effects (e.g.,
the number of individuals of each species that will be affected or the degree to which the
populations will be impacted). Instead, the DEIR/S merely asserts, absent evidence or
analysis, that “because of the limited amount of habitat involved and its relatively linear
configuration, project’ effects on Western Riverside County MSHCP-covered species are
considered nominal and are adequately addressed by the Western Riverside County
MSHCP.” DEIR/S at 3.20-11. This conclusion, however, is pure speculation; there is no
data or analysis accompanying it.

Moreover, the assertion that a linear configuration of the Project somehow
eliminates the potential for biological impacts defies credulity. If this were true, no
roadway project or roadway expansion project would ever impact biological resources.
There are over 400 acres of Coastal sage scrub and chaparral habitats, and about 160
acres of riparian and woodland habitats in the Project’s study area. NES at 50, Table 3.2.
Clearly, the Project has the potential to impact habitat and species within this area. Nor
can the document rely on a vague reference to the MSHCP as a justification for not
analyzing the Project’s impacts. The MSHCP does not excuse Caltrans from CEQA’s
mandate that it fully disclose the impacts to rare and common plant and animal species.
CEQA Guidelines § 15065 (a)(1).

The DEIR/S’s treatment of impacts to the Santa Ana Sucker, a federally
threatened species, is equally cursory. The document explains that, due to changes in the
water quality caused by the Project, this species could be impacted. DEIR/S at 3.21-4
and 3.21-15. Yet, rather than describe this impact, and the effect on this species, the
DEIR/S simply looks to compliance with NPDES permit requirements for discharge. Id.
CEQA requires more than this cursory approach to impact analysis and mitigation. When
a lead agency relies on measures to find that project impacts will be reduced to a level of
insignificance, there must be substantial evidence in the record demonstrating that the
measures are feasible and will be effective. Sacramento Old City Assn. v. City Council of
Sacramento, 229 Cal.App.3d 1011, 1027 (1991); Kings County Farm Bureau v. City of
Harford, 221 Cal.App.3d 692, 726-29 (1990). There is no such evidence in the DEIR/S.
For example, a stormwater treatment measure necessary to reduce impacts to a level of
insignificance may not be practicable, and thus may not be required under the regulations
the EIR/S relies upon. Additionally, while the DEIR/S relies extensively on the use of
best management practices (“BMP”) to reduce the Project’s water quality impacts (at
3.10-32 and 33), all BMPs are not created equal. See Exhibit H, Low Impact
Development: A Literature Review, describing cutting edge stormwater treatment
measures. Moreover, the DEIR/S contains no evidence that NPDES standards are
sufficient to protect the Santa Ana Sucker. Consequently, the DEIR/S conclusion that impacts to the Santa Ana Sucker would be less than significant cannot be sustained.

Finally the DEIR/S acknowledges that the Project would result in the loss of 5-10 Southern California black walnut trees and 50 Coulter’s matilija poppy plants. DEIR/S at 3.19-12. Each of these are covered by the MSHCP and are therefore, by the DEIR/S’s own standards, a special-status species. *Id.* The DEIR/S erroneously concludes that the Project’s impact on these species would be negligible because “they have no legal or regulatory protection beyond the level afforded by the Western Riverside County MSHCP or a CNPS watch list and because the few individuals potentially removed under Alternatives 1 and 2 are not in any Western Riverside County MSHCP conservation areas.” DEIR/S at 3.19-12. Here too, the document provides no evidence to support its conclusion that impacts to these species would be less than significant. These species meet the definition of special-status species; impacts to them must be analyzed at the same level of detail as other special-status species. Moreover, since the species appear to be afforded limited protection under the MSHCP or CNPS, it would seem that mitigation for these impacts would be more, not less, important.

Finally, the DEIR/S acknowledges that these species warrant special consideration under CEQA because they are considered part of coastal sage scrub natural communities (NES at 106, 107), yet the CEQA section of the DEIR/S provides no indication that these species have received this special consideration. *(See DEIR/S at 4-12 simply repeating the language that the species are afforded no special protection under the MSHCP or CNPS).* In violation of CEQA, the document fails to evaluate and mitigate the impacts on these California special plants. Guidelines § 15125(b).

3. The DEIR/S Fails to Meet CEQA and NEPA’s Requirements for Analysis of Cumulative Biological Resources Impacts.

NEPA and CEQA require agencies to prepare a cumulative impacts analysis in evaluating the impact of a proposed project. The importance of the cumulative impacts analysis has been repeatedly underscored by both federal and state courts. NEPA defines a cumulative impact as:

the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from
individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. § 1508.7; see also 40 C.F.R. §§ 1508.25(a)(2), 1508.27(b)(7). The Ninth Circuit has held that “where several actions have a cumulative or synergistic environmental effect, this consequence must be considered in an EIS.” City of Tenakee Springs v. Cough, 915 F.2d 1308, 1312 (9th Cir. 1990). The federal courts further require the cumulative impacts analysis to be detailed and supported with empirical data. See, e.g., Natural Resources Defense Council v. Hodel, 865 F.2d 288, 299-300 (D.C. Cir. 1988).

Likewise, CEQA requires a discussion of the environmental impacts, both direct and indirect, of the proposed project in combination with all “closely related past, present and reasonably foreseeable probable future projects.” Guidelines § 15355(b); see also Cal. Pub. Res. Code § 21083(b); Guidelines §§ 15021(a)(2), 15130(a), 15358. The discussion of cumulative impacts must “reflect the severity of the impacts and the likelihood of their occurrence” (Guidelines § 15130(b)), and must document its analysis with references to specific scientific and empirical evidence. Mountain Lion Coalition v. California Fish & Game Comm'n, 214 Cal.App.3d 1043, 1047, 1052 (1989).

Here the DEIR/S' analysis of cumulative impacts to biological resources is entirely deficient. The document conducts the first step of the analysis: identification of the transportation, land use, and public utility projects in the vicinity of the proposed Project. See DEIR Chapter 3.25. Yet, it fails to conduct the second step: the actual analysis of the combined effects of these anticipated projects. It sidesteps the necessary analysis claiming that “detailed environmental analyses were not available for many of the cumulative projects.” DEIR/S at 3.25-31 and Cumulative Impacts Analysis Report at 5-14 and 5-20. It then simply concludes that “[b]ecause many of those projects are in the same approximate geographic area as the SR-91 CIP, it is reasonable to assume that they could impact the same types of natural communities as the SR-91 CIP Build Alternatives.” Id.

Caltrans cannot evade its obligation to conduct an analysis of cumulative environmental impacts. As explained by the Court in Laurel Heights I, 47 Cal.3d at 399 (1988) (Laurel Heights I), “[w]e find no authority that exempts an agency from complying with the law, environmental or otherwise, merely because the agency's task may be difficult.” Environmental Planning and Information Council of Western El Dorado County v. County of El Dorado, 131 Cal.App.3d 350, 357 (1982) (information regarding the project’s impacts must be “painstakingly ferreted out.”). Earth Island Institute v. U.S. Forest Service, 351 F.3d 1291, 1300 (9th Cir. 2003) (citations omitted)
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(federal agencies must “consider every significant aspect of the environmental impact of a proposed action . . . [and] inform the public that [they have] indeed considered environmental concerns in [their] decision-making process[es].”)

The SR-91 Project would result in a host of significant impacts to species and habitat, yet the DEIR/S fails to address these effects under cumulative conditions. Many past and ongoing projects that have also affected, or are affecting, CHSP and other reserves of habitat in the area. For example, Metropolitan Water District recently constructed a secondary access road to its Diemer Water Filtration Plant in Yorba Linda, that goes through, and impacts, CHSP. See http://www.hillsforeveryone.org/projects/mwd-road.html. The Santa Ana River Flood Control Project Reach 9, Phase 2A will also impact CHSP. See http://smmc.ca.gov/pdf/attachment2651_Comment%20Letter.pdf. Likewise, the Santa Ana River Interceptor Relocation Project will impact the area around the Santa Ana River Trail and Coal Canyon. See http://www.ocflood.com/SARI_home.aspx. In addition, there are numerous other developments and projects, including the proposed Mountain Park housing development and the Army Corps of Engineers Green River HOA bank protection project, Green River mobile home park bank protection project, Green River Golf Course bank protection, and protection of the Santa Ana River Interceptor line on the north side of Green River HOA at Aliso Creek. The cumulative impacts of these projects in conjunction with this Project must be analyzed. See City of Carmel-by-the-Sea v. U.S. Dept. of Transp., 123 F.3d 1142, 1160 (9th Cir. 1997) (EIS insufficient when it described past projects “with generalities insufficient to permit adequate review of their cumulative impact”); CEQA Guidelines § 15130, 15355.

Analysis of cumulative impacts to the Coal Canyon undercrossing will be particularly important. The undercrossing is part of an essential corridor for wildlife movement through the Chino Hills region, but its ability to support such movement is increasingly tenuous. The projects discussed here, with their overlapping construction schedules, will create noise and human disturbance for the next ten years, severely reducing the corridor’s ability to support wildlife movement. And after that time, the Project under review here will continue to bring noise and disturbance to Coal Canyon. The DEIR/S must be revised to take account of these cumulative impacts, along with other impacts of past, pending, and future projects on biological resources.

The DEIR/S must be revised to include a comprehensive analysis of the Project’s cumulative effects on habitats and plant and animal species and identify feasible mitigation for impacts deemed to be significant.
B. The DEIR/S Fails to Adequately Analyze the Project's Impacts on Parks.

Chapter 3.1, section 3.1.3 of the DEIR/S analyzes the Project's impacts on parks and recreational facilities. It also analyzes the Project's compliance with applicable federal laws that protect parklands, including section 4(f) of the Department of Transportation Act of 1966 and section 6(f) of the Land and Water Conservation Fund Act. The Project must comply with the procedural and substantive mandates of sections 4(f) and 6(f). In addition, CEQA and NEPA require that the DEIR/S contain an accurate analysis of the Project's consistency with every "applicable land use plan, policy, or regulation of an agency with jurisdiction over the project." CEQA Guidelines Appx. G § X(b); See also Senville v. Peters, 327 F. Supp. 2d 335, 350 (D. VT 2004) (EIS that contained insufficient 4(f) evaluation was inadequate). Under CEQA, any inconsistency between the project and such plans must be disclosed as a significant impact on the environment, and mitigation to reduce or avoid that impact must be identified. See, e.g., Pocket Protectors v. City of Sacramento (2004) 124 Cal.App.4th 903, 930, 934. Under NEPA, a failure to properly analyze inconsistencies render the EIS inadequate as a matter of law. Senville, 327 F. Supp. 2d at 350.

Here, the DEIR/S incorrectly analyzes the impacts of the Project on parkland. In addition, although sections 4(f) and 6(f) constitute applicable policies or regulations of an agency with jurisdiction over the Project, the DEIR/S fails to fully analyze the Project's consistency with the sections. For example, the document incorrectly analyzes the applicability of section 4(f)'s "de minimis" provision and fails entirely to analyze whether the taking of land in CHSP is consistent with the California Outdoor Recreation Plan, a land use plan made applicable to the project by the Conservation Fund Act. Moreover, Caltrans has failed to comply with procedural and substantive mandates of the Department of Transportation Act and Land and Water Conservation Fund Act, as described more fully below.

1. The DEIR/S Underestimates the Amount of Parkland That Will Be Impacted by the Project and Fails to Disclose the Severity of Those Impacts.

The DEIR/S acknowledges that the Project will directly impact land that is a part of the Park. For example, it states that the Project will directly use .06 acres for footings related to an aerial freeway ramp (the Green River Road off-ramp), and would also require a .73 acre aerial easement for the ramp. DEIR/S at 3.1-63. However, the DEIR/S fails to analyze other probable impacts of the Project on CHSP. For example, given that there will be three columns for the freeway ramp located on Park land (DEIR/S at 3.1-
72), presumably Caltrans will also need an easement that would allow it to traverse Park land for maintenance of the ramp and columns. However, the DEIR/S is silent about this likely use of Park land, even though such an easement would preclude other uses of the land. Caltrans must factor this use of Park land into its calculation of feasible minimization and mitigation of impacts. To be a legally adequate informational document, the DEIR/S also must disclose the necessity of any such easement.

Moreover, the EIR inconsistently describes the Project's impacts on CHSP. In most places, it asserts that the Project will only directly impact .06 acres of land. See, e.g., DEIR/S at 3.1-61, 3.1-62, 3.1-77, B-8. Indeed, it only provides measures to mitigate the taking of that amount. DEIR/S at 3.1-77. But this small number is misleading, as it accounts for only the actual footprint of the three columns that will support the Green River Road off-ramp. In addition to these columns, and as described above, there may well be other direct impacts to the Park over time if Caltrans needs to access and maintain the ramp and footings/columns. Also, there will undoubtedly be direct impacts to Park land associated with the .73 acre aerial easement. As the DEIR/S admits, "there may be some restrictions on future uses in the area under the aerial easement, at the ground surface, to avoid adverse impacts to the bridge and to ensure that rail and surface vehicles can continue to safely pass under the bridge." DEIR/S at 4-38. Thus, the actual, direct impacts to the Park include not merely the .06 acres from the ramp footings, but also include "[t]he 0.73 ac area under the aerial easement and the 0.28 ac area in CHSP south of that easement[, which] result[s] in a total 1.01 ac used by Alternatives 1 and 2." DEIR/S at 4-38. The DEIR/S' failure to accurately and consistently describe the full range of impacts from the off-ramp renders it inadequate to carry out its purpose as an informational document.3

Moreover, the DEIR/S fails to analyze the feasibility of using the planned temporary construction easements and permanent subsurface easement in the Park. For example, just west of Coal Canyon Road on the south side of SR-91, Caltrans plans a permanent subsurface easement with an intrusion into the Park of 1.88 acres. But the DEIR/S fails to disclose that there is a conservation easement on this land and fails to analyze whether that easement allows the subsurface easement for the Project. Likewise, 3 Regardless of the DEIR/S inaccuracies regarding the magnitude of impacts to parks, many such impacts, as well as impacts to biological resources, would be reduced if not avoided by elevating the off-ramp now proposed for Coal Canyon and shifting it to a less-sensitive location. Moreover, the alternatives discussed in the comments submitted by the Center for Biological Diversity would similarly reduce or avoid these impacts.

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Caltrans wants two temporary construction easements of .57 acres in the Park on the north side of SR-91 but fails to disclose the existence of, or the Project’s consistency with, a conservation easement on that land.

To be legally complete, the DEIR/S must (1) analyze whether Caltrans will require a maintenance easement and how that easement would limit use of Park land, (2) disclose whether the existence of the ramp and aerial easement will render the portion of the Park beneath the ramp essentially useless for all park purposes, and (3) disclose the conservation easements on Park land and analyze whether those easements allow Caltrans to use Park land for construction work or subsurface improvements. In particular, the DEIR/S must analyze what uses will still be allowed beneath the ramp and what uses will be prohibited or limited. Will the ramp preclude the Park from constructing any buildings in the area, improving its access road, or allowing certain other types of uses? Will the public still be allowed to use the area under the freeway ramp? As described in more detail below, Caltrans must also propose mitigation for the entire impacts, not just the .06 acres directly impacted by the footings.

2. **The DEIR/S Falls to Analyze the Impacts of Increased Noise, Lighting and Fire Ignition Risk on Parks.**

Increased noise from freeways can negatively affect park users and wildlife. For recreational users of parks, increased noise detracts from the peaceful atmosphere and serenity of a park. For wildlife, noise and lights can deter animals from using areas of habitat that they might otherwise use, thereby decreasing the range of available land for the animals. Of particular concern, the Coal Canyon area serves as a critical wildlife corridor, connecting CHSP on the north with the vast, undeveloped Santa Ana mountains on the south. The recently established wildlife undercrossing at the old Coal Canyon Road exit forms a critical link for wildlife to cross the freeway. See Janet Wilson, *Wildlife Highway Links Vital Habitats*, Los Angeles Times, April 19, 2004, attached as Ex. L.

Although the Project includes a sound barrier in certain areas in order to reduce noise impacts to residences and other human-related sensitive receptors, the DEIR/S appears to ignore the potential impacts of noise to wildlife in parks or other areas. Indeed, the document bluntly admits that “[n]oise abatement is only considered for areas of frequent human use that would benefit from a lowered noise level.” DEIR/S at 3.15-6; see also id. at 3.15-28 – 39 (analyzing feasibility of sound walls only in locations
where residences would be impacted). The DEIR/S’s failure to analyze the potential impacts of noise on wildlife, and in particular on the Coal Canyon Road wildlife undercrossing, renders its analysis legally deficient.

In addition, the DEIR/S fails to analyze the effect of increased lighting along the freeway. Although the DEIR/S states that virtually no new lighting is planned due to the expansion, DEIR/S at 3.7-13, it does not analyze the increased lighting due to headlights from the increased traffic at night, which could deter wildlife from using the undercrossing or other areas near the freeway.

The DEIR/S also ignores the increased risk of fire ignition from the expanded freeway. Given the recent fire history (e.g., the Freeway Complex Fire) in the area, as well as the fire that is burning in Carbon Canyon as of July 7, 2011, this issue is of particular concern. In fact, the DEIR/S asserts, counterintuitively, that “the project would have a beneficial effect related to wildland fire hazards” because it will widen the freeway, creating a wider fire break so that fires will not spread as easily. DEIR/S at 4-5. Even assuming this is accurate, the DEIR/S ignores the fact that fires often begin on roadways. This has historically been true of SR-91, which has been the source of numerous area fires. Given that the freeway will now carry even more vehicles, there is a greater likelihood of fire ignition from the road. The DEIR/S must analyze this impact.

3. The DEIR/S Fails to Analyze Cumulative Impacts to Parks.

The DEIR/S entirely fails to analyze any impacts to CHSP or other public parks or recreation areas that the Project would cause in conjunction with other past, present or

4 The EIR shows that noise barriers are reasonable and feasible along Coal Canyon Road. DEIR/S at Figure 3.15-1, Sheet 2. However, it appears to not actually require noise barriers in that location. DEIR/S at 4-35. Further, the map showing feasible noise barriers at Coal Canyon Road shows that they would be adjacent to open space; yet this contradicts the earlier statement that sound barriers were only considered for areas where residences would be impacted. The DEIR/S’ confusing and contradictory noise analysis makes it nearly impossible to tell what was actually analyzed. This flaw is, in itself, a violation of CEQA because the document fails to actually inform the public and decisionmakers of the Project’s impacts in a comprehensible fashion.

5 Hills For Everyone is presently completing a fire study that shows that this stretch of the 91 freeway is a frequent source of ignition for fires that eventually spread to the Park; we will submit the study to Caltrans when it is complete.
reasonably foreseeable future projects. Instead, the DEIR/S states that: 

"[b]ecause Alternatives 1 and 2 (LPA) and their design variations would not result in direct impacts on Section 4(f) properties after mitigation, the potential for the SR-91 CIP to contribute to cumulative impacts related to these resources was not further evaluated in this analysis." DEIR/S at 3.25-61. First, the fact that there might not be any project-specific impacts, even if true, does not mean that there are no cumulative impacts. Kings County Farm Bureau, 221 Cal.App.3d at 719-21. Moreover, the DEIR/S' assertion that the Project will "not result in direct impacts" on protected properties is demonstrably false. As the DEIR/S freely admits in other sections, the Project does directly impact CHSP on a permanent basis and other parks on a temporary basis. See, e.g., DEIR/S at 3.1-63 (the Project would result in the "permanent use" of land in CHSP and temporary use of other parks).

Because the Project would admittedly result in some impacts to park lands, the DEIR/S must analyze these impacts in a cumulative setting. The fact that the Project's impacts to parks may be small individually is irrelevant to a cumulative analysis. CEQA Guidelines § 15355(b) ("Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."); Kings County Farm Bureau, 221 Cal.App.3d at 719-21. Indeed, in a rapidly developing area such as Riverside County, parks and open space are a finite and shrinking resource, and any individually minor impact must be assessed in conjunction with the myriad other impacts occurring due to other projects.

Here, it appears that other highway widening projects in the area may affect CHSP and other parks. Although it is impossible to tell from the DEIR/S the extent or certainty of any such impacts, the DEIR/S describes numerous other highway projects near the parks affected by this Project. For example, the SR 241/91 interchange project may have impacts on Featherly Regional Park and Canyon RV Park. Also, the SR 91/SR 71 Interchange Improvement Project will impact CHSP, and if the western section of the Mid-County Parkway is constructed, it would impact El Cerrito Sports Park. Similarly, the many projects discussed in section I.A.3, above, would each impact CHSP and other area parks and recreational resources. The DEIR/S must analyze the cumulative impacts of these and other known development and highway projects on CHSP and other area parks.

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6 See discussion of the standard for cumulative analysis, infra.

7 Indeed, as described in section I.A.2, above, some other highway "projects" are actually part of this Project and should be analyzed together in this EIR/S.
4. The DEIR/S’ Mitigation for Park Impacts Is Inadequate.

The DEIR/S admits that impacts to parks constitute a significant impact for CEQA purposes (DEIR/S at 4-18, 3-36 – 37), thus triggering CEQA’s requirement that the EIR identify all feasible mitigation that could minimize or avoid these impacts. CEQA Guidelines § 15126.4(a)(1)(A) (discussion of mitigation “shall identify mitigation measures for each significant environmental effect identified in the EIR”). The DEIR/S does propose some mitigation for purposes of meeting requirements of the Land and Water Conservation Act and the Department of Transportation Act. DEIR/S at 3.1-77 – 3.1-78. However, nowhere does the DEIR/S analyze whether the mitigation proposed under these requirements also meets Caltrans’ separate obligation to mitigate impacts to parklands under CEQA. See DEIR/S at 3.1-76 – 77 (discussing mitigation “to address project impacts under Sections 4(f) and 6(f) . . .” but not CEQA). California courts have long rejected Caltrans’ implicit approach of relying on compliance with other legal requirements to satisfy CEQA’s mitigation requirements. See Kings County Farm Bureau v. City of Hanford, 221 Cal.App.3d 692, 716 (1990) (compliance with agency regulations does not conclusively indicate that a proposed project would not have a significant and adverse impacts requiring mitigation).

In any event, the proposed mitigation is inadequate for any purpose. First, the DEIR/S indicates that Caltrans does not even yet know whether it will replace the parkland taken by the Project. Instead, it states that, during public circulation of the DEIR/S, it “will continue to consult with State Parks” on the issue of compensation for the use of land in CHSP. DEIR/S at 3.1-77. Likewise, it states that, in the future, it will “coordinate with State Parks on the identification” of other mitigation measures to improve the existing trailhead near the Green River Road off-ramp. Id. This means that the public has no assurance that any particular mitigation will occur, or knowledge of what the final mitigation will be. Although the document contains a handful of mitigation ideas, it contains no performance standards to ensure that mitigation measures will serve their intended purposes and will adequately reduce impacts. This standard-less deferral of mitigation until after project approval is unacceptable under CEQA. See Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296, 309 (deferral of mitigation until after project approval is inadequate); see also San Joaquin Raptor Rescue Ctr., 149 Cal.App.4th at 671.

More importantly, the DEIR/S fails to propose mitigation that addresses all of the Project’s impacts on parklands. Rather, it merely proposes mitigation for the .06 acres of land directly impacted by the freeway ramp columns. DEIR/S at 3.1-77. Given that the aerial easement will also significantly impact the Park, and that the Project will actually
“result in a total of 1.01 ac used” in the Park, the DEIR/S must propose mitigation for all of these impacts. DEIR/S at 4-38.

5. The DEIR/S Fails to Satisfy the Procedural and Substantive Mandates of Section 4(f) of the Department of Transportation Act and Fails to Analyze the Project’s Consistency with the Act.

In enacting section 4(f) of the Department of Transportation Act of 1966, Congress declared that “special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands [and] wildlife and waterfowl refuges . . . .” 49 U.S.C. § 303. As a means of realizing these broad goals, Congress specified two fundamental substantive mandates: (1) prohibiting federal agencies from approving transportation projects that require use of a public park, recreation area or wildlife refuge unless there are no feasible and prudent alternatives to using such land; and (2) requiring transportation projects that use a public park, recreation area or wildlife refuge to use all possible planning to minimize harm to the land. 49 U.S.C. § 303(c) (emphasis added).

The Transportation Act thus codified the requirement that federal agencies consider alternatives to environmentally damaging proposals even before this principle was enshrined as a core provision in NEPA. Indeed, the Act’s provisions are even more stringent than NEPA’s, as they include the substantive requirement that an agency actually select a feasible and prudent alternative to proposed highway routes that would otherwise damage these protected areas. Further, as the DEIR/S recognizes, agencies often seek to comply with section 4(f) by purchasing or paying for replacement park land. See DEIR/S at 3.1-77 (recognizing Caltrans’ obligation to provide replacement land for property protected under section 4(f) that is taken as part of the Project).

a. The DEIR/S Improperly Concludes that Impacts On Parkland are “De Minimis.”

Recent amendments to the Department of Transportation Act allow agencies to find that a project’s impacts to protected resources are only “de minimis,” and that section 4(f) protections therefore do not apply. In order to properly make de minimis findings, an agency must show that the “impact is one that will not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f).” 23 C.F.R. § 774.17. The Federal Highway Administration states that:

The purpose of the language [regarding de minimis findings] is to clarify that the portions of the resource important to protect, such as playground equipment at a public park, should be distinguished from areas such as
parking facilities. While a minor but adverse effect on the use of playground equipment should not be considered a de minimis impact under section 4(f), encroachment on the parking lot may be deemed de minimis, as long as the public's ability to access and use the site is not reduced.\(^8\)

Thus, for purposes of public parks such as CHSP, a de minimis finding is not proper if a project, together with mitigation measures, would adversely affect the natural setting, views of hikers, accessibility for hiking and other recreation, habitat for wildlife, or other features or attributes that qualify the area for protection under section 4(f). Here, with regard to CHSP, the Project would unquestionably adversely “affect the features, attributes, or activities qualifying the property for protection under Section 4(f).” The Project will not merely encroach on a parking lot or impact unimportant or fungible features of the Park. Rather, it will place a freeway entrance ramp over ¾ of an acre of parkland immediately adjacent to a trailhead and that provides access to a rare natural stretch of the Santa Ana River. DEIR/S at 3.1-72. It will also make it so that “[u]sers of that trail in CHSP would have very close views of a large retaining wall on the north side of SR-91.” Id. Although the DEIR/S does not state how large the retaining wall would be in this location, it may be up to 40 feet high. DEIR/S at 5.25-18 (retaining walls will be anywhere from 3 ft high to 40 ft high).

Despite this unequivocal evidence of direct adverse impacts to key Park attributes, the DEIR/S concludes, inexplicably, that a de minimis finding is justified because “[t]he changes to CHSP as a result of the project would be minimal [and t]here would be no interference with the features, activities, attributes, or purposes of CHSP, on either a temporary or permanent basis.” DEIR/S at 3.1-75 (emphasis added). As described above, the Project unequivocally has some interference with important features of CHSP. Thus, the DEIR/S’ conclusion regarding the de minimis finding is baseless.

Though Caltrans fails to explain its reasoning for finding “no interference,” there are two possible explanations, neither of which is valid. First, earlier in DEIR/S, the document states that “[t]here are no park amenities in the part of CHSP adjacent to the project segment of SR-91. The user amenities (trails, etc.) are located farther in CHSP so park patrons are not directly adjacent to the freeway and do not have views of SR-91.” DEIR/S at 3.1-55. If this were true, Caltrans might have a non-frivolous argument that

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the Project did not impact important features of the Park. However, this assertion is
directly contradicted by other statements in the DEIR/S, which clearly indicate that there
is a “trailhead located immediately north of the area where the columns [of the new off-
ramp] would be located” and that “[u]ser[s] of that trail in CHSP would have very close
views of a large retaining wall” in that area. DEIR at 3.1-72. Thus, the DEIR/S’ finding
of de minimis impacts cannot be justified by an allegation that important Park amenities
are not near the Project site. Moreover, because the DEIR/S contains internal
contradictions regarding whether there is a trailhead at the part of the Park impacted by
the Project, it is legally deficient as an informative public document under CEQA and
NEPA. See San Joaquin Raptor, 27 Cal.App.4th at 730 (“[a]n accurate project
description is necessary for an intelligent evaluation of the potential environmental
effects of a proposed activity.”).

Second, Caltrans may be relying on possible mitigation to the Project’s impacts on
the Park to make its de minimis finding. For instance, the DEIR/S states that various
mitigation measures will be undertaken in order to address the taking of .06 acres of
CHSP and the “visual impacts of the retaining wall and the elevated [] off-ramp.”
DEIR/S at 3.1-77. However, the DEIR/S’ findings regarding de minimis impacts do
not appear to take this mitigation into account; rather, they state that there “would be no
interference with the features, activities, attributes, or purposes of CHSP.” DEIR/S at
3.1-75 (emphasis added). Moreover, the DEIR/S admits that the impacts to trail users of
their views due to the retaining wall would only be “partially mitigated with
visual/aesthetics treatments.” DEIR/S at 3.1-75 (emphasis added). Moreover, as
described above, to fully mitigate the Project’s impacts to parks, Caltrans would need to
mitigate not just for the .06 acres of land taken due to the ramp footings, but also for the
land impacted by the aerial easement. Thus, the de minimis finding could not be justified
even with current mitigation.

The improper analysis of the de minimis standard renders the DEIR/S’ analysis of
the Project’s consistency with section 4(f) inaccurate, in violation of CEQA and NEPA.
See Serrville, 327 F. Supp. 2d at 350 (EIS that contained insufficient 4(f) evaluation was
inadequate). Further, because the de minimis findings are not justified, Caltrans must
comply with section 4(f)’s substantive mandate to avoid using any part of CHSP for the
Project unless there are no feasible and prudent alternatives, and to use all possible
planning to minimize harm to the Park. 49 U.S.C. § 303(c).

b. The DEIR/S Fails to Accurately Analyze Consistency
With Section 4(f) Because Its Constructive Use Analysis is
Improper.
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Section 4(f) protects park lands not only from direct uses, but also from “constructive uses.” A “constructive use” of 4(f) lands occurs when:

[A] transportation project does not incorporate land from a section 4(f) resource, but the project’s proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features, or attributes of the resource are substantially diminished.

23 C.F.R. § 771.135(p)(2). Examples of constructive uses include noise increases, substantial aesthetic impairment, restriction of access, vibration impacts, and ecological intrusions, among others. See 23 C.F.R. § 771.135(p)(4).

The application of section 4(f) to constructive use has been recognized by the courts in a wide variety of circumstances. The Ninth Circuit was the first to recognize such circumstances and has continued to do so. In Brooks v. Volpe, 460 F.2d 1193, 1194 (9th Cir. 1972), for example, the court found that a highway encircling a campground was subject to section 4(f) despite the fact that there was no direct use of protected lands. Since then, federal courts have found constructive use of section 4(f) lands resulting from such impairments as increased noise, unsightliness, and impaired access. See, e.g., Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 202 (D.C. Cir. 1991) (holding noise from airport expansion would impact nearby park); Citizen Advocates for Responsible Expansion, Inc. v. Dole, 770 F.2d 423, 439 (5th Cir. 1985) (holding highway project would cause aesthetic and visual intrusion on protected park and historic buildings); Monroe County Conservation Council v. Adams, 566 F.2d 419, 424 (2d Cir. 1977) (holding highway would restrict access to park because nearby residents would have to cross four lanes of heavy traffic).

Here, the DEIR/S fails to analyze or describe whether the Project would result in constructive use of protected lands due to increased noise, runoff, vibration or other impacts. Although Appendix B contains some information regarding constructive use of parks, courts have held that an agency’s analysis must be contained in the EIR, not “scattered here and there in EIR appendices.” Santa Clarita Organization for Planning the Environment v. County of L.A., 106 Cal. App. 4th 715, 722 (2003).

Moreover, the DEIR/S (including Appendix B) fails to analyze “constructive uses” for all relevant protected areas, including CHSP, the Santa Ana River Trail, and the Featherly Regional Park, among other areas. Appendix B at B-5 – B-8. Because the
Project will be constructed adjacent to all three protected areas, the DEIR/S must analyze potential constructive use of these areas. Given that the Project would result in construction of 2-4 lanes of new freeway adjacent to these areas, which will result in aesthetic, noise, runoff and other impacts, the Project will undoubtedly substantially impair the visual and recreational attributes in portions of all three protected areas.

In particular, the Project’s noise will impact park areas significantly. The DEIR/S discloses that the Project will result in a 10 decibel increase from existing conditions in either nine or twelve different locations along the length of the Project, depending whether Alternative 1 or 2 is selected. DEIR/S at 3.15-19 – 3.15-24. However, the DEIR/S does not disclose whether this level of noise increase is expected in protected park areas. Id. In particular, it does not disclose whether there would be a high level of noise increase at Canyon RV park in Featherly Regional Park.

Courts have found “constructive use” where a freeway project will result in a 10 decibel increase in noise levels in parks. Davis v. Mineta, 302 F.3d 1104 (10th Cir. 2002). Moreover, noise increases are particularly impactful in areas such as campgrounds. See Brooks, 460 F.2d 1193 (9th Cir. 1972) (noise increase in campground due to highway project resulted in constructive use). Thus, the DEIR/S must analyze whether the Project will result in significant noise increases in protected areas, thereby causing a constructive use. If so, Caltrans must also undertake all possible planning to reduce the impacts, as required by section 4(f).

6. The DEIR/S Fails to Abide by the Requirements of Section 6(f) of the Land and Water Conservation Fund Act and to Adequately Analyze the Project’s Consistency with Section 6(f).

When local governments receive federal funding through the Land and Water Conservation Fund Act program, they agree to comply with 36 CFR § 800, Executive Order 11593, § 106 of the National Historic Preservation Act of 1966 and Section 6(f)(3) of the Land and Water Conservation Fund Act (“Conservation Fund Act”), which states: “No property acquired or developed with assistance under this section shall, without the approval of the National Secretary of the Interior, be converted to other than public outdoor recreation uses.” 16 U.S.C. § 460l-8(f). The Secretary of the Interior may approve conversions only if the local agency complies with the terms of the conversion provisions of the Conservation Fund Act and provides replacement parkland that satisfies the requirement that the public recreation estate remain undiminished. Id.

CHSP received funds through the Conservation Fund Act. DEIR/S at 3.1-54. Thus, Caltrans must abide by the various provisions of federal law outlined above,
including the obligation to provide replacement parkland to ensure that the Park's attributes remain undiminished. As explained above, the DEIR/S also must fully analyze the Project's consistency with section 6(f). However, the DEIR/S fails to meet the requirements of CEQA and NEPA, and Caltrans fails to show that it will comply with the various substantive requirements of federal law before approving the Project.

First, although Caltrans has apparently consulted with State Parks regarding its obligations under section 6(f), there is no indication that it has received approval of the Department of the Interior or National Park Service, or that it intends to seek such approval. See DEIR/S at 3.1-76 (stating that “[c]onsultation with State Parks has been ongoing” but not mentioning consultation with the National Park Service). Yet consultation with the National Park Service is required, as “The NPS Regional Director has the authority to disapprove conversion requests and/or to reject proposed property substitutions.” See Exhibit K, Land and Water Conservation Fund State Assistance Program Manual, Chapter 8 p. 8-4 (2008). Without approval from National Park Service, there is no assurance that the federal government will allow Caltrans' proposed conversion of recreational land in CHSP or its proposed substitution of land. Given that the Green River Road off-ramp, with its footings in CIISP, is an integral part of the Project, and that the DEIR/S contains no alternative that avoids use of Park land, Caltrans must obtain the approval of the National Park Service in order to proceed with the Project. Caltrans' failure to obtain or seek this approval is a glaring omission that must be remedied.

Second, Caltrans improperly relies on the Conservation Fund Act’s streamlined provisions for “small conversions” that amount to less than 10% of a property’s area. DEIR/S at 3.1-76. In order to satisfy the criteria for a “small conversion,” Caltrans must demonstrate that the proposed conversion is not controversial and that the replacement property is contiguous to the original Section 6(f) area. See Ex. K, p. 8-10. But here, as demonstrated by this letter, the conversion is controversial. Riverside County and Caltrans should not be taking more precious parkland to build ever-larger freeways. SR 91 is already 10 lanes, and this Project would widen it to 12 or even 14 lanes. What next? 18 lanes? 20? We simply cannot build ourselves out of traffic jams, and taking more parkland as part of Caltrans’ misguided attempt to pave over the rest of southern California should be, and is, controversial. Moreover, the DEIR/S does not assure that replacement parkland would be contiguous to CHSP. Indeed, it does not even ensure that replacement parkland will be provided; rather, it states that Caltrans will either provide contiguous, replacement parkland or monetary compensation to address the conversion of parkland under section 6(f). DEIR/S at 3.1-77. However, section 6(f) contemplates that
an agency will provide replacement parkland, not monetary compensation. 16 U.S.C. § 4601-8(f)(3).

Lastly, The DEIR/S fails to make any mention of the California Outdoor Recreation Plan in Chapter 3.1, Land Use, which purports to identify and evaluate all of the Project’s “impacts related to land use.” DEIR/S at 3.1-1. Furthermore, the California Outdoor Recreation Plan and its consistency with the Project are not discussed in any other section of the DEIR/S. The complete failure to evaluate and disclose the Project’s consistency with this state-wide plan is a failure to comply with CEQA, and renders the DEIR/S inadequate.

7. The DEIR/S Fails To Discuss Caltrans’ Obligations Under the Public Park Preservation Act.

The DEIR/S also fails entirely to acknowledge the Public Park Preservation Act of 1971, Pub. Res. Code § 5400 et seq., and its relevance to the Project. The Public Park Preservation Act, which applies to any park operated by a public agency, provides in part:

No city, city and county, county, public district, or agency of the state, including any division, department or agency of the state government, or public utility, shall acquire (by purchase, exchange, condemnation, or otherwise) any real property, which property is in use as a public park at the time of such acquisition, for the purpose of utilizing such property for any nonpark purpose, unless the acquiring entity pays or transfers to the legislative body of the entity operating the park sufficient compensation or land, or both, as required by the provisions of this chapter to enable the operating entity to replace the park land and the facilities thereon.

Pub. Res. Code § 5401. The replacement land or compensation must be sufficient to provide substitute park land of comparable characteristics, substantially equal size, and capable of being used by generally the same persons as use the existing park. Pub. Res. Code § 5405.

Caltrans’ obligations under the Park Preservation Act extend at a minimum to CHSP. The DEIR/S must discuss Caltrans’ obligation to replace any park land it acquires with similar park land elsewhere and how it intends to comply with this requirement. See, e.g., City of Fremont v. San Francisco Bay Area Transit Dist., 34 Cal.App.4th 1780, 1790 (legally adequate EIR where BART fully discussed obligation
under the Public Park Preservation Act). Though the DEIR/S discusses similar obligations under federal law, see DEIR at 3.1-77, Caltrans’ obligations under the state Park Preservation Act are not necessarily identical. For example, where, as here, the amount of land acquired from a public park is less than 10% of the park’s area, the acquiring entity may opt to improve the remaining park instead of acquiring new, replacement park land. Pub. Res. Code § 5404. Although the DEIR/S indicates that, for purposes of federal law, Caltrans intends to replace the acquired parkland and also to improve the existing parkland (see DEIR/S at 3.1-77), the DEIR/S should address whether Caltrans intends to use the same method to comply with the Park Preservation Act. If so, as discussed above, Caltrans may not rely on uncertain, possible plans to mitigate taken parkland, but must commit to a definite course of action that will fully mitigate the land in CHSP that will be taken under the proposed Project.

III. The DEIR/S Reaches the Bizarre and Unsupportable Conclusion that the Project Has No Potential to Induce Growth.

In one of the DEIR/S’ most blatant shortcomings, it concludes that the Project will have no growth-inducing impacts whatsoever. DEIR/S at S-30 (Chapter 4), 3.2-9. There is no credible evidence to support this conclusion, which is contrary to established research regarding the likelihood of freeway projects to induce growth. The conclusion is also contrary to Caltrans’ own guidance documents, and common sense. The DEIR/S must be recirculated after Caltrans undertakes a new analysis of growth inducing impacts.

Both NEPA and CEQA require analysis of the growth-inducing impacts of a proposed project. Pub. Res. Code § 21100(b)(5); 40 C.F.R. § 1508.8(b). CEQA requires that an EIR include a “detailed statement” setting forth the growth-inducing impacts of a proposed project. Pub. Res. Code § 21100(b)(5); City of Antioch v. City Council of Pittsburg, 187 Cal.App.3d 1325, 1337 (1986). The statement must “[d]iscuss the ways in which the proposed project could foster economic growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.” CEQA Guidelines § 15126.2(d). It must also discuss how projects “may encourage and facilitate

9 “Research has shown that . . . changes in accessibility can influence the direction of growth in a region and the rate of growth in local areas.” Caltrans, “Guidance for Preparers of Growth-related, Indirect Impact Analyses,” p. 3-4, attached as Exhibit I; see also Sierra Club, Ill. Chapter v. US Dept. of Transp., 962 F. Supp. 1037, 1043 (N.D. Ill 1997) (“Highways create demand for travel and expansion by their very existence.”) (citing Swain v. Brinegar, 517 F.2d 766, 777 (7th Cir.1975)).
other activities that could significantly affect the environment, either individually or cumulatively” or “remove obstacles to population growth.” *Id.*

According to NEPA, an EIS must consider “growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.” 40 C.F.R. § 1508.8(b). “Induced growth consists not only of growth that would not have occurred absent the project, however, but of relocated or redirected growth due to changes in accessibility.” *Senville v. Peters*, 327 F. Supp. 2d 335, 368 (D. VT 2004). The purpose of this analysis is “to evaluate the possibilities [for new growth induced by the project] in light of current and contemplated plans and to produce an informed estimate of the environmental consequences.” *City of Davis v. Coleman*, 521 F.2d 661, 676 (9th Cir. 1975). In conducting this analysis, “an agency must use its best efforts to find out all it reasonably can.” *Id.* Applying this standard, the Ninth Circuit in *City of Davis* found “totally inadequate” the government agency’s conclusion that a proposed freeway interchange would not have significant growth-inducing effects. *Id.* Indeed, the court found the interchange an “indispensable prerequisite” and “essential catalyst” for future development. *Id.* at 674.

A. The DEIR/S’ Analysis of Growth Inducing Impacts is Woefully Inadequate.

The DEIR/S purports to use a “first cut screening analysis” to determine the Project’s potential for inducing or affecting growth. DEIR/S at 3.2-9. This type of analysis is described in detail in Caltrans’ 2008 guidance document entitled “Guidance for Preparers of Growth-related, Indirect Impact Analyses.” *See* Exhibit I. Yet in the DEIR/S, Caltrans fails to follow its own guidance regarding how to undertake this screening analysis, and it flatly ignores most of the factors listed in its guidance regarding how to determine if a highway project will induce growth. For example, in its guidance, Caltrans states that “screening factors to consider include accessibility, project type, project location, and growth pressures in the area.” *Id.* at 5-4. According to the guidance, a project may have growth-related impacts due to increased accessibility to the area if:

- Development that would have occurred anyway could be arranged in a different pattern. For example, new commercial activities might choose sites that the proposed project makes more accessible rather than other sites in the study area.

- The proposed project could cause some businesses or households to locate in the study area instead of other places in the region. For example, if access is improved...
to land on the urban fringe, developers may capitalize on the improved access and build homes in these areas instead of elsewhere in the region.

- The proposed project could stimulate new real estate development that changes existing land uses and increases intensities in already developed areas. For example, residential properties near a new interchange might be redeveloped into commercial buildings because the changes in accessibility will make the land more attractive to commercial users who will offer higher prices for the land.

Ex. I at 5-4.

Here, the DEIR/S admits that the Project will cause “improved travel times” and will improve interchanges and widen freeways. DEIR/S at 3.2-10 – 3.2-11. Yet the DEIR/S fails to analyze whether developers may capitalize on the improved access, whether development that may have occurred anyway may be arranged in a different pattern, or whether residential property near a newly improved interchange might be redeveloped. In short, the DEIR/S fails to analyze the very factors that its own guidance document declare to be essential factors in determining the growth-inducing potential of a highway project.

Similarly, Caltrans’ own guidance states that projects such as this, which are in an urban/suburban fringe, and which add HOV or HOT lanes, are precisely the types of projects that may have growth-inducing impacts:

Adding high occupancy vehicle (HOV) lanes or mixed-flow lanes are examples of projects that could cause growth-related impacts because they add capacity to an existing facility. (Ex. I at 5-5).

**Urban/Suburban Fringe.** Undeveloped parcels adjacent to an expanding urban/suburban area can be prime growth areas. Fringe areas generally have high land availability and lower land prices. *Transportation projects in these areas have a high potential to cause growth-related impacts,* particularly if the land is suitable, development regulations are favorable, and the area is in the path of an expanding urban/suburban core. (Ex. I at 5-6 (emphasis added)).

Overall, Caltrans’ own guidance states that a first-cut screening analysis is generally insufficient to measure growth-related impacts when a project (1) adds new capacity on an existing roadway, (2) is located in an urban/suburban fringe area, and (3) is located in an area with lots of growth pressure. Ex. I at 5-8. All of these factors are
present here, yet Caltrans undertook only the most cursory first-cut screening analysis, and no follow-up analysis. Indeed, its “analysis” consists of nothing more than bare assertions and unsupported conclusions, which cannot provide the substantial evidence necessary to support its conclusion that the Project will have no growth inducing impacts.

As an example of its shoddy analysis, the DEIR/S admits that the Project will improve accessibility in the Project area, yet concludes, with no analysis, that the Project would not induce growth because it allegedly “would not substantially modify local, intra-regional or inter-regional accessibility to and/or from SR-91 and I-15.” DEIR/S at 3.2-10. In other words, many more people will be able to use the freeways to reach distant jobs, thereby making commute times shorter and living in Riverside County more appealing. However, because the Project does not create more entrances to the freeways, the Project does not modify freeway accessibility; thus, the Project cannot possibly change development patterns.

This cramped analysis of accessibility fails to account for the fact that accessibility to an area is measured not just by the number of entrances to roads, but also “reflects both the attractiveness of potential destinations and ease of reaching them.” Ex. I at 3-3. Indeed, as Caltrans’ guidance states, “Transportation projects may reduce the time-cost of travel, thereby enhancing the attractiveness of surrounding land to developers and consumers.” Id. Here, this is precisely what the Project would do, making commute times from Riverside County to Orange County shorter and thereby making surrounding land more attractive to consumers and developers. Yet the EIR fails to even acknowledge, much less analyze, this critical component of accessibility. This failure renders the DEIR/S inadequate under CEQA and NEPA.

Moreover, the DEIR/S is even internally inconsistent regarding the potential for growth in the area. On the one hand, it states that the Project “area is projected to continue to experience growth in population and jobs even in jurisdictions relatively constrained by limited land available for development.” DEIR/S at 3.2-11. It also states that “On average, the [Project] study area is about 50 percent built out.” DEIR/S at 3.1-1. Yet on the other hand, the DEIR/S states that “The project area includes highly urbanized areas (City of Corona, the part of Riverside County within the project limits) with little remaining development capacity.” DEIR/S at 3.2-11. Caltrans uses this second “fact” to

10 See DEIR/S at 1-3 (showing Project in regional context, on the fringe between urban parts of Orange and Riverside Counties, and suburban/rural parts of Riverside County).
conclude that, because there is little developable land left, the Project cannot be expected to induce growth. *Id.* However, there is no evidence to support the DEIR/S’s conclusion that the area is built out, and that growth therefore will not occur. On the contrary, the DEIR/S repeatedly discusses the continuing growth expected in the Project area. See, e.g., DEIR/S at 3.1-1 (“The study area is forecast to continue to grow rapidly over the next 20 years”).

The DEIR/S also meekly attempts to support its conclusion that the Project will not impact growth by stating that “SR-91 is also constrained on the south by the C[leveland] N[ational] F[oorest] and New O[range] C[ounty] Park [J, and constrained on the north by CHSP, the Santa Ana River, and Featherly Regional Park.” DEIR/S at 3.2-11. But these parks constrain development along only a small percentage of the Project corridor. See DEIR/S at Figure B-1 (showing that parks only abut Project for small percentage of corridor length, and that lots of developable land remain in vicinity of Project). Besides, the Project includes widening a significant section of the I-15, yet the DEIR/S does not even attempt to explain whether or to what extent growth is constrained along this section of freeway.

In sum, the DEIR/S relies on unsupported assumptions to dismiss the idea that a massive widening of two freeways could induce growth at all. This reasoning flies in the face of current research, which shows that such roadway expansions do induce development. See Reid Ewing & Allan Lichtenstein, *Induced Traffic and Induced Development*, October 2002, attached as Exhibit J.11 If Caltrans and FHWA have contrary data—and there is no indication in the DEIR/S that they do—they must reference it in the DEIR/S. 40 CFR § 1502.24 (agencies must “identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions relied upon in the [EIS].”). However, they cannot rely on unsupported assumptions to summarily conclude that the “proposed project is not expected to influence the amount, timing, or location of growth in the project area.” DEIR/S at 3.2-11.

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11 This study, in its summary on the first page, states that “research that has been done on induced development suggests it is a real phenomenon. While the cause and effect between road construction and development is not totally clear, the studies suggest that some level of development is likely to occur specifically as a result of the additional road capacity.”
B. The DEIR/S Fails to Analyze Cumulative Growth Inducing Impacts.

It is undisputed that this Project is an integral part of dozens of other planned highway expansions in the region, all of which will affect the movement of goods and people—and induce further growth—in the region. See DEIR/S at 3.25-41 – 3.25-51 (listing cumulative projects). The DEIR/S’ wholesale failure to analyze the cumulative growth-inducing impacts of these inter-connected projects violates CEQA and NEPA. CEQA Guidelines § 15130(a) (stating requirements for cumulative impacts); San Joaquin Raptor, 27 Cal.App.4th at 732-33; 40 C.F.R. § 1508.25(a), (c). The DEIR/S must be revised to include this critical analysis.

IV. CONCLUSION

In order to cure the panoply of defects identified in this letter, the DEIR/S must be revised to fully and accurately describe all components of the proposed Project. Substantial new information must be obtained to adequately assess the environmental impacts of the whole of the Project, and to identify effective mitigation measures and alternatives capable of alleviating these impacts. Both CEQA and NEPA require that the public have a meaningful opportunity to review and comment upon this significant new information, which should be presented in the form of a recirculated draft EIR/S. In addition, more analysis needs to be conducted to ensure that Caltrans has considered all feasible and prudent alternatives to using section 4(f) parkland and has undertaken all possible planning to minimize harm to such protected lands.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

[Signature]

Gabriel M.B. Ross
Erin B. Chalmers
Laurel L. Impett

Note: Exhibits A to L are provided in Attachment 4, Hills for Everyone Comment Letter Attachments

Exhibits:

Exhibit A: SR-91/SR-71 Interchange Improvement Project Initial Study and Proposed Mitigated Negative Declaration, Caltrans, November 2010
Exhibit B: RCTC SR-91/SR-71 Interchange Improvement Project Information Sheet, RCTC
Exhibit C: RCTC SR-91/SR-71 Interchange Project Newsletter, RCTC
Exhibit D: I-15 Corridor Improvement Project Overview, RCTC
Exhibit E: I-15 Corridor Improvement Project Map, RCTC
Exhibit F: I-15 Corridor Improvement Project Objectives, RCTC
Exhibit G: Draft 2011 SR-91 Implementation Plan, OCTA
Exhibit J: Induced Traffic and Induced Development, Reid Ewing & Allan Lichtenstein, October 2002
Exhibit L: Wildlife Highway Links Vital Habitats, Janet Wilson, Los Angeles Times, April 19, 2004

cc: Claire Schlotterbeck; Hills For Everyone
Jonathan Snyder; United State Fish and Wildlife Service
Judi Tamasi; Wildlife Corridor Conservation Authority
Jay Chamberlain; Chief Resources Division, Department of Parks and Recreation
Ron Krueper; Superintendent Los Lagos District, Department of Parks and Recreation
Cara Allen; Habitat Conservation Branch, CA Department of Fish and Game
State Route 91/State Route 71 Interchange Improvement Project

State Routes 91 and 71
Riverside County
08-Riv-91 PM R0.6/R2.6
08-Riv-71 PM 1.6/3.0
EA 0F5410/FN 080000137

INITIAL STUDY with Proposed Mitigated Negative Declaration

Submitted Pursuant to: (State) Division 13, California Public Resources Code and 40 USC 309

THE STATE OF CALIFORNIA
Department of Transportation

Riverside County Transportation Commission

By,

David Broeker
Deputy District Director
Division of Environmental Planning
California Department of Transportation

Initial Study and Proposed Mitigated Negative Declaration
Prepared by the
State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assignment of responsibility pursuant to 23 U.S.C. 327.

Caltrans

November 2010

Date of Approval
GENERAL INFORMATION ABOUT THIS DOCUMENT

What's in this document:
The California Department of Transportation-District 8 (Department), in cooperation with the Riverside County Transportation Commission (RCTC), have prepared this Initial Study (IS), which examines the potential environmental impacts of the alternatives being considered for the proposed project located at the State Routes 91/State Route 71 interchange within the limits of the City of Corona in Riverside County, California. The document describes why the project is being proposed, alternatives for the project, the existing environment that could be affected by the project, the potential impacts from each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do:
Please read the IS. Additional copies of this document, as well as the technical studies, are available for review at:

Riverside County Transportation Commission
400 E. 1st Street, 1st Floor
Riverside, CA 92501-2208
15 Dec: 11:00 am to 5:00 pm
14-F: 8:00 am to 5:00 pm

Corona Public Library
650 S. Main Street
Corona, CA 92882
Wed-Thu: 10:00 am to 6:00 pm
Fri: 10:00 am to 5:00 pm
or by appointment

Caltrans, District 8
464 W. 4th Street, 6th Floor
San Bernardino, CA 92401-1400

We invite you to attend a public information meeting regarding the proposed project at the Corona City Hall on December 9, 2010, from 5:00 p.m. to 8:00 p.m.

We welcome your comments. If you have any comments regarding the proposed project, please send them to the Department by the deadline indicated below.

Submit comments via postal mail to:
Attention: Aaron Burton
Environmental Branch Chief
Environmental Studies “D”
California Department of Transportation
464 W. 4th Street, 6th Floor, 185 1163
San Bernardino, CA 92401-1400

Submit comments via e-mail to: Aaron_Burton@dot.ca.gov or at the project Web site
http://www.dot.ca.gov/hrb/infocenter/infocenter.htm

Please submit comments by December 21, 2010.

What happens next:
After comments are received from the public and reviewing agencies, the Department may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, the Department could design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made available in Braille, large print, on audiotape, or on computer disk. To obtain a copy in one of these alternate formats, please call (951) 787-7151 or write RCTC, 3859 Vine Street, Suite 201, Riverside, CA 92504. Attn: Mr. Khalid Burn or use California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2939 (Voice) or 711.
Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

**Project Description**

The California Department of Transportation (Department), in cooperation with the Riverside County Transportation Commission (RCTC), proposes to improve the State Route (SR) 91/SR 71 interchange by constructing a new direct flyover connector from eastbound SR 91 (post mile [PM] R0.6/R2.0) to northbound SR 71 (PM 1.630). The proposed project includes the following project components: flyover connector, ramp/bridge widening, restriping of SR 91 eastbound lanes, modification or construction of new drainage facilities, retaining walls, and relocation of access roads. The proposed project would improve the current and future operational efficiency and enhance the capacity of the eastbound SR 91 to northbound SR 71 connector.

**Determination**

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is the Department’s intent to adopt an MND for this project. This does not mean that the Department’s decision regarding the project is final. This MND is subject to modification based on comments received by interested agencies and the public.

The Department has prepared an Initial Study (IS) 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 for the following reasons:

- The proposed project would have no effect related to the following resources:
  - Agricultural Resources
  - Mineral Resources
  - Wetlands Use and Planning
  - Community Impacts
  - Utilities and Emergency Services
  - Growth
  - Cultural Resources
  - Relocations/Real Estate Acquisition
  - Utilities and Service Systems
  - Parks and Recreation
  - Paleontological Resources

November 2010

SCH #
"New" Initial Study and Proposed Mitigated Negative Declaration

Click here to download the Initial Study and Proposed Mitigated Negative Declaration.

Click here to find out how to comment on this project or attend a meeting.

State Route 91/State Route 71 Interchange Improvement Project

RCTC has begun the Project Report and Environmental Document process to improve the connection between State Route 91 and State Route 71 in and near the City of Corona. This project is part of a larger effort to improve mobility along the State Route 91 Corridor in Riverside County and Orange County.

The State Route 91/State Route 71 (SR-91/SR-71) interchange is a significant source of traffic congestion in the area, and this project is designed to reduce this congestion, enhance the safety of motorists, support the movement of goods, and improve mobility and connections between the two freeways and among the counties of Riverside, Orange and San Bernardino. Work on the preliminary engineering and environmental document began in Spring 2009 and is expected to continue until early 2011.

This interchange falls within one of four freeway corridors that RCTC has designated as high priorities to receive $2 billion in funding during the next 10 years. These four corridors - SR-91, Interstate 10, Interstate 15, and Interstate 215 - will receive priority funding from Measure A, the half-cent sales tax for transportation improvements in Riverside County. Schedules have been set to find and deliver major transportation projects along these corridors during the coming decade.

A project of the Riverside County Transportation Commission
RCTC • 4060 Lemon Street, 3rd Floor, P.O. Box 12008 • Riverside, CA 92502-2208 • 951-787-7141 • www.rctc.org
WHAT IS THE SR-91/SR-71 INTERCHANGE IMPROVEMENT PROJECT?

Improving mobility on State Route 91 is one of the top priorities of the Riverside County Transportation Commission (RCTC). The connection between State Route 91 and State Route 71 to and near the City of Corona is critical to reduced traffic congestion in this area. RCTC is proposing a set of improvements to the State Route 91/SR-71 Interchange, which provides a vital link between the counties of Riverside, Orange and San Bernardino.

The proposed interchange improvements will reduce daily traffic delays. Drivers currently experience about one hour of delay during peak travel times on this section of SR-91, partially due to congestion at this interchange. The project will enhance driver safety, boost inter-county connections, support the movement of goods, and facilitate mobility throughout Southern California. The total cost of the improvements is estimated to be $100 million.

The SR-91/SR-71 interchange falls within one of four freeway corridors that RCTC has selected to receive $2 billion in funding during the next 10 years. These four corridors—SR-91, Interstate 10, Interstate 15, and Interstate 215—will receive priority funding from Measure A, the half-cent sales tax for transportation improvements in Riverside County. Schedules have been set to fund and deliver major transportation projects along these corridors during the coming decade.

Work is underway on the Project Report and Environmental Document phase of this interchange improvement effort. This phase of work is expected to continue until early 2011. Construction could start as early as 2013 and be complete by 2016.

WHO ARE THE PROJECT PARTNERS?

The Riverside County Transportation Commission has teamed with the following agencies to plan and deliver this project:

- The California Department of Transportation
- The County of Riverside
- The City of Corona
WHAT STUDIES ARE NEEDED FOR THIS PROJECT?

For and in connection with the construction and improvement, expansion and/or
construction of SR 91/91/710 interchange project, these documents will summarize the results of the
following studies:

- Current and future traffic
- Preliminary engineering design
- Possible effects on air, water, noise, utility and sensitive plants and wildlife
- Potential impacts to area residents and businesses, parks and recreational areas, cultural and
  historic resources, and public services
- Consistency with city and county general plans and compliance with Riverside County's Multi-Species
  Habitat Conservation Plan
- Project cost estimates

These reports are necessary to meet requirements of the California Environmental Quality Act and to obtain
state approvals. If state approvals are obtained, final engineering design, environmental permitting, and right-of-way
acquisitions will be conducted. Once these activities are completed, construction can begin.

HOW CAN YOU BE PART OF THIS PROCESS?

Public participation is a very important part of the environmental approval process. To learn more or to comment on the
proposed improvements, please:

- Watch for notices and attend public meetings about the project
- Ask to be placed on the project mailing list
- Visit the project website at www.SR91-SR710project.info
- Visit the Caltrans website of the California Department of Transportation: www.dot.ca.gov
- Call RCTC at (951) 787-7141
- Write to the Riverside County Transportation Commission, P.O. Box 1208, Riverside, CA 92513-2208
I-15 Corridor Improvement Project Overview

| Overview | Objectives | Alternatives | Environmental Considerations | What Are HOV Lanes
|---|---|---|---|---
| Project Overview |

Working to improve traffic capacity and operations on Interstate 15 (I-15), the Riverside County Transportation Commission (RCTC) and California Department of Transportation (Caltrans) District 8 are exploring widening the highway from just north of the I-15/I-215 separation near Murrieta, northward to State Route 60 (SR-60) near Ontario.

The project includes the study of two build alternatives and a no build alternative. Build Alternative 1 proposes to add one Carpool (HOV) lane and one regular or general purpose lane in each direction from SR-74 to SR-60 and one HOV Lane from I-215 to SR-74. The widening of this facility will occur by utilizing the unpaved center median whenever possible. Build Alternative 2 will add two Tolloed Express lanes and one general purpose lane in each direction from SR-74 to SR-60 and one HOV Lane from I-215 to SR-74.

The proposed I-15 Corridor Improvement Project (CIP) stretches approximately 44 miles in length, traveling through Murrieta, Wildomar, Lake Elsinore, Corona, Norco and portions of unincorporated Riverside County. As an element of RCTC’s 10-year western county highway delivery plan, the project currently has an estimated construction cost of $1.7 to $2.5 billion.
Project Map

RCTC and Caltrans District 8 propose to improve traffic capacity and operations on I-15 from just north of the I-15/I-215 separation in the City of Murrieta, northward to State Route 60 (SR-60).
I-15 Corridor Improvement Project Overview

Objectives

- Reduce traffic delays and travel time.
- Provide selected interchange ramp improvements.
- Implement improvements consistent with the RCTC 2009 Measure A 10-Year Delivery Plan.
- Reduce air pollution from stop-and-go traffic.
- Accommodate the Surface Transportation Assistance Act (STAA) National Network for trucks.
- Providing capacity and congestion relief.
Draft 2011 State Route 91 Implementation Plan
Background

- AB 1010 (Chapter 688, Statutes 2002)
  - Enabled OCTA purchase of 91 Express Lanes
  - Eliminated non-compete clause
  - Required annual plan submittal to legislature

- SB 1316 (Chapter 714, Statutes 2008)
  - Authorizes OCTA transfer of express lanes rights within Riverside County
  - Allows for additional capital and transit projects
  - Extends OCTA/RCTC toll operation window to 2065

Plan Background

- Emerged from 2005 major investment study and state legislation
- Comprehensive plan to improve inter-county travel
- Many projects now in development phase
- Updated annually
- Organized by project readiness
Overview

- 2011 plan update incorporates:
  - SB 1316
  - OCTA Measure M2
  - RCTC 10-year delivery plan
  - RCTC Measure A
  - Recent project development activities
- Projects are grouped by implementation year
- Traffic analysis
- Next steps

Projects By Year 2016

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Summary</th>
<th>Implementation Year 2016</th>
<th>Goal (mi)</th>
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<tbody>
<tr>
<td>1</td>
<td>Metrolink Short-Term Expansion Plan (2013)</td>
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<td>2</td>
<td>Widen SR-91 Between SR-55 and SR-741 by Adding a 5th General Purpose (GP) Lane in Each Direction (2013)</td>
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<td>3</td>
<td>SR-7/SR-81 Interchange Improvements (2015)</td>
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<td>123.2</td>
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<td>4</td>
<td>SR-91 Westbound Lane at Tustin Avenue (2015)</td>
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<td>38.3</td>
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<td>5</td>
<td>Initial CIP: Widen SR-81 by One GP Lane In Each Direction East of County Line, Collector-Obliterator Roads and I-15 SR-81 Direct South Connector, Extension of Express Lanes In I-15 and Systems/Local interchange Improvements (2016)</td>
<td></td>
<td>1,200</td>
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<tr>
<td>6</td>
<td>Express Bus Improvements Orange County to Riverside County (2010)</td>
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<tr>
<td></td>
<td>SUBTOTAL</td>
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Projects Between Years 2017 and 2025

<table>
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<tr>
<th>Project No.</th>
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<td>7</td>
<td>SR-241/SR-91 Express Lanes Connector (2017)</td>
<td>180</td>
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<td>8</td>
<td>Metrolink Service and Station Improvements (2026)</td>
<td>335</td>
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<td>9</td>
<td>SR-91 Between SR-57 and SR-55 (2025)</td>
<td>425</td>
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SR-57 – Orange Freeway (State Route 57)

Projects Between Years 2026 and 2035

<table>
<thead>
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<th>Project No.</th>
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<th>Cost (M)</th>
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<tbody>
<tr>
<td>10</td>
<td>Fallbrook Boulevard Improvements (Post-2022)</td>
<td>78.8</td>
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<td>12</td>
<td>Elevated Four-Lane Facility (Major Investment Corridor A) from SR-241 to I-15 (TBD)</td>
<td>2,720</td>
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<tr>
<td>13</td>
<td>Inland Corona Expressway Four-Lane Facility from SR-241/SR-133 to I-15/Cajalco Road (TBD)</td>
<td>8,885</td>
</tr>
<tr>
<td>14</td>
<td>Anaheim to Ontario International Airport High-Speed Rail (Post-2030)</td>
<td>TBD</td>
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<tr>
<td></td>
<td>SUBTOTAL</td>
<td>11,868+</td>
</tr>
</tbody>
</table>
Traffic Analysis

- Operations model focused on freeway congestion
- Shows benefits of major projects
- Results presented for existing, interim, and horizon years

Traffic Summary (PM, eastbound)

Mainline Eastbound SR-91 from SR-57 to I-15

PM Peak Hour Average Travel Time (in Minutes)

0 20 40 60 80 100 120

Existing (2010) 2016 2025 2035 2035 AAB

© Orange County © Riverside County
**Traffic Summary** *(AM, westbound)*

Mainline Westbound SR-91 From I-15 to SR-57

AM Peak Hour Average Travel Time [in Minutes]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
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<td>Riverside County</td>
<td>Circle</td>
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<td>Circle</td>
<td>Circle</td>
<td>Circle</td>
</tr>
</tbody>
</table>

**Recommendations/Next Steps**

- Approve draft plan
- Provide to OCTA Board of Directors and RCTC in mid-June and July
- Forward approved plan to state legislature
- Continue project implementation efforts
- Continue to seek funding opportunities
Low Impact Development (LID)
A Literature Review

EXECUTIVE SUMMARY
A literature review was conducted to determine the availability and reliability of data to assess the effectiveness of low impact development (LID) practices for controlling stormwater runoff volume and reducing pollutant loadings to receiving waters.

Background information concerning the uses, ownership and associated costs for LID measures was also compiled. In general LID measures are more cost effective and lower in maintenance than conventional, structural stormwater controls. Not all sites are suitable for LID. Considerations such as soil permeability, depth of water table and slope must be considered, in addition to other factors. Further, the use of LID may not completely replace the need for conventional stormwater controls.

Maintenance issues can be more complicated than for conventional stormwater controls because the LID measures reside on private property. In most instances, homeowners agree to only the first year of maintenance. homeowner associations could be a mechanism for providing long-term maintenance to these areas. Generally, bioretention facilities require replacement of dead or diseased vegetation, mowing as needed, and replacement of soils after 5-10 years. Grass swales require periodic mowing and removal of sediments. Maintenance of permeable pavements requires annual high-powered vacuuming of the area to remove sediments.

Several studies have been conducted to analyze the effectiveness of various LID practices based on hydrology and pollutant removal capabilities. Bioretention areas, grass swales, permeable pavements and vegetated roofs were the most common practices studied. These techniques reduce the amount of Effective Impervious Area (EIA) in a watershed. EIA is the directly connected impervious area to the storm drain system and contributes to increased watershed volumes and runoff rates. There are documented case studies that conclusively link urbanization and increased watershed imperviousness to hydrologic impacts on streams. Existing reports and case studies provide strong evidence that urbanization negatively affects streams and results in water quality problems such as loss of habitat, increased temperatures, sedimentation and loss of fish populations (USEPA, 1997).

In general bioretention areas were found to be effective in reducing runoff volume and in treating the first flush (first 1/6 of) stormwater. Results from three different studies indicate that removal efficiencies were quite good for both metals and nutrients. Removal rates for metals were more consistent than for nutrients. Removal rates for metals ranged from 78-97% for lead, 45-97% for copper and 64-98% for zinc. Nutrient removal was more variable and ranged from 0-87% for phosphorus, 37-90% for Total Kjeldahl Nitrogen, <0-82% for ammonium and for nitrate <0-26%. Effluent volumes were lower than influent volumes. These studies were conducted by means of simulated rainfall events. Analysis of actual long-term rainfall events would produce more reliable data.

The effectiveness of grass swales was also quite good for both pollutant removal and runoff volume reduction. A study of three different sites in the United States reveal similar results despite the differences in location. In general, performance of swales is
Reduction of impervious surfaces can greatly reduce the volume of runoff generated by rainfall. Several methods can be employed to reduce total impervious surface area. Permeable pavements and vegetated roofs are two methods to accomplish this goal. Vegetated roofs have been used extensively in Germany for more than 25 years and results show up to 30% reduction in annual runoff in temperate climates. Many opportunities exist to retrofit these systems into older highly urbanized areas of the United States. The Philadelphia project case study provides an example of this practice.

Permeable pavements can also reduce impervious surfaces. However, they are more expensive to construct than traditional asphalt pavements. Costs of these systems may be offset by the reduction of traditional curb and gutter systems to convey stormwater. Benefits of these alternate pavement types include better infiltration, ground water recharge, reduction in runoff volume and treatment of stormwater for pollutants. The study conducted in Tampa, Florida outlines these benefits as well as the opportunity to retrofit permeable pavements into existing parking lots with little or no loss of parking space. Less than 20% of rainfall was converted to runoff when using permeable pavements. Study results from the University of Washington, compare several different treatments of varying permeability. The study shows that the higher the amount of perviousness of the treatment, the greater the reduction of runoff volume and pollutant loadings.

The use of LID is relatively new and not widespread. Most of the available data are from Prince George's County, Maryland, which pioneered the use of LID. The data available for bioretention analysis were from single simulated storm events in actual bioretention facilities or from laboratory constructed and tested bioretention systems. The data for grass swales were for only a few storm events, collected over a short period of time. The only available data for a long-term study came from the Aquarium parking lot in Tampa, Florida and the Washington permeable pavement project. More long-term analysis is required to more accurately assess the effectiveness of LID and to determine long-term trends.

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1 LOW IMPACT DEVELOPMENT

1.1 Introduction

Low impact development (LID) is a relatively new concept in stormwater management. LID techniques were pioneered by Prince George’s County, Maryland, in the early 1990s, and several projects have been implemented within the state. Some LID principles are now being applied in other parts of the country, however, the use of LID is infrequent and opportunities are often not investigated. The purpose of this report is to conduct a literature review to determine existing information about the application of LID in new development and existing urbanized areas, including ownership, operation and maintenance issues. A related objective was to locate relevant studies of LID projects, which would provide evidence of the effectiveness of LID in retaining predevelopment hydrology and as a mechanism for pollutant removal for stormwater. The data from the studies were analyzed for usefulness and validity and the findings are summarized.

LID is a site design strategy with a goal of maintaining or replicating the predevelopment hydrologic regime through the use of design techniques to create a functionally equivalent hydrologic landscape. Hydrologic functions of storage, infiltration, and ground water recharge, as well as the volume and frequency of discharges are maintained through the use of integrated and distributed micro-scale stormwater retention and detention areas, reduction of impervious surfaces, and the lengthening of flow paths and runoff time (Coffman, 2000). Other strategies include the preservation/retention of environmentally sensitive site features such as riparian buffers, wetlands, steep slopes, valuable (native) trees, flood plains, woodlands and highly permeable soils.

LID principles are based on controlling stormwater at the source by the use of micro-scale controls that are distributed throughout the site. This is unlike conventional approaches that typically convey and manage runoff in large facilities located at the base of drainage areas. These multifunctional site designs incorporate alternative stormwater management practices such as functional landscape that act as stormwater facilities, filter gardens, depression storage and open drainage swales. This system of controls can reduce or eliminate the need for a centralized best management practice (BMP) facility for the control of stormwater runoff. Although traditional stormwater control measures have been documented to effectively remove pollutants, the natural hydrology is still negatively affected (inadequate base flow, thermal fluxes or flashy hydrology), which can have detrimental affects on ecosystems, even when water quality is not compromised (Coffman, 2000). LID practices offer an additional benefit in that they can be integrated into the infrastructure and are more cost effective and aesthetically pleasing than traditional, structural stormwater conveyance systems.

Conventional stormwater conveyance systems are designed to collect, convey and discharge runoff as efficiently as possible. The intent is to create a high efficiency drainage system, which will prevent on-site flooding, promote good drainage and quickly convey runoff to a BMP or stream. This runoff control system increases groundwater recharge, increases runoff volume and changes the timing, frequency and rate of discharge. These changes can cause flooding, water quality degradation, stream erosion and the need to construct end of pipe BMPs. Discharge rates using traditional BMPs may be set only to match the predevelopment peak rate for a specific design year. This approach only controls the rate of runoff allowing significant increases in runoff volume, frequency and duration of runoff from the predevelopment conditions and provides the mechanisms for further degradation of receiving waters (Figure 1).

LID has often been compared to other innovative practices, such as Conservation Design, which uses similar approaches in reducing the impacts of development, such as reduction of impervious surfaces and conservation of natural features. Although the goals of Conservation Design protect natural flow paths and existing vegetative features, stormwater is not treated directly at the source. Conservation Design protects large areas adjacent to the development site and stormwater is directed to these common areas.

![Figure 1: Changes in Stormwater Hydrology as a Result of Urbanization](image)

Although this approach protects trees and does reduce runoff, there is still potentially significant amount of connected impervious areas and centralized stormwater facilities that may contribute to stream degradation through stormwater volume, frequency and thermal impacts. Therefore, the hydrologic and hydraulic impacts of this approach on receiving waters may still be significant, although the volume and flows will be less than without the conservation design. The stormwater control measures used in Conservation Design are off-site and therefore not the individual property owner’s responsibility. However, maintenance is generally provided by the homeowners association and financed through association fees.

1.2 Benefits and Limitations

The use of LID practices offers both economical and environmental benefits. LID measures result in less disturbance of the development area, conservation of natural features and can be less cost intensive than traditional stormwater control mechanisms. Cost savings for control mechanisms are not only for construction, but also for long-term
maintenance and life cycle cost considerations. For example, an alternative LID stormwater control design for a new 2/70 unit apartment complex in Aberdeen, NC will save the developer approximately 22% or $175,000 of the stormwater construction costs. On this project, almost all of the subsurface collection systems associated with curb and gutter projects have been eliminated. Strategically located bioretention areas, compacted with outfalls, depressions, grass channels, wetland swales and specially designed storm water basins are some of the LID techniques used. These design features allow for longer flow paths, reduce the amount of polluted runoff and filter pollutants from stormwater runoff (Blue Land, Water and Infrastructure, 2009).

Today many states are facing the issue of urban sprawl, a form of development that consumes green space, promotes auto dependency and widens urban fringes, which puts pressure on environmentally sensitive areas. "Smart growth" strategies are designed to reconfigure development in a more eco-efficient and community oriented style. LID addresses many of the environmental practices that are essential to smart growth strategies including the conservation of open green space. LID does not address the subject of availability of public transportation.

LID provides many opportunities to retrofit existing highly urbanized areas with pollution controls, as well as address environmental issues in newly developed areas. LID techniques such as rooftop retention, permeable pavements, bioretention and disconnecting rooftop rain gutter spots are valuable tools that can be used in urban areas. For example, stormwater flows can easily be directed into rain barrels, cisterns or across vegetated areas in high-density urban areas. Further, opportunities exist to implement bioretention systems in parking lots with little or no reduction in parking space. The use of vegetated roof tops and permeable pavements are 2 ways to reduce impervious surfaces in highly urbanized areas.

LID techniques can be applied to a range of lot sizes. The use of LID, however, may necessitate the use of structural BMPs in conjunction with LID techniques in order to achieve watershed objectives. The appropriateness of LID practices is dependent on site conditions, and is not based strictly on spatial limitations. Evaluation of soil permeability, slope and water table depth must be considered in order to effectively use LID practices. Another obstacle is that many communities have development rules that may restrict innovative practices that would reduce impervious cover. These "rules" refer to a mix of subdivision codes, zoning regulations, parking and street standards and other local ordinances that determine how development happens (Center for Watershed Protection, 1995). These rules are responsible for wide streets, expansive parking lots and large-lot subdivisions that reduce open space and natural features. These obstacles are often difficult to overcome.

Additionally, community perception of LID may prevent its implementation. Many homeowners want large-lots and wide streets and view reduction of these features as undesirable and even unsafe. Furthermore, many people believe that without conventional controls, such as curbs and gutters and end of pipe BMPs, they will be required to contend with basement flooding and subsurface structural damage.

2 LOW IMPACT DEVELOPMENT PRACTICES

LID measures provide a means to address both pollutant removal and the protection of predevelopment hydrological functions. Some basic LID principles include conservation of natural features, minimization of impervious surfaces, hydraulic disconnects, disbursement of runoff and phytoremediation. LID practices such as bioretention facilities or rain gardens, grass swales and channels, vegetated rooftops, rain barrels, cisterns, vegetated filter strips and permeable pavements perform both runoff volume reduction and pollutant filtering functions.

2.1 Bioretention

Bioretention systems are designed based on soil types, site conditions and land uses. A bioretention area can be composed of a mix of functional components, each performing different functions in the removal of pollutants and attenuation of stormwater runoff (Figure 2).

![Figure 2: Typical Bioretention System (Prince George's County Department of Environmental Resources, 1993)]
Six typical components found in bioretention cells:

- **Greas silt fence**: reduces runoff velocity and filters particulate matter.
- **Soil ball** provides aeration and drainage of the planting soil and assists in the flushing of pollutants from soil materials.
- **Ponding area** provides storage of excess runoff and facilitates the settling of particulates and evaporation of excess water.
- **Organic layer** performs the function of decomposition of organic material by providing a medium for biological growth (such as microorganisms) to degrade petroleum-based pollutants. It also filters pollutants and prevents soil erosion.
- **Planted soil** provides the area for stormwater storage and nutrient uptake by plants. The planting soils contain some clays which absorb pollutants such as hydrocarbons, heavy metals, and nutrients.
- **Vegetation** (plants) functions in the removal of water through evapotranspiration and pollutant removal through nutrient cycling.

Bioretention facilities are less cost intensive than traditional structural stormwater conveyance systems. Construction of a typical bioretention area in Prince George's County, Maryland is between $5,000 and $10,000 per acre drained, depending on soil type (Sebastian, 2000). Other sources estimate the costs for developing bioretention sites at between $3 and $15 per square foot of bioretention area. Design guidelines recommend that bioretention systems occupy 5-7% of the drainage basin. Additional savings can be realized in reduced construction costs for storm drain pipe. For example, bioretention practices reduced the amount of storm drain pipe at a Medical Office Building in Prince George's County, Maryland from 800 to 230 feet, which resulted in a cost saving of $24,000 or 50% of the overall drainage cost for the site (Dept of Environ Resources, 1993).

Components of the bioretention area should meet required guidelines in order to provide the most productive system possible. The mulch layer should be approximately 2-3 inches thick and replaced annually. Soil should be tested for several criteria before being used.

- pH range: 5.5 - 6.5
- Organic matter: 1.3 - 3.0%
- Magnesium (Mg): 350 lbs/acre
- Phosphorus (P2O5): 100 lbs/acre
- Potassium (K2O): 85 lbs/acre
- Soluble salts: < 500 ppm

Plant material should be obtained from certified nurseries that have been inspected by state or federal agencies (Dept of Environ Resources, 1993). Native species should be used and selected according to their moisture regime, morphology, susceptibility to pests and diseases and tolerance to pollutants. Selection of plant species should be based on site conditions and ecological factors. A minimum of three species of trees and three species of shrubs should be selected to insure diversity, differing rates of transpiration and provide a more constant rate of evapotranspiration and nutrient and pollutant uptake throughout the growing season (Dept of Environ Resources, 1993). Species that require regular maintenance should be avoided or restricted. Prince George's County recommends a warranty be established with the nursery as part of the plant installation, and should include care and 90% replacement of plants for the first year.

**Table 1: Example Maintenance Schedule for Bioretention Areas** (Prince George's County, Department of Environmental Resources, 1993)

<table>
<thead>
<tr>
<th>Description</th>
<th>Method</th>
<th>Frequency</th>
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<td>Remov e mulch areas</td>
<td>By Hand</td>
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<td>As Needed</td>
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<tr>
<td>Remove previous mulch layer before adding new</td>
<td>By Hand</td>
<td>Once a Year</td>
<td>Spring</td>
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<tr>
<td>layer (optional)</td>
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</tr>
<tr>
<td>Additional mulch added</td>
<td>By Hand</td>
<td>Once a Year</td>
<td>Spring</td>
</tr>
<tr>
<td>(optional)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>PLANTS:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Remove and replace all dead and diseased</td>
<td>See Planting</td>
<td>Twice a Year</td>
<td>Mar 15 - Apr 30</td>
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<tr>
<td>vegetation that cannot be treated</td>
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</tr>
<tr>
<td>Treat all diseased trees and shrubs</td>
<td>Mechanical or by</td>
<td>N/A</td>
<td>Varies, depends on insect or disease</td>
</tr>
<tr>
<td>Hand</td>
<td></td>
<td></td>
<td>infection</td>
</tr>
<tr>
<td>Water of plant materials, at the end of the day</td>
<td>By Hand</td>
<td>Immediately</td>
<td>N/A</td>
</tr>
<tr>
<td>for 1/4 consecutive days after planting</td>
<td></td>
<td>Completion of</td>
<td></td>
</tr>
<tr>
<td>planting</td>
<td></td>
<td>Projects</td>
<td></td>
</tr>
<tr>
<td>Replace stakes after one year</td>
<td>By Hand</td>
<td>Once a Year</td>
<td>Remove only in the</td>
</tr>
<tr>
<td>years</td>
<td></td>
<td></td>
<td>Spring</td>
</tr>
<tr>
<td>Replace excised stakes or wires</td>
<td>By Hand</td>
<td>N/A</td>
<td>As Needed</td>
</tr>
</tbody>
</table>

Annual maintenance is required for the overall success of bioretention systems. This includes maintenance of plant material, soil layer and the mulch layer. A maintenance schedule outlining methods, frequency and time of year for bioretention maintenance should be developed. Table 1 is a typical maintenance checklist. Plants will provide enhanced environmental benefit over time as root systems and leaf complexes increase in size and pollutant uptake and removal efficiencies. Soil, however, begins filtering pollutants immediately and can lose their ability to function in this capacity over time. Therefore, evaluation of soil fertility is important in maintaining an effective bioretention system. Substances in runoff such as nutrients and metals eventually disrupt normal soil
functions by lowering the cation exchange capacity (CEC) (Dept. of Environ. Resources, 1993). CEC is the soil's ability to adsorb pollutant particles through ion attraction and will decrease over time. It is recommended that soils be tested annually and replaced when soil fertility is lost. Depending on environmental factors, this usually occurs within 5-10 years of construction. Replacement of soil can be accomplished in 1-2 days for approximately $1,000-$2,000 for a typical system which will drain one acre in the northeastern U.S. (Wallace, 2000).

2.2 Grass Swales

Grass swales or channels are adaptable to a variety of site conditions, are flexible in design and layout, and are relatively inexpensive (US DOT, 1996). Generally open channel systems are most appropriate for smaller drainage areas with mildly sloping topography (Center for Watershed Protection, 1998). Their application is primarily along residential streets and highways. They function as a mechanism to reduce runoff velocity and infiltration devices. Sedimentation is the primary pollutant removal mechanism, with additional secondary mechanisms of infiltration and adsorption. In general, grass channels are most effective when the flow depth is minimized and detention time is maximized. The stability of the channel or overland flow is dependent on the erodibility of the soils in which the channel is constructed (US DOT, 1996). Decreasing the slope or providing dense cover will aid in both stability and pollutant removal effectiveness.

Engineered swales are less costly than installing curb and gutter/storm drain inlet and storm drain pipe systems. The cost for traditional structural conveyance systems ranges from $40-$50 per running foot. This is two to three times more expensive than an engineered grass swale (Center for Watershed Protection, 1998). Concerns that open channels are potential nuisance problems, present maintenance problems, or impact pavement stability can be alleviated by proper design. Periodic removal of sediments and mowing are the most significant maintenance requirements.

2.3 Vegetated Roof Covers

Vegetative roof covers or green roofs are an effective means of reducing urban stormwater runoff by reducing the percentage of impervious surfaces in urban areas. They are especially effective in older urban areas with chronic combined sewer overflow (CSO) problems, due to the high level of imperviousness. The green roof is a multilayered constructed material consisting of a vegetative layer, media, a geotextile layer and a synthetic drain layer. Vegetated roof covers in urban areas offer a variety of benefits, such as extending the life of roofs, reducing energy costs and conserving valuable land that would otherwise be required for stormwater runoff controls. Green roofs have been used extensively in Europe to accomplish these objectives. Many opportunities are available to apply this LID measure in older U.S. cities with stormwater infrastructures that have reached their capacities.

Green roofs are highly effective in reducing total runoff volume. Simple vegetated roof covers, with approximately 3 inches of substrate can reduce annual runoff by more than 50 percent in temperate climates (Miller, 2000). Research in Germany shows that the 3-inch design offers the highest benefit to cost ratio. Properly designed systems not only reduce runoff flows, but also can be added to existing rooftops without additional reinforcement or structural design requirements. The value of green roofs for reducing runoff is directly linked to the design rainfall event considered. Design should be developed for the storm events that most significantly contribute to CSOs, hydraulic overloads and runoff problems for a given area.

2.4 Permeable Pavements

The use of permeable pavement systems is an effective means of reducing the percent of imperviousness in a drainage basin. More than thirty different studies have documented that stream, lake and wetland quality is reduced sharply when impervious cover in an upstream watershed is greater than 10%. Porous pavements are best suited for low traffic areas, such as parking lots and sidewalks. The most successful installations of alternative pavements are found in coastal areas with sandy soils and flatter slopes (Center for Watershed Protection, 1998). Permeable pavements allow stormwater to infiltrate into underlying soils promoting pollutant treatment and recharge, as opposed to producing large volumes of rainfall runoff requiring conveyance and treatment. Costs for paving blocks and stones range from $2 to $4, whereas asphalt costs $0.50 to $1 (Center for Watershed Protection, 1998).

2.5 Other LID Strategies

Another strategy to minimize the impacts of development is the implementation of rain gutter disconnects. This practice involves redirecting rooftop runoff conveyed in rain gutters out of storm sewers, and into grass swales, bioretention systems and other functional landscape devices. Redirecting runoff from rooftops into functional landscape areas can significantly reduce runoff flow to surface waters and reduce the number of CSO events in urban areas. As long as the stormwater is transported well away from foundations, concerns of structural damage and basement flooding can be alleviated. As an alternative to redirection of stormwater to functional landscape, rain gutter flows can be directed into rain barrels or cisterns for later use in irrigating lawns and gardens. Disconnections of rain gutters can effectively be implemented on existing properties with little change to present site designs.

Many strategies exist to reduce the amount of impervious surface in development areas. Designing residential streets for the minimum required lane width to support traffic, on-street parking and emergency service vehicles, can reduce imperviousness. Other practices include shared driveways and parking lots, alternative pavements for overflow parking areas, center islands in cul-de-sacs, alternative street designs rather than traditional grid patterns and reduced setbacks and frontages for homes.
3 EVALUATION OF LID EFFECTIVENESS

3.1 Hydrological Measures

Enhancements in site drainage from traditional stormwater control measures, such as curbs and gutters that eliminate potential on-site flooding, often result in an increase in surface runoff. These alterations can cause an increase in volume, frequency and velocity of runoff flows, resulting in flooding, high erosion and a reduction in groundwater infiltration, as well as a reduction in water quality and habitat degradation. Four hydrological functions should be considered when investigating the effectiveness of LID practices. The runoff curve number (CN), time of concentration, retention and detention. LID techniques and the hydrological design and analysis components are represented in Table 2.

<table>
<thead>
<tr>
<th>LID Practice</th>
<th>Low Impact Hydrologic Design and Analysis Components</th>
<th>Lower Post-Development CN</th>
<th>Increase Tc</th>
<th>Retention</th>
<th>Detention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flatten Slopes</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase Flow Path</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase Roughness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Minimize Disturbances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Flatten Slopes on Slope</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Infiltration Swales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetative Filter Strips</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disconnected Impervious Areas</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce Culverts and Outlets</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Rain Barrels</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roofing Cover</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Downspouts</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Vegetation Preservation</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

The runoff potential for a site is characterized by the runoff curve number or CN. One method of measuring hydrological function on a developed site is to compare the pre and post-developed curve number. The CN method is used extensively in the analysis of environmental impact and design rainfall-runoff hydrology. The curve number measures a watershed or subwatershed's hydrological response and is determined based on soil type, land cover and amount of impervious surfaces (Hawkins 1998). A detailed explanation of both proposed and existing land cover is the basis for determining the low-impact development CN, which is a calculation of the potential for runoff at a development site. One of the goals of LID is to design a system so that the post-developed CN is as close as possible to the predevelopment CN for the site. Limiting the percent of imperviousness is one technique to accomplishing this. The runoff coefficient, which can be derived from the CN, calculates the percent of rainfall converted to runoff.

The time of concentration (To) refers to the amount of time it takes for water to travel from the most distant point to the watershed outlet. By retaining predevelopment To, negative impacts associated with development can be reduced. Retention and detention of rainfall are the key components of increases in To. As the amount of impervious surface increases within a site, altering drainage paths, the contribution of total land area to excess rainfall increases, causing the time for stormwater to reach downstream outlets to decrease. This increase in To reduces the pollutant removal capabilities of the site as well as resulting in an increase in the peak runoff rate. Maintaining To can be achieved by:

- Maintaining flow path lengths
- Increasing surface roughness
- Detaining flows
- Minimizing disturbances at the site
- Flattening grades in impact areas
- Disconnecting impervious surfaces
- Connecting pervious surfaces

3.2 Pollutant Removal Measures

Changes in site runoff characteristics can contribute to a reduction in water quality and degradation of aquatic and terrestrial habitats. LID practices provide a high level of water quality treatment controls due to runoff volume control of the "first flush" (first 1/4 inch) of runoff, which contains the highest pollutant loadings. Often LID practices control up to the first 2 inches of runoff and therefore treat a much greater volume of annual runoff (Coffman, 2000). By increasing the To and decreasing the flow velocity, LID practices result in a reduction in pollutant transport capacity and overall pollutant loading. Further, LID practices support pollution prevention by modifying human activities, which lower the introduction of pollutants into the environment.

LID practices such as bioretention facilities or rain gardens can be used as a mechanism for infiltration and pollutant removal, which is performed through physical and biological treatment processes occurring in the plant and soil complex. These processes include filtration, decomposition, ion exchange, adsorption and volatilization (Dept. of Env. Resources, 1993). Pollutant loadings are concentrated in the "first flush" of runoff from impervious surfaces and contain grease and oil, nutrients (nitrogen and phosphorus), sediments and heavy metals. Pollutant loadings and water quality impacts from development have been well documented in numerous studies. Concentrations of pollutants are appropriate to look at bioeffects, but pollutant loads are better for assessing impacts to downstream habitats when cumulative effects are considered (Rashid, 1999). Studies should consider investigating both total metals and dissolved metals, when analyzing LID practice's effectiveness.
4 CASE STUDIES

The LID "retention landscape" is designed to mimic the predevelopment hydrological conditions through runoff volume control, peak runoff rate control, flow frequency/duration control and water quality control. Determining effectiveness of LID practices can be achieved by evaluating hydrological function and pollutant removal capabilities. Little investigation has been done to prove the actual effectiveness of LID in retaining predevelopment hydrology and preventing or reducing pollutant loadings caused by stormwater runoff on developed sites. LID is a relatively new concept in stormwater management and not widely implemented in all areas and climates in the United States. Limited research and analysis has been conducted on the various practices, due to this limited application.

The following case studies, though limited, represent the best examples of projects that use LID concepts for stormwater management. Both hydrologic and pollutant removal effectiveness are investigated. The most significant source for data is Prince George's County, Maryland where many of the LID projects were developed and first implemented. The Low-Impact Development Center, also located in Maryland, has done significant work in design and planning of LID sites. First year data from a two-year study of a Tampa, Florida airport parking lot and an ongoing permeable pavement project in Washington state provide the only long-term analysis for the effectiveness of LID concepts (permeable pavements and swales) currently available.

4.1 Bioretention Facility
Laboratory and Field Study
Beltway Plaza Mall Parking Lot, Greenbelt, MD

Introduction

Land development results in increased stormwater runoff at the expense of infiltration. Additionally, surface runoff contains a broad range of pollutants and has been identified as one of the major sources for pollution of natural waters. Detention basins are commonly used for stormwater quality improvement and to optimize the infiltration of stormwater for recharge. A simple, yet effective method to control stormwater is through the use of bioretention areas or rain gardens.

Bioretention systems generally require less space, are more economical to build and require less maintenance than large-scale detention ponds. In addition, these landscaped areas have aesthetic value. The design capacity for the system is generally for a typical storm event (0.5-0.7 inches per hour of rainfall over six hours) and to handle runoff from a small development area. The goal of this study is to compare field results with baseline data obtained through a laboratory constructed and tested bioretention systems.

Study Site

This study was conducted in two phases. The first phase took place at the University of Maryland, Department of Civil Engineering, Stormwater Lab in College Park, Maryland. Two different-sized bioretention prototypes were constructed and fitted with ports at varying depths in order to collect and analyze water quality and infiltration data. The small prototype was 2.5 ft wide and 3.5 ft long with a depth of 24 inches of material. The small bioretention system was fitted with two port depths. The large prototype was 10 ft long, 5 ft wide with a depth of 36 inches, and was fitted with three ports at various depth levels. Both systems had a freeboard of 6 inches, to allow water to accumulate if necessary. The soil, organic mulch layer and vegetation, were analyzed prior to construction to ensure that the system was constructed according to design recommendations. Stimulated runoff was applied to both systems at a rate of 1.6 inches per hour for six hours. A total of 16 simulations were tested on the small box, and four on the large prototype. The total volume of runoff applied to the small system was 200 L, and 1,000 L for the large system. These volumes represent the bioretention prototypes occupying 5% of the drainage area.

This second phase, a field study, took place at an existing bioretention facility located in the parking lot of Beltway Plaza in Greenbelt, Maryland. The depth of the system is 42" and is designed so that runoff infiltrates through the system and is collected by a 6-inch diameter perforated pipe underdrain, which feeds into the main storm drain system. A 7.5-ft x 7.5-ft area of the bioretention facility was used to conduct the study. Approximately 1,000 L of synthetic runoff, with characteristics similar to those used in the laboratory, were applied to the system over a 6-hour period. Effluent samples were collected from the main storm drain at 20-30 minute intervals.
Study Results Summary

The laboratory results for the smaller prototype showed overall that the removal of heavy metals by the system was good. Copper, lead, and zinc levels in both upper and lower effluents had removal of more than 90%. Copper removal from samples taken from both ports was 94%. Lead removal was more effective from lower ports at 98%, but still good from upper ports at 94%. The average zinc removal from upper and lower ports was >90% (Table 3). No major variation of removal of metals occurred over time and all samples were less than EPA standards for freshwater. Nutrient removal for phosphorus was 63-73% from lower ports and approximately 49% from upper ports. The Total Kjeldahl Nitrogen (TKN) removal is 45-60% for the upper ports and 65-80% for the lower ports. Ammonium and nitrate removal followed no pattern and ranged from zero to 90%.

Table 3: Summary of Results for Smaller System—Standard Conditions

<table>
<thead>
<tr>
<th>Metal</th>
<th>Cu</th>
<th>Pb</th>
<th>Zn</th>
<th>P</th>
<th>TKN</th>
<th>NH₄⁺</th>
<th>NO₃⁻</th>
<th>TN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal Upper</td>
<td>94%</td>
<td>94%</td>
<td>97%</td>
<td>25%</td>
<td>55%</td>
<td>60%</td>
<td>11%</td>
<td>60%</td>
</tr>
<tr>
<td>Removal Lower</td>
<td>94%</td>
<td>98%</td>
<td>98%</td>
<td>63%</td>
<td>80%</td>
<td>83%</td>
<td>26%</td>
<td>75%</td>
</tr>
</tbody>
</table>

Results from the large prototype correlated with those of the smaller constructed system. Experimental results indicated that removal of metals in most cases was more than 90%. Average copper removal for upper ports was 90% and 93% for middle and lower ports. Lead removal from upper ports was 93%, and >97% for middle and lower ports. The removal of zinc was 87% for upper ports and >96% for middle and lower ports. The data showed a trend of greater metal removal with depth. Nutrient removal was better from lower ports in most cases compared to removal of middle and upper ports. Phosphorous removal for lower ports was about 60-80% and 50-60% for upper ports. The upper ports showed a 10-15% increase in phosphorous levels above the influent amounts. The TKN removal was 50-75% for the lower and middle ports and a 45-50% increase was noted for upper ports. Removal of ammonium was 54% at upper ports, 86% for middle ports and 79% at lower ports (Table 4). Doubling or halving the influent pollutant levels during the laboratory testing had little effect on the effluent pollutant levels. Higher levels of phosphorous and TKN in effluent at the upper ports can be attributed to the vegetation.

Table 4: Summary of Results for Large System—Standard Conditions

<table>
<thead>
<tr>
<th>Metal</th>
<th>Cu</th>
<th>Pb</th>
<th>Zn</th>
<th>P</th>
<th>TKN</th>
<th>NH₄⁺</th>
<th>NO₃⁻</th>
<th>TN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal Upper</td>
<td>90%</td>
<td>93%</td>
<td>87%</td>
<td>0%</td>
<td>37%</td>
<td>54%</td>
<td>(-97%)</td>
<td>(-29%)</td>
</tr>
<tr>
<td>Removal Middle</td>
<td>93%</td>
<td>&gt;97%</td>
<td>&gt;96%</td>
<td>73%</td>
<td>60%</td>
<td>85%</td>
<td>(-194%)</td>
<td>0%</td>
</tr>
<tr>
<td>Removal Lower</td>
<td>93%</td>
<td>&gt;97%</td>
<td>&gt;96%</td>
<td>81%</td>
<td>68%</td>
<td>79%</td>
<td>23%</td>
<td>43%</td>
</tr>
</tbody>
</table>

During the field test at Beltway Plaza, a total of 1,000 L of synthetic runoff were applied to the bioretention area over a 6-hour period at a rate of approximately 0.5 inches per hour. Of the 1,000 L of influent, only 39% left the system. The remaining water leaked through cracks into the manhole, was held in the facility, or infiltrated. Effluent samples were analyzed for removal of nutrients and heavy metals (copper, lead, and zinc).

The TKN removal was about 50% and the phosphorous removal was observed at approximately 75%. Nutrient concentrations were below input levels, with a removal of about 17%. The removal for ammonium was very good at >95%. Removal of metals was very good and was consistent with the laboratory results. The removal of copper was 97% and for lead, and zinc, the removal was >95% (Table 5).

Table 5: Summary of Results for Field Bioretention Study

<table>
<thead>
<tr>
<th>Metal</th>
<th>Cu</th>
<th>Pb</th>
<th>Zn</th>
<th>P</th>
<th>TKN</th>
<th>NH₄⁺</th>
<th>NO₃⁻</th>
<th>TN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal</td>
<td>97%</td>
<td>&gt;99%</td>
<td>&gt;95%</td>
<td>65%</td>
<td>52%</td>
<td>92%</td>
<td>15%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Removal rates for the field study corresponded with the rates observed for the two laboratory constructed bioretention systems. In all cases pollutant removal rates approached 100% for the metals copper, zinc and lead. Doubling or halving the concentration levels of the influent had no effect on removal efficiencies and were statistically equivalent in nearly all cases. Pollutant removal rates for all systems are compared in the above graph (Figure 3). The negative removal rate for nitrate in the large prototype, upper and middle ports, was attributed to the release of previously captured nitrate or nitrite from nitrification processes.

Figure 3: Pollutant Removal Rates for All Systems
4.2 Bioretention Facility
Field Study
Peppercorn Plaza Parking Lot at Inglewood Center, Landover, MD

Introduction

Impervious surfaces, such as parking lots, are a major contributor to pollutant loads in receiving waters in urban areas. These surfaces provide a place for pollutants to accumulate and later wash-off in the first flush of rainfall events. Parking lots are good site locations for bioretention systems, since they can be retrofitted into existing lots with little or no loss of parking space. In addition, patrons have expressed appreciation of green space within parking areas. Bioretention areas are a natural means of controlling pollutants from entering urban water bodies. The hydrologically functional landscape, can be used as a mechanism for pollutant removal, through physical and biological treatment processes occurring in the plant and soil complex. The bioretention area in the Inglewood Center Parking lot, was analyzed for pollutant removal efficiency during a simulated rainfall event.

Study Site

The study was conducted at one of the two bioretention areas in the Inglewood Plaza parking lot. An area of 30 m² was used in the south facility for the simulated rainfall event. The bioretention facility contains a T-shaped under drain that runs the entire length of the system and is located 32.5 inches below the surface (Figure 4). The under drain directly connects with the storm drainage system. Samples were collected from a pool of water in the storm drain observation area. Output samples were collected every 30 minutes. The soil was dry at the onset of the experiment, due to lack of rainfall for a period of several days prior to the experiment. The synthetic rainfall was applied at a rate of 1.6 inches per hour for a duration of six hours. A total of 300 gallons (1100L) was applied over the course of the experiment.

Figure 4: Bioretention System at Peppercorn Place, Inglewood Plaza (Davis, 1999)
Project Results Summary

Effluent concentrations for metals were fairly constant over the sampling period, with zinc being the exception by showing improved removal over time. Average removals for total copper were 43%, total lead was 70%, and total zinc 64%. The removals were 5-14% better for dissolved metals. Nutrient concentrations were all below input levels. Removal of phosphorus was very good at 87%. Removal of TKN was observed at 67%, and nitrate averaged 15% (Table 6). Ammonium was not detected in either the influent or the effluent. In addition, the bioremediation facility removed some calcium, however chloride concentrations were higher in the effluent than in the influent, which is attributed to salting of the parking lot in the winter. Also, temperature variations during the experiment showed evidence of the system cooling the runoff water temperature.

Table 5: Summary of Pollutant Removal Results of Bioremediation System at Ingleswood Place

<table>
<thead>
<tr>
<th></th>
<th>Cu</th>
<th>Pb</th>
<th>Zn</th>
<th>Ca</th>
<th>P</th>
<th>TKN</th>
<th>NO₃⁻</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rem.</td>
<td>43%</td>
<td>70%</td>
<td>64%</td>
<td>25%</td>
<td>87%</td>
<td>67%</td>
<td>15%</td>
</tr>
</tbody>
</table>

By using syntactic runoff, the concentrations of applied pollutants could be controlled and accurately measured and compared to levels found in the effluent. However, testing has not been done on an actual rainfall event to determine effectiveness of the system for reducing runoff volume and pollutant loads.

4.3 Permeable Pavements and Swales
Field Study
Stormwater Management, Florida Aquarium Parking Lot, Tampa, FL

Introduction

Impervious surfaces are responsible for more stormwater runoff than any other type of land use. Paved surfaces that often replace vegetated areas increase the volume and frequency of rainfall runoff. In addition, these surfaces provide a place for pollutants to accumulate between rainfall events, and are later washed off into receiving waters. Keeping runoff on-site for infiltration as well as chemical, physical and biological processes to take place is the most effective means of reducing pollutant loadings. This study quantifies how much runoff and pollutant loadings can be reduced by using swales and landscaped depressions in parking lots. In addition to investigating basins with and without swales, three paving surfaces were compared. The research is designed to determine pollution load reductions measured from these different treatments within the parking lot; different paving materials in the parking lot; a planted strip with native trees and a small pond used for final treatment. Pollutant concentrations and infiltration were measured and analyzed for the various control methods. First year date collected in the parking lot between August 1999 and August 1999 were evaluated for this study. Also, sediment samples were collected from each of the swales, two locations in the strip and two locations in the pond.

Project Area

The study site is a parking lot at the Florida Aquarium in Tampa, Florida. The study uses the entire parking area, 4.65 ha, to define the drainage basin. The parking lot was modified for the study by reducing the length of each parking space by 51 meters, which allows for a 122-cm wide grass swale between rows. The vehicle front end now hangs over a grass swale instead of pavement, which prevented any reduction in the number of parking spaces within the parking area. Four different scenarios were investigated to determine the most efficient method of runoff reduction and pollutant removal. Eight basins, two of each type, were constructed and fitted with instrumentation to collect flow-weighted water quality samples and measure discharge amounts during storm events (Figure 5). The four treatment types are:

- Asphalt paving with no swale
- Asphalt paving with a swale
- Cement paving with a swale
- Permeable pavement with a swale

Rainfall quality and volume were compared to runoff quality and volume to determine the effectiveness of each treatment type.
Project Results Summary

The larger garden areas (approximately the size of one parking space) account for a runoff coefficient calculation reduction of 40-50 percent for the smaller basins. The runoff coefficient is a value that ranges from zero to one and expresses the fraction of rainfall volume that is actually converted into storm runoff volume. The runoff coefficient closely tracks percent impervious cover. For rainfall events less than 2 cm, basins with swales and permeable pavement have 80-90% less runoff than basins without swales, and 60-80% less runoff than basins with the other pavement types and swales. The percent of rainfall converted to runoff for each treatment type is shown in Figure 6.

Larger rainfall amounts show fewer differences in runoff amounts between the different pavement types, but basins with swales have approximately 40% less runoff than the basins without swales. Soil analysis at the site shows a higher than average gravel content (8.9%) which may account for the good infiltration rates. Comparisons of rainfall with storm runoff amounts showed that swales reduced runoff for all rainfall events and paving types.

Water quality analysis shows that average concentrations varied by paving and depression storage types. Rainfall has been identified in other studies as a significant source of nitrogen in runoff. This site displayed the same correlation between concentrations of ammonia and nitrate in rainfall and their concentrations in runoff. Phosphorus concentrations displayed the inverse, since concentrations were higher in effluent samples than in the initial rainfall. The levels were somewhat higher in the runoff of basins without planted swales and the highest concentrations of phosphorus were noted in basins where runoff traveled through grassed swales.

Figure 5: Florida Parking Lot Study Site (Rushhton, 1999)

Figure 6: Percent of Rainfall Volume Converted to Runoff Volume for Events Less Than 2cm

Paving material showed an effect on the concentration of metals in runoff. Basins paved with asphalt showed higher concentrations of iron, manganese, lead, copper and zinc than those paved with cement or permeable paving. Many of the major ions also showed a correlation with the paving material. Potassium, sodium, sulfate and calcium concentration were much higher in the basins paved with cement, which is made from limestone, although these levels were still well below levels considered detrimental to the environment. No consistent pattern was discernable for suspended solids, but generally measurements were low when compared to similar stormwater studies.

Water quality data was examined because they provide a more realistic measure for understanding the impacts of stormwater on receiving waters. Pollutant loads include both the volume of water discharged and the concentration of pollutants measured. Higher loads for all constituents, except phosphorus, were noted for basins without swales, since more water was discharged from these basins. Although phosphorus concentrations were much lower in basins without swales, loads were about the same.
Removal for Ammonia was 45% for asphalt with swale, 73% for cement with swale and 85% for permeable pavement with swale. Total nitrogen removal was 42% for permeable pavement with swale, 16% for cement with swale and 9% for asphalt with swale. TSS removal varied from 91% for permeable pavement with swales to 46% for asphalt with swales.

Table 7 summarizes the constituent load efficiency of the various treatments. The concentrations and loads measured during this study were compared to other stormwater studies conducted in Florida, and the values were much lower than measured values at other sites. Metal removal was good for the permeable pavement with swale treatment, with copper at 81%, iron 92%, lead 85%, manganese 92% and zinc 75%. The removals for the cement with swale treatment were somewhat lower, with the asphalt with swale treatment showing the poorest performance of the three treatments with swales.

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Asphalt with swale</th>
<th>Cement with swale</th>
<th>Permeable with swale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia</td>
<td>45%</td>
<td>73%</td>
<td>85%</td>
</tr>
<tr>
<td>Nitrate</td>
<td>49%</td>
<td>61%</td>
<td>66%</td>
</tr>
<tr>
<td>Total Nitrogen</td>
<td>9%</td>
<td>16%</td>
<td>42%</td>
</tr>
<tr>
<td>Ortho Phosphate</td>
<td>-180%</td>
<td>-180%</td>
<td>-74%</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>-9%</td>
<td>-62%</td>
<td>3%</td>
</tr>
<tr>
<td>Suspended Solids</td>
<td>46%</td>
<td>78%</td>
<td>91%</td>
</tr>
<tr>
<td>Copper</td>
<td>23%</td>
<td>72%</td>
<td>81%</td>
</tr>
<tr>
<td>Iron</td>
<td>52%</td>
<td>84%</td>
<td>92%</td>
</tr>
<tr>
<td>Lead</td>
<td>55%</td>
<td>76%</td>
<td>85%</td>
</tr>
<tr>
<td>Manganese</td>
<td>40%</td>
<td>69%</td>
<td>92%</td>
</tr>
<tr>
<td>Zinc</td>
<td>46%</td>
<td>62%</td>
<td>75%</td>
</tr>
</tbody>
</table>

The concentrations of metals in sediment samples collected in swales were consistent with concentrations measured in stormwater runoff. Higher concentrations of metals were found in swales paved with asphalt than those of grass. None of the metals measured in the sediments exceed the level where toxicity to organisms is probable when compared to the Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration (NOAA) chemical toxicity guidelines for marine environments. However, copper and zinc concentrations were above the level where toxicity is possible.

Nutrient concentrations measured in sediment samples for TKN and total phosphorus were lower in the bodies without grassed swales. Sediment samples taken from locations in the swale and the wet detention pond were compared to swale samples. The comparison showed that most of the metals are being settled out in the swales or deposited in the drop boxes. Sediment samples at the site were tested for 100 organic pollutants, but only 16 were detected at the site. The high concentrations found in this and similar studies indicate that atmospheric deposition is the source for most of the 16 detected organic pollutants.
4.4 Vegetated Roof Covers

Field Study
Green Rooftop, Philadelphia, PA

Introduction

Many older American cities are plagued with nuisance flooding on roads and walkways and chronic overflows of combined sewer systems. In highly impervious cities, vegetated rooftops offer a practical solution for controlling runoff at the source. A vegetated roof cover is a layer of living vegetation installed on top of a conventional roof. By mimicking natural hydrologic processes, they can achieve runoff characteristics similar to open space conditions. Green roofs are comprised of three components: subsurface drainage, growth media and vegetation. Specific hydraulic performance objectives are achieved through the appropriate selection of these components. Vegetated roof covers have been used extensively in Germany for 25 years.

Project Area

A 3,000-sq ft rooftop in Philadelphia was fitted with a demonstration vegetated rooftop. The performance objective was the restoration of predevelopment runoff peak rates for a 24-hour, 2-year return-frequency storm. Although in the Philadelphia area, 50% of all rainfall is contributed by storms with volumes of 2 inches or less over a 24-hour period. The “green roof” used is only 3.4 inches (8.6 cm) thick, including the drain layer (Figure 7). Its maximum saturated weight is less than 17 lb/ft2 and it weighs less than 5 lb/ft2 when dry. No additional structural support was necessary for installation. The saturated infiltration capacity is 3.5 inches per hour. The key features of this system are a synthetic under-drain layer which promotes rapid water drainage from the roof surface, thin, lightweight growth media suitable for installation on existing roof surfaces and a meadow-like setting of perennial Sedum varieties selected for hardiness and the ability to withstand seasonal conditions typical of the area.

Figure 7: Structure of the Philadelphia Vegetated Roof Cover (Miller, 1998)

Project Results Summary

Currently too few storms have been observed to permit quantitative assessment of the vegetative covered roof. Data are available from one intense storm monitored during a 0.4 inch, 20-minute rainfall event (Figure 8). Supplemental data from a pilot-scale experimental station were used in this study. Test data show that for storms with less than 0.6 inches, runoff is negligible. During a 9-month period, 44 inches of rainfall was recorded at the pilot-scale test station, with only 15.3 inches of runoff generated. Runoff occurred for precipitation events between 0.6 and 3.0 inches, but logged rainfall significantly. Attraction was lower for the pilot-scale experiment than the anticipated modeled value (40% vs. 49%), which has been attributed to differing drain conditions and a steeper slope at the test site. Additional benefits of this project include extended life of the underlying roof materials, reduction of energy costs by improving effectiveness of insulation and restoration of ecological aesthetic value of open space in densely populated areas.

Figure 8: A Rainfall Event of 0.4 Inches with Media Completely Saturated (Miller, 1998)
4.5 Permeable Pavements

Field Study

Permeable Pavements for Stormwater Management, Olympia, WA

Introduction

This study demonstrates the use of permeable surfaces for reducing runoff volume, improving infiltration and reducing pollutant loadings in an urban parking area. Numerous problems associated with urbanization, such as flooding, channel erosion and destruction of aquatic habitats are closely linked to the loss of water-retaining function of soil in urban landscape. As impervious surfaces increase, a stormwater runoff reservoir of tremendous volume is removed. Water that may have lingered in this reservoir for anywhere from a few hours to many weeks now flows rapidly across land surfaces and arrives at stream channels in short, concentrated bursts. The scope of this project was to evaluate existing information on types and characteristics of permeable pavements, construct and monitor a full-scale test site and evaluate long-term performance of these systems. This study of permeable pavements evolved from a growing recognition of the limitations of traditional stormwater management in keeping water in the soil by allowing excess of water to the soil over large areas of landscape.

Study Site

The study site is an employee parking lot on the southeast corner of the King County Public Works facility in Renton, Washington. The permeable pavement sections of the lot were constructed for the purpose of this study. A total of eight stalls using four different pavement types were constructed. In addition, a ninth stall of traditional asphalt was used as a control. The parking stalls are fitted with pipe, gutters and gauges to collect and measure the quantity and quality of storm runoff from each pavement type. Subsurface trenches were constructed down to the middle of each stall and imbedded into the subgrade six to eight inches below the surface. This allows for the collection of only a fraction of the infiltrated water (about 1.8%). The permeable pavement types studied were:

- A plastic network with grass infilling (<5% impervious)
- An equivalent plastic network with gravel infilling (<5% impervious)
- Impervious blocks with grass infilling (~60% impervious)
- Impermeable blocks with gravel infilling (~90% impervious)

Project Results Summary

Data used to monitor the various permeable pavements were from three different storm events during the autumn of 1996. The volume of runoff generated from cement blocks with 60% impervious surface stalls and runoff from traditional asphalt are compared (Figure 9). The storm had a fairly uniform distribution of rainfall (4mm per hour) throughout the duration of the event. Rain falling on the asphalt yielded sharp hydrograph peaks and a high total volume of runoff water. Only about one peak per hour (0.03mm per hour of runoff) was recorded for the cement blocks with 60% impervious surface. These data are representative of data gathered at the other stalls and reflect little or no runoff from the permeable pavement stalls.

![Figure 9: Surface Runoff from 60% Impervious Pavement vs. Asphalt (Booth, 1996)](image_url)

In contrast to surface runoff, subsurface flow generally responds more slowly and more uniformly. The data for a storm of short duration and moderate intensity are represented in the following graph (Figure 10). Individual peaks on the bar graph indicate rainfall rates as high as 14mm per hour, lasting for short durations (15-minute intervals). Runoff gauges on all four systems showed virtually no surface runoff (on average 0.03 mm). It displays a characteristically attenuated discharge peak and lagged response to the rainfall inputs. All pervious surfaces responded similarly. For the asphalt surface, the volume of water running off the asphalt responded quickly to changes in the rate of rainfall. This is indicated by high peak flows corresponding with precipitation amounts, with little lag time noted (Figure 11).
Water quality results were obtained from samples collected directly from tipping bucket gauges. Only five samples from the four subsurface collection troughs and the asphalt surface runoff were analyzed. Chemical analysis of the subsurface samples showed sub-detection levels for many of the constituents and relatively low levels for all tested compounds. Measured concentrations of common metals (copper, lead, zinc, aluminum, and iron) were substantially below the reported national averages. Subsurface samples did show slightly higher concentrations than runoff, which can be attributed to the troughs collecting the "distilled" 2 percent of runoff, from directly under where vehicles park. Still, these concentrations were below typical values seen in urban runoff.
Grass Swales

Field Study
Highway Grass Channels, Northern Virginia, Maryland, and Florida

Introduction

The U.S. Department of Transportation, Federal Highway Administration conducted a field study to determine the pollutant removal efficiencies of grassed channels and swales along highways in Northern Virginia, Maryland, and Florida. Sampling was conducted at the inflow and outflow areas of the channels, which provided data for quantity and quality of waters entering and leaving the channels. The samples were analyzed for the following pollutants:

- Total Suspended Solids (TSS)
- Heavy Metals (cadium, copper, lead and zinc)
- Nitrogen (Total Kjeldahl Nitrogen and nitrate/nitrite)
- Total Phosphorus
- Total Organic Carbon

Twelve rainfall events were monitored, including both frequent and infrequent rainfall periods, most involving discrete stormwater runoff events following a minimum of two days of dry weather. In addition continuous rainfall periods of seven to 14 days were included to determine overall removal efficiencies.

Project Area

The test area in northern Virginia is located along I-66. The channel has an average slope of 4.7% with a total drainage area of 1.27 acres (0.51 ha). Stormwater enters the channel indirectly, by means of overland flow. Stormwater data were collected from June 13, 1987 through November 12, 1987. The test site in Maryland is a grass channel located alongside I-270. This channel has a slope of 3.2% and a total drainage area of 1 acre (0.40 ha) with stormwater entering by means of overland flow. Data were collected for the period beginning June 18, 1987 and ending mid-September 1987. The Florida test site is a grass channel median located between the East and West lanes of I-4. The Florida grass channel has a lower slope than the other two test sites with a drainage area of 0.26 acres (0.23 ha). Data collection began at this site on February 25, 1988 and ended on October 31, 1988.

Project Results Summary

All three locations showed some effectiveness with regard to pollutant removals, although results varied depending on the method of analysis and the location. The results for all three locations are represented in Table 8. Sediment core samples were obtained from the channels and compared to samples from adjacent, upland areas, to determine pollutant removal effectiveness of the grass channels. Based on the data from the analysis the following conclusions were made. Removal of metals appears to be directly related to the removal of TSS, whereas nutrient removal is not. Removal of TSS can be estimated using flow depth and travel time relationships. Relatively low nutrient removal may be observed in channels that are effective in removing other pollutants. The controlling factors in pollutants removal of grass channels are length, channel geometry, channel slope and average flow. Both metals and nutrients are removed in grass channels, but metal removal is more reliable.

Table 6: Long-Term Pollutant Removal Estimates for Grassed Swales

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>VA</th>
<th>MD</th>
<th>FL</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSS</td>
<td>65%</td>
<td>65%</td>
<td>56%</td>
</tr>
<tr>
<td>TOC</td>
<td>76%</td>
<td>73%</td>
<td>64%</td>
</tr>
<tr>
<td>TN</td>
<td>17%</td>
<td>9%</td>
<td>48%</td>
</tr>
<tr>
<td>NO3</td>
<td>11%</td>
<td>-14%</td>
<td>45%</td>
</tr>
<tr>
<td>NO2</td>
<td>41%</td>
<td>40%</td>
<td>45%</td>
</tr>
<tr>
<td>TP</td>
<td>12-20%</td>
<td>40-50%</td>
<td>10%</td>
</tr>
<tr>
<td>Cd</td>
<td>12-16%</td>
<td>22-72%</td>
<td>20-45%</td>
</tr>
<tr>
<td>Cr</td>
<td>20%</td>
<td>14%</td>
<td>51-61%</td>
</tr>
<tr>
<td>Cu</td>
<td>10%</td>
<td>10%</td>
<td>62-67%</td>
</tr>
<tr>
<td>Pb</td>
<td>41-55%</td>
<td>18-92%</td>
<td>67-94%</td>
</tr>
<tr>
<td>Zn</td>
<td>49%</td>
<td>47%</td>
<td>91%</td>
</tr>
</tbody>
</table>
CONCLUSION

Pollutant loading reduction data for bioretention systems are promising in that removal percentages for heavy metals and nutrients seem quite high. Generally, the experimental data show a fairly consistent removal rate for all of the tested bioretention systems for heavy metals and most nutrients (Table 9). Field study results support the laboratory baseline data collected by the University of Maryland, College Park. However, the field studies provide data for single, simulated rainfall events using synthetic rainfall. A larger number of sampled events would be required for statistical validity of the results.

Table 9: Pollutant Removal Efficiencies for Laboratory and Field Bioretention Studies

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Laboratory (small)</th>
<th>Laboratory (large)</th>
<th>Delray Plaza</th>
<th>Ingleswood Plaza</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pb</td>
<td>93–95%</td>
<td>93–97%</td>
<td>&gt;95%</td>
<td>70%</td>
</tr>
<tr>
<td>Cu</td>
<td>91–97%</td>
<td>90–93%</td>
<td>97%</td>
<td>43%</td>
</tr>
<tr>
<td>Zn</td>
<td>93–99%</td>
<td>87–96%</td>
<td>&gt;93%</td>
<td>64%</td>
</tr>
<tr>
<td>P</td>
<td>15–83%</td>
<td>0–61%</td>
<td>65%</td>
<td>87%</td>
</tr>
<tr>
<td>TKN</td>
<td>59–66%</td>
<td>47–69%</td>
<td>52%</td>
<td>67%</td>
</tr>
<tr>
<td>NH₄⁺</td>
<td>&lt;0–83%</td>
<td>54–85%</td>
<td>92%</td>
<td>N/A</td>
</tr>
<tr>
<td>NO₃⁻</td>
<td>11–26%</td>
<td>&lt;0–23%</td>
<td>16%</td>
<td>15%</td>
</tr>
<tr>
<td>Tr</td>
<td>60–75%</td>
<td>&lt;0–43%</td>
<td>49%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

The use of synthetic runoff during the bioretention experiments, both in the lab and field, allowed the concentrations of applied pollutants to be controlled and accurately measured, so that influent and effluent levels could be compared. In addition, infiltration could be determined based on the volume of runoff versus volume input. The statistical analysis applied for the mass loadings was sound. However, testing for these studies has not been conducted for any actual rainfall events to determine effectiveness of the system for reducing runoff volume and pollutant loads. A comparison of average pollutant removal efficiencies is shown in Figure 12.

The grass swales data from the Federal Highway Study show trends in removal of metals as they relate to TSS removal for three different areas in the United States. However, a short study period, using data from only a few storm events, is used to quantify the results. Additional data from numerous storm events would be required to provide statistical validity to the analysis. The data from additional, less extensive studies conducted by the University of Virginia help to validate the highway data, as pollutant loading removal rates and runoff volume reduction rates were fairly consistent between the two studies. Conclusions drawn from both studies indicate that not only length, but also longitudinal slope and the presence of check dams increase the pollutant removal capabilities (Kue, 1999).

In addition, a study conducted in Ontario, Canada concluded that no evidence existed to show that nutrient or metal concentrations in soils increased with age in grass swales, as concentrations varied regardless of age. Also, the Canadian study determined that no degradation in vegetative quality resulted from continuous exposure to stormwater runoff. It was shown that vegetation quality was similar to what would be found along conventional systems (Sabourin, 1999). The Canadian study also showed that total runoff volumes from grassed swales were 6–30% less than conventional systems and that a loading comparison revealed that the system released significantly less pollutants than conventional systems.

Permeable pavements can reduce the percent imperviousness for urban areas, which allows for greater infiltration rates and reduced runoff volumes. In addition these alternate pavement types function as stormwater pollutant removal mechanisms. Preliminary data from the Washington project show effectiveness, but too few storms have been analyzed. Only the Florida Aquarium parking lot data represent an analysis of a significant number of actual storm events. As the study continues, and second year data become available, more compelling proof of the pollutant removal effectiveness and runoff volume reduction can be realized. The methodology for testing runoff volume reduction and mass pollutant loadings in the Florida study provided reliable data.

Extensive data exist that show runoff volume reduction using vegetated roof covers in Europe, especially Germany. The data are specific to temperate climates and results vary considerably for other areas in the United States. However, the Philadelphia project shows the benefits of this application in reducing runoff volume by reducing the level of imperviousness in urbanized areas. Further, it demonstrates the capacity for retrofit of green roofs in highly impervious, older, urbanized U.S. cities experiencing chronic CSO problems. Little data are available from this demonstration project. However, with continued monitoring, evidence of the suitability of green roofs in the United States may become more apparent.
6 RECOMMENDATIONS

A detailed comparison of pre- and post-development conditions and an analysis of adjacent areas using traditional stormwater controls and LID practices side-by-side, would provide the best possible assessment of LID effectiveness hydrologically and as a mechanism for reducing pollutant loadings. The Jordan Cove Urban Watershed project in Waterford, Connecticut, is currently under construction for a side-by-side analysis, however, no data are available at this time. Baseline predevelopment hydrological data are currently being collected for comparison once the development is completed and monitoring begins.

Most of the current field data available for bioretention facilities are for single, simulated rainfall events. Fitting the existing, tested bioretention areas in Prince George’s County with monitoring equipment and running a significant number of tests on actual rainfall events over 9 months to 1 year, would provide higher quality data. Long-term studies would prove or disprove the long-term effectiveness of bioretention systems, as well as provide information on trends in soil fertility lifetimes and trends in reduced capabilities over time. The two-year Florida Aquatic study is currently the best possible source for these data.

The majority of case studies cited above are ongoing investigations, and reported data represent preliminary findings. Follow-up on these studies will provide better support for proof of effectiveness of LID practices. Additional studies testing LID practices should be initiated at the use of these practices grows. Preliminary findings should be viewed as a starting point, and not the empirical proof of effectiveness for the various LID practices studied. The development of a database for entry and storage of LID study data could provide a useful tool for future investigation of LID effectiveness.

7 REFERENCES


Booth, Derek B., Leavitt, Jennifer and Peterson, Kim. 1996. The University of Washington Permeable Pavement Demonstration Project, Background and First-Year Field Results. Center for Urban Water Resources Management, Department of Civil Engineering.


Guidance for Preparers of Growth-related, Indirect Impact Analyses

Chapter 1. Introduction

1.1 Purpose and Background

What

This guidance for preparers of growth-related, indirect impact analyses includes the introductory information below and five additional chapters:

- Regulatory Framework and Definitions
- Land Use, Transportation and Growth
- Key Concepts for Growth-related Impact Analyses
- Making the First Cut
- Performing the Analysis

The guidance focuses on growth-related, indirect impact analyses for Caltrans' surface transportation projects in California that are subject to the National Environmental Policy Act (NEPA) and/or the California Environmental Quality Act (CEQA). NEPA and CEQA require that the direct, indirect, and cumulative effects of proposed actions be assessed and disclosed. Indirect effects are generally defined as those that are caused by a project, but unlike direct effects, occur later in time or are further removed in distance. Indirect effects can range from physical environmental effects, such as downstream sedimentation resulting from project construction, to growth-related effects resulting from changes in accessibility to a previously undeveloped area or a redistribution of growth.

The guidance specifically deals with the subset of indirect effects associated with highway projects that encourage or facilitate land use or development that changes the location, rate, type, or amount of growth—and are referred to in the guidance as "growth-related impacts." Not every project will need a growth-related impact analysis; such an analysis typically will be needed in the environmental document for those highway projects that are built along a new alignment and/or provide new access.

Growth-related impacts and the need for analysis should be considered early in project development. Where such impacts are identified, appropriate and reasonable steps to avoid or minimize such impacts also should be considered early and incorporated into the project and the environmental document. A growth-related impact analysis assists with complying with the requirements of NEPA and CEQA, which include (1) considering environmental consequences of project actions in the planning process as early as possible; and (2) providing a well-documented and sound basis for government decision-making.

Who

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the U.S. Environmental Protection Agency (USEPA) recognize the importance of thoroughly considering indirect impacts during the preparation of environmental documents. An interagency work group representing FHWA, Caltrans, and USEPA has developed this guidance to assist Caltrans' practitioners (environmental staff, project managers, and consultants) responsible for preparing environmental documents pursuant to NEPA and CEQA.

While FHWA, USEPA, and other agencies nationwide have prepared other guidance papers on this subject, this document was prepared to address growth-related impact analyses expressly for highway projects in California.

Why

This guidance will help practitioners identify whether a growth-related impact analysis is needed for a proposed transportation project. It also will help practitioners prepare an analysis that is sound and well documented. Further, the data developed during the analysis can be used to support other project-related analytical requirements, such as compliance with USEPA's Section 404(d)(1) Guidelines.

When

If the lead agency determines it is needed, a growth-related impact analysis would be developed concurrently with the direct, indirect, and cumulative impact analyses for the proposed transportation project's environmental document.

How

The Work Group intends for this guidance to be practical and flexible, and recognizes that the need for and scope of a growth-related impact analysis will vary according to type and scale of the project proposed, the area where the project is located, and the resources of concern potentially affected (e.g., wetlands, vernal pools, threatened/endangered species, prime farmland, Section 4(d) property, etc.). The guidance provides several tools and approaches that can be applied, based on the potential

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1 In June 2008, FHWA, Caltrans, and USEPA entered into a partnership agreement, the "Mare Island Accord," to support coordinated, cooperative, effective, and collaborative work among the three agencies in the transportation and environmental planning processes. This guidance is a product of the Mare Island Accord.
1.3 Summary

The Work Group prepared this guidance for environmental professionals with varying degrees of expertise. The modular structure of the guidance provides flexibility so that practitioners can refer to specific topics. To build a foundation for growth-related impact analysis, this guidance provides the following:

- Definitions of terms fundamental to growth-related impact analysis.
- A suggested approach to help determine whether an analysis is needed.
- A suggested step-by-step approach for performing the analysis.
- Examples of best practices and tools to use in the analysis.

The guidance was prepared to address California's specific challenges. The guidance will help practitioners to: (1) identify when an analysis should be performed; (2) identify the appropriate resources to analyze; (3) define the geographic and temporal parameters of the analysis; (4) analyze growth in relation to the project; (5) select the appropriate methods to assess resource impacts; and (6) make supportive impact findings. The guidance emphasizes that early communication, coordination, and involvement among federal, state, and local agencies helps avoid conflict and delay, and allows for the early consideration of avoidance and minimization opportunities to reduce resource impacts.

The material presented in this guidance is meant to be used in conjunction with—but not substituted for—agency policies, regulations, and legal requirements. Each agency contributing to the guidance recognizes that the approach to growth-related impact analysis may vary widely depending on the nature and context of the project proposed, the affected resources, the extent of available data, and other factors. The agencies also recognize that the guidance may be updated to reflect new issues or challenges as they arise. Notwithstanding the project-appropriate variations in method and procedure, FHWA, Caltrans, and USEPA Region IX agree with the advice presented in this guidance document concerning context, methods, analytical approach, and growth-related impact analysis format.

The agencies that developed this guidance are interested in your views. If you have comments or suggestions, please contact:

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Email: Kelly_Dunlap@dot.ca.gov

1.2 Additional Reference Materials

On September 13, 2002, President George W. Bush signed Executive Order (EO) 13274, Environmental Stewardship and Transportation Infrastructure Project Reviews. This EO established an Intergency Task Force to advance environmental stewardship and streamlining efforts to coordinate expeditious transportation decision making, and to address priority projects. The Task Force established an Intergency Task Force on indirect and cumulative impacts to evaluate this topic and identify opportunities where greater interagency coordination and collaboration could lead to improvements in the decision-making process for projects. The Task Force Task Group released the Draft Baseline Report on March 15, 2005. The appendices of the Draft Baseline Report include a comprehensive annotated bibliography and links to guidance documents, commentaries on case law, and other helpful materials.
Chapter 2. Regulatory Framework and Definitions

What are Indirect Effects?

Indirect effects refer to actions of a type that do not cause an action and occurring changes in the pattern of land use, population density or growth rate, and related effects on natural systems (40 CFR 1508.8). This guidance refers to a specific type of indirect effect—the effect of growth that can be linked to the development of a California transportation project.

NEPA and the California Environmental Quality Act (CEQA) require that direct, indirect, and cumulative effects of proposed actions be assessed and disclosed, but NEPA and CEQA define the term “indirect effects” slightly differently. Section 604 of the Clean Water Act (CWA), as implemented by the Section 604(d)(1) Guidelines (40 CFR 230, subpart B), also provides a framework for identifying indirect effects.

2.1 NEPA Regulatory Framework

Although the NEPA statute does not distinguish among types of environmental effects (42 U.S.C. 4331), its implementing regulations (40 CFR 1500-1508) define environmental effects as having three components: direct, indirect, and cumulative effects.4

- Direct Effects. Those effects caused by the action and occurring at the same time and place (40 CFR 1508.8).
- Indirect Effects. Those effects caused by the action and occurring later in time or further removed in distance, but still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (40 CFR 1508.8).
- Cumulative Effects. Those impacts on the environment that result from the incremental impact of the action when added to or occurring together with other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7; also see Caltrans Guidance for Preparing for Cumulative Impact Analysis). Cumulative impacts encompass the direct and indirect effects attributable to the proposed project along with the environmental effects of other past, present, and reasonably foreseeable future actions.

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4 The terms "effect" and "impact" are used synonymously in the CEQ regulations (40 CFR 1508.8), the CEQA guidelines, and in this guidance.
Indirect impacts, as well as direct impacts, can be considered a subset of cumulative impacts but are distinguished by an established cause and effect relationship to a proposed federal action, such as a transportation project. Figure 2-2 is an illustration and comparison of the cause and effect relationship of indirect and direct impacts to a project action. Indirect impacts are caused by another action or actions that have an established relationship or connection to the project (related actions). These induced actions are those that would not or could not occur except for the implementation of a project. These actions are often referred to as "but for" actions and generally occur at a later time or some distance removed from the original action.

**Figure 2-2. Direct and Indirect Impact Diagrams**

Source: FHWA January 2003

### 2.2 CEQA Regulatory Framework

The CEQA Guidelines define indirect impacts as:

- "Indirect or secondary effects that are caused by the project and are later in time or further removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems (CEQA Section 15158(a)(2))."

Section 15158(a)(2) of the CEQA Guidelines states that a growth-inducing impact could occur if:

...the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth (e.g., a major expansion of a wastewater treatment plant might, for example, allow for more construction in the service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristics of some projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

Additional information on CEQA and indirect impacts can be found in California Guidelines for Preparation of Cumulative Impact Analyses, CEQA Guidelines for Cumulative and Indirect Impacts.

### 2.3 CWA Regulatory Framework

Section 404 of the CWA regulates the discharge of dredged or fill material into waters of the United States to meet the intent of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. The U.S. Army Corps of Engineers and U.S. Environmental Protection Agency (USEPA) share responsibility under Section 404. The Corps of Engineers administers the 404 program, including issuing permits, with the USEPA providing oversight.

The USEPA's 404 (d)(1) Guidelines (40 CFR 230 subpart B) specify that a permit can be issued for a discharge of dredged or fill material into waters of the United States only if the discharge is determined to be the least environmentally damaging practicable alternative (LEEDA), so long as the alternate does not have any significant adverse environmental consequences (40 CFR 230.10(a)). To make this determination, the 404(d)(1) Guidelines require an analysis of cumulative and secondary effects on the aquatic ecosystem. Secondary effects are defined as the effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials into waters of the United States, but do not result from the actual placement of the dredged or fill material. For purposes of this guidance, secondary and indirect effects mean the same thing.

The Corps of Engineers makes a LEEDA determination by considering both the direct and indirect impacts of the proposed project, including growth-related, indirect impacts. As shown in Figure 2-3, it is possible for an alternative with greater direct impacts, but fewer indirect impacts...
3.1 Factors that Influence Growth

Many factors influence land use and development in an area, as illustrated in Figure 3.1. Factors such as population and economic growth, desirability of certain locations, costs and availability of developable land, physical and regulatory constraints, transportation, and the cost of water and public services all strongly influence where, when, and what type of development takes place.

Many of these factors also influence the policies and decisions associated with land use and growth. The key players include households, businesses, developers, and government officials (see FHWA’s Influence of Transportation Infrastructure on Land Use and NC/DP Report 423A, Land Use Impact of Transportation: A Handbook). The interaction of supply and demand for housing and business properties in the land market produces the pattern of development within an area. Within this market, households and businesses create demand for new buildings and locations while developers provide these products within the supply and cost constraints of local government. External factors, such as zoning laws, tax incentives, and proximity of public transit and roadways, also influence this relationship.

Households weigh the costs of different locations with their needs and preferences for living space, neighborhood type, quality of schools and other public services, and access to jobs, goods, services, and recreation. Various types of households weigh these factors differently as they consider what type and location of housing will best satisfy their needs and are within their budgets.
Figure 3.1. Factors Influencing Land Use and Development

- Planning & Zoning
- Ownership
- Population
- Environmental Regulations
- Individual Preferences
- Infrastructure
- Water
- Utility
- Transportation
- Private Sector
- Local Government
- State Government
- Federal Government


Businesses also balance the costs of various locations with their need to be accessible to workers, customers, suppliers, and information, and to be attractive places to work and shop. These needs often lead them to cluster with other businesses in downtowns, suburban activity centers, and office and industrial parks. They also may seek other uses for the highly accessible and visible places even though space may cost more in these locations.

Real estate developers respond to this market demand by evaluating the needs and preferences of their customers—most often homebuyers and commercial and industrial business owners—and then by building new development projects that respond to that market. These new developments can compete with the existing stock of buildings for this market. Sometimes new developments augment existing supply in an expanding market; sometimes they compete with existing supply in a stagnant market, drawing tenants and buyers away from older properties.

Local government actions attract or discourage development by influencing the supply of land available for development/development; the densities at which development can occur; and directly or indirectly the cost of development. Developers' projects also can be constrained by the ability of local governments to provide needed infrastructure.

Further information about the factors that influence growth and a list of possible data sources is found in NCHRP Report 446, Draft Reference for Estimating the Indirect Effects of Proposed Transportation Projects (Course Module 4, Step 2 - Identify Study Area Directions and Goals).

3.2 What is It About Transportation?

Land use and transportation are inextricably linked. Everything that happens to land use has transportation implications and transportation actions may affect land use. Transportation agencies such as Caltrans play a role in land use changes by providing infrastructure that can improve mobility to different destinations, and/or open up access to new locations. At the same time, new land development generates traffic to that location and this additional travel generates the need for new transportation facilities. The extent that transportation influences development or the extent that land use influences transportation is a matter of ongoing debate (see ReNEPA).  

Accessibility

Accessibility is the most direct link between transportation and land use. The concept of accessibility is key to understanding how transportation and land use relate to one another (NCHRP Report 423A). Transportation promotes spatial interaction between activities or land uses. This interaction is measured by accessibility, which reflects both the attractiveness of potential destinations and ease of reaching them. The pattern of land uses is important because it determines the opportunities or activities that are within range of a given place. The potential for interaction between any two places increases as the cost of movement between them—either in terms of money or time—decreases. Consequently, the structure and capacity of the transportation network affect the level of accessibility.

Transportation projects may reduce the time-cost of travel, thereby enhancing the attractiveness of surrounding land to developers and consumers. When the change in accessibility provided by a transportation project facilitates land use change and growth in population and employment, one outcome can be growth-related impacts to environmental resources.

ReNEPA is the FHWA's online "community of practice" supporting an open exchange of knowledge, information, experiences, and ideas about NEPA, related environmental issues, and transportation decision making.
Research has shown that although accessibility improvements rarely change the rate of growth of a region (such as a county or metropolitan area), changes in accessibility can influence the direction of growth in a region. The relative rate of growth will depend on a variety of factors, including the design and location of transportation projects. The placement of an interchange may not always be the same as the rate of growth along a stretch of highway, as growth occurs. Placing the interchange near a relatively intact wetland, rather than near an agricultural development, could have very different consequences on environmental resources of concern.

3.3 Transportation and Land Use in California

Growth in California

Rapid population growth continues in California. In 2005, the state’s population exceeded 36.8 million persons (Department of Finance Press Release May 2, 2005). The population is expected to increase by an average of 600,000 persons per year for the foreseeable future. If this projection holds, by 2020 the state’s population will reach over 45 million, and by 2030 it will be nearly 52 million (California Transportation Plan 2001, May 2004).

The Department of Finance projects this population growth and forecasts its distribution around the state. The Department of Housing and Community Development, together with the regional Councils of Government (COG) throughout the state, estimates how many housing units each region and locality will be required to accommodate this growth, although the state’s ability to enforce this requirement on local governments is limited.

Caltrans has a 20-year planning horizon consistent with standard FHWA practice for transportation project planning. In addition to Department of Finance projections, Caltrans signs facilities based on travel demand projections prepared by Metropolitan Planning Organizations (MPO) in urban areas and county projections in rural areas. Travel demand forecasts are developed directly from population projections prepared by COGs, which are often (though not always) the same entities as the MPOs. The population and land use forecasts are based on the local government’s general plan.

In California, local governments—not Caltrans or FHWA—control the amount, location, and timing of new real estate development. A local government is required by state law to adopt a general plan. This plan should accommodate the jurisdiction’s fair share of future housing as determined by the Department of Housing and Community Development and the COG. Although the state’s ability to enforce this requirement is limited, most local governments do take this responsibility seriously. The general plan also reflects the community’s vision for how and where land is developed, preserved, or redeveloped.

The general plan can be a good source for obtaining information about expected growth and development patterns that are likely to unfold in a community. A general plan addresses the following seven elements (William Fulton and Paul Shigley, Guide to California Planning):

- The land use element deals with population density, building intensity and the distribution of land uses within a city or county.
- The circulation element deals with all major transportation improvements. It serves as an infrastructure plan and must address the development patterns expected by the land use element.
- The housing element assesses the need for housing for all income groups and lays out a program to meet those needs.
- The conservation element deals with flood control, water and air pollution, and the need to protect sensitive resources, such as endangered species habitat, wetlands, and prime farmland.
- The open-space element provides a plan for the long-term conservation of open space in the community.
- The noise element identifies noise problems in the community and suggests measures for noise abatement.
- The safety element identifies seismic, geologic, flood, and wildfire hazards and establishes policies to protect the community.

CEQA review is required when general plans are adopted, amended, or updated. NEPA review is not required because preparing or amending a general plan is a federal action. Caltrans’ role in the land-use planning and development review process is limited to intergovernmental review of projects that affect the state highway system.

Land use change and the precise details of new development are not strictly predicted and the reliability of land use plans can be variable. Even if a proposed transportation project is in a local agency’s general plan, actions at the time of project analysis could create a situation in which the project may contribute to growth-related impacts. In addition, Fulton and Shigley (2005) explain that because general plans are revised every 10 to 15 years at most, the plans may be out of date by the time of project analysis. Accordingly, general plans should not be used as the sole source of reliable land use information.
Key Transportation Growth Issues

Much of the guidance provided by CEQ, FHWA, and other agencies concerning growth-related impact analysis appears to focus on transportation projects whose purpose is to stimulate growth (i.e., growth is a part of the project's purpose). In California, projects are rarely designed to encourage or facilitate growth. Most California capacity-increasing projects are proposed as a response to traffic congestion that results from growth that has already occurred or will soon occur, rather than attracting new growth to an area that otherwise would not receive it. From this perspective, growth causes the project—the project is not designed to cause growth. Hence, when California projects have growth-related impacts, it is usually an unintended outcome of the project.

Even if the intended effect is to respond to growth that has occurred or is projected to occur, an unintended result of reducing congestion could be to increase accessibility—which could, in turn, affect the timing and location of additional growth and possibly drive growth into areas where growth was not planned or may not otherwise be foreseenable. This growth also could result in increased pressure on resources in the area.

Analyzing these types of growth-transportation relationships can be difficult. Nevertheless, this is an analysis required by NEPA and CEQA. Chapter 5, Making the First Cut and Chapter 6, Performing the Analysis are designed to help the practitioner evaluate whether and how a transportation project may lead to growth-related impacts. When growth-related impacts are reasonably foreseeable, the guidance emphasizes the need for the Project Development Team (PDT) to consider and incorporate avoidance and mitigation measures for potential resource impacts. Chapter 4, Key Concepts for Growth-related Impact Analyses, discusses what makes an action or an impact "reasonably foreseeable."

Chapter 4. Key Concepts for Growth-related Impact Analyses

This chapter discusses the concepts of "reasonably foreseeable" and "causally" as they relate to assessing the growth-related impacts of a transportation project. To be considered reasonably foreseeable, an action, while uncertain, must be probable or likely to occur. In addition, although development and transportation projects are often built in close proximity to each other, this does not necessarily mean that a causal relationship exists between the transportation project and growth.

4.1 "Reasonably Foreseeable"

CEQ provided the following guidance discussing the meaning of the term "reasonably foreseeable."

"The FIS must identify all the indirect effects that are known, and make a good faith effort to explain the effects that are not known but are "reasonably foreseeable" (Section 1508.8(b)). [If there is total uncertainty about the future land owners or the nature of future land uses, then, of course, the agency is not required to engage in speculation or contemplation about their future plans. But, in the ordinary course of business, people do make judgments based upon reasonably foreseeable occurrences. It will often be possible to consider the likely purchasers and the development trends in that area or similar areas in recent years, or the likelihood that the land will be used for an energy project, shopping center, subdivision, farm or factory. The agency has the responsibility to make an informed judgment and to estimate future impacts on that basis, especially if trends are ascertainable or potential purchasers have made themselves known. The agency cannot ignore uncertainty, but probably, effects of its decisions."

In other words, reasonably foreseeable events are those that are likely to occur or are probable, rather than those that are merely possible. This means that those effects that are considered possible, but not probable, may be excluded from NEPA analysis. There is an expectation in the CEQ guidance that judgments concerning the probability of future impacts will be informed ones, rather than based on speculation. At the same time, the agency can and should use its own informed judgment in order to make reasonable predictions.

A review of case law regarding "reasonably foreseeable" actions and effects can be found in NCHRP Report 466, "Best Practice for Estimating the Indirect Effects of Proposed Transportation Projects (Course Modules 2 - Review of Case Law on Indirect Effects Evaluation)."

and in the *Draft Baseline Report*, Executive Order 13327, Indirect and Cumulative Impacts Workgroup (March 2005).

A confident prediction of whether growth is reasonably foreseeable requires judgment and needs to be based on information obtained from reliable sources. Coordination with local land use agencies and officials, including the review of adopted plans and similar documentation, if available, is important.

Assessing the growth-related impacts of a proposed transportation project can be thought of as a three-part process:

1. What is the reasonably foreseeable growth and land use change without the project? What is it with the project?
2. To what extent will the project influence the overall context, timing, location, or timing of that growth?
3. Will project-related growth put pressure on or cause impacts to environmental resources of concern?

In thinking about this process, it is important to understand that growth per se is not really what matters. What matters is the potential impact that this growth may have on resources of concern. For there to be a growth-related impact, the practitioner must find that growth is a reasonably foreseeable consequence of a transportation project (even in combination with other factors)—and that growth would impact resources of concern.

Determining whether growth is reasonably foreseeable can be a difficult task. Text Box 1 provides an example discussing the difference between probability and certainty. It illustrates the significance of distinguishing between a prediction (the probability something will happen) and the reliability of that prediction (the level of certainty). Thus, it is not just the predicted probability of something happening that makes it foreseeable, but also the reliability of those predictions. The practitioner should have a qualitative sense of how reliable higher conclusions are based on the reliability of the source data.

**Text Box 1. Distinguishing Between Probability and Certainty**

Two amateur weather forecasters estimated the probability that it will rain tomorrow in their city. They both estimate the probability to be 80%. But how certain was each one about his prediction? One is very confident about his prediction, because he referred to current satellite imagery from the National Weather Service. The other is less confident about his prediction, because he used a less reliable data source—his personal journal of the weather during the same week last year.

Both predictions arrive at the same probability that it will rain, but the certainty about the predictions is not the same. Obviously the prediction using satellite imagery would be more certain. Other factors also can influence the level of confidence in a prediction.

**4.2 “Causality”**

The extent to which land use influences transportation and vice versa is a matter of ongoing debate. Statistics say, “Correlation does not imply causation” (see Text Box 2). Growth is not necessarily caused by a transportation project. If the potential for growth in an area is inevitable and consistent with local land use plans and current trends, the transportation project would not influence growth, thus there would be no growth-related impacts attributable to the project. The question that must be analyzed is whether the transportation project will change the location, rate, type, or amount of growth. For example, how much of the future growth will occur anyway (re-build) and how much will occur if the transportation project is built? The difference between these two projections is the amount of growth that would not occur “but for” the project and is a growth-related impact.

**Text Box 2. Correlation and Causation**

Consider the following examples of correlations:
- Ice cream sales and the number of shark attacks on swimmers.
- Skirt lengths and stock prices.
- The number of cavities in school children and their vocabulary size.

Statisticians see a relationship between all of these factors. But a correlation between two things does not necessarily imply causality—that is, the notion that one factor (skirt lengths) caused the other (stock prices) to occur. These correlations do not imply causality—they are "correlation responses" often to unknown factors. For instance, ice cream sales and shark attacks are likely each caused by increases in the number of people who come to the beach.

This example does illustrate why a growth-related impact analysis can be difficult. Sometimes transportation causes growth, sometimes growth causes transportation, and in some ways the correlation between transportation and growth is in response to other factors. The practitioner is tasked with untangling and estimating the causal relationship between transportation and growth.

The practitioner needs to consider these concepts to determine if growth will be a reasonably foreseeable effect of a transportation project. It would be unusual to conclude that a project would have no growth-related impact issues associated with a project without at least performing a “first-cut” screening (see Chapter 5, Making the First Cut). Likewise, a practitioner cannot assume a causal relationship exists between future land uses changes and this project without further analysis.
Chapter 5. Making the First Cut

There is a continuum of transportation projects that range from those having little likelihood of growth-related impacts to those having a high likelihood of growth-related impacts. This chapter describes some "first cut" screening factors that can help determine where a proposed project fits in the continuum. It suggests what factors to consider, how to document the results, and what, if anything, to do after completing the first-cut screening.

It is fairly easy to make the "first-cut" decisions for projects that fall at either end of the continuum. For example, it would be inappropriate to conclude that growth-related impacts are not reasonably foreseeable for an auxiliary lane project in a highly urbanized area with low growth rates and little remaining development capacity. Once this decision is made, no further analysis of growth-related impacts would be necessary. In contrast, a new bypass with interchanges adjacent to an urban area (urban fringe) could increase accessibility to undeveloped land. In the presence of other factors such as a growing regional economy, suitable terrain, and favorable development regulations, this project would likely have growth-related impacts and would need further analysis.

For projects in the middle of the continuum, the practitioner will need to make an initial determination of further investigation or analysis of growth-related impacts needed. If so, the results of the first-cut screening can help focus the analysis on potential issues that should be investigated in greater detail. Chapter 6 of this guidance, Performing the Analysis, describes the suggested steps for conducting the analysis.

5.1 Caltrans Project Development Process

Consideration of growth-related impacts should begin early in the project development process. The first-cut screening is used to determine whether the potential for growth-related impacts is a project issue that needs to be evaluated in the environmental document. After completing the first-cut screening, the practitioner will have concluded and documented that either: (1) growth-related impacts are not reasonably foreseeable; or (2) further investigation or analysis is required. Any potential for growth-related impacts also should be discussed at Project Development Team (PDT) meetings, so that opportunities for avoidance and mitigation can be explored and documented.

At the beginning of the Project Approval and Environmental Document (FAED) stage, the practitioner should review the Preliminary Environmental Analysis Report (PEAR) for any preliminary conclusions regarding growth-related impacts. The practitioner also should talk with members of the PDT who worked on the project during the Project Initiation Document (PID) stage, especially the Project Manager and environmental staff. There are three possible outcomes from this review:

- If the PEAR concludes that growth-related impacts are not reasonably foreseeable, the practitioner should examine the basis for this conclusion and verify that this is still the case, taking into consideration any project changes and new information. If this conclusion is still valid, no further analysis is necessary and the conclusion should be stated in the environmental document. If the practitioner determines that a closer look is warranted, then a growth-related impact analysis should be conducted as described in Chapter 6.
- If the PEAR concludes that there is potential for growth-related impacts, the practitioner should conduct a growth-related impact analysis as described in Chapter 6.
- If the PEAR is silent about growth-related impacts, the practitioner should perform a first-cut screening as described below. Based on the outcome of the screening, the practitioner either documents that growth-related impacts are not reasonably foreseeable, or performs a growth-related impact analysis. Chapter 6 of this guidance describes the suggested steps for conducting the analysis.

5.2 Conducting the First-cut Screening

The flowchart in Figure 5-1 provides an overview of the steps used to conduct the first-cut screening. The practitioner uses readily available information to examine a variety of interrelated factors to answer the following questions:

1. To what extent would travel times, travel cost, or accessibility to employment, shopping, or other destinations be changed? Would this change affect travel behavior, trip pattern, or the attractiveness of some areas to development over others?
2. To what extent would change in accessibility affect growth or land use change—its location, rate, type, or amount?
3. To what extent would resources of concern be affected by this growth or land use change?
Figure 5-1. The First Cut

Making the First Cut

May 2005
use change can cause residential or business displacement, altering the character of a community or changing property values/rents.

Some basic questions to consider when screening a potential project for changes in travel behavior and accessibility include:

- Is the number of trips likely to change?
- Do project alternatives have the potential to affect travel speeds and travel times?
- Are project alternatives likely to change levels of congestion and level of service (LOS)?
- Does it appear that project alternatives may change accessibility to, from, and within the study area?

Early in the Caltrans project development process, it is unlikely that results of the traffic operations analysis will be available to help answer these types of questions. However, a review of existing traffic counts, accident data, traffic forecasts, programming information for the corridor in the Regional Transportation Plan (RTP), and the purpose and need statement will help the practitioners piece together a picture of the project's context. This can help the practitioner conclude whether a potential accessibility change could result from the proposed project.

Project Type

Project types can range on a continuum from those projects having no likelihood of causing growth-related impacts to those projects having a high likelihood of causing impacts. For example:

- Projects not likely to cause growth-related impacts include projects to perform pavement rehabilitation, culvert work, signalization or storm damage repair; to install median barriers, sound walls or landscaping; or to widen existing lanes to standard widths, make curve corrections, or widen shoulders. These are typically projects on an existing facility that do not increase capacity or increase accessibility. These projects will not warrant an analysis of growth-related impacts.

- Adding high occupancy vehicle (HOV) lanes or mixed-flow lanes are examples of projects that could cause growth-related impacts because they add capacity to an existing facility. These projects warrant closer consideration to determine whether an analysis of growth-related impacts will be necessary.

- Projects such as a bypass, new road, or new interchange/intersection are the most likely to have growth-related impacts. These are typically projects that create a new facility or new access. These projects will likely require an analysis of growth-related impacts.

7 A nearby, politically separate municipality with social and economic ties to a central city (urban area).
Growth Pressure

The amount and intensity of development in an area also can be an early indicator when considering growth-related impacts. If there is little active development because of a built-out land use pattern, there is likely low opportunity for growth, whereas proposed or ongoing construction activity, growth-control centers in newspapers, and the presence of tracts of undeveloped land likely indicate a high opportunity for growth.

The general plan, other local plans, and census data are just a few of the data sources that can provide projections of future population, employment growth, and land development for an area. Other potential sources of data regarding growth plans and trends are discussed in NCHRP Report 465, *Draft Reference for Estimating the Indirect Effects of Proposed Transportation Projects* (Course Module 4, Step 2—Identify Study Area Directions and Goals). Keep in mind, however, that general plans may be out of date and other factors such as market conditions or developers’ plans can change. Even in areas where there is an up-to-date plan and an effective planning process, it is still wise to consult with local and regional planners, real estate experts, and other knowledgeable people in the area to confirm the growth plans and trends expressed in the plan (see the discussion of general plans in Section 3.3, *Growth in California*, and the sample questions in the Data Gathering Issue Paper prepared for the cumulative impact analysis guidance).

Some general circumstances that could influence the likelihood of growth pressure include (see NCHRP Report 465, Course Module 7, Step 5—Identify Potentially Significant Indirect Effects for Analysis):

- Land availability and price. Development cannot take place without the availability of land at a price suitable for development.
- Existing infrastructure. The amount and kind of infrastructure (sewer, water, etc.) existing or planned in an area.
- Regional economy. Development is unlikely to occur if the regional economy will not support new jobs and households, if credit or financing is not readily available, or if the availability of labor, suppliers, or local markets for goods is not sufficient.
- Vacancy rates. High vacancy rates in housing or commercial space would likely be absorbed before any shift in development occurs.
- Land use controls. Development is shaped by zoning ordinances and other land use controls that influence the amount of land available, the densities permitted, and the costs of development.

The continuum of the first-cut screening factors described above is illustrated in Figure 5-2. Keep in mind that these factors must be considered in combination when determining whether a proposed project could cause growth-related impacts. The Sectional Issues for Transportation Improvement Projects, which follows Chapter 6 of the guidance, illustrates the process for conducting a first-cut screening.

**Figure 5-2. Is There a Potential for Project-related Growth?**

**Geographic Area**

The geographic area selected for evaluating growth-related impacts will generally be larger than the study area for direct impacts because indirect impacts are later in time or farther removed in distance. However, the geographic area should not be so large as to dilute the magnitude of the impacts. For example, many transportation projects originate in regional plans, but considering the whole region may lead to an analysis that diminishes the effects of an individual project. Some tools for determining the geographic area are discussed below (additional information can be found in NCHRP Report 465, Course Module 3, Step 1—Initial Scoping for Indirect Effects Analysis).

**Political Boundaries.** Boundaries based on the limits of political jurisdictions can be used to evaluate growth-related impacts. Many data sources such as demographics, growth projections, and general plans are
5.3 Document the First-cut Screening

If the first-cut screening concludes that there is not a growth-related impact issue with the proposed project, the document the process and conclusions for the file.

If the first-cut screening concludes that a growth-related impact analysis is necessary, the practitioner should: (1) document the process and results of the first-cut screening for the file; (2) budget the time and cost necessary for undertaking the work; (3) consider avoidance and minimization measures early when refining the project alternatives; and (4) discuss any potential issues with the Project Development Team (PDT). Chapter 6, Performing the Analysis, describes the steps for conducting a growth-related impact analysis and some tools that could be used to perform the analysis.
Chapter 6. Performing the Analysis

Chapter 5 of the guidance provided some project- and growth-related factors that could be used to conduct a first-cut screening to weigh a project's likelihood of causing growth-related impacts. This chapter provides a step-by-step approach for conducting a more detailed growth-related, indirect impact analysis. No single formula is available for determining the appropriate scope and extent of the analysis. Ultimately, the practitioner must determine the methods and extent of the analysis based on the location, size, and type of the project proposed, the type of environmental document needed, and the potential to affect resources of concern.

6.1 Developing a Growth-related Impact Analysis

The flow chart in Figure 6-1 provides an overview of the steps used to conduct the growth-related impact analysis. The analysis occurs during the Project Approval and Environmental Document (PAED) stage when the direct and cumulative impact analyses are being prepared, and the NEPA/CEQA documents are being developed. The steps involved in the analysis are sequential, however, as more information for the proposed project becomes available, it should be used to refine the analysis.

Key Points to Consider

Data gathering. Data are the foundation of the analysis. Many of the data needed are in existing documents. The Data Gathering Issues Paper, prepared for the cumulative impact analysis guidance, presents ways to identify existing data and the steps to take if data are unavailable. It includes information on tapping public and internal data sources, and which agencies to contact and the types of data they maintain.

Qualitative and quantitative data. When resources issues can be measured, quantitative data are preferable and should be used in the analysis whenever relevant data are available. Using qualitative data is especially valuable when waters of the United States under Section 404 of the Clean Water Act (see Section 2.3) and other biological resources are involved. Quantitative data can be useful for identifying avoidance and minimization opportunities and for preparing permit applications.
Avoidance and minimization opportunities. Identifying avoidance and minimization opportunities is an important theme throughout the analysis. In Section 6.2 the potential growth-related effects are re-built into the project. Analysis results will be used as a factor in the identification of the preferred alternative, which attempts to balance all resource impacts (social, economic, and environmental). If a Section 404 permit will be required, analysis results will be used as a factor in identifying the least environmentally damaging practicable alternative (LEPDA, see Section 2.3). Because a Section 404 permit can only be issued for the LEPDA, it is important to consider avoidance and minimization opportunities for growth-related impacts early on and periodically during the analysis.

6.2 Step-by-step Approach for Conducting the Analysis

The growth-related impact analysis is used to determine whether a transportation project could contribute to growth-related impacts that would affect resources of concern. Its purpose is to more clearly identify the relationship between the new-build alternative, the proposed build alternative(s), and foreseeable growth (growth that would not have occurred "but-for" the project), as well as to consider ways to avoid or minimize resource impacts should they occur. The following steps serve as guidelines for identifying and analyzing growth-related impacts of a proposed transportation project:

1. Review previous project information and decide on the approach and level of effort needed for the analysis ("right-side" the analysis).
2. Identify the potential for growth for each alternative.
3. Assess the growth-related effects of each alternative to resources of concern.
4. Consider additional opportunities to avoid and minimize growth-related impacts.
5. Compare the results of the analysis for all alternatives.
6. Document the process and findings of the analysis.

A hypothetical, illustrative example of a growth-related impact analysis, the Carson City Transportation Improvement Project, follows Chapter 6.

This fictional example was developed to illustrate the process for conducting a first-cut screening (described in Chapter 5), as well as for Steps 1 to 6 of the analysis as described in this chapter.

Step 1: Review Previous Project Information and "Right-size" the Analysis

In this step, the practitioner will need to review information from previous work on the project, particularly the first-cut screening. In addition, the project process may have provided information on potential growth-related impact issues and on resources of concern. Also consider the amount of time that has elapsed since the first-cut screening (see Chapter 5) was prepared to account for changing conditions.

The first-cut screening will likely need to be supplemented with additional data and analyses, especially if preparing an Environmental Impact Statement (EIS). "Right-sizing" the analysis means choosing an analysis approach and the appropriate tools to answer the questions and accomplish the goals of the analysis. The depth of the study should be consistent with the scale of the project and its possible effects. It is not necessary or appropriate to engage in research outside the scope of a NEPA or CEQA analysis. When selecting an analysis approach and the tools to use, it is important to consider the amount of time that has elapsed since the first-cut screening (see Chapter 5) was prepared to account for changing conditions.

A well-chosen method will besalient (answers the question), valid (accepted by peers), and easily communicated to decision-makers and the public. Some methods may be more certain results are quantifiable, but a point of diminishing returns is usually reached. This does not mean that the best approach is to use a method that is inherently more robust and funded to the point of diminishing returns. Certain is not a virtue in and of itself. Investing in the right analysis approach to the point that it accomplishes its goal—and goes no further—is the virtue.

A variety of tools can be employed when analyzing growth-related effects. Table 6-1 describes some of the tools that could be used for Steps 2 and 3 of the analysis. A list is provided to a summary description of the tool, its typical applications, and its strengths and weaknesses. In NCHRP Report 456, "Guidelines for Assessing Social and Economic Effects of Transportation Projects," describes various techniques for evaluating changes in travel time, accessibility, and social impacts. In addition, NCHRP Report 466 (Course Module 3, Step 1—"Initial Screening for Indirect Effects Analysis") provides a discussion of factors to consider when matching methods to project types.

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Table 6-1: Possible Tools for Conducting a Growth-related Impact Analysis

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qualitative Analysis</strong></td>
<td>Qualitative methods using expert knowledge are used frequently to predict and evaluate land use interactions. One such method, the Displi method, presents a systematic way to use expert opinions based on an interview method that begins with general questions, but focuses the questions and the analysis more precisely as the process continues. Other qualitative methods include meetings with stakeholders or a project task force. Regardless of the method used, experts or stakeholders should be identified and contacted early in the process.</td>
</tr>
<tr>
<td><strong>Transportation Forecasts</strong></td>
<td>Transportation forecasts summarize the transportation planning and traffic engineering processes to identify the size and type of proposed project to be developed. Transportation forecasts can be especially helpful in determining the capacity associated with transportation facilities, and changes in behavior after new transportation facilities are constructed.</td>
</tr>
<tr>
<td><strong>Geographic Information Systems GIS</strong></td>
<td>GIS provides the ability to map, display, and analyze data with a spatial component such as land use, census data, road networks, etc. It also can be used to identify environmental constraints, demographic data, etc. GIS is a valuable tool that can provide maps and other data that can be used in land use and regional economic models. GIS is increasingly being used by Caltrans, local agencies, and regional organizations.</td>
</tr>
<tr>
<td><strong>Integrated Land Use and Transportation Models</strong></td>
<td>Integrated models are required to simulate the relationships between land use and transportation. These models predict how changes in accessibility influence changes in location of businesses and businesses, and how congestion caused by travel for households and businesses affects accessibility. These models are frequently used by Counties and Governments (CUGS) and Metropolitan Planning Organizations (MPOs). Depending on the type of project, land use and transportation models can provide data that show what has triggered growth in the past, and whether these triggers would provide the same result in the future.</td>
</tr>
<tr>
<td><strong>Transportation Techniques and Models</strong></td>
<td>Economic models are statistical and mathematical models that depict the decision making processes of businesses, households, financial institutions and governments, and how these behaviors influence changes in the economy's trend. These models can be tailored to specific regions, and are often used by regional planning agencies to forecast employment and population change on regional or statewide levels. Economic models are useful for assessing the impacts of transportation investment and policies on a regional economy, and are useful in identifying how changes in transportation system would affect the regional economy. However, because they best predict changes over large areas or corridors with multiple jurisdictions or urban centers. As a result, they are not useful in identifying the effects of a single transportation improvement on a local area. Also, these models cannot be easily and timely consumed.</td>
</tr>
</tbody>
</table>

*Note: Tools are listed from the most qualitative to most quantitative; a link is provided to a summary description of the tool, its typical applications, and its strengths and weaknesses. Adapted from NCHRP Report 426, Committee on Task 7 and 8, and NCHRP Report 423A, Section 2, Analytical Tools.*

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**Step 2: Identify the Potential for Growth for Each Alternative**

In this step, the practitioner will need to predict the land use and development patterns in the geographic area for each alternative, including the no-build alternative (without project). Initially this evaluation should be done for the no-build alternative. The practitioner should consider producing a future development scenario without the transportation project.

Table 6-2 provides some data sources to use for identifying the patterns, type, rate, and location of growth (also see the Data Gathering Herein section). Compiling and reviewing these types of data and any available planning documents can help the practitioner determine the following information:

- Is land available for growth in the geographic area?
- What areas are targeted for growth?
- How much of previously designated growth has occurred or is in progress?
- Has growth happened outside designated areas?
- What type of zoning is in the geographic area?
- Do proposed zoning changes usually gain approval?
- Is land in the area sought by developers?
- What areas and resources are protected from growth?

Keep in mind that general plans and other planning documents are updated over time and may be out-of-date. Even if there is an up-to-date plan, it is still wise to consult with local experts to confirm growth plans and trends. Another way to gauge how successful previous plans have been in predicting managing growth is to evaluate how local plans have changed over time and how well the local government has followed the plans (zoning changes, variances).

An additional consideration to take into account is the level of certainty for growth. It should not be assumed that all planned growth will occur. William H. Fulton, co-author of Guide to California Planning (2003), has estimated that approximately 60% to 80% of the development anticipated in a general plan's land use element actually happens (personal communication, January 2006). Talking with local planners and other experts can help identify the degree of certainty associated with growth plans and trends in the geographic area.
Table 6-2. Data Sources for Identifying Growth

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Data Elements</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Census Data</td>
<td>Population, income, age, industry and economic trends, etc.</td>
<td>Recent and historical data can be obtained and assembled in time-series for trends, block groups, or other geographic groupings to reveal trends.</td>
</tr>
<tr>
<td>State/Regional Growth Forecasts</td>
<td>Growth forecasts</td>
<td>California Department of Finance, state planning agencies, MPOs, other planning authorities generate growth forecasts.</td>
</tr>
<tr>
<td>Bureau of Economic Analysis (BEA) Industry Data</td>
<td>Industry earnings and employment</td>
<td>The BEA maintains time-series data at the county or metropolitan statistical area (MSA) level that can reveal economic development trends.</td>
</tr>
<tr>
<td>County/Local Building Permits</td>
<td>Building permits, certificates of occupancy</td>
<td>Yearly data can reveal trends for household growth and location.</td>
</tr>
<tr>
<td>Vacancy/Capacity Changes</td>
<td>Zoning variances, regulation changes</td>
<td>Public records can be consulted to identify trends in the enforcement and stability of land use regulations.</td>
</tr>
<tr>
<td>Local Maps</td>
<td>Existing features</td>
<td>Location of residential and commercial areas, town centers, parks, schools, etc.</td>
</tr>
</tbody>
</table>

Planning Documents/Comprehensive Plans

<table>
<thead>
<tr>
<th>Planning Document</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Transportation Plans (RTP)</td>
<td>Long-range plans for transportation improvements in a defined regional area. Reviewing the RTP can determine whether the proposed project would support the transportation network shown.</td>
</tr>
<tr>
<td>Caltrans Transportation Plan (Regional)</td>
<td>Transportation concept plans can be used to fill in the data gap between outdated local general plans and the environmental analysis of current roadway development projects. When a transportation corridor extends across multiple local jurisdictions, a concept report also serves as a planning tool to facilitate dialogue among those jurisdictions and resource agencies, regional transportation planning agencies, Caltrans, and other stakeholders.</td>
</tr>
<tr>
<td>Planning Documents (e.g., Local Plan, Comprehensive Plan, Specific Area Plan)</td>
<td>Identifies planned growth for a designated period. Planning documents are updated over time and may be out of date. Consult with local residents to confirm growth plans and trends, and to determine the extent to which the planning documents provide development or the assumptions used to propose plans. For example, do proposed zoning changes usually gain approval if land in the area sought by developers? The documents also can help to identify trends and community vision.</td>
</tr>
</tbody>
</table>

Note: Not all of this data would be useful for every project. The practitioner can use the Preliminary Environmental Analysis Report (PEAR) as a starting point to determine additional information needs, as well as coordinate with the technical specialists who prepare the biology, community impact analysis (CIA), and land use impact analysis.-biological studies. Consulting with local planning staff is invaluable for obtaining information on development proposals and community values. An effective public involvement program will also yield local use and resource information. |

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Next, the practitioner will need to determine if and how the land use and development patterns for each build alternative would change from the future development scenario crafted for the no-build alternative. In other words, will there be a change in the location, rate, type, or amount of growth that would not have occurred "but for" the project? The practitioner should take into account the following points (also see NCHRP Report 466, Course Module 7, Step 5—Identify Potentially Significant Indirect Effects for Analysis):

- Consider how the potential for growth (location, rate, type, amount) varies among the build and no-build alternatives.
- Consider whether the proposed alternative(s) support previously designated development areas.
- Consider whether the proposed alternative(s) would remove barriers to development.
- Consider whether access provided by the proposed project would affect the desirability of an area for development.

Some analysis approaches for this step could include:

- Contact local planning agencies and business development councils for their input on changes in development with and without the project.
- Develop a future development scenario for each build alternative.
- Ask local or regional land use experts to review and/or contribute to the future development scenarios.
- Use of expert panels, which involves gathering together transportation planners, land use planners, resource agency staff, developers, and other experts to develop estimates of land use and other changes that would occur with and without the project.
- Use of geospatial information systems (GIS) to better characterize the geographic scope of project effects.

If the build alternative(s) are found to not cause a change in the location, rate, type, or amount of growth, then the analysis of growth-related impacts is complete. The practitioner should document the process and findings of the analysis in the environmental document (see Step 6).

Step 3: Assess the Growth-related Effects of Each Alternative to Resources of Concern

In this step, the practitioner will need to identify if and to what extent the change in growth identified in Step 2 for each alternative would affect resources of concern. The practitioner will need to identify the resources to consider in the analysis by gathering input from knowledgeable individuals and reliable information sources. Table 6-3 provides some data sources (planning documents, environmental resource plans) that can be used for identifying resources of concern. Also see Exhibit B, Resource Guide from the Data Gathering Issue Paper, which presents various types of data that may be available for a specific resource and the source of such data. When resource issues can be measured, quantifiable data, such as an acre-by-acre estimate, is preferred.

If it is determined that a change in growth would not affect resources of concern, then the analysis is complete. The practitioner should document the process and findings of the analysis in the environmental document (see Step 6).

Step 4: Consider Additional Opportunities to Avoid and Minimize Growth-related Impacts

After identifying the possible growth-related impacts of each alternative to resources of concern, it is important to consider whether additional opportunity exists to further avoid or minimize these impacts.

Some key avoidance and minimization measures available in the practitioner's tool box include alignment changes, the location and/or configuration of access points, traffic impact fees, and mode choices. Decision about alternative alignment choices are often made very early in the project development process to address transportation needs within a particular corridor. However, project alternatives may be modified to avoid or minimize growth-related impacts. Transportation choices that increase accessibility could place pressure on sensitive resources in the vicinity of the access point. Although modifying the location and/or configuration of access points is typically considered as a measure to avoid or minimize direct impacts, this approach also may be effective in redirecting future development that could affect resources in the vicinity of the access point. Also, transit projects, in combination with land use policies, can encourage compact development ("smart growth").

Local governments are best situated to incorporate the types of avoidance and minimization measures typically associated with land use. Transportation agencies can contribute to these measures with technical assistance. Purchasing access rights or conservation easements can prevent or minimize growth by limiting land accessibility and can help protect areas containing sensitive resources. Conservation easements also can be established to protect resources in perpetuity. Similar strategies include land banking and developing habitat conservation plans or resource conservation plans. For more information on these strategies, see the Guide to California Planning (2005) by William Fulton and Paul Shipley, and NCHRP Report 466, Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects (Course Module 10, Step 4—Assess the Impacts and Develop Appropriate Mitigation and Enhancement Strategies).
Step 5: Compare the Results of the Analysis for All Alternatives

In this step, the practitioner should summarize how and to what extent growth associated with the no-build and build alternatives would affect resources of concern. The results of this comparison will be used to contribute to the identification of the preferred alternative, which attempts to balance all resource impacts (social, economic, and environmental). If a Section 404 permit will be required, the results also will be used for identifying the LEAPPA (see Section 3.5).

Also consider the reliability of the results in light of the uncertainties inherent in the analysis process and the data used (see NCHRP Report 565, Guide Module 9, Step 2—Evaluate Analysis Results).

Step 6: Document the Process and Findings of the Analysis

It is important for the practitioner to clearly document the analysis process and its findings. This will clarify for decision-makers, the public, and resource agencies that all of the issues have been examined, includes information about the methods and assumptions used, the agencies and experts consulted, and any other research. The product of this step will be included in the environmental document.

Describe the Method and/or Process Used. Briefly state how the analysis was conducted. For example, a specific traffic forecast or a general plan was used, or maps were provided by resource agencies that show known wetland locations. Briefly state the approach that was used, identify the source and year of the data used, and describe any data gaps. If qualitative analytical approaches were used, such as questionnaires or interview panels, describe them.

Explain assumptions used in the analysis. Explain any assumptions used and limitations that were faced when conducting the analysis. Readers will need to know how conclusions were drawn in situations for which there were data gaps, lack of information, or limitations on obtaining data (e.g., data were cost prohibitive). If evaluating significant adverse effects in an RIS, refer to CB2's guidelines at 40 CFR 1502.22 for principles regarding incomplete or unavailable information. If models were used, summarize the assumptions on which the models are based. Also be sure to include any assumptions made with regard to uncertainty or the likelihood of potential development.

State your conclusions. The analysis will result in a conclusion about whether the project will influence growth, and what effect, if any, this growth will have on resources of concern. The conclusions should reflect the impact of each alternative using the data developed during the analysis. Also, describe avoidance and minimization measures incorporated into the project and document any commitments made.

6.3 Mitigation

By CQEA definition (40 CFR 1506.20), mitigation of impacts means avoiding, minimizing, rectifying, reducing and/or compensating with a substitute. This hierarchy is referred to as "sequencing," which means that actions to avoid and minimize adverse impacts should be considered first. This mitigation sequencing process is carried forward into the regulations and policies of FHWA and Caltrans, as well as CEQA and the Section 404 regulations.

As discussed earlier in this chapter, there are a number of tools to avoid or minimize growth-related impacts. If avoidance or minimization of adverse effects to resources is not possible, then other mitigation strategies will need to be considered in the environmental document. It is suggested that a dialogue be initiated with the appropriate local agencies and resource agencies regarding other mitigation strategies.

Making a determination that mitigation is required for a growth-related, indirect impact can be complicated because there are many factors that contribute to growth (see Figure 3-1). Because these factors usually occur in combination with other actions by local agencies and private entities, Caltrans is not required to mitigate indirect effects that are outside of its control. Project-related land development is almost always under the control of local governments and the private sector.

The most effective way to mitigate or reduce the potential adverse resource effects from changes in land use is through the application of controls by local governments. Local governments have the authority to reject land use proposals that are inconsistent with local goals, surrounding uses, future plans, or zoning.

Despite these limitations, Caltrans is uniquely qualified to exercise a leadership role in environmental planning and stewardship. The Work Group advocates the following approach for transportation projects to alleviate the need for mitigation (other than avoidance or minimization) of growth-related, indirect impacts:

- Early collaborative planning between federal, state, and local agencies to ensure that planning includes the need for mitigation (other than avoidance or minimization) of growth-related, indirect impacts.
- Incorporating reasonable avoidance and minimization measures for identified resource impacts.
- Thoroughly documenting analysis results.
- Assuring consistency with regional habitat/ restoration planning efforts.
- Identifying opportunities for project stakeholders to become involved in regional planning efforts.
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Section 6001 of the 2005 Transportation bill SAFETEA-LU provides support for early collaboration and integrated planning, and requires Metropolitan Planning Organizations to discuss potential retaliation activities and locations in the Regional Transportation Plan. In addition, FHWA's linking of NEPA and planning provides tools for interagency, collaborative transportation, land use, and environmental planning.

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Sources and Additional Reference Materials


Federal Highway Administration web site, ReNEPA. FHWA's online community of practice supporting an open exchange of knowledge, information, experience, and ideas about NEPA, related environmental issues, and transportation decision making. Available at http://scre.fhwa.dot.gov/renepa/.


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Sources and Additional Reference Materials

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Descriptions of Analytical Tools

The following discussions are intended to help the practitioner assess which analytical tool or combination of tools may be appropriate to use when analyzing the growth-related effects of a highway project. Several tools are described—qualitative analytic transportation forecasts; geographic information systems (GIS); integrated land use and transportation models; and regression analysis, econometric forecasting techniques, and models. The discussions include the basic types of each tool, when they might be applied, their strengths and weaknesses, and sources for additional information.

Qualitative Analysis

Qualitative methods using expert knowledge are used frequently to predict and evaluate land use interactions. There are a variety of qualitative analysis methods that can be applied to growth-related impact analysis. In general, qualitative approaches are most effective if used in conjunction with quantitative and GIS-based methods. Similarly, quantitative methods rarely always require the framework and context that an effective qualitative study provides. Gathering expert opinions and qualitative analysis can be helpful in developing a more focused analysis of known issues and can help frame corresponding quantitative and GIS studies.

Basic Types

There are several broad categories of qualitative techniques:

- Stakeholder and Focus Group Meetings – This approach uses engagement with locally affected citizens and experts to gather background information, knowledge of key issues and to find what resources are considered most valuable to neighborhoods affected by a given project.

- Qualitative Inference – This technique involves a case study description of an area of concern, e.g., habitat or neighborhood, and an identification of resources based on professional judgment of the possible impacts that the proposed project would entail. The case study focuses on the indicators that characterize the area of concern. Techniques involving professional judgment are often combined with other techniques noted here.

- Literature Review/Comparative Case Analysis – A comparative study involves comparing a like area where a similar project has been completed to the area of concern where a project is proposed. This is similar to the Qualitative Inference approach, but uses comparisons to enrich the analysis.

- The Delphi Method – This is a more systematic way to use expert opinions based on an interviewing method that begins with general questions, but focuses the questions and the analysis more precisely as the process continues. It employs survey research technique designed toward the systematic solicitation and organization of expert intuitive thinking from a group of knowledgeable people. It entails essence of the two methods described above, but is a more structured process.

- Scenario Writing – This method creates an outline in narrative form of some conceivable future environment given certain assumptions about the present and a sequence of events in the intervening period. Multiple scenarios can be drafted to include a variety of changing conditions, a spectrum of potential developments, and a series of hypothetical socio-political, ecological, and economic consequences of proposed actions. This technique can develop ideas and identify causal relationships that might not surface in more structured methods. Rather than predictive, scenario writing is a technique which attempts to establish some logical sequence of events to show how, under present conditions and assumptions, a future environment might evolve. Scenarios can also serve to set the upper and lower bounds of potential outcomes.

- Networks – Creating system diagrams or networks can be used in classifying, organizing, and visualizing information. This approach uses a diagramatic version of the scenario writing method and assumes a high level of knowledge and expertise by its designer. The Network approach can be both qualitative and quantitative.

- Matrices – This technique is used to display and interpret information developed using many other qualitative and quantitative techniques. The matrix is commonly a grid diagram in which two distinct lists are arranged along perpendicular axes, e.g., sections and environmental characteristics. The intersections between the two that would produce impacts are noted and effects are described in a binary fashion (yes or no) a qualitative fashion (descriptive paragraph) or a quantitative fashion rank or index.

Typical Applications

Qualitative methods can usefully serve to evaluate the context or overall situation wherever little historical data exist or where existing data are questionable or inconsistent. In most cases, qualitative approaches to an impacts assessment are part of a larger, multi-phased approach to doing an analysis. Qualitative approaches are most important for their ability to help frame an impact analysis. This is a most critical function when designing very large and complex analyses.

Strengths and Weaknesses

Strictly qualitative approaches have some limitations and risks. Foremost among these is the risk of slipping into speculation based on limited data or unusual circumstances. Broad participation, including input from local planners, experts, or other stakeholders through surveys, interviews, or task forces can serve as a safeguard against this. Broad and diverse participation also serves to present against ideological biases, which is a risk when relying heavily on qualitative analyses. The Scenario Writing and Network methods are only as good as the underlying understanding of assumptions of complex processes and interactions. Similarly, they place a high bar on the knowledge and expertise of the practitioners crafting them.

This summary was adapted from NCHRP Report 466, Course Modules 7 and 8.

For More Information


Transportation Forecasts

Transportation planners have long relied on computer-based models to predict how traffic patterns change with improvements to the transportation system. The traditional four-step model estimates how land use results in trips, what type of trips are generated, what mode is used for trips, and where and when those trips occur on the transportation network. Outputs from the travel model can be used to determine key factors in land use change: accessibility (ease of travel to key destinations) and number of trips (reflecting opportunities for highway oriented or retail businesses).

Basic Types and Typical Applications

There are two basic types of techniques using travel demand models:

- **Sensitivity and Comparative Evaluations** - Outputs of a travel demand model (volumes, level of service estimates, travel times, vehicle miles traveled (VMT)) can be used to establish the where a project will have an effect on local traffic and travel times and whether the effect is regional or localized in nature. This involves a forecast of travel demand with a project alternative (build alternative) and without (no-build alternative) and comparison between the two conditions. If a project has a negligible effect on regional travel times, or indicates that VMT is the effect can be determined to be localized. Localized effects can be evaluated by analyzing changes in local traffic conditions in combination with qualitative (e.g., comparative case, scenario writing) or quantitative (e.g., relating traffic levels at a new interchange to types of businesses that may be supported by that area by traffic).

- **Input to Simple Regional Land Use Evaluations** - Outputs of the travel model can also be used as input variables to an accessibility analysis (evaluation of how travel times between key destinations change with and without a project) and a simple gravity model (method for allotting growth in households or employment based on accessibility change) for use in a broader regional analysis.

Strengths and Weaknesses

Transportation Forecasts can provide valuable insight into how a project would affect local and regional patterns of traffic. Analysts can use this information in a qualitative or quantitative assessment to establish the location and extent of local activity changes in accessibility or affect land use change. Traditional models will not provide direct output of the key variables (households and employment) in an indirect impact evaluation and will not capture the dynamic interaction of land use and transportation in feedback loops over time (see the summary for Integrated Land Use and Transportation Models). Travel demand models require special expertise to produce and evaluate results. The expense and complexity of travel models make them appropriate only in situations where an established, calibrated regional or statewide model is in place.

This summary was adapted from NCHRP Report 445, Course Module 8 and NCHRP Report 423A, Section 2, Analytical Tools.

For More Information

NCHRP Report 445, Section 2, Changes In Travel Time and Section 6, Accessibility.

Geographic Information Systems (GIS)

GIS provides the ability to map, display, and analyze spatial data for evaluations of indirect and cumulative impacts. Although cartographic techniques for evaluating impacts have been in use for many years, GIS allows for the assembly of large databases and automated processing. In most locations, state, regional, and local planning agencies maintain GIS datasets that are useful in indirect impact evaluations. These datasets include roadway networks, political boundaries, topography, vacant land, existing land use, zoning, demographic and employment statistics, historic resources, habitats, and natural resources. GIS is useful for all steps in an evaluation but is often combined with other methods.

Basic Types

There are two basic types of techniques using GIS:

- **Map Overlays** - The McLaugh overlay technique (1969), which involves the combination of project design maps and natural and community feature and resource maps, is time-tested and can be readily implemented in GIS. This technique can be particularly useful for visualizing potential indirect/cumulative effects related to retention of the physical environment, e.g., habitat fragmentation or community segmentation, GIS has greatly enhanced the ability to process and display cartographic information. Cartographic techniques are limited in their ability to reveal the structure, function, and dynamics of areas. However, their utility can be expanded by relating inventoried information about those characteristics via a relational database.

- **Resource Capability Analysis** - Another cartographic technique applicable to identification of indirect/cumulative effects is resource capability analysis (Rubenstein 1987). Similar to the overlay technique, this process involves the preparation of two maps: an opportunity map depicting conditions favorable to development (topography, soil type, zoning, and regulatory standards) and a constraint map depicting areas unsuitable for development (wetlands, floodplains, slopes, parks, or other notable features). Overlaying the two maps produces a land suitability map indicating areas with capacity for potential induced growth. This map could be further modified to indicate areas with the highest potential for complementary development (interchanges, workshops) and development shifts (interchanges and feeder roads) under the action alternatives.

Typical Applications

In analyses of growth-related effects, GIS is most often used to catalog resources and identify areas of conflict between features of the project and features of the natural or human environment. These include direct impacts such as property takings or habitat encroachment and indirect impacts to habitats and communities by allowing analysts to determine the location and extent of natural systems and notable community features.

While GIS cannot predict the location of future households or employment, it can be used to determine likely locations for these activities by analyzing the location of existing development, project features, zoning, and natural features and constraints. Some tools are now available which combined GIS input and display capabilities with decision rules or land use modeling techniques to
Integrated Land Use and Transportation Models

Integrated land use and transportation models represent enhancements to the typical four-step travel demand model used at state and regional agencies. In the traditional models, demographic and land use assumptions used in the estimation of trips are developed outside the model and remain fixed for each forecast year in a model run. Integrated models allow land use to shift in each forecast year to capture how changes in the transportation system affect land use change, and how land use change will affect volumes on the roadway network. Through an iterative process these integrated models predict an equilibrium land use and traffic pattern for future years or years in the traffic forecast. Based on region-wide forecasts of population and employment, these models allocate new housing and employment to local areas based on transportation accessibility, land availability, and in some cases land prices and other factors.

Basic Types

There are several basic types of integrated models that vary in their complexity and methods:

- **Scenario Based Models**—These models allow the user to enter information about current land use conditions and the transportation network through Geographic Information System (GIS) maps. Users then input parameters on future land use regulations, and weights for factors that typically influence land use decisions. The models then rate land areas for their suitability for development and allocates regional growth to local areas based on suitability. Factor weights and other parameters can then be altered to create scenarios to be compared for planning or impact analysis purposes. Examples include the commercially available What If? and Smart Growth Index packages.

- **Spatial Interaction/Gravity Models**—These models use a Lowry gravity-model formulation to allocate employment and households based on measures of attractiveness for development including availability of land, travel time and cost, and household income. These models can typically be linked to a region's travel modeling system to provide a feedback loop. Parameters for allocation are typically estimated through a process of calibration specific to the location being evaluated. Examples include the widely used ESPAN-EMPALIT16/Airport package developed by Steven Palmen for the U.S. Department of Transportation and the UDAM system used in Florida.

- **Market Equilibrium Models**—Several modeling systems in use in the United States and Europe base predictions for household and employment location on the demand and supply for those land uses and information on the economic factors in location choices of households and employers developed through discrete choice estimation techniques. Integration with travel demand models allow the land use models to account for increases or decreases in travel time and cost in location decisions. Parameters for allocation are estimated through a process of calibration specific to the location being evaluated. Examples include UrbanSim, Microsim, TRAVEL, and MPLAN.

- **Cellular Models**—A more recent line of modeling involves making predictions about future land use based on probability modeling developed through time-series observations and decision-rules. One example is LEAM which uses historical series of satellite or aerial photography imagery in combination with maps of attributes and constraints to make predictions on future land uses.
Typical Applications

Most integrated, transportation and land use models require a significant investment in time and money to develop. Most current applications are by academic and Metropolitan Planning Organizations. In areas where these models are already in place and calibrated to local conditions, they can be used to assess the magnitude and location of land use change associated with a transportation improvement. By comparing results using a "no-build" transportation network and a "build" alternative, the analyst can identify the increment of change in households and employment in each area the model analysts (usually Traffic Analysis Zones (TAZs) made up of census tracts or block groups). The analyst can evaluate the land use changes in the context of resources and notable features.

Strengths and Weaknesses

Integrated models are based on established theories of location choice and land development. By providing a feedback loop between land use and travel estimation, the models more closely represent reality than traditional travel demand models because they assume a dynamic rather than a static land use/transportation system. Integrated models also allow the analyst to directly estimate the key variables in an induced growth analysis - housing and population. Models available to date, however, have been costly to set-up, implement, and maintain because of their costs, data requirements, and need for calibration to local conditions. For these reasons, these models are used almost exclusively in academic and regional planning settings and there are very limited examples of their use in NEPA/CEQ planning evaluations of projects.

This summary was adapted from NCHRP Report 466, Course Module 8.

For More Information


FHWA Travel Model Improvement Program (TMIP) located at http://tmip.fhwa.dot.gov/.

Regression Analysis, Econometric Forecasting Techniques and Models

Econometric and statistical models are mathematical equations that can be used to describe natural and social systems. In these models, statistical techniques are used to uncover relationships or correlations between elements of these systems so that analysis can make predictions about the future. These techniques are used often in regional planning to forecast employment and population change and describes the decision-making processes of businesses, households, financial institutions, and governments.

Basic Types

There are three broad categories of statistical analysis techniques:

- Curve Fitting/Trend Extrapolation - Trend extrapolation techniques are used to determine how one dependent variable (e.g., population, household size, or number of building permits issued) has varied with a single independent variable (time) in the past, so that a projection may be made about the future. Spreadsheet software and statistical packages can be used to analyze time-series data and develop best-fit curves and projections.

- Econometric Forecasting Models - Regression and econometric techniques allow the analyst to establish the relationship between a dependent variable and one or more independent variables. For example, by establishing the correlation between past levels of employment in a particular county or city to past national economic indicators (e.g., national employment or industry output), an analyst can make projections local activity by relying on established projections of the national indicators.

- Discrete Choice Models - Discrete choice models can be used to predict the behavior of a decision-maker's choice by establishing the relationship between choices and the characteristics of the decision maker (e.g., age, income, employment status, housing tenure). Information on the link between choices and the characteristics of decision makers is often established through surveys (stated preference) or through observations of past behavior (revealed preference).

Typical Applications

- No-action Future Projections - In doing an evaluation of induced growth impacts, the analyst needs to compare the growth of an area's population and employment without the project (No-Action) to the future with project alternatives. Some local areas may not have estimates of future growth available at the level of detail needed (i.e., geography, time). Other areas may have forecasts that explicitly consider the effect of the proposed project and how it affects projected population and employment. Current trends may be more appropriate for use as the baseline.

- Explaining Relationships or Developing Assumptions - By establishing the relative importance of transportation among the other factors influencing past location decisions in a local area (e.g., water/energy infrastructure, employment base, land use regulations, and ease of obtaining permits) an analyst can predict how a transportation improvement will contribute to future land use change. These types of studies can also involve quantitative evaluation of comparative cases in other regions.
- Impacts on Property Values and Location Attractiveness — There is a growing literature in economics and planning relating changes in property values to improvements in transportation access such as interchanges and transit stops. By looking at how accessibility improvements have been capitalized into real estate prices in comparable areas, an analyst can make predictions about the effect of a proposed project on property values and ultimately land use and household or employment growth.

Strengths and Weaknesses

Economic techniques are widely used in social science and regional planning and, when used correctly, provide an effective and defensible method on which to base conclusions about the "reasonably foreseeable" future with or without a proposed transportation project. These techniques are often data intensive and may require considerable effort to determine if they will be useful in an evaluation. For example, an analyst may have to conduct a statistical analysis of a dataset before determining whether curve-fitting or econometric methods would produce statistically valid results. In general, economic and statistical techniques are most applicable on large-scale systems such as regional economies, urban centers, or large corridors where large datasets can be easily obtained and individual events (e.g., business openings or closings, zoning changes) do not obscure broader trends. Although widely available desktop software packages can make the task of econometric and statistical analysis less time consuming, trained professional judgment is required to ensure that statistical measures are accurately applied, interpreted, and summarized in documentation.

This summary was adapted from NCHRP Report 423A: Section 2, Analytical Tools.

For More Information


**Summary**

The issue of induced development and the associated loss of farmland and rural character is a controversial topic whenever new highway capacity is proposed. Induced development is development that would occur as a direct result of the additional roadway capacity from an expanded roadway—not development that would have been expected to occur with or without highway expansion. Because this is such an important issue throughout Chester County, the Chester County Planning Commission contracted with Dr. Reid Ewing, the Director of the Alan M. Voorhees Transportation Center at Rutgers University, to conduct a literature review and offer an opinion on what is known and what is not known about induced development. Dr. Ewing is a nationally recognized expert on traffic calming and the link between land use and transportation.

The key findings of this study include:

- The terms “induced traffic” and “induced development” are related but separate issues, but are often confused and used interchangeably. Induced traffic is the volume of traffic that is drawn to a new road by additional capacity. This induced traffic comes from a number of sources including trips diverted from other roadways, discretionary trips that might not have been made without the capacity increase, different employment location choices, induced development, etc. Induced development is one of the sources of induced traffic on an expanded roadway, but only accounts for a portion of that new traffic.

- There is significant research and literature on induced traffic, but very little on induced development. Based on this research on induced traffic, it is sometimes possible to predict induced traffic from a new or expanded roadway, at least within a range of possibilities.

- The limited research that has been done on induced development suggests it is a real phenomenon. While the cause and effect between road construction and development is not totally clear, the studies suggest that some level of development is likely to occur specifically as a result of the additional road capacity.

- No reliable method is currently available to predict levels of induced development. Experiments have been done with large and complex land use allocation models. Dr. Ewing examined the possibility of attempting to predict levels of induced development using regional land use models, such as DRAM/EMPA, and others. Although these models were not developed with this application in mind, it would be theoretically possible to use them for this purpose. However, these models are very expensive, extremely time consuming, and data intensive to use, were designed to analyze large metropolitan areas rather than specific corridors, and have produced very questionable results even when used for their intended purposes. Use of these models does not appear to be a practical or reliable option for predicting induced development.

Finally, based on this study, one can conclude that induced development is likely to occur with many roadway projects, but how much induced development would occur for a given project cannot be reliably determined.

*Summary prepared by Chester County Planning Commission.*
Induced Traffic and Induced Development
Reid Ewing and Allan Lichtenstein

1. General Discussion

Controversy exists over whether and to what extent the addition of highway capacity induces new traffic and promotes development in proximity to the added highway capacity. The notion of induced traffic challenges the view that the expansion of existing roads or the building of new roads will necessarily relieve highway congestion. The idea of induced development challenges the view that highway investments are a response to growth and development, as opposed to a cause of them. In the highway debates that occur between environment and development interests, opposing sides have very different positions on the nature and magnitude of induced traffic and induced development. In this memo, we will attempt to sort out facts from debating points.

The theory of induced traffic rests on the economic theory of supply and demand. When the capacity of a specific highway or road network is expanded in order to relieve congestion, road supply grows. Initially, the increase in road supply leads to a reduction in travel times, that is, the cost of travel declines (from $P_1$ to $P_2$ in figure 1 below). Lower travel times, however, will prompt an increase in the quantity of travel demanded (from $Q_1$ to $Q_2$). Consequently, the levels of vehicle traffic will begin to rise over time. Eventually a new equilibrium will be reached. Demand and supply are then reconciled at a point where the amount of travel on the expanded highway is greater than that which existed without the expansion of the specific highway or road network ($P_3$ and $Q_3$ in figure 1 below). This increase in the demand for travel represents the induced traffic effect.

Conceptually the notion of induced traffic is easier to explain than to measure or quantify. The first obstacle to measurement is reaching agreement on a definition. Given a common definition, the phenomenon can be subjected to empirical testing and comparisons can be made across the various studies that have attempted to estimate the induced traffic effect. For the purposes of this memo it will be useful to borrow from the work of Patrick DeCoria-Souza. He poses a number of questions that need to be resolved when defining induced traffic. These are:

- type of travel - whether the travel being referred to is “person” travel or “vehicle” travel;
- unit of measure - whether the induced travel consists only of absolutely new trips (trips) or whether it also includes the lengthening of trips (miles);
- time frame of reference - whether induced travel refers to any increase in total daily personal travel or whether it refers to increases in peak period travel resulting from shifts in the time of day when personal travel is undertaken;
• geographic frame of reference—whether it is limited to a specific facility, corridor or sub-area or whether it is region-wide travel that is of interest, or whether a national perspective is necessary; and
• period of impact—whether travel impacts occur in the short-term (up to 1 year) or the long-term (up to 20 years).

The definition of induced traffic proposed by DeCorle-Souza serves as a useful baseline to compare with other definitions of induced traffic. He defines induced traffic as “any increase in daily vehicle miles of travel (daily VMT) in the long-term at the region-wide level resulting from expansion of highway capacity.” This definition implies:

• vehicle, not person trips;
• daily travel, without regard to peak and off-peak periods;
• region-wide, not limited to a specific corridor or facility; and
• long-term.

Most authors (Curvers, Hansen, Noland) agree with DeCorle-Souza’s definition that induced traffic is measured in terms of overall VMT. Few, however, tend to define it as specifically as DeCorle-Souza and do not include the geographic frame of reference or the period of impact. Typical of this approach is the definition given by Noland and Lera, who define induced traffic as “the increase in VMT attributable to any transportation infrastructure project that increases capacity.”

There are also some variations in the definition and those are found in those studies that examined induced traffic at the facility or corridor level. In these cases, average daily traffic (ADT) is used in addition to VMT as the measure of induced travel. The inclusion of ADT expands the definition to include diverted trips. Todd Litman uses the term “generated traffic” which he defines as “the additional vehicle travel that results from a road improvement.” In this definition, generated traffic consists of diverted traffic (trips shifted in time, route and destination), and induced vehicle travel (shifts from other modes, longer trips, and new vehicle trips). Molitorian, Samsingoi, Simunway and

Wiltz define induced demand as “the increment of new vehicle traffic (measured either as average daily traffic, ADT, or vehicle-miles traveled, VMT) that would not have occurred at all without the capacity of improvement.”

By emphasizing the contribution of road improvements to growth of vehicular traffic, these definitions create a methodological challenge: to separate the capacity-induced effect from those exogenous factors that also drive the growth in vehicular traffic. Exogenous factors, such as population growth, increases in income, and various other demographic factors, such as the increased participation of women in the labor force, all contribute to growth of VMT. It is only the increased VMT associated with a reduction in the cost of travel (due to road improvements) that qualifies as induced travel. Much of the empirical research has been aimed at distinguishing the induced traffic that occurs when highway capacity is expanded from the increase in travel that would have occurred in any event due to these exogenous factors.

To better understand induced traffic and its connection to induced development, it is necessary to explore the behavioral consequences of additions to roadway infrastructure capacity. Looking more specifically at the “period of impact” aspect of the definition, the short-run and long-term behavioral consequences should be distinguished. In the short-run, a variety of sources can contribute to increased traffic without any induced development. These include route switches, mode switches, and changes in destination. In addition there is the possibility of new trips that would not have occurred without the addition in infrastructure capacity.

In the long run, increases in highway capacity may lower travel times so that residences and businesses are drawn to locate in the area surrounding the expanded highway capacity. The question is always whether the new development that occurs in proximity to the highway was induced to locate there as a consequence of the expansion or whether it would have occurred anyway, regardless of the change in local accessibility. If the

1 Over time, however, the influence of these factors will change. For example, as the participation of women reach a saturation point, its influence will wane.
development itself would not have occurred otherwise, both traffic it generates and the development itself can unambiguously be considered induced. (See Figure 2 below reproduced from Cervero, 2002 which shows the relationship between induced traffic and induced development.)

For example, if there is a notable increase in trips to a theme park following a major improvement to the highway linking an urban area with the theme park, this would clearly be considered induced traffic in the short run. And, if the theme park expands to take advantage of the increased capacity of the highway link, this too would be considered induced but would fall into the category of induced development, a long-run phenomenon.

Figure 2: Path of Induced Demand and Elasticity Measures

2. Summary of Literature

The subject of induced traffic has received much attention in the professional literature and many studies have attempted to measure it. By contrast, the subject of induced development has received scant attention. This section summarizes the available literature on induced travel demand and induced development. First, the results of various studies are described in order to show what is known about these two phenomena. Second, the key issues that remain unresolved are described. Finally, some conclusions appear at the end.

What is known about induced travel demand

Robert Cervero (2002) has distinguished five analytic approaches used to measure induced travel demand. They are: 1) facility-specific analyses; 2) model forecasts that require large scale travel demand forecasting computer simulation models; 3) area studies that use proxy measures in place of a preferred variable because its measurement is very difficult; 4) area studies that use partial measures because there is always the possibility that the results will be influenced by exogenous factors; and 5) disaggregate models that study travel behavior at the level of the individual trip maker rather than at the aggregate level. The different approaches lead to different estimates of the magnitude of the induced traffic effect. Results are typically summarized with elasticities. Elasticities present the percentage change in VMT or other travel output measure associated with each percent increase in highway capacity or each percent reduction in travel time due to the increased highway capacity. For example, an elasticity of 0.2 with respect to VMT means that for every ten percent addition in lane miles built, VMT will grow by 2 percent. Elasticities, thus, provide good overall summary measures of impacts. This section explains each of the approaches and presents results (often in the form of elasticities) from different studies.
a) Facility-specific studies

Facility-specific studies compare observed traffic counts along an improved or expanded roadway to what would have been expected had the project never been built. Three types of facility-specific studies are common practice. First, researchers have used growth comparisons of past traffic trends to a factor, like car registrations. Estimates are made of what traffic volumes would have been without a road improvement by factoring of known car registrations. The induced traffic is the difference between the recorded and expected traffic volumes. This technique has been used extensively in the United Kingdom. A 1994 study by the Standing Advisory Committee on Trunk Road Assessment in the United Kingdom that compared actual traffic volumes with forecasted volumes found that travel forecasts were, on average, 10 to 20 percent below actual recorded traffic (SACTRA, 1994).

A second approach uses a quasi-experimental procedure in order to introduce controls into the analysis. Time-series data of traffic counts are collected on a corridor where road improvements have occurred. These include observations both before and after the project’s completion. Traffic increases on these facilities are then compared to traffic growth on unimproved roads matched to the improved roads (in a paired comparison). A study carried out in California which compared eighteen state highway segments whose capacities had been paired with eighteen unimproved (control) segments matching the improved ones on facility type, region, approximate size, and initial traffic volumes and congestions levels for the period 1976 to 1996 “found the growth rates to be statistically indistinguishable” (Mokhtarian et al, 2002).

The third approach involves multiple regression analysis, a statistical procedure that examines the relationship between a dependent variable and a number of independent variables. This approach has seldom been undertaken at the facility specific level. One study, though, of eighteen California highway segments conducted for the period 1970 to 1990 found that elasticities of VMT with respect to lane miles were 0.2 to 0.3 during the first four years, increasing to 0.3 to 0.4 after ten years, and to 0.4 to 0.6 after sixteen years (Hansen et al, 1993). In other words, a ten percent increase in lane miles would generate a two to three percent increase in VMT during the first four years, increasing to three to four percent after ten years, and to four to six percent after sixteen years.

b) Model forecasts

A second analytical approach involves the use of large scale travel-demand forecasting computer simulation models. Differences between forecasted and actual volumes are assumed to represent induced travel. Little work has been carried out in the US to derive travel-model-based-estimates of induced demand. In one example where the conventional four-step travel demand model was used to compare actual and forecasted traffic on several expanded and enhanced facilities in northern California, compelling evidence of the existence of induced demand was found. In the case of a twelve-mile arterial upgrade to a grade-separated facility, Addison found that daily traffic on the improved section observed in 1985 exceeded 1985 forecasts by 21 percent, whereas peak-hour traffic was 25 to 30 percent higher” (Cervero 2002).

For the most part travel forecasting models in use are not up to the task of evaluating induced effects. As Mark Hansen has noted: “...most transportation models are not used in ways that fully reveal whether or how adding capacity can increase traffic. For example, most modeling studies assume that the number of trips to and from places like households and offices are independent of the transportation supply. A sizeable number also assume that origin-destination trip matrices, and even the modal distribution of trips, are independent of road capacity. Finally, and perhaps most important, it’s far from clear that conventional transportation models, even when enhanced to capture numerous potential links between road supply and traffic, have much predictive power, even if they faithfully replicate base-line conditions. This is because these models make predictions that depend on numerous calibration parameters (“fudge factors”) and are valid only if these parameters remain constant over time” (Hansen, 1995).
c) Area studies based on proxy measures

The third analytical approach, area studies based on proxy measures, employs statistical techniques, typically used in economic studies, to measure the effect of added lane-miles on VMT. Added lane miles, a proxy measure, is used because of difficulties measuring a preferred variable, such as travel time. This approach usually makes use of time series data which are data collected over discrete intervals of time. The data is aggregated on an area-wide basis, for example for counties or metropolitan areas, in order to estimate changes in VMT. Lane miles additions for the same areas serve as the independent variable in these analyses. An analysis of VMT growth vs. lane mile growth is used to estimate the magnitude of the induced travel effect. Results are usually expressed as elasticities, that is, the percentage change in VMT associated with each percent increase in highway capacity.

Numerous studies have adopted this broad approach and all have found evidence of induced traffic. One of the earliest studies conducted by a group of researchers at the UC Berkeley examined the relationship of VMT to the supply of state highways as measured in lane-miles for a set of metropolitan areas (Hansen, 1995; Hansen and Huang, 1997). They also analyzed whether induced VMT on state highway systems represented a net increase in traffic or only redistributed travel from other roads. At the county level, this study found that VMT would grow immediately by two percent (an elasticity of 0.2) immediately for every ten percent increase in lane-miles, building to six percent (an elasticity of 0.6) within 2 years. At the metropolitan level, the study found an elasticity of 0.5 percent after 4 years, meaning that induced travel had used up 90 percent of the new capacity within 4 years.

Subsequent studies by other researchers using variations of the techniques employed by Hansen and his associates have all found evidence of induced travel demand. A study by Fulton et al. (2000) confirms both the range of elasticities found in other studies and the robustness of these estimates. This study, which examined county level data from Maryland, Virginia, North Carolina, and Washington D.C., found average elasticities of VMT with respect to lane-miles on the order of 0.2 to 0.6, meaning 20 percent to 60 percent growth in VMT. These researchers also found that "growth in lane-miles precedes growth in VMT," a very important finding in sorting out cause and effect.

Another recent study, which used a data set consisting of 22 years of data for 34 California urban counties, found an elasticity of VMT to lane-miles of 0.56, that is, for every ten percent increase in lane-miles, VMT grows by 5.6 percent (Cervero and Hansen, 2000). Interestingly, this study also found an elasticity of lane-miles with respect to VMT of 0.33, that is for every ten percent increase in VMT, lane-miles grew by 3.3 percent. These results indicated "a strong two-way empirical relationship between road supply and demand." The authors, thus, conclude that "over the past several decades in California, road supply has been both a cause and an effect in relation to VMT." From the elasticity values, the effects of lane-mile additions on VMT appear to be stronger than vice versa.

d) Area studies based on partial measures

The fourth analytical approach, area studies based on partial measures, attempts to relate traffic increases directly to travel time savings in order to obtain a better measure of the benefits of road capacity improvements. However, because there is always the possibility that the results will be influenced by exogenous factors, the variables used in the analysis are considered only partial measures. In these cases elasticities are preceded by a negative sign because the result refers to the reduction in travel time that would be achieved with an increase in lane-mile capacity.

To date very few studies have used sophisticated statistical techniques to relate highway VMT to changes in travel time. In the United Kingdom, Goodwin (1996) estimated that "in round terms, as an overall average, reasonably well-established research on petrol price and values of time suggest a short-term elasticity of traffic with respect to travel time of about -0.5, and a longer-term elasticity of the order of -1.0," meaning that in the
short term traffic volumes would increase by 5 percent and in the long term by 10 percent in response to a ten percent change in speeds.

e) Disaggregate models

The fifth approach, disaggregate models, studies travel behavior at the level of the individual trip maker rather than at the aggregate level. Results of two studies done in the U.S. yielded lower elasticity estimates than those of most area studies, although confirming the existence of induced travel demand. Strathman et al. (2000) estimated cross-sectional elasticities of VMT with respect to per capita road capacity of 0.29, while Burr (2000) imputed travel time elasticities ranging between -0.35 and -0.38, with an average value of -0.44 (Cervero 2002; Noland and Lem, 2002).

f) Generalizing Across Studies

Cervero (2002) compares elasticity values across studies in a so-called meta-analysis. Again, the elasticity is the percentage change in one variable that accompanies a one percent change in another variable. An elasticity of VMT with respect to lane miles of 0.5 implies that every one percent increase in lane miles is accompanied by a 0.5 percent increase in VMT. Or equivalently, a doubling of lane miles (100% increase) is accompanied by a 50 percent increase in VMT. At the facility level, a doubling of lane miles is what you would get if a facility were widened from two to four lanes.

In his meta-analysis, Cervero (2002) extracts the mean elasticities shown in the table.

<table>
<thead>
<tr>
<th></th>
<th>Facility-Specific Studies</th>
<th>Area-wide Studies</th>
</tr>
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<tbody>
<tr>
<td>Short-Term</td>
<td>0</td>
<td>0.4</td>
</tr>
<tr>
<td>Medium-Term</td>
<td>0.265</td>
<td>NA</td>
</tr>
<tr>
<td>Long-Term</td>
<td>0.63</td>
<td>0.73</td>
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</table>

Based on the meta-analysis, Cervero (2002) concludes that "...the preponderance of research suggests that induced-demand effects are significant, with an appreciable share of added capacity being absorbed by increases in traffic, with a few notable exceptions." The exceptions are among the more sophisticated studies, so the elasticity estimates in the table may be on the high side. The more sophisticated studies control for more variables and, thus, the resulting elasticities are likely to be lower, whereas the more simple studies have higher resulting elasticities.

What is known about induced development

Compared to induced traffic, little work has been done in the area of induced development. This section describes the only three studies on the subject uncovered by our literature search.

The first is a study by Boarnet et al. (2000). Boarnet and his associates undertook a before-and-after study of the impact on house prices of the construction of toll roads in Orange County, CA. The study was premised on the idea that highway improvements affect urban growth patterns through land prices. If highways improve accessibility, an accessibility premium will be reflected in higher land prices (and higher house prices), and higher priced land will be developed more densely. That is to say, improved accessibility should be capitalized into house prices.

The results of the empirical analysis provided evidence that construction of the first two portions of the Orange County toll road network created accessibility premiums that were reflected in home sales prices. Boarnet et al. concluded that "the implication for induced travel is that the evidence from Orange County suggests rather strongly that new highways change the geographic pattern of accessibility, that those changes are reflected in home sales prices, and thus that it is reasonable to conclude that new highways will also create changes in development patterns." They continued that "based on the evidence in this study, home buyers are willing to pay for the increased access that new roads provided. It is that willingness to pay for increased access which influences
both development patterns and, potentially, induced traffic.” They ended with this telling comment: “Overall, our results are consistent with recent research that has suggested that induced travel is a real phenomenon, and our results are consistent with the hypothesis that changes in development patterns are one cause of induced travel.”

The second study was conducted by Hansen et al. (1998). Hansen and his associates employed econometric techniques to study land use impacts of highway capacity expansion projects in several corridors, all located in California’s four largest urban areas. Specifically, they measured the effect of the expansions upon land development in the area served by the expanded roadway, after controlling for other factors. Land development was measured in terms of construction permits for single and multi-family housing units, for commercial construction, and for industrial development.

Capacity enhancement had the effect of increasing the number of single-family housing permits in the affected corridor relative to the level in the region. The results for multi-family housing permits were similar. The results for non-residential land uses were more complex. “Capacity enhancement is found to have an immediate positive impact on commercial but not on industrial land use... In the case of commercial development there is evidence that this trend diminishes over time.” In conclusion, the authors write that “our results offer strong support for one overriding conclusion: highway capacity expansion stimulates development activity, both residential and non-residential, in the corridors served by the expanded facilities.”

The third study was conducted by Kockelman et al. (2001). This study took a three-pronged approach to understanding the impacts of capacity expansions on development by examining capacity expansions and land development in Austin, Texas. First, Kockelman and associates analyzed nine years of building permit data. Thereafter, they studied seventeen years of tax assessment records for parcels along an improved highway. Finally, they interviewed four real estate professionals with diverse perspectives of the land markets.

The results of the analysis of permitting data suggested “that the extensions had no impact on development activity.” However, the authors note that since the models offer “relatively poor prediction of permitting levels,... It may be that more spatially disaggregate and/or larger data sets would better expose the underlying relationships.” The examination of tax assessment records “found significant changes in land prices in response to right of way acquisition by the Texas Department of Transportation. The subsequent statistical analysis confirmed that the year of land acquisition is a significant event in land price adjustments.” In addition, they found that “the price of land on corners and the price of land with frontage on the major facility were much higher than other land.” Finally, the interview subjects “agreed that transportation has an underlying and possibly indirect role in determining the timing and location of development. Sites would not be considered for development without basic transportation access.” Still, factors such as zoning and permitting regulations, quality of schools, and prejudices for or against certain communities may play a much more important role in locational decisions than transportation access or planned improvements.

**What is not yet understood**

The study of induced traffic and induced development both confront similar issues with regards to what is not yet understood. The same theoretical and methodological challenges are encountered in studying induced demand and induced development and, to the extent, that these are not resolved, then the topics will not be fully understood.

### a) Appropriate Scale

Because of the interdependency of the road network, improvements on any one link will inevitably have repercussions on travel demand on other links that feed into it. Consequently, as noted in the paragraph on definition, a facility-specific analysis is too narrow in scale to account for all the traffic that may be induced by the expansion of road supply. A broader geographical scale, such as the metropolitan level or county level, as included in DeCorle-Sousa’s definition of induced demand, blurs any
connection to individual road projects. So what scale of analysis is big enough, but not too big? One possible compromise would be a corridor study which catches the localized land use changes and at the same time would be broad enough to understand the diversion patterns.

b) Data Collection

Data collection or data availability poses another problem. Suitable data is often dependent on the data collected by various state departments. These departments usually only collect data for higher level state and county roads that are under their jurisdiction. The collectors and arterials that feed into the state highway are under local jurisdiction and data is often not available for these roads. So it is unclear to what degree improvements to major facilities have spillover effects on local facilities.

c) Exogenous Variables

The problem of measuring induced demand is further compounded by the contribution of exogenous factors to increased travel. There is a need to separate the induced effect from those exogenous factors that also drive the growth in vehicle miles of travel. Exogenous factors, such as population growth, increases in income, rising car ownership, national and regional economic trends, whether the area in question is in the "path of growth", other infrastructure capacities (such as sewer and water availability), the declining real costs of gasoline in the U.S., and various other demographic factors, such as the increased participation of women in the labor force all affect the demand for travel.

Just how important are these exogenous factors as contributors to VMT growth relative to highway capacity increases? Few studies address this point. Hansen (1995) estimates that capacity expansions account for somewhere between 5 percent and 22 percent of the growth of VMT, while Noland (2001) estimates that induced travel effects account for about 28 percent of annualized growth in VMT.

d) Causality

Is the relationship between road supply and traffic a simple one-way causal link where more roads cause more traffic? Or does more traffic cause more roads? Or is there a simultaneous relationship where traffic and roads are co-dependent? Do road improvements both induce and respond to travel demand?

Most of the studies have not attempted to deal with this issue. The exceptions are described here. Fulton et al. (2000) applied certain statistical tests which provided a strong indication that changes in lane-miles preceded changes in travel, but not necessarily vice versa. Croscot and Hansen (2000), on the other hand, also using statistical techniques, found that the relationship worked in both directions suggesting that the causality works in both ways—supply induces demand and demand induces supply.

e) Interaction Effects

Little effort has been devoted to determining the conditions under which induced travel effects are large or small (Croscot 2002). One would expect the induced travel effect to be greater where levels of congestion are higher than in free-flowing conditions, but there is scant evidence of it. Likewise the evidence is not clear that urban areas produce greater induced demand effects than suburban or rural areas. The evidence is also weak that big metropolises register greater induced demand effects than medium or smaller sized metropolitan areas.

Conclusion

Overall, this review of the literature supports the conclusion reached by Noland and Len (2002) in their review of the evidence for induced travel: "Our conclusion from the
relevant literature is that the theory of induced travel can certainly not be refuted and is largely confirmed. This conclusion is shared by Correa (2002) in his review of the literature. He writes that “all that can be said with certainty is that induced demand effects exist (i.e., elasticities vary from zero), and they accumulate over time.” In addition, it should be noted that there is evidence that the relationship between road supply and traffic is two-way and more research needs to be done to discern the causal link. Similarly, the little work that has been done in the area of induced development also suggests that development is induced by new road infrastructure. In both cases there is need to refine the methods used to measure induced traffic and induced development as well for more work in trying to quantify these phenomena.

3. Quantifying Induced Development

A number of urban models have been developed over the years and implemented in various parts of the world. These are complex models that attempt to model the urban development process and include both land use and transportation elements. While they are not specifically designed to quantify induced development, it is possible to use them to do so.

Not much has been written about the problems of implementing such models. “Word on the street” is that they are expensive to implement due to data requirements, difficult to calibrate, and occasionally produce results that are unreasonable on their face. Particular problems have been reported with DRAM/EMPAL, the most widely used of such models. Some metros have dropped DRAM/EMPAL, others have given up trying to implement, and still others have had poor results. So the decision to develop an urban model should not be taken lightly.

This memo focuses on four sets of models as examples of the scale and scope of these models — the Disaggregated Residential Allocation Model (DRAM) and the Employment Allocation Model (EMPAL), TRANUS and MEPLAN, and a more recent entry to the field of urban modeling, UrbanSim. You can think of these as different generations of urban models, each building on the one before.

The DRAM/EMPAL model

DRAM/EMPAL model has been implemented in at least 16 metropolitan areas around the United States. It is the industry standard, despite the problems referenced above. The EMPAL model, which is the first stage in the DRAM/EMPAL modeling process, forecasts the locations of future employment by economic sector. This is done for each of the analysis zones in the study area. At the regional level the EMPAL model requires target year values of total employment by economic sector, and at the analysis zone level it requires base year values for:
- Households, by type;
- Employment by sector;
- Total land area;
- Land area occupied by basic and commercial employment; and
- Zone-to-zone travel times and/or costs.

Thereafter, the DRAM model forecasts the future location of households, by income level, given the distribution of employment. The DRAM model requires target year values of:
- Total population;
- Total person trips by purpose (i.e., work-to-home, work-to-shop, home-to-shop);
- Percent unemployment, by sector;
- Employees per household, by household type;
- Matrix of households by income per employee by sector; jobs per employee; and
- Net regional rate of employee commuting.

At the analysis zone level, the DRAM model requires base year values of:
- Households, by type;
- Total population;
- Total employed residents;
- Gross quarters population;
- Land area by use (i.e., basic and commercial employment, residential, streets and highways, developable, undevable); and
- Land area occupied by basic and commercial employment;
- Employment, by sector; and
- Zone-to-zone travel times and/or costs.

DRAM/EMPAL models are usually used in conjunction with a conventional four-step regional travel model, where outputs of one are fed back into the other and back and forth until equilibrium is reached. Expansion of infrastructure, such as a road widening, that

results in reduced travel impedance as estimated with a travel demand model, can be cycled through the DRAM/EMPAL models to influence future land use forecasts. In this way, induced development can be estimated.

The following diagram illustrates the procedure:

![Diagram](image)

EMPAL and DRAM forecast land use activity, that is, employment and households, in each zone, not land consumption. They have no economic content, and are simple spatial interaction rather than full-blown real estate models. The models are proprietary and a license fee of approximately $50,000 covers one year of implementation support, including model preparation and staff training. For an additional $5,000 annually technical support by telephone is provided. (These costs are as reported for 1997.)

MEPLAN and TRANUS models

MEPLAN and TRANUS have been or are being applied (one, the other, or both) in Sacramento, Baltimore, and Portland, as well as many cities outside the U.S. Although two distinct models, they are similar in their philosophy and structure. They integrate microeconomic theory with operational planning methods. They capture the interaction

2 The description of this model is drawn from a U.S. Environmental Protection Agency publication titled
of two parallel markets: one for land and one for transport. The land portion of these models predicts amount and location of activities by explicitly considering costs of land and development. Demands for goods, services, and labor are related to one another through an input-output framework. The projected amount and location of activities are then used to project travel demand, both passenger and freight, which is assigned to modes and routes on the basis of travel impedance measures. These travel impedances then influence the location of activities in future time periods. Thus, future land uses are influenced by the pattern of land use in the prior period and by previous period transport accessibility; and transport is influenced by previous infrastructure and present activity patterns arising from land use.

The general structure of these models is illustrated in the following diagram:

For both models, the data requirements for calibration are extensive. The simpler of the two, TRANUS, requires the following data for calibration of the base year:

**Land use**
- Number of households by income class by zone;
- Average number of people per household by income class;
- Average acres per dwelling by income class by zone;
- Average acres per employee by type by zone;
- Land sales prices by land use and density;
- Land use designations in local plans by zone;
- Number of employees by type and residence zone;
- Number of employees by income class and work zone;
- Average income per capita by income class;
- Household expenditures for land, travel, retail, other; and

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1 The description of this model is drawn from a U.S. Environmental Protection Agency publication titled "Evaluation of Modeling Tools for Assessing Land Use Policies and Strategies" August 1997.
• Number of school children by residence zone/school zone combinations and income class

Transport
• Road counts;
• Public transport route counts;
• Walk, wait, and ride time by mode;
• Average parking cost by zone;
• Free flow speeds by link type;
• Transit fares
• Operating costs by transit operator;
• Operating costs by auto user
• Fuel consumption;
• Average occupancy by auto for trip purpose;
• Average occupancy by transit;
• Car availability by trip purpose and household income class;
• Number of trips by zone pair;
• Proportion of trips in morning peak by purpose; and
• Cordo volumes.

The data requirements for subsequent periods are more modest. They include:

Land Use
• Allowable growth in each land use by zone;
• Building density caps by land use by zone; and
• Projections of total or basic regional employment.

Transport
• Network changes;
• Changes in transit headways and fares;
• Roadway tolls; and
• Parking charges.

Like the DRAM/EMPAL modeling system, the MEPLAN and TRANUS models can also be used to project induced development. An infrastructure upgrade, such as a road-widening, that resulted in reduced travel impedance, suitably estimated with a travel demand model, could be represented in the models and would lead to a change in projected land use pattern.

The cost of the complete MEPLAN system is $15,500 with an additional $4,650 for an associated graphics system. An unlimited TRANUS site license can be obtained for $6,000 from the Venezuelan firm Modelistas where Tomas de la Herrs the developer of TRANUS works. The fee includes software, documentation, one year of (email) support, and free upgrades as they become available. (These costs are as reported for 1997.) Implementation is additional, and reportedly can take six or more person years of effort.

UrbanSim model

The UrbanSim model is a more recently developed metropolitan-scale land use model which is "designed specifically to address the policy requirements of metropolitan growth management, with particular emphasis on interactions between land use and transportation." It has been applied in Honolulu and Salt Lake City as well as the Eugene-Springfield metropolitan area in Oregon. The software is distributed as Open Source software and can be downloaded from the Internet. There is some question "on the street" as to whether UrbanSim is fully operational yet.

The UrbanSim model adopts a behavioral approach. The model includes components that reflect the key choices of households, businesses, developers, and governments and their interactions in the real estate market. It is not a single model but is better described as an urban simulation system, consisting of a software architecture for implementing models and a family of models interacting within this environment.

*The description of this model is drawn from an article in the Journal of the American Planning Association titled "UrbanSim—Modelling Urban Development for Land Use, Transportation, and Environmental Planning" Vol. 68, No. 3, 2002.
The individual model components predict:

- The pattern of accessibility by auto ownership level (Accessibility Model);
- The creation or loss of households and jobs by type (Economic and Demographic Transition Models);
- The movement of households or jobs within the region (Household and Employment Mobility Models);
- The location choices of households and jobs from the available vacant real estate (Household and Employment Location Choice Model);
- The location, type, and quantity of new construction and redevelopment by developers (Real Estate Development Model); and
- The price of land at each location (Land Price Model).

The UrbanSim model also has the capacity to accommodate information that planners have about pending development, corporate relocations, or policy changes. Through changes in accessibility, induced development can be estimated and the model can be used to test the potential effects of major road improvements on development and traffic.

Conclusion

From this examination of existing land use allocation models, it is clear that these models can be used to project induced development impacts of a road expansion project. However, such models potentially have significant limitations for this use, including:

- Projecting induced development is not the purpose these models were designed for and the accuracy of such projections would be questionable;
- These models were designed to be used at a metropolitan area geographic scale and their accuracy if applied only to a specific roadway corridor or sub-region is questionable;
- Some of these models have produced results that have appeared to be illogical on their face – hence, their accuracy is questionable even when used for their intended purpose; and

- These models are highly data intensive and, thus, very expensive and time-consuming to implement.
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NATIONAL PARK SERVICE
U.S. DEPARTMENT OF THE INTERIOR

LAND AND WATER CONSERVATION FUND
STATE ASSISTANCE PROGRAM

FEDERAL FINANCIAL ASSISTANCE MANUAL
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CHAPTER 8 - POST-COMPLETION AND STEWARDSHIP

A. Purpose

Pursuant to Section 6(f)(3) of the LWCF Act and 36 CFR 59.3, this chapter contains the requirements for maintaining LWCF assisted sites and facilities in public outdoor recreation use following project completion and to ensure that LWCF-assisted areas remain accessible to the general public including non-residents of assisted jurisdictions. These post-completion responsibilities apply to each area or facility for which LWCF assistance is obtained, regardless of the extent of participation of the program in the assisted area or facility and consistent with the contractual agreement between NPS and the State. Responsibility for compliance and enforcement of these requirements rests with the State for both state and locally sponsored projects. These responsibilities cited herein are applicable to the area depicted or otherwise described on the 6(f)(3) boundary map and/or as described in other project documentation approved by the NPS.

B. Operation and Maintenance

Property acquired or developed with LWCF assistance shall be operated and maintained as follows:

1. The property shall be maintained so as to appear attractive and inviting to the public.

2. Sanitation and sanitary facilities shall be maintained in accordance with applicable health standards.

3. Properties shall be kept reasonably open, accessible, and safe for public use. Fire prevention, lifesaving, and similar activities shall be maintained for proper public safety.

4. Buildings, roads, trails, other structures and improvements shall be kept in reasonable repair throughout their estimated lifetime to prevent undue deterioration and to encourage public use.

5. The facility shall be kept open for public use at reasonable hours and times of the year, according to the type of area or facility.

6. A posted LWCF acknowledgement sign shall remain displayed at the project site pursuant to Chapter 7.

C. Availability to Users

1. Discrimination on the basis of race, color, national origin, religion, or sex. Under Title VI of the 1964 Civil Rights Act property acquired or developed with LWCF assistance shall be open to entry and use by all persons regardless of race, color, or national origin, who are
otherwise eligible. Title 43, Part 17 (43 CFR 17), authorizes the provisions of Title VI. The prohibitions imposed by Title VI apply to park or recreation areas benefiting from federal assistance and to any other recreation areas administered by the state agency or local agency receiving the assistance. Discrimination is also prohibited on the basis of religion or sex.

2. Discrimination on the basis of residence. Section 6(f)(5) of the LWCF Act provides, with respect to property acquired and/or developed with LWCF assistance, discrimination on the basis of residence, including preferential reservation, membership or annual permit systems is prohibited except to the extent reasonable differences in admission and other fees may be maintained on the basis of residence.

No fees charged to nonresidents can exceed twice the amount charged to residents. Where there is no charge for residents, but a fee is charged to nonresidents, nonresident fees cannot exceed fees charged for residents at comparable state or local public facilities. Reservation, membership or annual permit systems available to residents must also be available to nonresidents and the period of availability must be the same for both residents and nonresidents.

These provisions apply only to the recreation areas described in the project agreement. Nonresident fishing and hunting license fees are excluded from these requirements.

3. Discrimination on the basis of disability. Section 504 of the Rehabilitation Act of 1973 requires no qualified person shall, on the basis of disability, be excluded from participation in a program or activity that receives or benefits from federal financial assistance. The Americans with Disabilities Act of 1990 (P.L. 101-335) simply references and reinforces these requirements for federally-assisted programs.

4. Reasonable use limitations. Project sponsors may impose reasonable limits on the type and extent of use of areas and facilities acquired and/or developed with Fund assistance when such a limitation is necessary for maintenance or preservation. Thus, limitations may be imposed on the numbers of persons using an area or facility or the type of uses, such as “hikers only” or “hikers only.” All limitations shall be in accord with the applicable grant agreement and regulations.

D. Leasing and Concession Operations Within a Section 6(f)(3) Area

A project sponsor may provide for the operation of a Section 6(f)(3) area by leasing the area/facility to a private organization or individual or by entering into a concession agreement with an operator to provide a public outdoor recreation opportunity at the Fund-assisted site.

As the principal grantee, the State is ultimately accountable for assuring compliance with the applicable federal requirements, and, therefore, the delegation or transfer of certain responsibilities to subgrantees or lessees does not relieve the State of its compliance burden. As the grant recipient, the State has agreed to provide suitable replacement property should the public use of the leased or concessioned area/facility be restricted or the outdoor recreation resource be compromised.

All lease documents and concession agreements for the operation of LWCF-assisted sites by private organizations or individuals must address the following:

1. In order to protect the public interest, the project sponsor must have a clear ability to periodically review the performance of the lessee/concessionaire and terminate the lease/agreement if its terms and the provisions of the grant agreement, including standards of public use, accessibility, are not met.

2. The lease/agreement document should clearly indicate that the leased/concessioned area is to be operated by the lessee/concessionaire for public outdoor recreation purposes in compliance with provisions of the Land and Water Conservation Fund Act and implementing guidelines (36 CFR 59). As such, the document should require that the area be identified as publicly owned and operated as a public outdoor recreation facility in all signs, literature and advertising, and is operated by a lease/concessionaire as identified in the public information to eliminate the perception the area is private.

3. The lease/agreement document should require all fees charged by the lessee/concessionaire to the public must be competitive with similar private facilities.

4. The lease/agreement document should make clear compliance with all Civil Rights and accessibility legislation (e.g., Title VI of Civil Rights Act, Section 504 of Rehabilitation Act, and Americans with Disabilities Act) is required, and compliance will be indicated by signs posted in visible public areas, statements in public information brochures, etc.

X. Conversions of Use

Property acquired or developed with LWCF assistance shall be retained and used for public outdoor recreation. Any property so acquired and/or developed shall not be wholly or partly converted to other than public outdoor recreation use without the approval of NPS pursuant to Section 6(f)(3) of the LWCF Act and these regulations. The conversion provisions of Section 6(f)(3), 36 CFR Part 59, and these guidelines apply to each area or facility for which LWCF assistance is obtained, regardless of the extent of participation of the program in the assisted area or facility and consistent with the contractual agreement between NPS and the State.

Responsibility for compliance and enforcement of these provisions rest with the State for both state and locally sponsored projects. The responsibilities cited herein are applicable to the area depicted or otherwise described on the 6(f)(3) boundary map and/or as described in other project documentation approved by the Department of the Interior. This mutually agreed to area normally extends that actually receiving LWCF assistance so as to assure the protection of a viable recreation entity.
Local sponsors must consult early with the State LWCF Manager when a conversion is under consideration or has been discovered. States must consult with their NPS-LWCF Manager as early as possible in the conversion process for guidance and to sort out and discuss details of the conversion proposal to avoid mid-course corrections and unnecessary delays. A critical first step is for the State and NPS to agree on the size of the Section 6(0) park land impacted by any non-recreation, non-public use, especially prior to any appraisal activity. Any previous LWCF project agreements and actions must be identified and understood to determine the actual Section 6(0) boundary.

If the NPS is alerted or otherwise becomes aware of an ongoing conversion activity that has not been approved, NPS shall request the State Liaison Officer (SLO) to advise the project sponsor of the necessary prerequisites for approval of a conversion and to discontinue the unauthorized conversion activities. If the conversion activity continues, NPS shall formally notify the State it must take appropriate action to preclude the project sponsor from proceeding further with the conversion, use, and occupancy of the area pending NPS independent review and decision of a formal conversion proposal (see Section 10 below).

The NPS Regional Director has the authority to disapprove conversion requests and/or to reject proposed property substitutions. This approval is a discretionary action and should not be considered a right of the project sponsor.

1. Situations that trigger a conversion include:
   a. Property interests are conveyed for private use or non-public outdoor recreation uses.
   b. Non-outdoor recreation uses (public or private) are made of the project area, or a portion thereof, including those occurring on pre-existing rights-of-way and easements, or by a lessor.
   c. Unallowable indoor facilities are developed within the project area without NPS approval, such as unauthorized public facilities and sheltering of an outdoor facility.
   d. Public outdoor recreation use of property acquired or developed with LWCF assistance is terminated.

2. Situations that may not trigger a conversion if NPS determines that certain criteria are met include:
   a. Underground utility easements that do not impact the recreational use of the park and is restored to its original surface condition (see Section F below).
   b. Proposals to construct public facilities, such as recreation centers and indoor pool buildings, within a Section 6(0) protected area where it can be shown there is a gain or increased benefit to the public outdoor recreational opportunity. These proposals must be reviewed by the NPS as a “public facility request” (see Section H below). The

3. Prerequisites to the NPS Consideration of Conversions. Formal requests from the project sponsor for permission to convert LWCF assisted properties in whole or in part to other than public outdoor recreation uses must be submitted to the State Liaison Officer to NPS in writing and conform to the prerequisites set forth in 36 CFR 59.

States shall consult with NPS when conversions are proposed or discovered and prior to making formal request to NPS. States shall use the Proposal Description and Environmental Screening Form (PDESF) to prepare its conversion proposal (see Chapter 4). The PDESF guides the development of the conversion proposal, including the incorporation of the following prerequisites that must be met before NPS will consider the formal conversion request:

   a. All practical alternatives to the conversion have been evaluated and rejected on a sound basis.
   b. The fair market value of the property to be converted has been established and the property proposed for substitution is of at least equal fair market value as established by a state approved appraisal (see Chapter 4 for appraisal guidance) excluding the value of structures or facilities that will not directly enhance its outdoor recreation utility.
   c. The property proposed for replacement is of reasonably equivalent usefulness and location as that being converted. Depending on the situation, and at the discretion of the NPS, the replacement property need not provide identical recreation experiences or be located at the same site, provided it is in a reasonably equivalent location. Generally, the replacement property should be administered by the same political jurisdiction as the converted property. NPS will consider state requests to change the project sponsor for any replacement property when it is determined a different political jurisdiction can meet the criteria for replacement properties. Equivalent usefulness and location will be determined based on the following criteria:
(1) Property to be converted must be evaluated in order to determine what recreation needs are being fulfilled by the facilities which exist and the types of outdoor recreation resources and opportunities available. The property being proposed for conversion must be evaluated in a similar manner to determine if it will meet recreation needs that are at least like in magnitude and impact to the user community as the converted site. This criterion is applicable in the consideration of all conversion requests with the exception of those where wetlands are proposed as replacement property.

Wetland areas and interests therein shall be considered to be of reasonably equivalent usefulness as compared to the recreational usefulness of the property proposed for conversion if they have been identified in the wetlands provisions of the Statewide Comprehensive Outdoor Recreation Plan (SCORP) in accordance with Section 6(f)(3) of the LWCF Act as amended (36 CFR 59.2) by Section 303 of the Emergency Wetlands Resources Act of 1986.

(2) Replacement property need not necessarily be directly adjacent to or close by the converted site. This policy provides the administrative flexibility to determine location recognizing that the property should meet existing public outdoor recreation needs. While generally this will involve the selection of a site serving the same community(ies) or area as the converted site, there may be exceptions. For example, if property being converted is in an area undergoing major demographic change and the area has no existing or anticipated future need for outdoor recreation, then the project sponsor should seek to locate the substitute area at another location within the jurisdiction.

(3) Should a local project sponsor be unable to replace converted property, the State would be responsible, as the primary recipient of federal assistance, for assuring compliance with these requirements and for the substitution of replacement property.

(4) The acquisition of one parcel of land may be used in satisfaction of several approved conversions (see Section 6 below) and vice versa.

d. The property proposed for replacement meets the eligibility requirements for LWCF assisted acquisition (see Chapter 3). The replacement property must constitute or be part of a viable recreation area. Viability and recreational usefulness is dependant upon the proposed outdoor recreation development plan and timetable for the development of the replacement parks. If full development of the replacement site(s) will be delayed beyond three years from the date of conversion approval, the conversion proposal shall explain why this is necessary (see Chapter 3.B.7).

For proposed replacement property with a history of contamination, proposals must address the nature of the contamination, how the contaminated area has been or will be remediated, how the area will be developed into a safe, public outdoor recreation area, and how provisions will be put in place to monitor the new replacement parkland to ensure public health and safety in perpetuity. Certain contaminated areas may not meet the equal or greater recreational usefulness prerequisite for replacement land. Early coordination with NFS for conversion proposals involving contaminated replacement land, even if remediated, is required (see 3.4 below).

Unless each of the following additional conditions (also see Chapter 3) is met, land currently owned by another public agency may not be used as replacement land for land acquired as part of an LWCF project:

(1) The replacement land was not originally acquired by the sponsor or selling agency for recreation.

(2) The replacement land has not been previously dedicated or managed for recreational purposes while in public ownership.

(3) No federal assistance was provided in the replacement land's original acquisition unless the assistance was provided under a program expressly authorized to match or supplement LWCF assistance.

(4) Where the project sponsor acquires replacement land from another public agency, the selling agency must be required by law to receive payment for the land so acquired (see Chapter 3.A.9).

An exception may be made to this condition only in the case of development projects for which the project sponsor's match was not derived from the cost of the purchase or value of a donation of the land to be converted, but from the value of the development itself. In this case, public land that has not been previously dedicated or managed for recreation/conservation use may be used as replacement land even if this land is currently owned by the project sponsor or is transferred from one public agency to another without cost.

a. In the case of Section 6(f)(3) protected areas that are partially rather than wholly converted, the impact of the converted portion on the remaining area shall be considered. If such a conversion is approved, the unconverted area must remain recreationally visible to be replaced as well.

f. All necessary coordination with other federal agencies has been satisfactorily accomplished including, for example, compliance with Section 4(f) of the Department of Transportation Act of 1966.

g. The guidelines for environmental review under NEPA have been satisfactorily completed and considered by NFS during its review of the proposed Section 6(f)(3) action. In cases where the proposed conversion arises from another federal action, NFS
final review of the State’s proposal shall not occur until the NPS is assured all environmental review requirements for the other federal actions have been met, e.g., Army Corps of Engineer permits.

The environmental review process must analyze not only the Section 6(f)(3) area proposed for conversion, but also the development of the replacement parkland. The purpose and scope of the environmental review must focus on the impacts on the “human environment” resulting from the loss of the Section 6(f)(3) parkland, impacts on any remaining Section 6(f)(3) parkland for partial conversions, and the development of new Section 6(f)(3) replacement parkland. The scope of the environmental review should not include impacts of the actions precipitating the conversion on resources beyond the Section 6(f)(3) boundary, such as impacts of a new housing development or a school on a neighborhood.

The environmental analysis must be conducted in a neutral and factual manner and result in statements that reflect this same neutrality to the interested and affected public. It cannot focus on and understand the details of the proposed federal actions converting parkland including the replacement of new parkland according to 36 CFR 59. The environmental analysis documents should not include statements that promote or justify the actions precipitating the conversion, such as proclaiming that the subject parkland is the best location for a new fire station.

For detailed guidance on NEPA and how to conduct environmental reviews for LWCF conversions, consult Chapter 4 of this manual, and the NPS.

4. State preparation of conversion proposal for NPS review. To avoid any unnecessary delays, duplication of effort, and mid-course corrections, the States shall consult with NPS early when conversions are proposed or discovered to ensure:

a. The extent of impact from the conversion activity on Section 6(f)(3) protected areas is mutually agreed upon; and

b. The acceptability of proposed replacement parkland has been explored prior to State/local sponsor expenditure of resources on appraisals and the required environmental review process to be undertaken in accordance with NEPA.

The State shall coordinate the development of the conversion proposal including ensuring the project sponsor complies with applicable federal, state and local laws, regulations and permit requirements. As the proposal is developed, the State may enlist the assistance of NPS to provide technical guidance as needed, especially for complex and controversial conversions. A State’s submission of a formal conversion request to NPS is a State’s endorsement of the conversion. If a State does not concur or endorse the conversion, then the proposal should not be forwarded to NPS for formal review and decision.

5. NPS review of the State conversion proposal. NPS will conduct an independent review of the proposal using the conversion prerequisites and any other critical factors that may have arisen during proposal development. If the State has adequately addressed the prerequisites, and NPS finds no other reason to deny the request, the NPS administrative record will be documented as such and an amendment will be signed approving the conversion.

6. Banking excess market value of replacement land for future conversions. The acquisition of one parcel of replacement land may be used in satisfaction of several approved conversions.

Excess fair market value (FMV) of a replacement property can be “banked” for a period not to exceed five years from the date of the initial conversion amendment. During this time period, the same project sponsor may use the remaining value to make up the FMV difference in cases where the subsequent conversion property satisfies the equal usefulness criteria but is appraised FMV falls short of the equal fair market value requirement.

The initial replacement property with the excess fair market value may not be used to satisfy the equal usefulness criterion for subsequent conversions unless additional conversions are anticipated by the sponsor at the time of the original conversion request and the accompanying documentation clearly addresses how the replacement property would satisfy the equal usefulness criteria for the original conversion as well as those that are anticipated.

7. Conversions on leased land. Should a conversion occur on leased land during the term of the lease, the State must comply with the conversion requirements of Section 6(f)(3) including the provision of replacement land. In this instance, the conversion of the original lease can be replaced with a leasehold interest for a period of time that is not less than the time remaining on the original lease, and, which fulfills the recreation commitment agreed to in the original lease agreement.

For existing projects that involve leases, the responsibility for retaining the property in recreation terminates at the end of the lease period unless the grant agreement calls for some other arrangement. Lease agreements containing a renewal clause that can be exercised by the lessee must be reviewed to ensure that Section 6(f)(3) compliance will continue throughout the duration of the next lease period.

8. Conversion proposal documentation. A conversion requires an amendment to the original project agreement. Therefore, the amendment should be submitted concurrently with the formal conversion request or at such time as all details of the conversion have been worked out with NPS.

The formal conversion proposal submission to NPS must include the following items:

LWCF State Assistance Program Manual  Effective 10/01/2008  Chapter 8-8
a. A transmittal letter briefly describing the conversion proposal and requesting NPS review and approval.

b. Standard Form 424 for amendments (see Chapter 7).

c. FD/ESF including Step 6, the environmental screening form, and an environmental assessment document analyzing the entire conversion proposal (the converted parkland and the replacement parkland in one document).

d. LWCF project amendment form identifying changes to the original Section 6(f)(3) boundary caused by the conversion and to establish a new 6(f) boundary around the replacement site(s).

e. Signed and dated Section 6(f)(3) boundary map for any remaining parkland resulting from a partial conversion, and for the replacement site(s).

f. Description and Notification Form (DNF)

Once the conversion has been approved by NPS, replacement property should be immediately acquired and developed according to the replacement proposal timetable. If development will be delayed beyond three years from the date of NPS conversion approval, then a request for delayed development beyond three years with a justification for the delay must be made to NPS (see Chapter 3.B.7.c).

9. Small conversions. Small conversions are composed of small portions of Section 6(f)(3) protected areas that amount to no more than 10 percent of the 6(f)(3) protected area or five acres, whichever is less. States should consult with NPS prior to developing the small conversion proposal.

Because small conversion proposals are less complex, NPS review and decision can be facilitated when:

a. Minor or no environmental impacts would occur on resources being removed from Section 6(f)(3) protection, on the remaining Section 6(f)(3) area, and on the contiguous new replacement parkland by placing it under Section 6(f)(3) protection per the environmental screening form. This includes consideration of impacts to historic resources per the Section 106 process of the National Historic Preservation Act. The entire conversion proposal is categorically excluded from further environmental review under NEPA (see Chapter 4).

b. The proposed conversion is not controversial.

c. The replacement property is contiguous to the original Section 6(f)(3) area.

The State's proposal must include:

d. Transmittal letter describing the entire small conversion proposal.

e. Standard Form 424.

f. FD/ESF with the portion for conversions completed indicating that a categorical exclusion is justified.

g. LWCF project amendment form.

h. Description and Notification Form (DNF).

i. Revised 6(f) boundary map indicating the deletion of the small converted area and the addition of the replacement property.

10. Discovering unauthorized conversions. When it is discovered that a Section 6(f)(3) area has been converted without NPS approval, a conversion proposal must be submitted and reviewed by NPS for retroactive action. The NPS shall notify the State it is in violation of the grant contract, program regulations, and law, and an immediate resolution of the unapproved conversion must be expedited.

If it is discovered that an unauthorized conversion is in progress, the State must notify the project sponsor to cease immediately until the conversion process pursuant to 36 CFR 59.3 has been satisfactorily completed.

Resolution of the conversion will require State and NPS review of the conversion proposal as previously set forth in Section E.4 above including the provision of suitable replacement property.

If the sponsor has already provided replacement property without NPS approval, the eligibility of the replacement land must meet the same Section 6(f)(3) requirements as if it had not yet been acquired. It is incumbent upon the State to make the case that the replacement land fully meets these requirements.

Failure by the State to take steps to follow this procedure shall be considered cause for NPS to apply penalty options described in Section N below.

11. Conversions with delayed parkland replacement. Exceptions to the immediate replacement requirement (see Section 8 above) will be allowed only when it is not possible for replacement property to be identified prior to the State's request for the conversion. An express commitment must be received from the State to satisfy Section 6(f)(3) substitution requirements within a specified period normally not to exceed one year following conversion approval.
Such proposals are not routine and must include sufficient evidence to justify why such a delay is necessary.

F. Underground Utility Easements and Rights-of-Way

The State may allow underground utility easements within a Section 6(f)(3) area as long as the easement site is restored to its pre-existing condition to ensure the continuation of public outdoor recreational use of the easement area within 12 months after the ground within the easement area is disturbed. If restoration exceeds the 12 month period, or the easement activities result in permanent above-ground changes, NPS shall be consulted to determine if the changes will trigger a conversion. If present or future outdoor recreation opportunities will be impacted in the easement area or in the remainder of the Section 6(f)(3) area, a conversion will be triggered.

G. Commercial Signage in Section 6(f)(3) Areas

Commercial signs are only allowable within Section 6(f)(3) boundaries when the advertising is attached to allowable park structures such as benches, fencing, walls, and buildings and are not inconsistent with the park setting and the built environment in which they are located (e.g., athletic fields). Signs may face either outside or inside the park. Commercial advertising in the form of a stand-alone structure such as a billboard that creates a footprint in the park, or commercial signage permanently affixed to a natural feature within the 6(f) area, is a conversion regardless of which direction it faces.

H. Proposals to Construct Public Facilities

Public facility requests will only be approved if the public facility clearly results in a net gain in outdoor recreation benefits or enhances the outdoor recreation use of the entire park, and the facility is compatible with and significantly supportive of the outdoor recreation resources and opportunities of the Section 6(f)(3) protected area. The State shall use the PD/ISBP to document its public facility proposal using the following criteria and submit it along with a project amendment and a recommendation for federal approval for NPS review and decision.

The NPS will consider requests to construct sponsor-funded public facilities when the following criteria have been met:

1. Uses of the facility will be compatible with and significantly supportive of outdoor recreation resources and uses at the rest of the site and recreation use remains the overall primary function of the site. The proposed public facility will include a recreational component and will encourage outdoor recreation use of the remaining Section 6(f) area.

2. All design and location alternatives have been adequately considered, documented and rejected on a sound basis.

3. The proposed structure is compatible and significantly supportive of the outdoor recreation resources of the site, whether existing or planned. The park’s outdoor recreation use must continue to be greater than that expected for any indoor uses, unless the site is a single use facility, such as a swimming pool building, which virtually occupies the entire site.

Examples of uses which would not ordinarily be approved include, but are not limited to, a community recreation center which takes up all or most of a small park site, clinics, police stations, restaurants catering primarily to the general public, fire stations, professional sports facilities or commercial resort or other facilities which: (1) are not accessible to the general public; or, (2) require membership; or, (3) which, because of high user fees, have the effect of excluding elements of the public; or, (4) which include office, residential or elaborate lodging facilities.

Restaurant-type establishments with indoor dining/seating that cater primarily to the outdoor recreation public must be reviewed under this public facility policy. Other park food service operations such as snack bars, carry-out food service, and concession stands with outdoor dining including pavilions and protected patios are allowable without further NPS if the primary purpose is to serve the outdoor recreating public.

4. Potential and future benefits to the total park’s outdoor recreation utility must be identified in the proposal. Any costs or detriments should be documented and a net recreation benefit must result.

5. The proposed facility must be under the control and tenure of the public agency that sponsors and administers the original park area.

6. The proposal has been analyzed pursuant to NEPA, including providing the public an opportunity to review and comment on the proposal if required as part of the NEPA review.

7. All applicable federal requirements for approval are met.

8. The proposal has been adequately reviewed at the state level and has been recommended by the SLO.

I. Requests for Temporary Non-Conforming Uses Within Section 6(f)(3) Areas

All requests for temporary uses for purposes that do not conform to the public outdoor recreation requirement must be submitted to and reviewed by the State. The State, in turn, will submit a formal request to NPS describing the temporary non-conforming use proposal.

Continued use beyond six-months will not be considered temporary, but will result in a conversion of use and will require the State/project sponsor to provide replacement property pursuant to Section 6(f)(3) of the LWCF Act.
1. Criteria. NPS will use the following criteria to evaluate each request:

a. The size of the parkland area affected by any temporary non-recreation use shall not result in a significant impact on public outdoor recreation use. This means that the site of the temporary activity should be sufficiently small to restrict its impacts on other areas of a Fund-assisted park.

b. A temporary use shall not result in permanent damage to the park site, and appropriate mitigating measures will be taken to ensure no residual impact on the site once the temporary use is concluded.

c. No practical alternatives to the proposed temporary use exist.

d. All applicable federal requirements for approval are met.

e. The proposal has been adequately reviewed at the state level and has been recommended by the SLO.

2. Required proposal documentation. The State’s formal proposal to NPS shall include:

a. SLO recommendation;

b. PD/RSF providing a complete description of the proposed temporary use, including:

   (1) start and completion dates;

   (2) identification of the portion of the site affected, including a map showing the relationship of the temporary use site to the full area protected under 6(f)(3) and a justification of why the area needed is the minimum necessary for the proposed use;

   (3) an analysis of the alternatives to the proposed use that were considered;

   (4) a description of both immediate impacts on the site as a result of the temporary use and any residual or long-term impacts on the site's environment or on recreation use;

   (5) a description of any appropriate mitigation actions that may be necessary and a schedule for their implementation; and,

   c. An acknowledgement by the SLO a full conversion will result if the temporary use has not ceased after the maximum six-month period allotted.

J. Sheltering Facilities within Section 6(f)(3) Areas

NPS approval is required to shelter an existing facility located within a Section 6(f)(3) protected area. See Section 3.C.7 for further guidance.

X. Obsolete Facilities

Project sponsors are not required to continue operation of a particular recreation area or facility beyond its useful life. However, Section 6(f)(3) of the LWCF Act requires project sponsors maintain the entire area within the Section 6(f)(3) boundary in some form of public outdoor recreation use.

Notwithstanding neglect or inadequate maintenance on the part of the project sponsor, a recreation area or facility may be determined to be obsolete if:

1. reasonable maintenance and repairs are not sufficient to keep the recreation area or facility operating;

2. changing recreation needs dictate a change in the type of facilities provided;

3. park operating practices dictate a change in the type of facilities required; or

4. the recreation area or facility is destroyed by fire, natural disaster, or vandalism.

States may determine a facility is obsolete and permit its use to be discontinued or allow a particular type of recreation use of the LWCF assisted area to be changed provided that the project record maintained by the State is documented by the sponsor with a justification statement for determining obsolescence and the State concurs in the change. However, NPS approval must be obtained prior to any change from one LWCF allowable use to another when the proposed use would significantly contravene the original plans for the area. See Section L below for further guidance.

If, in the judgment of the State, the facility is needed and was lost through neglect or inadequate maintenance, then replacement facilities must be provided at the current value of the original investment.

LWCF assistance may be provided to renovate outdoor recreation facilities that have previously received LWCF assistance if the State determines the renovation is not required as a result of neglect or inadequate maintenance and the State documents the project record to that effect.

L. Significant Change of Use

Section 6(f)(3) of the LWCF Act requires project sponsors maintain the entire area defined in the project agreement in some form of public outdoor recreation use. NPS approval must be obtained prior to any change from one eligible use to another when the proposed use would significantly contravene the original plans or intent for the area as described in the original LWCF project.

NPS approval is not required, however, for each and every facility use change. Users within a Section 6(f)(3) protected area should be viewed in the context of overall use and should be
monitored in this context. A change from a swimming pool with substantial recreational development to a less intense area of limited development such as a passive park, or vice versa, would, for example, require NPS approval.

States shall notify NPS in writing of proposals to significantly change the use of Section 6(f)(3) areas in advance of their occurrence. NPS will expedite a determination of whether a formal review and approval process will be required. A primary NPS consideration in the review will be the consistency of the proposal with the Statewide Comprehensive Outdoor Recreation Plan.

If the change in use proposal requires a formal review and decision by NPS, the State shall complete the Proposal Description and Environmental Screening Form (PD/ESP) found in Chapter 4.

Changes to other than public outdoor recreation use constitute a conversion and will require NPS approval and the substitution of replacement land in accordance with Section 6(f)(3) of the LWCF Act.

M. Post-Completion Inspections

1. Purpose. In order to determine whether properties acquired or developed with LWCF assistance are being maintained and used for outdoor recreation purposes in accordance with the project agreement and other applicable program requirements, a state post-completion inspection is to be made within five years after final billing and at least once every five years thereafter.

The following points should be taken into consideration during the inspection of properties that have been developed for public use:

a. Retention and use. Is the Section 6(f)(3) boundary intact and the property being used for outdoor recreation purposes including those intended through the projects funded with LWCF assistance?

b. Appearance. Is the property attractive and inviting to the public?

c. Maintenance. Is upkeep and repair of structures and improvements adequate? Is there evidence of poor workmanship or use of inferior quality materials or construction? Is vandalism a problem? Is the area being maintained?

d. Management. Does staffing and servicing of facilities appear adequate?

e. Availability. Is there evidence of discrimination? Is the property readily accessible and open to the public during reasonable hours and times of the year?

f. Signage. Is the area properly signed to allow for user information and safety, and proper acknowledgement of the federal Land and Water Conservation Fund?

g. Interim Use. Where lands have been acquired but not yet developed, the inspection should determine whether the interim uses of the property are in accordance with agreements with the NPS.

2. Reporting. Within 90 days of completion of an on-site inspection, States shall submit to NPS a post-completion inspection report for only those projects which have compliance problems. The report should include the date of inspection, description of the findings, and a summary report of corrective actions taken or to be taken.

For all other sites inspected with no compliance problems, the State shall only report to NPS the project number and date of inspection, and shall retain the actual inspection report with the State LWCF project file. States shall submit a report of all LWCF project sites inspected at least annually and by September 30.

Post-completion inspection reports shall also be completed for those projects in which the facilities have been deemed obsolete. The report should include certification by the State Liaison Officer that the facility is obsolete and that such obsolescence is not a result of neglect or inadequate maintenance on the part of the project sponsor.

3. Applicability. The provisions of this section apply to the Section 6(f)(3) area encompassing the area or facility assisted by the LWCF, regardless of the extent of LWCF assistance in that area or facility. That is, in cases where assistance is provided only for an acquisition, the entire park or recreational area involved, including developments on the lands so acquired, are subject to the provisions of this section. Where development assistance is given, the lands of the park or recreation area identified on the Section 6(f)(3) boundary map are subject to this section.

4. State Responsibility. Responsibility for enforcement of the provisions of this chapter rests with the State. The NPS will inspect LWCF assisted areas and facilities from time to time, but it shall conduct such visits in concert or through consultation with the State agency or State Liaison Officer.

5. Costs. The costs of making post-completion inspections by the State are allowable overhead charges for LWCF assistance and are allowable costs covered by the indirect cost rate.

6. NPS Inspections. Properties acquired or developed with LWCF assistance shall be available for inspection by the NPS Director or other NPS representatives.

N. Penalties for Failure to Comply with Federal Laws and Regulations

Pursuant to 43 CFR Part 12.81, when the NPS determines a State has violated or failed to comply with applicable federal law, or the regulations governing this program with respect to a project, NPS may withhold payment of Federal funds to the State on account of such project, withhold funds for other projects of the State, withhold approval of further projects of the State,
and take such other action deemed appropriate under the circumstances, including debarment and suspension pursuant to Executive Order 12549 at 43 CFR 12.100-510, until compliance or remedial action has been accomplished by the State to the satisfaction of NPS.
Wildlife Highway Links Vital Habitats

The Region

Now closed to vehicles, a Santa Ana Canyon underpass allows animals wider range.

April 19, 2004 Janet Wilson | Times Staff Writer

Until 15 months ago, a highway underpass beneath the Riverside Freeway was a favorite hideaway for sleep-deprived truckers in search of a nap. Today, hopeful signs indicate that four-legged creatures are reclaiming the passageway as a critical wildlife crossing.

"Two weeks ago we had a beautiful mountain lion track right here after the rain. Deer, too. Look, there are probably skunks," Chino Hills State Park Supt. Ron Krueper said, bending over delicate paw prints etched in the soft silt of a creek bed.

For The Record
Los Angeles Times Saturday April 24, 2004 Home Edition Main News Part A Page 2 National Desk 1 inches; 47 words Type of Material: Correction
Wildlife underpass -- An article in Monday's California section about a wildlife crossing under the Riverside Freeway incorrectly reported that animals crossing from north to south tend to go west along a bike trail, to Brush Canyon. In fact, animals crossing south to north follow that path.

Under the smooth, arching concrete belly of the freeway, the harsh lighting and asphalt are gone. Caltrans shut down the Coal Canyon Road exit in 2003, ripping up the offramps. Bobcats, coyotes and songbirds are among the animals now spotted using the wide underpass.

"They can make a dash through 50 yards without getting really jumpy," said Claire Schlottarbeck, executive director of Hills for Everyone, which fought for 18 years to eliminate the freeway exit and a proposal to build 1,550 homes and an industrial park alongside Coal Canyon Road.

The project was never built, and neither was Coal Canyon Road. The land, 650 acres, was bought with $55.5 million in state funds and is now part of Chino Hills State Park.

The only reminders of the project were offramps and the underpass that, essentially, led to nowhere.

Scientists lobbied to remove the exit because they recognized that wildlife long knew what humans discovered as they developed the region: The Coal Canyon area is at the center of several natural passageways.

"Restoring a natural linkage in what is now a road underpass would set a global precedent," wrote a panel of conservation biologists in 1998 after studying area terrain and animal movement. "Conservation-minded citizens throughout the world could look to Coal Canyon as an example of how an ecological error was corrected through thoughtful public action."

Southland commuters know a different Coal Canyon -- the former exit bordering Orange and Riverside counties that radio traffic reporters list daily as a major congestion point.

"The 250,000 cars and trucks that go by here every day probably have no idea they're going over a wildlife crossing," said Krueper.

Railroad tracks, a major sewer line and the Santa Ana River also all squeeze through the area, between the Chino Hills to the north and the Santa Ana Mountains to the south.

Using centuries-old trails, the wildlife funnels down from broad lateral canyons and steep mountain flanks at rough cross angles to the freeway.

"This is the pinch point," said Krueper. "You've got this hourglass of a wildlife crossing bisecting this narrow main transportation point, with road, rail and the Santa Ana River."

Krueper gestured to green ridges tipped with yellow mustard, and a flower-lined creek bed abutting the churning freeway. "Animals use ridges and creek beds for travel," he said. "That's their road map."

The wildlife corridor is 3 miles across at its broadest point, with Yorba Linda crowding in on one side, and Corona and the other, but conservation biologists who champion connecting "islands" of habitat believe it is enough.

Providing proper wildlife linkages could help maintaining genetic diversity, they say, by hooking up large swaths of habitat to avoid inbreeding. They also provide escape routes to reach other wild lands in case of fire or drought, and keep large predators at the top of the food chain because they have enough room to roam, ensuring that mid-size skunks and raccoons and others don't over-multiply and wipe out songbirds and frogs, for instance.

Like any construction project, there are bumps in the road, and there is years' worth of additional work ahead.

It was box culverts -- pitch dark, 6-foot-high tunnels scrawled with fading graffiti -- that made biologists realize the area was a natural wildlife crossing. Biologist Paul Baiser tracked one mountain lion through the culverts 22 times in a year and followed him by using a radio collar to Brea, 15 miles to the north. Mammals exiting the underpass on the south side tend to go west along a bike trail to Brush Canyon, or east through a golf course to Aliso Canyon, both part of Chino Hills State Park. Mountain lions can roam an area of 150 square miles, and Krueper said that from Chino, they can go through Puente Hills, across occasional roads and under the San Gabriel River Freeway from the Whittier Narrows to the San Gabriel Mountains.
On the south side, the state park links with the Cleveland National Forest, providing 420,000 acres of largely unbroken habitat stretching south through San Diego County. Endangered gests oftuchers nest here in coastal sage scrub, and the rare Tecate cypress clings to canyon walls.

But the specter of development bumping up against the wildlife corridor remains.

Anhein officials and the Irvine Co. are preparing zoning for a master-planned community that could put more than 3,000 homes along and below a ridge that Krueper says is vital to cougars and other wildlife.

"We're talking with them; we're hopeful that we can keep a buffer zone ... that would save the ridge," he said. Krueper said mountain bikers, hikers and others are welcome to pass through the undercropping, which connects an extended network of trails.

"Humans use it during the daytime, and the animals use it at night," said Krueper. "It works."
O-8-1
The EIR/EIS provides a complete and thorough analysis of all potential environmental impacts of the proposed project. For specific and complete responses to the issues raised in this comment letter, refer to responses to comments O-8-2 through O-8-54, below.

O-8-2
As reflected in the responses to comments O-8-3 through O-8-54, below, in other responses in this Responses to Comments appendix, and throughout the EIR/EIS, RCTC and the Department prepared and circulated to the public a Draft EIR/EIS that provides a complete analysis of all environmental issues and assesses the potential impacts of the proposed project, and which includes mitigation that is sufficiently detailed to adequately address those potential impacts.

Refer also to Section O.5.4.3, Recirculation of the Environmental Document, in Section O.5.4, Common Response Related to the Environmental Process and Schedule, on page O-15, for additional discussion regarding why RCTC and the Department did not prepare or circulate a revised Draft EIR/EIS because such recirculation was not required under either CEQA or NEPA.

O-8-3
Refer to Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18 in Section O.5, Common Responses, for project effects at CHSP, mitigation for those effects, and the results of the consultation with State Parks regarding the project effects and mitigation at CHSP.

Refer to Section O.5.5.4, De Minimis Determination, on page O-22, which indicates that the Department made a determination that the project effects at CHSP would be de minimis and State Parks concurred with this determination on March 26, 2012. As a result, no discussion of avoidance alternatives is required for the project effects at CHSP.

Refer also to comment letter F-1 on page O-45 in which the Department of the Interior “…concurs that there is no feasible or prudent alternative to the Preferred Alternative identified in the document, and that all reasonable measures to minimize harm to Section 4(f) property have been identified.”
O-8-4

Refer to responses to comments O-8-5 through O-8-14, below, which explain why the project description is stable, complete, and fully adequate to allow for a meaningful and thorough analysis of the potential environmental impacts of the project.

O-8-5

The desirable LOS on freeways are described in Section 1.3.1.3, Level of Service, on page 1-14 and are shown on Figure 1-3 on page 1-15 in the EIR/EIS. Table 1.4 on page 1-20 in the EIR/EIS shows the existing LOS on the project segments of SR-91 and I-15. Tables in Section 3.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, in the EIR/EIS provide detailed information on LOS with and without the project, as follows:

- **Table 3.6.5**: Baseline/Existing (2007) and 2015 and 2035 No Build Freeway Mainline Peak-Hour Levels of Service (page 3.6-47)
- **Table 3.6.11**: Freeway Mainline Peak-Hour Levels of Service for Baseline/Existing (2007), 2015 No Build, and the 2015 Initial Phase of Alternative 2 (page 3.6-59)
- **Table 3.6.22**: Freeway Mainline Peak-Hour Levels of Service for Baseline/Existing (2007), 2035 No Build, and Design Year 2035 with Alternatives 1 and 2 (page 3.6-71)

The LOS described above identify the desired design standards for the project. The tables cited above provide detailed information documenting the ability of the No Build and Build Alternatives to meet the desired LOS in 2015 and 2035. The text and table citations in this response are to locations in the EIR/EIS where more detailed discussion of the LOS standards and the LOS under with and without project conditions are provided.

Section 15124(b) of the CEQA Guidelines requires an EIR to include a statement of the project objectives. Project objectives do not typically include design standards as noted in this comment. They are typically clear and declarative statements identifying specific effects anticipated to be achieved by a project. The Department and the Riverside County Congestion Management Plan both designate LOS E as the desired LOS design standard for freeways. When a freeway operates at less than LOS E (i.e., LOS F), the carrying capacity of the freeway is reduced, resulting in unstable flow, persistent congestion, and stop-and-go traffic. LOS F conditions generate public pressure to improve the road to improve the LOS. It is recognized that LOS E is
general design objective that must be balanced against other factors, including environmental impacts, costs and feasibility, and that not every road can achieve that objective without creating offsetting problems. However, alternatives can be assessed on a relative basis against how well they meet or approach this design standard. The traffic analysis in Section 3.6 in the EIR/EIS specifically considers the performance (LOS) of the freeway segments with and without the project, consistent with the identified LOS E design standard. This allows each alternative to be compared to the design standard to assess whether it meets the defined project objectives. As a result, RCTC and the Department did not revise the project objectives.

O-8-6

The improvements on local roads proposed as part of the Build Alternatives are shown in the preliminary project plans provided in Appendix L, Project Features, in the EIR/EIS. No local street improvements are planned outside the boundaries of the Build Alternatives shown on those preliminary plans.

For example, in Appendix L2, Project Features, the following sheets show the areas where improvements to local streets at their crossings of SR-91 are included in the overall project improvements in Alternative 2. The improvements to those local streets are to join the existing local streets with the proposed project improvements or at overcrossings/undercrossings.

- Along SR-91:
  - Sheet 4: Gypsum Canyon Road
  - Sheet 12: Green River Road
  - Sheet 22: Auto Center Drive/Serfas Club Drive
  - Sheet 24: South Maple Street
  - Sheet 25: Smith Avenue
  - Sheet 27: Lincoln Avenue
  - Sheet 30: Buena Vista Avenue
  - Sheet 32: East and West Grand Avenue
  - Sheets 31 and 32: Main Street
  - Sheet 37: Promenade Avenue
  - Sheet 38: McKinley Street
  - Sheet 43: Buchanan Street
  - Sheet 44: Pierce Street
Along I-15:
- Sheet 55: Hidden Valley Parkway
- Sheet 56: Corona Avenue
- Sheet 57: Crest Road
- Sheet 62: Old Ternesca Road
- Sheet 64: Ontario Avenue
- Sheet 67: El Cerrito Road
- Sheet 69: Cujalco Road

The improvements to these local streets are within the disturbance/construction limits for the project. The analysis in the EIR/EIS considered the project impacts within the disturbance/construction limits. As a result, the potential impacts of these local street improvements were considered in the analysis in the EIR/EIS.

O-8-7
As part of the preliminary engineering effort required for preparation of the Project Approval/Environmental Documentation (PA/ED), a Conceptual Drainage Study Report (April 2010) was prepared. This report addressed existing and proposed drainage deficiencies and improvements associated with the SR-91 CIP improvements.

During March 2010, RCTC conducted preliminary investigations of the existing culvert conditions within the limits of the SR-91 CIP on SR-91 and I-15. Using available as-built plans, each cross culvert was examined to determine when the culvert was originally installed. It was determined that the majority of the cross culverts were over 40 years old and are reaching the ends of their service lives.

Additionally, with Department assistance, RCTC reviewed and addressed required improvements to specific culvert locations identified by the Department Maintenance Division. Those improvements were added to the proposed drainage improvements for the SR-91 CIP Build Alternatives and are included in the conceptual drainage plans.

Because a detailed analysis of drainage hydraulics is not required during the PA/ED phase, it was mutually agreed between the Department and RCTC that, prior to or during the design/build phase of the project, a comprehensive culvert investigation will be performed to determine the structural integrity of the existing drainage system. Those required culvert investigations and rehabilitation will be conducted
following the guidelines in the Department’s Design Information Bulletin 83 (DIB 83). The culvert improvements included in the Build Alternatives will be limited to the existing and proposed rights-of-way for SR-91 and I-15, and in some cases, within TCEs.

The Department will have ultimate approval of the final drainage design to ensure that deficiencies are addressed, and appropriate improvements to address those deficiencies are implemented.

Section 3.0, Existing Regional System, in the Conceptual Drainage Study Report addresses specific requirements that were agreed to by the Department and RCTC. That section of the report is provided following the last response to the last comment in this letter.

O-8-8
Refer to response to comment O-8-9, below, which explains why the projects mentioned in these comments have separate and independent utility and are not separate parts of the SR-91 CIP.

The SR-91 Eastbound Lane Addition Project cited in the footnote is a separate project from the SR-91 CIP. The Lane Addition Project was proposed specifically to address traffic congestion at a pinch point on eastbound SR-91; that improvement focuses on traffic movement in that area. That project addresses a different traffic need than the SR-91 CIP. As a result, the Lane Addition Project has separate and independent utility.

O-8-9
The projects cited in comments O-8-9 through O-8-14 and described in Exhibits A through G provided with this letter are projects separate from the SR-91 CIP. Each of those projects has independent utility and logical termini, and can be constructed and operated effectively with or without the implementation of the SR-91 CIP. These projects are all included in the cumulative impacts analysis starting on page 3.25-1 in Section 3.25, Cumulative Impacts, in the EIR/EIS and are listed individually in Table 3.25.1, Summary of Transportation Projects in the SR-91 CIP Study Area, on page 3.25-43 in the EIR/EIS.

O-8-10
Refer to response to comment O-8-9, above.
**O-8-11**
Refer to response to comment O-8-9, above.

**O-8-12**
Refer to response to comment O-8-9, above.

**O-8-13**
Refer to response to comment O-8-9, above.

**O-8-14**
Refer to response to comment O-8-9, above.

**O-8-15**
Refer to responses to comments O-8-16 through O-8-44, below, which explain why all the project impacts were fully analyzed under both NEPA and CEQA, and why the project complied with all applicable mitigation requirements.

**O-8-16**
Refer to responses to comments O-8-17 through O-8-19, below.

**O-8-17**
All areas within and immediately adjacent to the project impact limits were surveyed by foot by biologists with a thorough knowledge of the regional setting and the specific biological resources being surveyed. Where access was not available for surveys, survey preparers erred on the side of caution and assumed the presence of biological resources likely to occur based on the site conditions. For example, areas of riparian vegetation were assumed to be wetlands. In those instances, analysis in the NES (2010) was based on the assumption of presence, and avoidance/minimization measures and compensatory mitigation were included as necessary.

Refer also to response to comment O-8-18, below, for a discussion of Braunton’s milk-vetch.

**O-8-18**
The purpose of the BSA was to extend the survey area beyond the area of potential direct effects to adequately identify any biological resources and analyze direct and indirect effects. This defined a BSA that was substantially larger than the direct project impact limits. All areas of potential habitat for Braunton’s milk-vetch, including USFWS-designated critical habitat, are outside the SR-91 CIP impact limits (71 Federal Register [FR] 66374-66423), but within the BSA. All areas with potential
habitat for Braunton’s milk-vetch have been surveyed multiple times over multiple years with negative results (e.g., as documented in the SR-91 CIP NES [June 2010] and the Eastbound SR-91 Lane Addition Project NES [January 2007]). In addition, the proposed project will not directly impact these areas of potential Braunton’s milk-vetch habitat. Therefore, the project is not expected to directly affect this species. However, because Braunton’s milk-vetch occurs in alluvial washes, it is difficult to determine its complete distribution as it often changes from year to year. Regardless, as discussed in Section 3.21.3, Environmental Consequences, on page 3.21-9 in the EIR/EIS, the SR-91 CIP will not directly impact these areas of potential Braunton’s milk-vetch habitat and is not expected to directly affect this species. Therefore, as described in Section 3.21.3.3, Temporary Impacts, on page 3.21-15 in the EIR/EIS, it was determined that the SR-91 CIP Build Alternatives may indirectly affect this species temporarily during construction (e.g., dust, human presence), based on the assumption that Braunton’s milk-vetch may be present, even though it was not observed during the surveys, as described in Section 3.21.3.3, Temporary Impacts, on page 3.21-15 in the EIR/EIS. Measures NC-1, NC-2, NC-4, and NC-5, starting on page 3.17-27 in Section 3.17.4.2, Other Measures, in the EIR/EIS, are expected to avoid and/or minimize these potential impacts. Because the proposed project may indirectly affect Braunton’s milk-vetch temporarily during construction, a Section 7 Consultation was conducted and a Biological Opinion was received from the USFWS on November 30, 2011. Based on the Biological Opinion, the USFWS determined a “may affect, but not likely to adversely affect” finding for Braunton’s milk-vetch. Refer to Section O.5.10, Common Response Related to the Biological Opinion, on page O-43 in Section O.5, Common Responses, for additional information regarding the Biological Opinion and mitigation obligations.

O-8-19
The BSA includes both the area of potential direct project impacts (the project disturbance limits) and a substantial buffer area so as to allow for a thorough analysis of potential resources that could be affected by the project. As a result, the presence of potential habitat for a special-status species in the BSA does not necessarily mean the project would impact that species. Focused surveys were conducted for all special-status species with potential habitat in the BSA. A thorough analysis of potential direct, indirect, permanent, temporary, and cumulative project impacts were evaluated for each special-status species, based on the specific requirements of each species. If additional surveys were deemed to be required, they were included in the avoidance, minimization, and mitigation measures. For additional information regarding Braunton’s milk-vetch, refer to response to comment O-8-18, above.
O-8-20
The SR-91 CIP Build Alternatives are not expected to directly impact LBV, but could result in indirect temporary impacts through the loss of potential (but not occupied) habitat in Orange County. As described in the LBV discussion in Section 3.21.3.2, Permanent Impacts, on page 3.21-14 in the EIR/EIS, the proposed project may directly impact LBV in Riverside County. Measures NC-1, NC-2, NC-3, NC-5, and NC-9 in Section 3.17.4.2, Other Measures (starting on page 3.17-27), and Measures WET-1, WET-2, and WET-3 in Section 3.18.4.2, Other Measures (starting on page 3.18-15), in the EIR/EIS address potential project impacts to LBV in Orange and Riverside Counties. Measures NC-17, NC-18, and NC-19 in Section 3.17.4.2 are measures in association with the Western Riverside County MSHCP to address potential impacts to LBV in Riverside County. A Section 7 Consultation was conducted and a Biological Opinion was received from the USFWS on November 30, 2011. Based on the Biological Opinion, the USFWS determined a "may affect, but not likely to adversely affect" finding for LBV. Refer to Section O.5.10, Common Response Related to the Biological Opinion, on page O-43 in Section O.5, Common Responses, for additional information regarding the Biological Opinion.

By going through the consistency process for the Western Riverside County MSHCP and the Section 7 Consultation with the USFWS, the project must demonstrate to the resource agencies (e.g., USFWS and CDFG) that the avoidance and minimization measures and the compensatory mitigation are biologically equivalent or superior to the project impacts. This will result in full mitigation and will ensure that the impacts are not substantial. As part of the Biological Opinion, the SR-91 CIP was determined to be consistent with the relevant Western Riverside County MSHCP policies and procedures.

Refer also to responses to comments O-8-21 through O-8-28, below.

O-8-21
Table 3.20.1 (Special-Status Wildlife Species Potentially Occurring or Known to Occur within and in the Vicinity of the BSA) on page 3.20-3 and Sections 3.20.2.2 (Western Riverside County MSHCP-Covered Species) on page 3.20-8 and 3.20.2.3 (Other Special-Status Species) on page 3.20-9 in the EIR/EIS identify special-status animal species that may be indirectly impacted by the SR-91 CIP Build Alternatives as a result of the loss of potential habitat. Measures NC-1 through NC-19, WET-1 through WET-3, and AS-2 through AS-7 in Section 3.20.4, Avoidance, Minimization,
and Mitigation Measures, on page 3.20-13 in the EIR/EIS address potential impacts to special-status animal species other than burrowing owl.

For the analysis of covered activities under the Western Riverside County MSHCP, such as the SR-91 CIP, the analysis of impacts to sensitive species as a result of covered activities was addressed in the EIR/EIS completed for the Western Riverside County MSHCP in 2004. Western Riverside County MSHCP permittees (RCTC and Caltrans for the SR-91 CIP) mitigate for impacts to covered species by meeting their obligations as stipulated in the Western Riverside County MSHCP Implementation Agreement. As a permittee under the Western Riverside County MSHCP, RCTC received a consistency conclusion from Western Riverside County RCA on April 4, 2011, that the SR-91 CIP demonstrates consistency with the requirements for covered road projects and with other requirements of the Western Riverside County MSHCP.

A Section 7 Consultation was conducted and a Biological Opinion was received from the USFWS on November 30, 2011. Refer to Section O.5.10, Common Response Related to the Biological Opinion, on page O-39 in Section O.5, Common Responses, for additional information regarding the Biological Opinion.

**O-8-22**

The linear configuration of the proposed project did not preclude the analysis of project impacts to potential biological resources. As discussed in response to comment O-8-19, above, the BSA includes both the area of impact and a substantial buffer area. Starting on page 3.17-1 in Section 3.17, Natural Communities, in the EIR/EIS, the amount of each Natural Community of Special Concern that will be impacted by the SR-91 CIP Build Alternatives is identified. A complete analysis was conducted based on the quantity of impacts by the proposed project and the quality of the natural communities in the BSA. These impacts were determined not to be significant under CEQA as discussed in the EIR/EIS in Section 4.2.1.3, Biological Resources, on page 4-3; Section 4.2.2.3, Biological Resources, and Land Use and Planning, on page 4-13; and 4.2.3.2, Biological Resources, on page 4-24. Because the SR-91 CIP was considered (i.e., as a covered project) during the development of the Western Riverside County MSHCP, the part of the project in Riverside County has, in essence, already been mitigated for being within the Western Riverside County MSHCP. As part of the Biological Opinion, the SR-91 CIP was determined to be consistent with the relevant Western Riverside County MSHCP policies and procedures and would not be considered substantial under NEPA.
O-8-23
Because the only suitable habitat for the Santa Ana sucker is in the Santa Ana River and the project will not directly impact the Santa Ana River, the SR-91 CIP is not expected to directly impact the Santa Ana sucker. The Build Alternatives will not directly affect the Santa Ana sucker or its habitat in the Santa Ana River. However, the Build Alternatives could potentially affect the sucker if the project impacts water quality in the Santa Ana River because the sucker is a water-dependent species. Implementation of the water quality measures (Measures WQ-1 through WQ-4) would ensure that the project would not result in substantial adverse water quality impacts and, therefore, would not impact the Santa Ana sucker. The Corps is currently separately realigning sections of the Santa Ana River and armoring the banks with concrete. As described in Section 3.18.3.2, Permanent Impacts, on page 3.18-10 in the EIR/EIS, information for the Corps project was provided by the Corps, and the SR-91 CIP impacts were reduced accordingly. The discussion of the Santa Ana sucker in Section 3.21.3.3, Temporary Impacts, on page 3.21-15 in the EIR/EIS identifies the potential for temporary and indirect project impacts to the Santa Ana sucker as a result of changes in water quality. However, as described on page 3.10-23 in Section 3.10.3.2, Permanent Impacts, and on page 3.10-28 in Section 3.10.3.3, Temporary Impacts, in the EIR/EIS, the equivalent of over 100 percent of new impervious areas will be treated for water quality based on BMPs implemented as part of the SR-91 CIP Build Alternatives (that is, storm water runoff from all the new impervious surfaces and some of the existing impervious surfaces would be treated by the project BMPs). The BMPs included in the Build Alternatives are described in the subsection titled “Water Quality/Erosion Control” on page 2-15 in Chapter 2, Project Alternatives, in the EIR/EIS. As shown in Table 2.7 on page 2-20 in the EIR/EIS, the SR-91 CIP will include biofiltration swales and/or strips, as described in Attachment H included with this comment letter, in addition to other types of BMPs. Some of the BMPs described in Attachment H may not be feasible for the SR-91 CIP due to structural and/or safety issues. The individual types of BMPs included in the alternatives are listed in Table 2.7 on page 2-20 in Chapter 2 in the EIR/EIS. As a result of the incorporation of BMPs, the SR-91 CIP Build Alternatives were determined not to result in substantial adverse water quality impacts.

O-8-24
As described in Section 3.19.3.2, Permanent Impacts, on page 3.19-12 in the EIR/EIS, the SR-91 CIP Build Alternatives would result in the removal of parts of, but not all of, the California black walnut and Coulter’s matilija poppy populations within the BSA. Figure 3.19-2 on page 3.19-13 in the EIR/EIS indicates the parts of
those plant populations that would be permanently impacted by the project. Both these species are ranked by the California Native Plant Society (CNPS) as California Rare Plant Rank 4 (Rank 4). CNPS Rank 4 species are not considered rare, but are uncommon enough to be monitored regularly. As described in Section 3.19.2.2, Special-Status Plant Species in the Biological Study Area, on page 3.19-2 in the EIR/EIS, California black walnut and Coulter’s matilija poppy are not federally or State listed and have no official status. Although they are addressed in the EIR/EIS, they are not listed, proposed for listing, or candidates under the federal or State Endangered Species Act. In addition, they do not meet the definition of rare or endangered under CEQA Sections 15380(b) and (d) or the California Native Plant Protection Act (Fish and Game Code Sections 1900 et seq.). Both species are covered under the Western Riverside County MSHCP and are considered adequately conserved under that habitat conservation plan for project impacts to California black walnut and Coulter’s matilija poppy in Riverside County. The removal of four to eight California black walnut trees in Orange County (there are no project impacts to Coulter’s matilija poppy in Orange County as shown on Figure 3.19-1 on page 3.19-5 in Section 3.19, Plant Species, in the EIR/EIS) is not considered substantial due to the removal of a small patch of isolated individuals. As a result, the impacts of the SR-91 CIP Build Alternatives to these species are not substantial.

O-8-25
Refer to response to comment O-8-24, above.

O-8-26
The analysis of cumulative impacts to biological resources was based on information reasonably available. As noted in Section 3.25, Cumulative Impacts, starting on page 3.25-1 in the EIR/EIS, detailed information regarding possible impacts of many projects was not available. The columns in Tables 3.25.1 and 3.25.2 in Section 3.25 titled “Summary of Environmental Evaluation, Documentation, and Impacts” indicate if there was an environmental document available for each specific project at the time the cumulative impacts analysis was conducted. For other cumulative projects where information was unknown, conservative estimates (worst case) of the potential impacts of those other cumulative projects were evaluated in comparison to impacts from SR-91 CIP.

The Western Riverside County MSHCP provides a comprehensive, habitat-based approach to the protection of covered species by focusing on conservation and management of lands essential for their long-term conservation. A key purpose of the
Western Riverside County MSHCP is to address cumulative impacts to endangered, threatened, and sensitive species within the Western Riverside County MSHCP area. The Western Riverside County MSHCP assesses the total direct and indirect impacts of all the covered projects (including the SR-91 CIP) on the species and habitats within the entire Western Riverside County MSHCP region. Specifically, as a regional plan, the Western Riverside County MSHCP serves to provide mitigation for cumulative impacts to covered species and their habitats. Project consistency with the Western Riverside County MSHCP ensures that cumulative and indirect impacts to those species are effectively mitigated. The SR-91 CIP was determined to be consistent with the Western Riverside County MSHCP by the RCA on April 4, 2011. Therefore, cumulative impacts on covered species in western Riverside County, including any contribution by the SR-91 CIP, are considered to be fully mitigated.

The cumulative impact analysis for biological resources in Orange County focused on the SR-91 CIP impacts in the regional context along with the impacts from other reasonably foreseeable past, present, and future projects. The SR-91 CIP is expected to fully avoid, minimize, and/or mitigate for impacts to all sensitive biological resources. In most instances, the mitigation that will be provided will result in a net increase in native vegetation (i.e., coastal sage scrub, riparian/riverine, and oak woodland) in the region. This will result in a net beneficial cumulative effect. In addition, because the sensitive biological resources being impacted by SR-91 CIP are already disturbed due to the existing highway corridor and the habitat mitigation will take place in protected open space areas adjacent to other native vegetation, the functionality of the available native habitat for special-status species will exponentially increase. This will benefit the special-status species in the region. However, because the future is uncertain, a conservative approach was taken. Rather than relying on the likelihood of the SR-91 CIP resulting in a beneficial cumulative effect to sensitive biological resources, it was determined it may contribute a small amount to cumulative impacts.

O-8-27
Refer to response to comment O-8-26, above, regarding cumulative impact analyses for biological resources. Refer to Section O.5.10, Common Response Related to the Biological Opinion, on page O-39, for discussion regarding the Biological Opinion for the project received from the USFWS on November 30, 2011, and the project mitigation obligations.
The SR-91 CIP is not expected to result in significant impacts to any species or habitats. Cumulative impacts to biological resources are addressed in Section 3.25.5.9, Natural Communities, Plant Species, and Animal Species, starting on page 3.25-30 in the EIR/EIS; Section 3.25.5.10, Wetlands and Other Waters of the United States, starting on page 3.25-37; and Section 3.25.5.11, Threatened and Endangered Species, starting on page 3.25-39. As described in those sections, the project is not expected to contribute to cumulative impacts to biological resources. As shown on Figure 3.1.5 in Section 3.1, Land Use, in the EIR/EIS, the proposed project is expected to permanently affect CHSP in two locations. One location is an underground permanent easement that will not affect any surface features, including biological resources, in any way (i.e., it will have no project-specific or cumulative effects of any kind). The other location is at Prado Road, where construction of the Build Alternatives will require a 0.48 ac of land for a permanent easement for two permanent bridge columns, an aerial easement for the elevated Green River Road off-ramp, and a small area south of the easement. No special-status species, natural communities of special concern, or other biological resources will be affected in the project impact area at Prado Road. As a result, the SR-91 CIP will not contribute to cumulative adverse impacts on biological resources in CHSP, including special-status species and natural communities of special concern. In addition, the Santa Ana River Mainstem Project Reach 9 Phases 2A and 2B and SARI Repairs Upstream of Prado Dam (Reaches IV-A and IV-B) Project that are referenced in this comment were included in the cumulative analysis, as well as many other nontransportation projects in the area, as described in Table 3.25.2 starting on page 3.25-55 in the EIR/EIS.

O-8-28
The SR-91 CIP Build Alternatives include extensive avoidance, minimization, and compensatory mitigation measures in Section 3.17, Natural Communities, and Section 3.21, Threatened and Endangered Species, in the EIR/EIS that address potential project impacts at Coal Canyon. As a result, it was determined that the proposed project will only contribute a small amount to the cumulative impacts to Coal Canyon and the surrounding areas. The openness ratio remaining after the widening of SR-91 (5.98 calculated in feet) will be of ample size to allow large mammals to move between the regions. Implementation of Measure NC-7 on page 3.17-32 in the EIR/EIS to restore disturbed habitat with native vegetation is expected to further attract wildlife to this corridor. In addition, large areas of open space are preserved on each side of the undercrossing, and there are either no or very limited opportunities for development in those areas. While the SR-91 CIP and other projects are expected to contribute to a cumulative impact to wildlife movement at Coal
Canyon, it is expected that Coal Canyon will continue to function as a viable corridor for large mammals. Therefore, cumulative impacts to wildlife movement at Coal Canyon are not expected to be substantial.

Temporary impacts to wildlife movement at Coal Canyon will cease on completion of construction and are not expected to result in permanent cumulative effects to wildlife movement. Avoidance and minimization measures are included in Section 3.17.4.2, Other Measures, in the EIR/EIS to reduce those temporary effects during construction. For example, wildlife movement occurs predominantly at night. Measure NC-12 on page 3.17-34 in the EIR/EIS strictly limits the hours of construction to daytime except for limited instances when evening or night work is required for safety or operational reasons. When night work is required, Measure NC-9 on page 3.17-33 in the EIR/EIS requires the contractor to direct lighting and noise away from wildlife corridors. Because evening and night work will only be required in limited, short-duration circumstances (e.g., lane closure for placement of safety rails), impacts to wildlife movement would be minimal and temporary. Refer also to response to comment O-8-26, above.

O-8-29
The 2008 California Outdoor Recreation Plan (CORP), prepared by the CDPR, is the statewide master plan for parks, outdoor recreation, and open space for California. The CORP provides policy guidance to all outdoor recreation providers, including federal, State, regional and local agencies, and special district, that provide outdoor recreational lands, facilities, and services in California. It also serves as a mandatory accountability document for states receiving funds from the L&WCF Act. CDPR is the State agency with the authority to act for California in dealing with the Secretary of the Department of the Interior (DOI) regarding the L&WCF. As written in the introduction to the CORP: [the Plan] “…provides a strategy for statewide outdoor recreation leadership and action to meet the state’s identified outdoor recreation needs.” While there are strategies, issues, and actions identified in the CORP, they are broad as they must describe identified goals on a statewide basis. The CORP is not regulatory in nature, but provides information goals, activities, deficiencies, and recreation demand and projections germane to the current and future operation and success of the State Parks system. While it does identify itself as a master plan for California Parks, its policies do not translate into codified regulations or rules. However, the distribution of the L&WCF has clear stipulations on what resources may be acquired with that funding, including remuneration and/or mitigation.
In its consultation letter dated January 26, 2012, the NPS indicated that two previous L&WCF Act grants were used for the acquisition of land for CHSP. The Build Alternatives would require acquisition of a small amount of land in parcel #31 in CHSP, which was not acquired with those grants. The NPS letter goes on to say “…we have determined that LWCFA §6(f)(3) does not now apply to parcel #31, and that the proposed project, were it to be built today, would not cause a LWCFA conversion of parkland on parcel #31.” As a result, at this time, the requirements for the protection and mitigation of the acquisition of land from parcel #31 for the proposed project under Section 6(f) do not apply.

However, the NPS also indicated in its consultation letter that the timing of the closing of an approved third major L&WCF Act grant to State Parks for CHSP is not known. When that grant is closed, it will modify the Section 6(f) boundary for CHSP to include all the existing land in the park, including all of parcel #31. Because of the uncertainty of the timing of the closing of that approved L&WCF Act grant to CHSP, the NPS consultation letter also recommends “…that CEQA and NEPA environmental compliance treat the property as if §6f applied now, in terms of potential impacts assessment and mitigation measures.”

Because parcel #31 is not currently subject to the requirements of protection and mitigation under Section 6(f), RRTC and the Department are proceeding without treating parcel #31 as if Section 6(f) applies now and will continue to monitor the status of the L&WCF Act grant closing. However, in the event that the grant is closed prior to construction of the SR-91 CIP, the requirements for the protection under Section 6(f) will need to be analyzed and addressed with CHSP and CDPR, Office of Grants and Local Services.

Therefore, the proposed 0.48 ac easement cannot be analyzed against the CORP (a non-regulatory plan) for consistency because of the strategic nature of the CORP. Refer also to Section 0.5.5, Common Response Related to Chino Hills State Park, on page 0-18 for project effects at CHSP, mitigation for those effects, and ongoing consultation with CDPR regarding the project effects and mitigation at CHSP, including compliance with the requirements under the L&WCF Act.

The de minimis finding described on page 3.1-79 in the Draft EIR/EIS was clearly identified as a “Preliminary Section 4(f) De Minimis Finding.” De minimis impacts on publicly owned parks are defined as those that do not adversely affect the activities, features, and attributes of the Section 4(f) property after consideration of
avoidance, minimization, and mitigation measures. The permanent 0.48 ac easement at CHSP will not adversely affect the activities, features, and attributes of the park because there are no park features or amenities in the 0.48 ac area proposed to be used. The 0.48 ac area proposed to be used is a very small percent of the overall 14,173 ac park, and its use will not adversely affect the ability of park visitors to use the trail north of the Green River Road off-ramp or Prado Road (a public road) because the elevated off-ramp will not be within the right-of-way for, or otherwise block access to, Prado Road, and will not be within the boundary of the State Park or block access to the trailhead. Refer to Section O.5.5.4, De Minimis Determination, on page O-22, which indicates that the Department made a determination that the project effects at CHSP would be de minimis and State Parks concurred with this determination on March 26, 2012.

Refer also to Section O.5.5, Common Response Related to Chino Hills State Park, for project effects at CHSP, mitigation for those effects, and the consultation with State Parks regarding the project effects and mitigation at CHSP.

**O-8-30**
The total area that will be used at CHSP is 0.48 ac; this includes most of the area under the aerial easement for the Green River Road westbound off-ramp (the columns for the off-ramp will be within the area under the easement), and a small area south of the easement. Part of the area under the aerial easement is within the right-of-way for Prado Road, a public road. Because this is a public road and is not part of CHSP, that part of the area under the aerial easement was excluded when totaling the acreage in the park boundary that would be used by the SR-91 CIP. The 0.48 ac contains no park amenities or facilities and does not contain native plants. Access to the trail head and the park maintenance road in this area will not be affected by the SR-91 CIP.

In 2009, as part of consultation with State Parks for the Section 4(f) process for the proposed SR-91 CIP, State Parks provided a number of agreements and other documents related to the purchase of land for CHSP. Those documents all relate to the purchase of approximately 655 ac of land on the south side of SR-91 between approximately SR-241 and the Orange/Riverside County line. That property is often referred to as the St. Claire property. The property was sold by the Cypress Canyon Group LLC to the CDPR for use as part of CHSP in the early to mid-1990s.

The following is a list of the documents received from State Parks:

1. Notification of Property Transfer CDPR 3-24-05 with attachments
2. Grant Deed Transferring Ownership from Cypress Canyon Group LLC to CDPR (10/3/00)

3. Quitclaim Deed (1-21-00)

4. Agreement Declaring Restrictive Covenants (9/21/00, recorded 10/3/00)

5. Memorandum of Unrecorded Grant Agreement (10-3-00)

6. California Wildlife Conservation Board (WCB) Real Property Acquisition Grant Agreement WC-0961-DT (5-24-00)

7. Property Acquisition Agreement CDPR (Buyer) and Cypress Canyon Group LLC (Seller) (8-28-00)

8. Policy of Title Insurance (10-3-00)

9. Program Supplement to No. MO22 Rev. 2 to Administering Agency-State Agreement for Federal-Aid Projects No. 12-0681 (9-19-00)

10. Financial Assistance Agreement, Agreement No. D99-054 (3-20-00)

11. Pledge Agreement in Support of CDPR’s Acquisition of the St. Claire Property at Coal Canyon (9-26-00)

Detailed review of these documents was conducted to assess whether they include possible restrictions on the use of land covered by the agreements for uses other than park uses within CHSP. Based on that review, Documents 1, 2, 3, 7, 8, and 10 did not appear to contain any restrictions related to the use of land from the 655 ac parcel. The restrictions in the other documents are:

- **Documents 4 and 9**: It appears that transferring land from State Parks to the Department, which are both State agencies, is consistent with the requirements of this agreement that TEA funds and land be committed to transportation enhancement projects.

- **Documents 5 and 6**: It appears that the only restriction to use of land under these agreements is the requirement for written approval of the use of the land from the WCB.

- **Document 11**: Although the language in this agreement appears to restrict the use of the land for any purpose other than preservation, the agreement does not identify any specific requirements for written approvals or any notification if land is proposed to be used for other purposes.

As discussed earlier, the Build Alternatives will result in the permanent use of land in CHSP at the Green River Road off-ramp. The Build Alternatives will also require permanent subsurface easements on the south side of SR-91 in the area covered by those documents. This permanent use is for a subsurface easement for the tiebacks for
the tieback wall. There would be no permanent use of land in CHSP at ground level at this location, and there would be no project-related facilities at ground level at this location. Tiebacks are steel rods approximately 20 to 30 ft long, which will be drilled into the hillside from the State highway right-of-way and extending under CHSP. The tiebacks will be attached to the retaining walls on the highway right-of-way. No buildings or other structures can be constructed above the tiebacks to protect the integrity of the tiebacks and the retaining wall. However, because the tiebacks are at the boundary of CHSP, it is unlikely that State Parks would construct any buildings or structures over the area of the subsurface easements and the tiebacks. Other park features such as benches, interpretive signing, and trail signage can be installed over the subsurface easement area.

The construction of the SR-91 Build Alternatives will require TCEs in this part of CHSP to accommodate construction activities related to extending the existing culverts at these locations. There would be no permanent project-related facilities in these areas. The disturbed areas in the TCEs would be returned to their existing condition, or better, at the completion of construction in these areas and prior to the return of these areas to State Parks.

As a result, it appears that the existing agreements related to the land in CHSP on the south side of SR-91 would not prohibit the permanent subsurface easement or the TCEs anticipated to be required under the SR-91 Build Alternatives.

Refer also to Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18 for project effects at CHSP, mitigation for those effects, and the consultation with State Parks regarding the project effects and mitigation at CHSP.

The footnote on page 18 of this comment letter mentions an off-ramp at Coal Canyon. There is no off-ramp proposed at Coal Canyon as part of the SR-91 CIP Build Alternatives.

**O-8-31**

As discussed in the Los Angeles Times article provided in Attachment L to this comment letter, the Coal Canyon Road underpass was closed in 2003 to allow for more wildlife movement between the Santa Ana Mountains and the Puente-Chino Hills. Indirect effects (including automobile traffic, litter, and noise in the area) to wildlife at Coal Canyon were thoroughly evaluated and determined not to be substantial. Because potential project impacts to wildlife movement due to traffic, litter, noise, etc. will not take place in the Coal Canyon wildlife crossing, they are
removed by distance and time; therefore, they would be indirect impacts of the project.

The only cause of indirect effects such as noise and lighting at Coal Canyon would be caused by traffic on the SR-91 mainline between Gypsum Canyon Road and Green River Road. As described in Table 3.6.22, Freeway Mainline Peak-Hour Levels of Service for Baseline/Existing (2007), 2035 No Build, and Design Year 2035 with Alternatives 1 and 2, in the EIR/EIS, the mainline peak-hour LOS on SR-91 will remain relatively the same, with or without the project. Because traffic levels will remain relatively the same with or without the project, indirect effects caused by traffic (e.g., noise and lighting) will remain relatively the same with or without the project. Therefore, Alternatives 1 and 2 are not expected to contribute substantially to these indirect impacts in Coal Canyon and the placement of sound barriers at Coal Canyon is not warranted. The forecasts in Table 3.15.13 indicate that noise levels are anticipated to be approximately the same in the future with or without the project, and that those future noise levels will be approximately 1–2 dB greater than under existing conditions. The actual noise contour lines would shift out, corresponding to the widening of the freeway (approximately one lane in each direction at Coal Canyon). Such a shift would be less than 1 dB at any ground location. Discussion was added to the Coal Canyon text in Section 3.17.3, Environmental Consequences, on page 3.17-16 in the EIR/EIS to describe this analysis.

In addition, the following condition, included in the Biological Opinion, was added as Measure TE-15 in the EIR/EIS. As with all project conditions and measures, RCTC and the Department will comply with the requirements of this measure.

**TE-15 Measure for Light Intrusion and Wildfires.** To minimize adverse effects from light intrusion from vehicle headlights and the potential threat of increased fires from the operation of SR-91, during final design, the Department and RCTC will work with the USFWS to investigate the possibility of adding features along SR-91 in the vicinity of the Coal Canyon wildlife crossing in Orange County. For example, consideration can be given to the placement of K-rail, concrete walls, and/or hardscaping barriers along the shoulder of SR-91. In investigating these features, consideration must be given to motorist safety, freeway
operations, vehicle headlight mitigation and the potential fire threat.

Refer also to Section O.5.5.7, Other Commitments by RCTC to Chino Hills State Park, on page O-28 which describes a March 26, 2012 Letter of Intent from RCTC to State Parks committing to provide a barrier along both the north and south sides of SR-91 in the vicinity of Coal Canyon, to shield headlight glare and freeway noise. The RCTC is committed to providing this barrier as part of the Ultimate Project in Alternatives 1 and 2.

O-8-32
Refer to response to comment O-8-31, above.

O-8-33
CHSP is already adjacent to parts of SR-91 and SR-71 and, therefore, is currently exposed to potential risks of fire associated with vehicle fires on SR-91 and other ignition sources (such as cigarettes thrown out car windows). This is a risk whenever a freeway or road is adjacent to areas of open space such as CHSP. This risk would continue unchanged in the future under the No Build Alternative and both Build Alternatives. However, Measure TF-15 was added to Section 3.21.4, Avoidance, Minimization, and/or Mitigation Measures, to address potential indirect impacts due to fire risk. In addition, as discussed in Section 3.5.2.2, Permanent Impacts, on page 3.5-7 in the EIR/EIS, the project would improve traffic throughput and travel times, and reduce delays for fire protection providers, and therefore may improve response times for emergency services. There is a temporary increased risk of fire during construction. Implementation of Measure NC-4 on page 3.17-31 in the EIR/EIS would minimize that risk.

Refer to Section O.5.5.6, Measures for Other Effects at Chino Hills State Park, on page O-25 which includes Measure UES-4, to provide a barrier on SR-91 between approximately SR-241 and SR-71, on both the westbound and eastbound sides of SR-91, to provide fire suppression and prevention benefits to CHSP.

The Freeway Complex Fire cited in this comment started north of and burned west and south through CHSP to SR-91, which effectively served as a firebreak to minimize the fire jumping over the freeway. That beneficial effect of the SR-91 facility is discussed on page 4-4 in Section 4.2.1.5, Hazards and Hazardous Materials, in the EIR/EIS.
**O-8-34**
Table 3.25.3 on page 3.25-63 in the EIR/EIS indicates that the SR-91 Build Alternatives would result in the permanent use of 0.48 ac of land in CHSP, but not from any other Section 4(f) or 6(f) resources. As a result, the analysis focused on whether the project effects on CHSP would contribute to cumulative adverse impacts on parks and the recreation functions in parks, specifically CHSP, when considered in conjunction with the effects of other projects. Because CHSP is so large (approximately 14,000 ac), it is adjacent to public facilities such as SR-91 and SR-71 or public improvement projects such as the work being conducted in the Lower Santa Ana River. As a result, land from CHSP has in the past, and will likely in the future, be needed for public projects such as the SR-91 CIP. At the same time, State Parks has in the past acquired, and likely will continue to acquire in the future, land for incorporation within the boundary of CHSP. As a result, although various projects have in the past required, or may in the future require, the use of land from CHSP, the overall effect of the removal of land from CHSP is not substantial when considered in the context of the overall size of the park and that ongoing land acquisition will likely result in the total net increase in the area of the park over time. As a result, the SR-91 CIP, by removing approximately 0.48 ac of land from CHSP [which will be mitigated for as part of the project consistent with the requirements of CEQA, NEPA, and Section 4(f)] is not expected to contribute to cumulative adverse impacts on CHSP.

**O-8-35**
Refer to response to comment O-8-29, above, for discussion regarding the appropriateness of a de minimis finding for the project effects at CHSP. Refer also to Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18 in Section O.5, Common Responses, for project effects at CHSP, mitigation for those effects, and the consultation with State Parks regarding the project effects and mitigation at CHSP.

**O-8-36**
Refer to Section 3.1.3.3, Section 4(f), Section 6(f), and the Public Parks Protection Act, and Appendix B, Resources Evaluated Relative to the Requirements of Section 4(f), in the EIR/EIS for the analysis of the project effects under Sections 4(f) and 6(f) consistent with the requirements of the Department of Transportation Act of 1966. Refer to Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18 in Section O.5, Common Responses, for project effects at CHSP, mitigation for those effects, and the consultation with State Parks regarding the project effects and mitigation at CHSP.
O-8-37
Refer to response to comment O-8-29, above, for discussion regarding the appropriateness of a de minimis finding for the project effects at CHSP. Refer also to Section O.5.5, Common Response Related to Chino Hills State Park for project effects at CHSP, mitigation for those effects, and the consultation with State Parks regarding the project effects and mitigation at CHSP.

It is acknowledged that the description of the park amenities in the vicinity of Green River Road was not correct in Table 3.1.5 on page 3.1-56 in the Draft EIR/EIS. The description of this area was revised in Table 3.1.5 to indicate there is a trail head and a park access/service road just north of the Green River Road interchange. However, the incorrect information in Table 3.1.5 does not make the EIR/EIS “...legally deficient as an informative public document under CEQA and NEPA. See San Joaquin Raptor...” (“[a]n accurate project description is necessary for an intelligent evaluation of the project environmental effects of a proposed activity.”)’” as cited in this comment. The correct information regarding the trail was provided later on page 3.1-63 in the subsection titled “Permanent Impacts to Parks and Recreational Facilities” in the Draft EIR/EIS, in the discussion of the preliminary de minimis finding. In addition, the description of these amenities is not a part of the SR-91 CIP description and, therefore, the correction noted above would not change the project description provided in Chapter 2, Project Alternatives, in the EIR/EIS.

O-8-38
Refer to Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18 for project effects at CHSP, mitigation for those effects, and the consultation with State Parks regarding the project effects and mitigation at CHSP.

O-8-39
Refer to response to comment O-8-29, above, for discussion regarding the appropriateness of a de minimis finding for the project effects at CHSP. Refer to Section O.5.5, Common Response Related to Chino Hills State Park, for project effects at CHSP, mitigation for those effects, and the consultation with State Parks regarding the project effects and mitigation at CHSP.

O-8-40
The key determination in assessing the potential for constructive use impacts is whether “...the projects proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired.” As discussed in Section B.3.2, Assessment of the Potential
for Constructive Uses, in Appendix B in the EIR/EIS, the analysis in the EIR/EIS determined that the indirect impacts of the SR-91 Build Alternatives would not be so severe as to meet this standard at the parks near the SR-91. The summary conclusion in Appendix B is consistent with the Department’s SER guidance for Section 4(f) documentation. Further, the citation from CEQA requiring documentation to be “...in the EIR...” not “...scattered here and there in the EIR appendices...” is not relevant because Section 4(f) is a federal issue, not a State issue.

O-8-41
Refer to Section O.5.5, Common Response Related to Chino Hills State Park, for discussion regarding CHSP and compliance with the requirements of Section 6(f).

O-8-42
Refer to Section O.5.5, Common Response Related to Chino Hills State Park, for discussion regarding CHSP and compliance with the requirements of Section 6(f), including required consultation with State Parks and the NPS.

O-8-43
Refer to Section O.5.5, Common Response Related to Chino Hills State Park, for discussion regarding CHSP and compliance with the requirements of Section 6(f).

O-8-44
Discussion regarding the Public Park Preservation Act of 1971 was added in a number of places, as appropriate, in Section 3.1.3, Parks and Recreational Facilities, starting on page 3.1-52. As discussed in detail in Section 3.1.3, Alternatives 1 and 2 would require the use of land in one publicly owned park (i.e., CHSP) and permanent subsurface easements at CHSP and the New OC Park (NNL). As a result of this acquisition of land from CHSP and the New OC Park (NNL) under Alternatives 1 and 2, compensation will be provided that meets the requirements of the Public Park Preservation Act for compensation, land, or both.

O-8-45
Refer to responses to comments O-8-46 through O-8-53, below.

O-8-46
Refer to response to comment O-6-5 on page O-256, which summarizes why the Build Alternatives would not result in growth-inducing impacts.

The growth analysis in Section 3.2, Growth, follows the guidance in the Department’s Guidance for Preparers of Growth-Related, Indirect Impact Analyses which discusses
whether the project would change or improve accessibility in and around western Riverside County, and where, when, where, and how much growth might occur with and without the project starting on page 3.2-9.

This comment cites three potential effects of growth. Those three potential effects are discussed in Section 3.2.3, Environmental Consequences, on page 3.2-9 in the EIR/EIS. That analysis concludes:

- The improvements to SR-91 and I-15 along with the associated interchanges in Alternatives 1 and 2 described in detail in Chapter 2, Project Alternatives, in the EIR/EIS are expected to result in improvements to operational performance by providing improvements that will increase the efficiency of the local interchanges and reduce the durations of congestion on the highway, but would not substantially modify local, intra-regional, or inter-regional accessibility to and/or from SR-91 and I-15. The Build Alternatives will not change accessibility to these freeways but will make the local interchanges operate more efficiently and at an acceptable LOS.

- The improved travel times expected to be achieved as a result of Build Alternatives could have a slight influence on demand for residential and nonresidential uses in the project area or nearby cities; however, it would not be expected to be sufficient to result in the need to modify adopted General Plans to allow for greater levels of development (residential and nonresidential). The Build Alternatives are expected to accommodate existing, approved, and planned growth in the area, but are not expected to influence the amount, timing, or location of growth in the area.

- The project is proposed in response to existing and forecast traffic congestion resulting from prior restrictions to any improvements on SR-91 east of the Orange County toll road and traffic congestion due to growth, both locally and regionally, that has already occurred. This area is projected to continue to experience growth in population and jobs even in jurisdictions relatively constrained by limited land available for development. Additional housing and businesses in western Riverside County will generate additional traffic. However, as discussed in Section 3.2, that growth is forecast to occur with or without the project based on adopted General Plan Land Use Elements. The project area includes highly urbanized areas (City of Corona, the part of Riverside County within the project limits) with little remaining development capacity. SR-91 is also constrained on the south by the Cleveland National Forest and the New OC Park (NNL), and on the north by CHiSP, the Santa Ana River, and Featherly Regional Park. The
proposed project is not expected to influence the amount, timing, or location of growth in the project area because, as discussed in Section 3.2, Growth, the type and location of the Build Alternatives are not sufficient to result in pressure for additional growth in western Riverside County. Accordingly, there is no reasonably foreseeable project-related growth expected to result from the proposed project.

As a result, the Build Alternatives were determined not to result in growth-inducing impacts.

O-8-47
Refer to responses to comments O-6-5 (on page O-217) and O-8-46 (above), earlier, which describe why the Build Alternatives would not result in growth-inducing impacts. As discussed starting on page 3.2-1 in Section 3.2, Growth, in the EIR/EIS, the majority of the areas along SR-91 and I-15 are built out or nearly built out. The project area is not a “fringe” area. As discussed in Section 3.1, Land Use, and Section 3.2, Growth, in the EIR/EIS, the majority of this area is built out or protected from development in parks and other open space uses. Refer to Figures 3.1-1 and 3.1-2 in Section 3.1, Land Use, which show existing and General Plan designated land uses. As shown on those figures, there are not substantial amounts of “undeveloped parcels” or areas of “high land availability” adjacent to the project study area that could be subject to development pressures. Further, the local jurisdictions’ General Plans already identify and designate land uses and land use densities within all the areas in their jurisdictions. There are no areas in the cities and counties along SR-91 and I-15 shown as undesignated on those General Plans (refer to Section 3.1, Land Use, in the EIR/EIS). As a result, the minor improvements in operations on SR-91 and I-15 are not sufficient to create pressure for new or higher density development along the project segments of SR-91 and I-15. Refer also to responses to comments O-8-48 and O-8-50, below.

O-8-48
As discussed on page 3.2-10 in Section 3.2, Growth, in the EIR/EIS, the SR-91 CIP Build Alternatives would result in improvements to the operational performance of SR-91 and I-15 but would not add new interchanges with local roads or other freeways on either SR-91 or I-15, would not increase the capacity of local streets beyond the immediate vicinity of the interchanges on SR-91 and I-15, and would not provide new access between SR-91 and I-15. The Build Alternatives will not change accessibility to the freeway but will make the local interchanges operate more
efficiently and at an acceptable LOS. Although operations on SR-91 and I-15 would be improved, this would not result in a substantial change in accessibility to/from these corridors and, therefore, the project improvements would not substantially modify overall local, intra-regional, or inter-regional accessibility to and/or from SR-91 and I-15.

It is acknowledged that the SR-91 CIP general-purpose and HOV/tolled express lanes will increase the capacity on SR-91. However, as noted in Section 3.2, the SR-91 CIP is proposed in response to existing congestion and demand in that corridor and it would not increase accessibility to/from SR-91 and I-15. As a result, that increased capacity is not expected to influence the amount, timing, or location of growth in western Riverside County.

This comment asserts that the SR-91 CIP project area is in an urban/suburban “fringe.” Refer to response to comment O-8-47, above.

**O-8-49**

Improvements in travel times are expected to have only a very minor effect on pressures for growth and development, as explained in the following text from page 3.2-12: “The improved travel times expected to be achieved as a result of Build Alternatives could have a slight increase on demand for residential and nonresidential uses in the project area or nearby cities. However, that influence is expected to be very minor when considered with other pressures for growth and development, specifically economic and market conditions in the area and developers available and interested in developing residential and/or nonresidential projects in western Riverside County. Demand for new development is largely driven by economic and market conditions. Improved travel times on SR-91 and I-15, while expected to benefit residents and businesses in this part of western Riverside County, are not expected by themselves to result in growth pressure for new residential or nonresidential uses in the area.”

**O-8-50**

The overall study area is approximately 50 percent built out. However, a very large percentage of the study area that is not “built out” is protected from development in parks and other designated open space. Refer to Figures 3.1-1 and 3.1-2 in Section 3.1, Land Use, which show existing and General Plan designated land uses. Those figures show the areas used or designated for recreation and other open space. As shown on Figure 3.1-1, land available for development is very limited in the incorporated cities and the areas not protected in parks and other open space. The
pressure for development in those already urbanized areas is largely related to economic factors such as less expensive housing rather than available freeway access to other areas. In addition, as discussed starting on page 3.1-1 in Section 3.1, Land Use, in the EIR/EIS, future growth in these areas has already been accounted for in the local jurisdictions’ adopted General Plans. As a result, the operational improvements in the Build Alternatives will not result in improvements in accessibility sufficient to increase demand for development in the areas along SR-91 and I-15.

O-8-51
Refer to response to comment O-8-50, above. Refer also to Section 3.1.1, Existing and Future Land Uses, starting on page 3.1-1 in the EIR/EIS, which clearly discusses the existing adopted General Plan land uses in the areas along SR-91 and I-15 and indicates much of that area is already built out or nearly built out consistent with those adopted General Plans. Future development in those areas is constrained by several factors. First, much of those areas are already built out or nearly built out. Second, and very importantly, the General Plans do not propose substantial changes in land uses or densities along the project segments of SR-91 and I-15. Overall economic conditions in the region and subregion are also very important factors in encouraging or discouraging development. Development and growth are dependent on consumers to acquire the product or service. Potential consumers must have sufficient economic resources to purchase and/or lease new developments. For example, if potential consumers do not have the economic resources to purchase new homes, then new home construction will slow until supply matches demand. Finally, the presence of existing development, parks, other open space, and the Santa Ana River create constraints to development because development is excluded from those areas.

O-8-52
Refer to responses to comments O-8-46 through O-8-51, above.

O-8-53
Refer to “Growth-Related Effects” in Table 3.25.3 on page 3.25-63 in the EIR/EIS, which indicates that “As discussed in Section 3.2, Growth, Alternatives 1 and 2 and their design variations would have little influence on the location, amount, rate, or type of growth in the study area. Because Alternatives 1 and 2 and their design variations would not result in direct or indirect growth-related effects, the potential
for the SR-91 CIP to contribute to cumulative impacts related to growth inducement was not further evaluated in this analysis. No mitigation is required.”

As a result, although there may be growth-inducing impacts associated with other transportation and other development projects (including those listed in Tables 3.25.1 and 3.25.2 on pages 3.25-43 and 3.25-55, respectively, in the EIR/EIS), the SR-91 CIP would not result in growth-inducing impacts and therefore would not contribute to cumulative growth-inducing impacts, if any, associated with those other projects.

**O-8-54**
As reflected in the responses to comments O-8-1 through O-8-53, above, in other responses in this Appendix, and throughout the EIR/EIS, the Draft EIR/EIS as prepared and circulated to the public provides sufficient information to adequately and fully identify and assess the potential impacts of the proposed project and includes mitigation that is sufficiently detailed to adequately address those potential impacts. As a result, RCTC and the Department did not prepare or circulate a revised Draft EIR/EIS as proposed in this comment because such recirculation is not required under either CEQA or NEPA. Refer also to Section O.5.4.3, Recirculation of the Environmental Document, in Section O.5.4, Common Response Related to the Environmental Process and Schedule, on page O-15, for additional discussion regarding why RCTC and the Department did not prepare or circulate a revised Draft EIR/EIS because such recirculation was not required under either CEQA or NEPA.

Refer also to responses to comments O-8-2 through O-8-53, above.
3.0 EXISTING REGIONAL SYSTEM

Existing storm drain facilities will be protected in place where possible and extended to the limits of the SR-91 CIP. Existing concrete headwalls will be removed and the storm drain will be extended to the new grading limit. New headwalls or outlet structures will be constructed to drain to respective natural drainage course. Appendix A shows Site Photos. Exhibit B through Exhibit F shows the locations of the culverts and their tributary watersheds.

The existing drainage system for SR-91 has been in place for many years and in some places the system may be reaching the end of its expected service life. RCTC and Caltrans have agreed to work together in an effort to assess the structural integrity of the existing drainage system. RCTC will investigate the necessary locations and propose a fix prior to or during the Design-Build phase. A sample investigation process is described here:

- All culverts within the project limits will have their inlets and outlets photographed. Any laterals coming from the median will have their outlets photographed. The condition of the pipe material at these locations will be described.
- A strong flashlight could be used to examine the culvert. Any noticeable deformations will be noted. The presence of standing water will be noted.
- Based on what is seen at the inlet and outlet a more detailed investigation may be warranted. A suspect culvert may be remotely videoed and this may require the culvert be cleaned.
- Special consideration will be given to the larger culverts as they present the greatest threat to safety.
- Based on the investigation, a determination will be made regarding culvert rehabilitation (following Design Information Bulletin No. 83) or replacement.

Improvements to failing culverts will be made where necessary. Funding issues will be discussed with Caltrans depending on the nature of repairs and both agencies will develop a mutually acceptable plan to fix the problem areas during the construction phase.

Table 3.1 provides relevant information for the culverts that will be impacted by the SR-91 CIP.
July 18, 2011

Mr. Aaron Burton
Caltrans District 8
464 W 4th Street, 6th Floor
San Bernardino, CA 92401

RE: Comments for the State Route Corridor Improvement Project EIR, Ayres Hotel – 1900 Frontage Road, Corona

Dear Mr. Burton,

I am writing regarding the draft EIR for the SR91 expansion in regards to impacts to my property from the proposed constructions envisioned by alternatives outlined in the document. My concerns can be categorized in two Areas:

Visual

1. **Impact:** The freeway frontage views of my buildings will be lost because the East Bound Off ramp will block the sight lines for the motorists.
   **Mitigation:** Wayfinding measures should be implemented that would direct patrons to the obscured frontage road businesses.

2. **Impact:** The rerouting of the frontage road will disrupt the historical traffic patterns. We believe that it will be more difficult for existing and new patrons to find the businesses along the frontage road.
   **Mitigation:** Short term and long term wayfinding solutions to direct traffic from the freeway exits to the Frontage Road businesses.

3. **Impact:** The installation of the proposed sound walls would further obscure the existing businesses on the Frontage Road.
   **Mitigation:** The sound walls in front of my property are deemed “feasible” but not “reasonable” in the EIR, so they should not be built.

4. **Impact:** The proposed East Bound Off ramp will pose a significant opportunity for graffiti if it is not obscured by landscape screening or enhanced by theme graphics.
   **Mitigation:** City identity graphics should be incorporated on the walls or bridge structure to discourage graffiti. Where space is available, screen planting should be used to reduce the visual impact of the off ramp structure in view of Frontage Road businesses.

**Phasing and Access Impacts**

1. **Impact:** The public access to my properties is vital for business viability during construction.
   **Mitigation:** Phasing plans should prioritize public access to businesses along Frontage Road. Closures must be avoided as these businesses are freeway patron dependant.

Respectfully submitted,

Bruce Ayres
President
O-9-1

This letter was submitted after the close of the public comment period, and the commenting party did not request an extension of the review period from the Department. In compliance with the requirements of NEPA, responses to the comments in this comment letter are provided below.

Although for CEQA compliance purposes, no response to the comments in this letter is required (refer to Section 15088 in the State CEQA Guidelines), they are provided here as noted above.

The content of this letter from the owner of the Ayres Hotels is identical to the content of letter O-2 on page O-195. Letter O-2 was submitted by BMLA Landscape Architecture on behalf of the owner of the Ayres Hotels. Refer to responses to comments O-2-1 through O-2-9 starting on page O-196, provided earlier in this report.
July 20, 2011

Aaron Burton
California Department of Transportation
District 8
464 West Fourth Street
San Bernardino, California 92401

State Route 91 Corridor Improvement Project Draft Environmental Impact Report/Environmental Impact Statement

Dear Mr. Burton:

The Wildlife Corridor Conservation Authority (WCCA) has reviewed the State Route 91 Corridor Improvement Project Draft Environmental Impact Report/Environmental Impact Statement (DEIR/S). We request that you consider and address these comments.

WCCA was created for the proper planning, conservation, environmental protection and maintenance of the habitat and wildlife corridor between the Whittier-Puente-Chino Hills and the Cleveland National Forest in the Santa Ana Mountains. As the last major natural open space resource connecting Los Angeles, Orange, San Bernardino, and Riverside Counties, the wildlife corridor provides essential relief from the urban environment. It exists as a single ecosystem in which changes that affect one part will invariably affect all other parts.

In summary, WCCA is concerned with the major significant inadequacies of the DEIR/S in its portrayal of direct and indirect impacts on Chino Hills State Park (CHSP), biological resources, and recreational resources. The impacts are grossly understated, and the mitigation is clearly deficient. Therefore, we urge recirculation of this document. There would be project-specific and cumulative impacts from a multitude of freeway and other projects along State Route (SR)-91, some of which are interrelated with the subject project. WCCA maintains that the DEIR/S is deficient, and that the Final Environmental Impact Report/Environmental Impact Statement (FEIR/S) must provide additional serious consideration of less damaging alternatives and substantial additional mitigation.
The DEIR/S Does Not Adequately Identify and Analyze Significant Impacts to Chino Hills State Park, Wildlife Movement, Other Biological Resources, and Recreational Resources

The DEIR/S does not provide an accurate representation of the actual significant project-specific and cumulative impacts to CHSP, wildlife movement, other biological resources, and recreational resources that would result from the proposed project, interrelated projects, and non-related nearby projects. The DEIR/S downplays those impacts.

The DEIR/S continually emphasizes that 0.06 acre of impact to CHSP is "minor" (DEIR/S, p. 3.1-70) and California Department of Transportation (Caltrans) concluded a de minimus finding impact per Section 4(f) legislation¹ (DEIR/S, p. 3.1-75). In fact, the impacts on park resources, biological resources, and recreational resources are grossly understated.

All of the impacts together total more than 0.06 acre, in direct and indirect impacts, and the DEIR/S fails to acknowledge the significance of the impacts with respect to the location. Footings for three columns supporting the bridge structure would be located on a total of approximately 0.06 ac of land within the boundary of CHSP (DEIR/S, p. 3.1-60). The 0.06 ac would be at ground level below the 0.73 ac aerial easement for the elevated structure or bridge. Both alternatives (1 and 2) would result in one permanent subsurface easement in CHSP to accommodate subsurface tiebacks on the south side of SR-91 (i.e., a 1.65 ac subsurface easement under Alternative 1 and a 1.88 ac subsurface easement under Alternative 2). Table 3.1.6 of the DEIR/S (p. 3.1-63) identifies 2.0 ac within CHSP for temporary construction easements. Clearly, this totals to more than 0.06 ac. Also, regarding the subsurface easement, the DEIR/S does not appear to address any future maintenance or potential emergency work, and thus future disturbance, for any subsurface work. If in fact no maintenance would be needed or anticipated, then why would an easement be needed? Regarding the "temporary" impacts, the DEIR/S does not adequately address the period of impact. A year of construction work would have much greater impact (e.g., disturbance to wildlife) than for example, one week of construction work.

The DEIR/S also fails to address the importance of the location of the impacts on the park. The project impacts would occur within a narrow stretch of CHSP (see Figure 2-16 of

¹Section 4(f) legislation is found at 23 United States Code (USC) 138 and 29 USC 303. Federal Highway Administration's final rule on Section 4(f) de minimus findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and 23 CFR 774.17 (DEIR/S, p. 3.1-52).
DEIR/S), which is relevant for both human users and wildlife movement. This area is a key park entrance location (for people park users)\(^2\) and a key part of the wildlife linkage. The impact in this area is important because of the key location, and because it is already constrained.

Furthermore, there will be clearly a permanent significant impact to human park users. Users of the trail in CHSP would have very close views of a large retaining wall on the north side of SR-91 under Alternatives 1 and 2 (DEIR/S, p. 3.1-60). This permanent impact has not been adequately mitigated.

As the DEIR/S (p. 3.17-13) states, Coal Canyon is the most important remaining wildlife connection between the Santa Ana Mountains and the Puente-Chino Hills. The project would widen the Coal Canyon undercrossing (DEIR/S, p. 3.17-18). There would also be increased noise, lighting, and potential for fire starts. The DEIR/S’s conclusion (p. 3.25-31) that alternatives 1 and 2 would beneficially affect wildlife movements in the area defies logic. Clearly there are significant direct and indirect impacts to much greater than 0.06 ac.

According to the DEIR/S (p. 3.1-74), a de minimus finding requires that the proposed action not adversely affect the activities, features, and attributes of the 4(f) resource. How can 4(f) de minimus finding be made, when in fact the proposed action clearly does adversely and significantly affect the park’s recreational and biological resources?

The project will have substantial impacts on coastal sage scrub (permanent impacts to 27.24 acres, DEIR/S, p. 3.17-15), and habitat potentially used by coastal California gnatcatchers (a bird species designated as threatened by the United States Fish and Wildlife Service). The DEIR/S is deficient for not defining impacts to gnatcatchers and their habitat in CHSP.

The DEIR/S is also deficient for not fully addressing the consistency or inconsistency of the proposed project with any restrictions on CHSP land, which was partially funded in part by the Land and Water Conservation Fund. State Parks provided the following additional text to be included in the Section 4(f) analysis, in their October 23, 2009 letter on the Section 4(f) consultation:

...the use of the two Coal Canyon parcels on the north and south side of SR-91 is limited by restrictive covenants and similar instruments. The Lead Agency will investigate restrictions on the proposed use of CHSP.

\(^2\)See State Parks’ letter dated October 23, 2009. This is only existing public access point for hikers and vehicles in this southern portion of Chino Hills State Park.
As stated in the DEIR/S (p. 3.25-34), past and present SR-91 transportation improvements and other development in the RSA [resource study area] have contributed incrementally to the reduction of opportunities for wildlife to move north and south between the Santa Ana Mountains and Chino Hills. Some of these freeway projects are interrelated and should be considered together in one California Environmental Quality Act (CEQA) document. Other projects that may not be interrelated would still contribute to significant cumulative impacts to biological and recreational resources in the area. Some of those projects are:

- SR-91/71 Interchange Improvement Project;
- new lane on SR-91 between SR-55 and SR-241;
- SR-91 Eastbound Lane Addition Between SR-241 and SR-71 (2007 Mitigated Negative Declaration);
- Santa Ana River Flood Control Project Reach 9, Phase 2A Embankment;
- Green River Mobile Home Embankment Project Reach 9 Phase II Portion of the Santa Ana River Mainstream Project; and
- Prado Basin and Vicinity Reach 9 and Stabilization of the Bluff Toe at Norco Bluffs, and Addendums.

Some of those impacts associated with these and other projects include, but are not limited to: widening of bridges, extension of culverts, direct loss of habitat, and "temporary" disturbance during construction (although construction time periods can in fact be quite long).

The DEIR/S also does not adequately address growth-inducing impacts of creating additional freeway capacity in a congested area.

**Need for Serious Consideration of Alternatives**

Because of these significant environmental impacts, the FEIR/S must include serious consideration of project alternatives, such as reversible lanes and an elevated structure within the SR-91 right-of-way. Alternatives must be thoroughly analyzed that do not result in direct impacts to CHSP and that avoid and minimize impacts to Coal Canyon and other sensitive biological resources.

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3...several approved or planned projects in the project study area may affect or require design coordination with the proposed project." (DEIR, p. S-2).

4http://www.octa.net/weeklyupdate/weekly_update_071111.html
The DEIR/S Does Not Include Adequate Mitigation for Significant Impacts to Chino Hills State Park, Wildlife Movement, Other Biological Resources, and Recreational Resources

The DEIR/S does not provide adequate mitigation to offset those significant impacts to CHSP, wildlife movement, other biological resources, and recreational resources. In fact, in too many cases, the DEIR/S defers the specifics of the mitigation, relying on future consultation with other agencies, which could result in development of, and modifications to, mitigation measures. Clearly consultation with State Parks is desired and of course mandatory, as State Parks will be involved in the Section 4(f) consultation, Section 6(f) Land and Water Conservation Fund consultation, and the issuance of a right-of-entry permit. However, that consultation should be well underway, and complete if possible, and the mitigation measures fleshed out prior to the FEIR/S. Clearly defined mitigation measures, notably those related to impacts to State Parks' land, must be included in the FEIR/S, affording the public and decision-makers the opportunity to evaluate the adequacy of the mitigation measures in relation to the impacts. Otherwise, the FEIR/S will be deficient.

It is critical that the FEIR/S provide appropriate avoidance and mitigation measures to address impacts to Coal Canyon, rather than “write-off” the health of the Coal Canyon linkage, while relying on mitigation identified in another plan in another county, Riverside County (for example, see potential mitigation proposed for cumulative impacts, DEIR/S, pp. 3.25-32 through 3.25-35). The western Riverside County plan does not even address Orange County, in which Coal Canyon is located.

If the project as proposed does move forward, the FEIR/S should include a comprehensive mitigation package for the cumulative impacts to Coal Canyon, CHSP, Santa Ana River, rare wildlife and plant species, sensitive plant communities, and recreational resources. Mitigation should be substantial and on the order of hundreds of acres of actual land acquisition and permanent preservation to offset the impacts from this project and the other...

5 "...the Department will continue to consult with State Parks on appropriate compensation for the use of land in CHSP protected under the requirements of Sections 4(f) and 6(f)...subject to refinement/modification..." (DEIR/S, p. 3.1-77); "Compensatory mitigation based on the Section 7 consultation for CAGN [coastal California gnatcatcher] and LBV [least Bell's vireo]..." (DEIR/S, p. S-28); Individual or Nationwide Corp permit, CDFG [California Department of Fish and Game] Streambed Alteration Agreement, Section 401 Water Quality Certification from the RWQCB [Regional Water Quality Control Board] (DEIR/S, p. S-27).

6Western Riverside County Multiple Species Habitat Conservation Plan
cumulative projects and growth-inducing projects.

The DEIR/S (p. 3.25-34) states that it is not reasonable for any one project such as the proposed project or a private development project to mitigate for these cumulative impacts. The difficulty of coordinating mitigation for cumulative impacts from several projects does not relieve the lead agency from the responsibility to comply with the requirements and spirit of CEQA to identify significant environmental impacts and to avoid and mitigate those impacts, even if they are cumulative impacts. An attempt must be made.

However, if Caltrans chooses not to acknowledge and address such cumulative impacts as required by CEQA, at the bare minimum, Caltrans must include well-defined mitigation in the FEIR/S to fully mitigate the direct and indirect impacts to CHSP, including Coal Canyon. Based on its prime location as a recreational and biological resource, that land to be impacted by the proposed project is irreplaceable. If the proposed project moves forward, then the highest level of offsite mitigation must be included in the FEIR/S. This must be at a bare minimum mitigation ratio of 20:1 (20 acres of mitigation land for every one acre of permanent impact), including mitigation for the acreage of the aerial easement. For any additional temporary impacts, the mitigation proposed should be 2:1 (two acres of land acquired or restored for every one acre impacted) to help offset the long-term temporal loss. The FEIR/S will be deficient unless there is well-defined mitigation, for example, specific parcels of land identified for acquisition and/or specific amount of funding to be designated for mitigation for direct and indirect impacts to CHSP. Said funding must be in place with the resource agency prior to construction.

In addition to this substantial mitigation package, the following mitigation measures must be included to address the unique situation at CHSP:

- sound walls around Coal Canyon, and for a substantial additional distance as recommended by the State Parks ecologist, to mitigate noise, lighting, and increased potential for fire starts;
- native habitat restoration around Coal Canyon; and
- prohibition on construction in and around CHSP during nighttime.

As outlined in this letter, WCCA is concerned with numerous deficiencies in the DEIR/S regarding identification of significant impacts to CHSP, Coal Canyon wildlife linkage, biological resources, and recreational resources, and the corresponding inadequate mitigation. WCCA recommends that the FEIR/S include additional analysis of impacts, serious consideration of project alternatives, and substantial mitigation to offset those impacts. The project proponents and decision-makers must seriously consider whether they want to sacrifice their parks of State-wide significance, and regionally significant biological and recreational resources, in order to promote a continually expanding major arterial in already congested areas.
If you have any questions, please contact Judi Tamasi of our staff by phone at (310) 589-3230, ext. 121, or by email at judi.tamasi@mrca.ca.gov. Thank you for your consideration of these comments.

Sincerely,

Glenn Parker
Chairperson
**O-10-1**

This letter was submitted after the close of the public comment period for the Draft EIR/EIS, and the commenting party did not request an extension of the review period from the Department. In compliance with the requirements of NEPA, responses to the comments in this comment letter are provided below.

Although for CEQA compliance purposes, no response to the comments in this letter is required (refer to Section 15088 in the State CEQA Guidelines), they are provided here as noted above.

Refer to responses to comments O-10-2 through O-10-21, below.

**O-10-2**

No response is necessary because this comment describes the function of the Wildlife Corridor Conservation Agency (WCCA) but does not ask a question or provide a comment relative to the technical information or environmental analysis in the EIR/EIS.

**O-10-3**

Refer to Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18 for discussion regarding the project effects on CHSP, mitigation included in the project to address those effects, the results of the consultation with State Parks and NPS. The analysis in Section 3.1, Land Use, and Appendix B, Resources Evaluated Relative to the Requirements of Section 4(f), in the EIR/EIS adequately and thoroughly documents the project effects at CHSP and the results of the consultation with State Parks and NPS. Therefore, RCTC and the Department did not recirculate the environmental document.

Refer also to Section O.5.4.3, Recirculation of the Environmental Document, in Section O.5.4, Common Response Related to the Environmental Process and Schedule, on page O-15, for discussion regarding why RCTC and the Department did not prepare or circulate a revised Draft EIR/EIS because such recirculation was not required under either CEQA or NEPA.

Refer also to Section O.5.7, Common Responses Related to Alternatives, on page O-30 in Section O.5, Common Responses, for discussion regarding the alternatives evaluated in the EIR/EIS and alternatives considered but not carried forward for detailed evaluation in the EIR/EIS.
Refer to Section O.5.10, Common Response Related to the Biological Opinion, on page O-39, for discussion regarding the Biological Opinion for the project received from the USFWS on November 30, 2011, and the project mitigation obligations.

Because this comment includes only general assertions regarding the adequacy of the document and does not provide specific examples of this commenter’s concerns, no further response is required (refer to Browning-Ferris Ind. v. City Council (1986) 181 Cal. App. 3d 852, 862 [where a general comment is made, a general response is sufficient]).

In addition, refer to responses to comments O-10-4 through O-10-21, below.

Refer also to responses to comments O-10-6, O-10-8, O-10-10, O-10-15, O-10-16, and O-10-17, below, for discussion regarding the project effects to biological resources.

**O-10-4**

The potential impacts of the project related to the cited environmental parameters are evaluated in detail in Chapter 3, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures, and Chapter 4, California Environmental Quality Act Evaluation, in the EIR/EIS, including assessment of the severity of the impacts, whether the project contributes to cumulative impacts when considered with the effects of other projects, and, in Chapter 4, the significance of those impacts under CEQA.

The total area that will be used at CHSP is 0.48 ac; this includes most of the area under the aerial easement for the Green River Road westbound off-ramp (the two columns for the off-ramp will be within the area under the easement). Part of the area under the aerial easement is within the right-of-way for Prado Road, a public road. Because this is a public road and is not part of CHSP, that part of the area under the aerial easement was excluded when totaling the acreage in the park boundary that would be used by the SR-91 CIP. The 0.48 ac contains no park amenities or facilities and does not contain native plants. Access to the trail head and the park maintenance road in this area will not be affected by the SR-91 CIP.

The de minimis finding described on page 3.1-79 in the Draft EIR/EIS was clearly identified as a “Preliminary Section 4(f) De Minimis Finding.” De minimis impacts on publicly owned parks are defined as those that do not adversely affect the activities, features, and attributes of the Section 4(f) property, after consideration of
avoidance, minimization, and mitigation measures. The use of land from CHSP, at 0.48 ac, will not adversely affect the activities, features, and attributes of the park because there are no park features or amenities in the 0.48 ac area proposed to be used. The 0.48 ac area proposed to be used is a very small percent of the overall park, and its use will not adversely affect the ability of park visitors to use the trail north of the Green River Road off-ramp or to use Prado Road (a public road) in that area. Refer to Section O.5.5.4, De Minimis Determination, on page O-22, which indicates that the Department made a determination that the project effects at CHSP would be de minimis and State Parks concurred with this determination on March 26, 2012.

This comment includes statements that the project effects are “understated.” However, this comment does not include any information or analysis supporting the assertion that the project effects are understated. The project effects and the project contributions to cumulative effects are described in detail throughout Chapter 3, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures, starting on page 3-1 in the EIR/EIS. Because this comment does not provide specific examples of where impacts are understated or what the analysis is that the commenter’s conclusion is based on, no further response to this comment is required.

Refer to Section O.5.10, Common Response Related to the Biological Opinion, on page O-39, for discussion regarding the Biological Opinion for the project received from the USFWS on November 30, 2011, and the project mitigation obligations.

O-10-5

The impacts to CHSP are clearly defined and explained in Section 3.1, Land Use, and Appendix B, Resources Evaluated Relative to the Requirements of Section 4(f), in the EIR/EIS as follows:

- 0.48 ac permanent use
- 2.0 ac for TCEs
- 1.65 or 1.88 ac for a permanent subsurface easement, for Alternatives 1 and 2, respectively

The effect of the project on CHSP is not a total of these three acreages. The use of 0.48 ac of land from CHSP would be a permanent use that would be substantially mitigated as described in Section O.5.5 on page O-18.
The areas in CHSP used for TCEs would be used for the period of time needed to make the project improvements in those areas. This would be a few to several months, but not the entire construction period for the entire project. The areas used for TCEs would be revegetated and returned to their original or better condition prior to returning those areas to State Parks. The subsurface easements would not restrict most uses in State Parks above the areas where those subsurface easements would be located.

Therefore, the only permanent adverse effect would be the permanent use of 0.48 ac of land from CHSP, which would be mitigated.

No maintenance is expected to be required for the project facilities (tie-backs) in the subsurface easements in CHSP. Any maintenance that would be necessary would be conducted from the SR-91 right-of-way (similar to the construction of the tie-backs) and would not result in any surface disruption in CHSP.

O-10-6
The permanent use of land from CHSP, at 0.48 ac, will not adversely affect the activities, features, and attributes of the park because there are no park features or amenities in the 0.48 ac area proposed to be used. The 0.48 ac area proposed to be used is a very small percent of the overall park, and its use will not adversely affect the ability of park visitors to use the trail north of the Green River Road off-ramp or to use Prado Road (a public road) in that area. Users of the trail can access the trail from Prado Road or from within CHSP; neither of these access points will be changed by the SR-91 CIP. Note there is no vehicular access or vehicular parking for park visitors at this location. The only vehicular access in this area is an unpaved park maintenance road extending from Prado Road into the park that is not intended to be used by park patrons. Similarly, access for wildlife to cross under the freeway in this area will not be modified by the project.

The park entrance location described in this comment corresponds to the West Prado Road Undercrossing (Western Riverside County MSHCP Proposed Constrained Linkage 1). As described in Section 3.17.3.2, Permanent Impacts, on page 3.17-17, although the SR-91 CIP will widen this undercrossing, the openness ratio remaining after that widening would still be sufficient to allow large mammals to move along this corridor and is not expected to further constrain this linkage.
O-10-7
It is acknowledged that trail users will have views of a large retaining wall on the north side of SR-91 in the vicinity of the Green River Road overcrossing. This part of the park already includes views of SR-91, the Green River Road overcrossing, the BNSF railroad tracks, Prado Road, and the unpaved park maintenance road. Further east, trail users have views of existing residential uses east of CHSP. As a result, this part of the CHSP currently does not provide trail users with visually or aesthetically pleasing views. In addition, trail users in this area are transient and would not spend substantial amounts of time on the trail because there are no recreation amenities to attract trail users to stay long in this area. As a result, the changes in views from the trail in this area, while adverse, are not considered substantial and do not require mitigation.

O-10-8
Refer to responses to comments S-3-15 (page O-108), O-8-31 (page O-396), and O-8-33 (page O-397) for discussion regarding the project effects at and near Coal Canyon and, due to fire risk, adjacent to areas of open space (such as Coal Canyon).

O-10-9
The de minimis finding described on page 3.1-79 in the Draft EIR/EIS was clearly identified as a “Preliminary Section 4(f) De Minimis Finding.” De minimis impacts on publicly owned parks are defined as those that do not adversely affect the activities, features, and attributes of the Section 4(f) property, after consideration of avoidance, minimization, and mitigation measures. The use of land from CHSP, at 0.48 ac, will not adversely affect the activities, features, and attributes of the park because there are no park features or amenities in the 0.48 ac area proposed to be used. The 0.48 ac area proposed to be used is a very small percent of the overall park, and its use will not adversely affect the ability of park visitors to use the trail north of the Green River Road off-ramp or to use Prado Road (a public road) in that area. In addition, the area does not contain native vegetation. As described in response to comment O-10-5, the project will result in the permanent use of only 0.48 ac of land from the park and includes revegetation of the 2.0 ac used for TCEs. As a result, the project would not result in adverse impacts on native plant communities in CHSP. Refer to responses to comments S-3-15 on page O-111 and O-8-31 on page O-397 for discussion regarding the project effects at and near Coal Canyon. Based on that information, the project effects at CHSP would be minimal. Refer to Section O.5.5.4, De Minimis Determination, on page O-22, which indicates that the Department made
a determination that the project effects at CHSP would be de minimis and State Parks concurred with this determination on March 26, 2012.

**O-10-10**

There will be no impacts to CAGN-occupied CSS vegetation in CHSP. Refer to responses to comments S-3-5 on page O-106 and S-3-11 on page O-108 for additional information regarding the project effects on CSS.

**O-10-11**

Refer to Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18 for discussion regarding project compliance with the requirements of Section 6(f), including consultation with the NPS.

Refer also to response to comment O-8-30 on page O-395 for a detailed discussion regarding the agreements and other documents related to the land purchases for CHSP. The land in the vicinity of the Green River Road off-ramp that would be used for the proposed project is not subject to compliance with the requirements of the L&WCF Act because this land was not purchased or improved with L&WCF funds.

**O-10-12**

Refer to Section 3.25, Cumulative Impacts, starting on page 3.25-1 in the EIR/EIS, which describes the cumulative transportation and nontransportation projects considered in the cumulative impacts analysis and provides a discussion regarding the potential for the SR-91 CIP to contribute to cumulative impacts related to biological resources.

The projects cited in this comment are included in the list of projects in Section 3.25 as follows:

- SR-91/SR-71 Interchange Improvement Project: Table 3.25.1, Project ID Number 5
- New Lane on SR-91 between SR-55 and SR-241: Table 3.25.1 (there is no Project ID Number because it is west of the project study area)
- SR-91 Eastbound Lane Addition Project: Table 3.25.1, Project ID Number 3
- Army Corps Projects: Table 3.25.2, Project ID Numbers 47 and 48

**O-10-13**

Refer to Section 3.2, Growth, starting on page 3.2-1 in the EIR/EIS, which provides a detailed evaluation of the potential for the SR-91 CIP to result in growth-inducing
impacts. That analysis concluded that the SR-91 CIP would not result in growth-inducing impacts.

O-10-14
Refer to Section 2.3.8, Alternatives Considered but Eliminated from Further Discussion Prior to the Draft Environmental Document, starting on page 2-140 in the EIR/EIS, which describes a broad range of alternatives considered for the SR-91 corridor but not carried forward for evaluation in the Draft EIR/EIS.

O-10-15
Refer to Section O.5.5, Common Response Regarding Chino Hills State Park, on page O-18 for mitigation developed in consultation with State Parks. Refer also to Appendix E, Environmental Commitments Record, in the EIR/EIS for the total program of avoidance, minimization, and mitigation measures included in the SR-91 to address project effects related to parks, wildlife movement, and biological resources.

O-10-16
Because Coal Canyon is in Orange County, the Western Riverside County MSHCP does not apply. However, the SR-91 CIP is not expected to result in substantial permanent impacts to wildlife movement at Coal Canyon, as described in the “Wildlife Corridors” subsection on page 3.17-21 in Section 3.17.3.2 in the EIR/EIS.

As described in the “Wildlife Corridors” subsection on page 3.17-21 in Section 3.17.3.2 in the EIR/EIS, the project is not expected to result in substantial permanent impacts to wildlife movement at Coal Canyon. While not substantial, some permanent impacts are expected and will contribute to the cumulative impacts to wildlife movement at Coal Canyon. Based on present and reasonably foreseeable future actions, combined with the potential impacts of this project, some of the cumulative projects are expected to include design features that beneficially affect wildlife movement and some are expected to adversely affect wildlife movement as discussed in Section 3.25.5.9, Natural Communities, Plant Species, and Animal Species, on page 3.25-30 in the EIR/EIS. As an example of a known future beneficial project, the Department is proposing to install some planting in State right-of-way at Coal Canyon as a separate, unrelated project. Should this separate, unrelated project not take place, the SR-91 CIP will install plantings at Coal Canyon to improve the function of this wildlife corridor. To address project-related temporary, permanent, and cumulative impacts, Measures NC-6 through NC-14 and NC-16, which are described starting on page 3.17-29 in the EIR/EIS, are included in the project to
minimize or avoid impacts to, and improve, wildlife movement through the region, including Coal Canyon.

**O-10-17**

As discussed starting on page 3.25-30 in Section 3.25.5.9, the proposed project is expected to beneficially affect wildlife movement in the region based on design features and Measures NC-6 through NC-14 and NC-16. Therefore, a comprehensive mitigation package resulting in the acquisition of land and permanent preservation of resources is not warranted.

**O-10-18**

There is no intent stated or implied in the EIR/EIS on either page 3.25-40 or anywhere else that RCTC and/or the Department has not complied with the requirements of CEQA and NEPA to identify project contributions to cumulative impacts and to provide for mitigation to address the project’s contribution to cumulative impacts. Section 3.25, Cumulative Impacts, starting on page 3.25-1 in the EIR/EIS, provides analysis of the potential for the SR-91 Build Alternatives to contribute to cumulative impacts for all the environmental parameters evaluated in the EIR/EIS. The text on page 3.25-40 was intended to indicate that no one agency or party should be responsible for mitigating the total effects of all cumulative projects; further, it can be very difficult to coordinate mitigation for multiple projects, particularly when there are multiple lead agencies. Nonetheless, the EIR/EIS includes substantial mitigation (refer to Appendix E, Environmental Commitments Record, for all the project mitigation measures) to address the impacts of the SR-91 CIP Build Alternatives, including the potential contribution of those impacts to cumulative impacts when considered with the effects of other cumulative projects in the area.

**O-10-19**

The measures described in Section O.5.5, Common Response Related to Chino Hills State Park, on page O-18 and in Appendix E, Environmental Commitments Record, in the EIR/EIS will minimize, avoid, and mitigate the adverse impacts of the SR-91 CIP on natural and human resources. Any mitigation ratios will be developed in consultation with the resources agencies.

Mitigation under CEQA and NEPA is typically roughly proportionate to the severity/amount/type of impact to avoid an unconstitutional taking from the project proponent. The requirement for rough proportionality of mitigation to impact results from the United States Supreme Court interpretations of the Constitution’s Fifth Amendment taking clause. In two similar cases (*Tigard vs. Dolan* and *Nollan vs. California*
Coastal Commission), the court found that the degree of exactions (i.e., mitigation requirements) for a proposal must bear a reasonable relationship to the actual impacts of the proposed project. As such, the 20:1 mitigation ratio noted in this comment, which is not based on other mitigation ratios in the area or the experiences of RCTC and the Department in mitigating project effects, would be inconsistent with the rough proportionality requirement for mitigation. Refer to Sections O.5.5.5 through O.5.5.7 starting on page O-24 in Section O.5, Common Responses, for discussion regarding the measures to address the project effects at CHSP.

O-10-20
Refer to response to comment O-10-19, above. The second two items on the bulleted list on page O-23 are included in the project mitigation measures. Sound walls are not proposed at Coal Canyon and are not included in the project.

Although sound walls at Coal Canyon are not proposed as part of the SR-91 CIP, the project does include the following measure to address State Parks’ concerns related to fire, light intrusion, and fire risks along that segment of SR-91. The barriers in this measure will provide some reduction in noise effects outside the freeway right-of-way along this segment of SR-91.

UES-4 Fire Prevention Adjacent to CHSP. The final design of the SR-91 CIP Build Alternatives will include closing gaps so there is the equivalent of a continuous barrier 30 to 36 inches high on the edge of the shoulder on both westbound and eastbound SR-91 from SR-71 to SR 241, as follows:

- Initial Phase: The 36-inch-high concrete barrier on westbound SR 91 between SR-71 and Green River Road already included in the design alternatives will meet the requirements for this barrier.
- Ultimate Project: Close gaps to provide an equivalent continuous barrier 30 to 36 inches high on the edge of shoulder on SR-91 in both directions between Green River Road and SR-241, which will meet Caltrans standards applicable at the time.

O-10-21
Refer to responses to comments O-10-1 through O-10-20, above.
O.6.6 Members of the General Public
This page intentionally left blank
From: Thundercloud6789@aol.com
To: aaron_burton@dot.ca.gov
BCC: Raindrop6789@aol.com
Sent: 5/20/2011 12:16:30 P.M. Pacific Daylight Time
Subj: Re: Caltrans - Concerns over Sound Wall SB J 1-C

Hi Aaron:

Re: SB No. J1-C

Thank you kindly.

As mentioned in our phone conversation, we are a hillside community and property owners pay a premium for our views. Known as The Estates at Corona Ranch. Consequently, a block wall that will greatly affect our views would not make sense.

We have known of the possibility of an sound wall from earlier presentation at the City of Corona. At that time in talking with affected neighbors, we agreed a sound wall would not be appropriate. On the other hand the neighbors would like to have sound attenuation improvement done to the affected homes in lieu of the wall.

You mentioned that Caltrans doesn’t want to be having to maintain private property. However, that could be solved by a properly written agreement whereby we the property owners indemnify Caltrans after the sound attenuation improvements are completed.

It stands to reason you have a budget for the sound wall so those funds could be used instead to attenuate the homes, as we do want a muffle the noise from the freeway.

Also as mentioned, the open space lot shown on your exhibit is owned by the HOA, of which I happen to be on the Board of Directors as the Vice President, and the Board would need to respond to you and likely the Board’s response would mirror my comments. Namely, forgo the sound wall but attenuate the homes.

Please forward my comments to the appropriate parties, thank you. Your kind assistance is greatly appreciated.

Best regards,

Mr. C. A. Alba, PE, PLS

890 Mandevilla Way, Corona CA
174.856.6792
P-1-1

The noise barrier at this location (NB J1-C) is on private property. It would not have to be constructed as a solid block wall. Refer to Section O.5.3.2, Common Response Related to Noise Barriers, on page O-10 in Section O.5, Common Responses, for discussion regarding alternative materials for sound barriers.

The last paragraph in Section 3.7.4.1, Summary of Impacts, on page 3.7-15 in the EIR/EIS discusses aesthetic features for sound walls as follows: "Aesthetic features will be included during final design of the project for retaining walls, sound walls, and bridge structures to reduce potential visual impacts." Refer also to Section 3.7.4.2, Permanent Impacts, on page 3.7-16 in the EIR/EIS for discussion of the potential aesthetic impacts of sound walls and of materials, textures, and graphic symbols that would be incorporated in the sound walls. In addition, plants such as vines may be considered to reduce aesthetic impacts of walls in areas where landscaping can be implemented and maintained.

Noise barrier surveys in accordance with the Department's Noise Protocol were mailed out to residents potentially affected by the construction of Noise Barrier J1-C. Based on the results of the voting process, NB J1-C did not indicate a 100 percent approval for construction, which is a requirement for noise barriers proposed on private property. Therefore, noise attenuation through the construction of NB J1-C was dropped from further consideration as part of the project.

Under Department and FHWA guidelines as described starting on page 3.15-1 in Section 3.15, Noise, in the EIR/EIS, sound attenuation improvements to homes in lieu of a sound wall are only provided when homes would experience a severe noise impact and a noise barrier at that specific location is determined not to be feasible. A severe noise impact is defined as 71 dBA or above, while a noise impact is defined as 66 dBA and above. Based on the analysis in the EIR/EIS for homes in this area, future with project noise levels are predicted to be from 66 to 69 dBA, and a sound wall was determined to be feasible and reasonable at that location. As a result, a sound barrier rather than interior sound attenuation improvements at the cited homes was proposed as part of the Build Alternatives.

P-1-2

RCTC and the Department will work with private property owners to ensure that sound walls on private property are maintained on that property in perpetuity. A right-of-entry permit could be needed to ensure that the Department can maintain the integrity of the sound wall, or there would be an amendment to the property title to
the effect that a sound wall was provided as noise abatement and is now the responsibility of the property owner.

Refer also to response to comment P-1-1, above.

**P-1-3**
Refer to the response to comment P-1-1, above.

**P-1-4**
Refer to responses to comments P-1-1, P-1-2, and P-1-3, above.
From: Daniel Woods
Phone: (951) 479-8119
Mailing Address: 441 Pueblo Rd
City, State: Corona, Ca
Zip: 92882

Comment/Question:

I am very excited about the Fast Track extension to the 15 Freeway. However, I am also concerned about keeping the traffic in those lanes for 5 extra miles. Please look at the San Diego Fast Track off ramp system which utilizes a left lane exit to Tee onto key overpasses. Green River's new bridge would be ideal for this, as would Lincoln Ave.

*You received this message because Daniel Woods submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator
P-2-1
Access to/from the express lanes will be provided at the existing access at Green River Road, which will be moved west, and new access will be provided to I-15 and at the eastern end of the improvements on SR-91. Therefore, express lane traffic will be able to enter/exit the express lanes at more than one location and will not have to stay in those lanes for the entire length of the express lanes on SR-91. Refer also to Section 2.1, Project Description, starting on page 2-1 in the EIR/EIS, which describes the express lane connections that would be provided in the SR-91 CIP Build Alternatives.

P-2-2
Alternative 2f was identified as the preferred project for implementation. As a result, the project will not implement FasTrak access at Lincoln Avenue, as suggested in this comment.
Attention: Eliza Echevarria
4080 Lemon Street, 3rd Floor
P.O. Box 12008
Riverside, CA 92502-2208
Phone: (951) 787-7141
Fax: (951) 787-7920

June 5, 2011

Re: Have the potential impacts been addressed?

Dear Eliza Echevarria,

I wrote to CAL TRANS a few years ago and stated that if the 91 freeway was going to be expanded that there was little or nothing on the South side of the 91 West of Green River for some distance and I believe the same is still true. I have looked at the image that were sent with your letter "SR-91CIP: NOISE BARRIER (SB SURVEY RESPONSE FORM" namely the image:

SHEET 4 of 5
SOUND BARRIER NB E - 1
WEST OF GREEN RIVER ROAD
DATE PLOTTED 11 - MAY - 2011

And it appears to me that one (1) double faced billboard, is going to be removed from my property (APN 101-290-023).

I own two STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION OUTDOOR ADVERTISING PERMITS
Permit number 41220 District 08, Route 91, Post Mile 0.77 and
Permit number 41356 District 08, Route 91, Post Mile 0.77

Will I be allowed to relocate this billboard by moving it to another location on my property? If so please send me all the required paper work for relocating this billboard.
Please reply to:

Gary Bailey
P.O. Box 431
Sun City, CA 92586

Thank you for your time and trouble

Gary Bailey
P-3-1

These billboards will be impacted by the partial acquisition of the parcel on which they are located. Refer to Table O.5 on page O-35 in Section O.5.8, Common Response Related to Billboard Relocation, which shows the impacts of Alternatives 1 and 2 on individual billboards, including the billboards cited in this comment. Section O.5.8 describes the process the RCTC will follow to relocate any billboards that must be moved to accommodate the project, including appropriate coordination with the billboard/property owner, the City of Corona, and the Department. The relocation of the cited billboard will be subject to compliance with the City of Corona Municipal Code and the Department Outdoor Advertising Act and Regulations for billboards adjacent to State highways. As shown in Table O.5, it is anticipated that this billboard can be relocated to another location on the parcel on which it is currently located. The relocation of billboards and compensation for billboards that cannot be relocated will be conducted by RCTC consistent with the requirements of the Uniform Act.

Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, which describes the process the RCTC will follow for the acquisition of privately owned property for the project, including full and partial acquisitions.

NOTE: This commenter (Mr. Bailey) provided additional comments in an email dated June 12, 2011. Refer to comment P-12 later in this section for those comments and the corresponding responses.
From: lindathorn@mail15.com
Sent: Sunday, June 05, 2011 10:22 PM
To: eechevarria@rtc.org
Cc: info91@mbimedia.com; CDonahue@ArellanoAssociates.com; thomasd@pbworld.com; Michael Amling; trahimian@4mccinc.com; shawn_oriez@dot.ca.gov
Subject: [Spam] SR-91 Give Us Your Feedback

From: Melanie Duran
Phone: 8506151418
Mailing Address: Breen
City, State: London
Zip: 11019

Comment/Question:

Specialists argue that <a href="http://bestfinance-blog.com/topics/mortgage-loans">mortgage loans</a> help a lot of people to live the way they want, because they can feel free to buy needed things. Furthermore, banks give auto loan for different classes of people.

*You received this message because Melanie Duran submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator
P-4-1
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 EIR/EIS. 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 report. In addition, all comments received on the Draft EIR/EIS are included in this report and will be made available to the public and decision-makers prior to any action on the proposed project.
From: Savannah Head
Phone: 8506151418
Mailing Address: Breen
City, State: London
Zip: 11019

Comment/Question:

It's perfect that we can take the <a href="http://bestfinance-blog.com">loan</a> moreover, this opens up completely new possibilities.

*You received this message because Savannah Head submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator
P-5-1

This comment does not raise an environmental issue within the context of CEQA and/or NEPA and does not ask any questions related to the technical analyses in the EIR/EIS. 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 report. In addition, all comments received on the Draft EIR/EIS are included in this report and will be made available to the public and decision-makers prior to any action on the proposed project.
Hello Aaron:

To date I have not received a follow up response to my email below dated 5-20-11. Can you tell me what is the hold up?

Best regards,

Mr. C. A. Alba, PE, PLS
890 Mandevilla Way, Corona CA
174.856.6792
P-6-1
This commenter’s 5-20-11 email was provided earlier in this report as comment P-1 on page O-429.

Refer also to Section O.5.4.2, Responses to Comments, on page O-15 in Section O.5, Common Responses, for discussion regarding the environmental process, including the process for the responses to comments received on the Draft EIR/EIS.

In addition, note that consistent with the requirements of CEQA and NEPA, all comments received on the Draft EIR/EIS are included in this report and will be made available to the public and decision-makers prior to any action on the proposed project.
Hi Mr Brad, thanks again for this notice. Unfortunately, I can't be there this Thursday as I have to work 'til 7pm. I will try to submit my written comments to Aaron Burton, CALTRANS after reviewing the report statement. In the meantime, would you please forward this document (my revised opinions/suggestions re: the State Route 91 Corridor Improvement Project) to those concerned? Thanks Mr Brad. Have a great evening!

Hi, there are a few things that I strongly believe that we can fix to ease the traffic congestion on the 91E
1. Just like the 71S to 91E, we need to place traffic lights/stop signs from 241N to 91E to control the free traffic flow from 241N to 91E, esp during rush hours

2. We should NOT allow the end of the toll roads (just before Green River Drive) to be extended for the following reasons:
   - This is the narrowest part of the 91E widening project and this is where commuters either exiting the toll roads to Green River Drive or trying to get in the carpool lanes from general purpose lanes on 91E --> creating bad traffic/congestion here
   - The extension at the end of the toll roads shorten the distance/ the time for commuters to make an exit to Green River Drive from the toll roads...Not to mention that these commuters have to cut through all the general purpose lanes before they are able to make an exit to Green River Drive --> again creating traffic jam

I hope this helps. Thanks for reading my opinions. Please feel free to contact me should you have any questions.

Best regards,

-Mr Tran-
Appendix O Responses to Comments

P-7-1
Refer to responses to comments P-7-2 and P-7-3, below.

P-7-2
Because the project proposes an additional lane for the SR-241 northbound to SR-91 eastbound traffic on SR-91 between SR-241 and SR-71, which is defined as an auxiliary lane, ramp metering of the SR-241 north-to-east connector is not required. The Department has agreed and has issued approval of a ramp metering exception at that location, as described in the Project Report.

P-7-3
Alternative 2f, the Preferred Alternative, would improve the weaving operation at this location. Specifically under Alternative 2f, express lane access will move west from Green River Road toward SR-241. This will allow a longer weaving distance and facilitate access to Green River Road, SR-241, and SR-71 from and to the SR-91 Express Lanes. The Green River Road bridge over SR-91, which is the narrowest part of SR-91, was designed to accommodate the proposed tolled express lanes.
From: Gmoses352@acl.com
Sent: Tuesday, June 07, 2011 9:58 PM
To: eechevarria@rctc.org
Cc: info8r1@mbimedia.com; CDonahue@ArellanoAssociates.com; thomasd@pbworld.com; Michael Amling; tahimian@4rncinc.com; shawn_oriaz@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: Gregory Moses
Phone: 951-283-8167
Mailing Address: 2940 Hidden Hills Circle
City, State: Corona, Ca.
Zip: 92882-8004
Comment/Question:
Please no PLA's or Union Project Labor Agreement,
then we can work without paying unions.

*You received this message because Gregory Moses submitted feedback regarding the SR-91 Highway Improvements.

Regards,
System Administrator
P-8-1

This comment does not raise an environmental issue within the context of CEQA and/or NEPA and does not ask any questions regarding the technical analyses in the EIR/EIS. 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 report. In addition, all comments received on the Draft EIR/EIS are included in this report and will be made available to the public and decision-makers prior to any action on the proposed project.
Sent: Friday, June 10, 2011 9:29 AM
To: echevarria@rtc.org
Cc: fisosr91@mbimedia.com; CDonahue@ArellanoAssociates.com; thomasd@pbworld.com; Michael
Amling; trahmian@4rmcinc.com; shawn_orlaz@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: Gary Elster Gary Elster

Phone: 8082503725

Mailing Address: 12 Malihini Place

City, State: Wailuku

Zip: 96793

Comment/Question:

The project appears to unfairly impact property owners on the south side of the freeway between
Serfas Club Drive and Maple/6th Ave whereas owners on the north side appear to have only minor
impacts. Why not consider sharing the impact equally.

*You received this message because Gary Elster Gary Elster submitted feedback regarding the SR-
91 Highway Improvements.

Regards,

System Administrator
P-9-1

The centerline of the existing highway will not be shifted, and the freeway will be widened equally on both sides. As shown in the preliminary design plans for the Build Alternatives provided in Appendix L, Project Features, in the EIR/EIS, the realignment and shifting of frontage roads result in a somewhat greater impact on the south side of SR-91, in the vicinity of Serfas Club Drive and Maple Street.

The property acquisition impacts described in Section 3.4.2, Relocations and Real Property Acquisitions, starting on page 3.4-36 in the EIR/EIS are based on preliminary designs for the Build Alternatives. That design will continue to be refined during the design/build phase for Alternative 2f, the Preferred Alternative. During that design/build process, the RCTC Project Engineer will continue to evaluate the project design with an objective to further reduce the acquisition of property for the project.
Aron Burton  
Senior Environmental Planner  
Caltrans District 8  
San Bernardino, Ca. 92401

Dear Mr. Burton,

It is with great concern that I write you because I feel that your agency is not listening to the people. I have written your agency on several occasions and have never received a reply.

We all agree that the 91 Freeway is too congested, but further widening of the freeway is not the answer. First of all let me say that I am totally against car pool and toll lanes. All lanes should be open to those who paid for them and not a select privileged few. Second, an alternate route to Orange County would be the best solution to the current problem. The proposed and rejected Freeway at Cajalco road would reduce the congestion on the 91 Freeway by at least 50 percent as a large portion of the congestion comes from the south county. Environmental and other concerns about this route are totally unfounded. The only citizens that disagree are those who live at Eagle Glen and do not want a Freeway running next to their property and golf course. I think we should do what is best for all citizens, not just a few.

The proposed tunnel at Cajalco was a ridiculous idea and totally unnecessary. Twelve short miles of conventional freeway at Cajalco would be the best investment we ever made. It is wide open land and there are no businesses or homes to buy or relocate. Any displacement of critters would be minimal and hardly noticed. The project could be completed in a shorter time at less money than your proposed 91 Freeway rework. Everyone I talk with agrees with me. I urge you to listen to the public and give the Cajalco Freeway a second look.

I attended your public presentation in Corona and was appalled by the amount of money spent trying to sell your 91 corridor improvement project. I realize that some of your efforts are mandated by state law. The sure amount of report books and foot thick volumes of paper was appalling. This is a prime example of government waste which extends to all government projects. Our road and other worthwhile projects could easily be paid for if we simply cut the paperwork and red tape. But this will never happen.

Again I plead with you, give the Cajalco route a second look.

H.G. Chaffin
Corona

1939 S. Main St
Corona, Ca. 92882
951-735-4791

[Signature]

CHAFFIN GARAGE INC.
MODEL T FORD 1939
1939 S. MAIN ST., CORONA CA 92882
P-10-1
Refer to responses to comments P-10-2 and P-10-3, below.

P-10-2
Should a project on Cajalco Road between Riverside and Orange Counties be pursued in the future, that project would be a separate project from any improvements in the SR-91 corridor.

Specifically, it should be noted that, based on the findings of the MIS and other studies considering traffic demand between Orange and Riverside Counties, improvements in the SR-91 corridor as well as at least two other corridors (A and B) are necessary. It is possible that Corridor B could be along an alignment extending Cajalco Road west from Riverside County to Orange County. Corridor B has not yet been advanced for preliminary engineering and environmental analysis. Refer to Section O.5.7, Common Response Related to Alternatives, on page O-35 in Section O.5, Common Responses, for discussion regarding the history of the SR-91 CIP and the need for improvements in both the SR-91 corridor and other parallel corridors to meet the forecasted demand between Riverside and Orange Counties.

P-10-3
This comment does not raise an environmental issue within the context of CEQA and/or NEPA. Consistent with the requirements of CEQA and NEPA, comments that raised environmental issues under CEQA and NEPA are responded to in this report. In addition, all comments received on the Draft EIR/EIS are included in this report and will be made available to the public and decision-makers prior to any action on the proposed project.
From: fouraceswild@yahoo.com [mailto:fouraceswild@yahoo.com]
Sent: Sunday, June 12, 2011 9:52 PM
To: echevarria@rctc.org
Cc: infosr91@mbimedia.com; CDonahue@ArellanoAssociates.com; thomasd@pbworld.com; Michael
Amling; trahlman@4rmcinc.com; shawn_oriaz@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: Bill Baker

Phone: 951-780-7913

Mailing Address: 18941 Newman Ave

City, State: Riverside, Ca.

Zip: 92508

Comment/Question:

Thank you for the opportunity to suggest and comment.

91 FWY IS a hazardous Fwy. Adding Toll lanes is not productive to Reducing traffic when a bucket of double yellow line paint could add one more general use lane and one carpool lane and one toll lane and NOT Take 2 years to complete (time spent on the road during construction) - This IS functional California is Broke NOT BROKEN This message has also been sent to Congressman Calvert Thank you in your Quest to Save California's TAX MONEY

*You received this message because Bill Baker submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator
This comment is correct in that the toll lanes and the Build Alternatives would not reduce traffic volumes in the SR-91 corridor. As discussed in Section 1.2, Purpose of the Project, on page 1-11 in the EIR/EIS, the purpose of the project is to improve movement in the SR-91 corridor rather than reducing traffic volumes. As shown in Table 1.10 on page 1-29 in the EIR/EIS, the Build Alternatives will result in reduced travel times and increased travel speeds in the SR-91 corridor compared to the No Build Alternative. Other tables in Chapter 1, Project, show that traffic volumes in the SR-91 corridor will increase in the future, with or without the project, and that operations will generally be better with the Build Alternatives than under the No Build Alternative. As a result, the improvements in the Build Alternatives, including the HOV and tolled express lanes, result in improved operations on SR-91 compared to the No Build Alternative.

Refer also to Section O.5.7, Common Response Related to Alternatives, on page O-35 in Section O.5, Common Responses, which describes the wide range of alternatives, including multiple carpool and GP lanes that were considered but not pursued and why those alternatives were not carried forward for detailed analysis in the EIR/EIS.

This comment also expresses concerns regarding the existing SR-91 freeway, alternative lane configuration, and fiscal matters. The design of the SR-91 CIP improvements will be approved by the Department. Safety features for all Department projects, including SR-91 CIP, typically include a range of features, depending on the individual project. Safety features included in the SR-91 CIP that will be approved by the Department during final design are anticipated to include proper offset of walls from shoulders and travel lanes, placement of guard rails, placement of crash cushions, and proper storage for ramps. In addition, during final design, detailed analysis of accident data for the project segments of SR-91 and I-15 will be conducted to assess whether additional safety features are needed at specific locations within the project limits.
From: Bill [mailto:weirdelr@verizon.net]
Sent: Sunday, June 12, 2011 8:23 AM
To: Cheryl Donahue
Cc: lougiordano
Subject: APN 101-290-023 relocation of billboard Green River and 91 freeway

Dear Cheryl Donahue,

I would like to thank you, Victoria Cook for and Chris LaBonte for all of your help. I studied the maps and I still don't know if I will be able to relocate the billboard on my property but I think I can... I think I can... I have spoken to the owner of the billboard, Mr. Drake Kennedy (Owner of Corona Outdoor Advertising and Regency Outdoor Advertising), and he has told me that if there is anyway to relocate the billboard on my property he will. If we are not able to relocate on my property ............. ....that is about all I can do...

I don't know if The Department of Transportation knows the exact location of the 14 foot high SOUND BARRIER and if the DOT notifies you or Arellano Associates of the exact location of the SOUND BARRIER I would appreciate having that information sent to me.

The property next to my property, APN 101-290-021, has two survey markers in the parking lot Marker #7 and Marker #8 and so far no one has been able to tell me if this is the location has been decided on for the 14 foot high SOUND BARRIER? (SEE attached video 91 freeway.wmv) If appraiser are not privy to this information I would appreciate it if you would forward my questions to someone at the DOT that might be know the location of this SOUND BARRIER.

I think the 14 foot high SOUND BARRIER will be located as shown on the attached images and attached video.

2 of the above images show the billboard where I believe it will be after it has been relocated.
1 - 60foot from barrier.jpg
2 - Field of view3.jpg
The third image “VIEW OF BB.jpg” is a 2011 Google view of the property.

60foot from barrier.jpg

the “60foot from barrier.jpg” is a October 22, 2007 Google image and it is easier to see the true location of the billboard in this image the yellow line was created using “Google Ruler” and Google said that line was 60 foot long. The long red line is where I believe the 14 foot high SOUND BARRIER is going to be placed. And I believe that that the driveway(red line) between the freeway and the Mammoth Office building is 30 foot wide.
Field of view3.jpg

The image “Field of view3.jpg” was created using a March 11, 2011 Google view (“VIEW OF BB.jpg”). Please note that I have added six lanes to the 91 freeway by copying a section of the six west bound lanes and pasting them next to the freeway in front of my property and there is still plenty of room to relocate the the billboard.

Thank you Victoria Cook and Chris LaBonte for all your time and trouble and

Yours truly
Gary Bailey
P.O. Box 431
Sun City, CA 92586  (951) 244 - 8405

CC to Corona Outdoor Advertising
Verizon's 150 high monopole is not in the field of view from the 91 freeway.

Field of view after billboard is moved. Please note that I have added six lanes to the 91Fwy, and there is still enough room to place the billboard. Lanes were added using copy and paste. Magnify image 300% and you will be able to count 12 lanes of traffic.
P-12-1
This billboard will be impacted by the partial acquisition of the parcel on which it is located. Refer to Table O.5 on page O-35 in Section O.5.8, Common Response Related to Billboard Relocation, which shows the impacts of Alternatives 1 and 2 on individual billboards, including the billboard cited in this comment. Section O.5.8 describes the process that RCTC will follow to relocate any billboards that must be moved to accommodate the project, including appropriate coordination with the billboard/property owner, the City of Corona, and the Department. As shown in Table O.5, it is anticipated that this billboard can be relocated to another location on the parcel on which it is currently located. The relocation of billboards and compensation for billboards that cannot be relocated will be conducted by RCTC consistent with the requirements of the Uniform Act.

Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, which describes the process RCTC will follow for the acquisition of any privately owned property for the project, including full and partial acquisitions.

P-12-2
The location of proposed noise barrier E-1 is within the proposed new State right-of-way on the edge of the shoulder of the proposed westbound on-ramp from Green River Road to SR-91. As shown on the preliminary project plans, that wall would be within the boundary of Assessor Parcel Number (APN) 101-290-023.

During the Department’s Noise Barrier Survey Process (Section O.5.3.3, Common Response Related to Noise Barrier Survey Process, on page O-13), this noise barrier was voted down by the commercial property owners in this location. However, the OCFCDC and the mobile home property owners voted for the approval of NB E-1. Therefore, NB E-1 was shortened to avoid the commercial properties that voted against the construction of NB E-1, and the noise barrier will be carried through during construction.

P-12-3
Refer to response to comment P-12-2, above. As noted above, this shortened noise barrier will be included in Alternative 2f. The billboard would be impacted by the project as discussed starting on page O-35 in Section O.5.8, Common Response Related to Billboard Relocation, and in Table O.5.
P-12-4
Refer to responses to comments P-12-1 to P-12-3, above.

NOTE: This commenter (Mr. Bailey) provided additional comments in an email dated June 5, 2011. Refer to comment P-3, earlier in this section, for those comments and the corresponding responses.
From: abelen@citybestinsurance.com [mailto:abelen@citybestinsurance.com]
Sent: Thursday, June 16, 2011 3:47 PM
To: eechevarria@rtc.org
Cc: info@91@mbimedia.com; Cheryl Donahue; thomasd@pbworld.com; michael.aming@lsc-assoc.com; trahimian@4rmcinc.com; shawn_oriaz@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: Mike Hafez
Phone: 909-821-3884
Mailing Address: 1630 E 4th Street Ste "D"
City, State: Ontario, CA
Zip: 91764

Comment/Question:

We adamantly object to this project as it will eliminate the little traffic flow we are currently encountering. The building of this fwy will harm my business traffic flow even more so by completely killing the visibility of my property. I sure hope you reconsider this project and come up with better solutions that will help us small business owners.

*You received this message because Mike Hafez submitted feedback regarding the SR-91 Highway Improvements.

Regards,
System Administrator
P-13-1
Efforts will be made during the design/construction phase to minimize any disruption of access to and visibility of existing properties to allow all businesses to remain open during construction. The project will include a Construction Liaison to work with local property owners so that construction activities that could or would affect those properties can be scheduled to minimize disruptions. A public outreach campaign will also be used to assist businesses and their patrons in minimizing inconveniences that arise during construction.

The State of California does not permit posting of informational signs for specific businesses on freeways. Although not required as mitigation for the project, consideration will be made to post “Roadside Business” signage in advance of exits on SR-91 to assist travelers in locating businesses in areas adjacent to the freeway. Acceptance of that recommendation by the Department will depend on a determination during final design that the signage would not conflict with required regulatory, directional, and safety signs.

Refer also to Section O.5.2, Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses, on page O-7 in Section O.5, Common Responses, which provides information regarding potential impacts to businesses.

This commenter did not provide an address for the cited property and, therefore, it is not possible to respond regarding the specific impacts, if any, of Alternatives 1 and 2 on that property.
From: Jim Ogle [mailto:jwogle@pacbell.net]
Sent: Thursday, June 16, 2011 10:59 AM
To: Cheryl Donahue
Subject: Re: 91 Freeway - Public Comment Process

Hi Cheryl- I am the property manager for 1441 Pomona Road, and attended the public hearing in Corona last Thursday. It was very informative. Do you know when a decision will be made as to which alternative will be chosen? Thank you.

Jim Ogle
Ogle Real Estate Services
1570 E. Edinger Ave., #12
Santa Ana, CA 92705
714/558-7211 (o)
714/558-7850 (f)
jwogle@pacbell.net
P-14-1

On September 20, 2011, the PDT identified Alternative 2f as the Preferred Alternative for the SR-91 CIP.

This commenter (Mr. Ogle) provided additional comments on a comment card at the public hearing, which are provided as C-44 later in this appendix.
From: MLShina@yahoo.com [mailto:MLShina@yahoo.com]
Sent: Sunday, June 19, 2011 12:36 PM
To: eechevarria@rctc.org
Cc: infosr91@mbimedia.com; CDonahue@ArellanoAssociates.com; thomasd@pbworld.com; Michael
Amling; trahimlan@4rmcinc.com; shawn_oriaz@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: Mary Lou Shina

Phone: (619)501-6616

Mailing Address: 6580 Glenroy Street

City, State: San Diego, CA

Zip: 92120

Comment/Question:

I am totally opposed to the 91 Improvement Project.

There is no benefit to me as a property owner because it will devalue the area.

My family owned this property known as Parcel 117-080-010-0 for over one hundred years.

Corona, the beautiful Circle City, as it was historically known and in which I was born and raised, was
destroyed when Route 91 was built. This, so-called improvement, will continue the devastating
destruction of our city.

*You received this message because Mary Lou Shina submitted feedback regarding the SR-91
Highway Improvements.

Regards,

System Administrator
P-15-1
This comment does not raise an environmental issue within the context of CEQA and/or NEPA, or ask any questions regarding the technical analyses in the EIR/EIS. Consistent with the requirements of CEQA and NEPA, comments that raised environmental issues under CEQA and NEPA are responded to in this report. In addition, all comments received on the Draft EIR/EIS are included in this report and will be made available to the public and decision-makers prior to any action on the proposed project.

P-15-2
It is acknowledged that Alternatives 1 and 2 will result in the removal of up to seven of the historic acorn-style streetlights and the removal of 18 trees within the boundary of the National Register of Historic Places (National Register) listed Grand Boulevard Historic District. A condition placed on the project, provided on page 3.8-20 in Section 3.8.4.1, Condition for the Acorn-Style Streetlights in the Grand Boulevard Historic District, requires the relocation of the acorn-style streetlights. Measure CR-1 in Section 3.8.4.2, Measure for Replacement of Trees Removed from the Grand Boulevard Historic District requires the replacement of the 18 trees elsewhere in the Historic District.

In addition, refer to Section 1.2, Purpose of the Project, on page 1-11, which indicates that one purpose of the project is to “…reduce diversion of regional traffic from the freeways into the surrounding communities…” This would be a beneficial effect of the project on the area around the Grand Boulevard Historic District.

Alternatives 1 and 2 were designed to minimize the acquisition and removal of homes and businesses, including those in the City of Corona.
From: Victor & Karen Quintana

Phone: 9517349251

Mailing Address: 307 S Smith Ave Trlr 76

City, State: Corona, Ca

Zip: 92882

Comment/Question:

Our first concern is our health. We are already next to the freeway and if the freeway gets moved closer to us we will be breathing all the exhaust. What is the law for a barrier wall next to a home? I thought it had to be 15 ft and that is what it is now.

We have been living here for 10 yrs and have made several home improvements. In the last 2 yrs we have installed a new roof, heating and air conditioning and replaced the piers and pads. Our house already vibrates, if the freeway is any closer it will shake our house and be way too loud. If we have to move will there be any compensation for all the money we have put into it recently?

A huge concern is how much notice are we going to get if we have to move? How can we live with all the noise, dust, dirt, & fumes that will be going on during construction? We also will not be able to sleep during all the construction. It would be best for us to move than live through all that for 4 years. My husband is a heart patient and it would not be healthy for him in any way. We would appreciate a response.

Thank you,

Victor & Karen Quintana

*You received this message because Victor & Karen Quintana submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator
P-16-1
There is no law that sets the distance between homes and noise barriers. Applicable local ordinances may restrict the proximity of any wall adjacent to structures and will likely vary with specific zoning limitations by local jurisdiction. The existing wall is 15 ft from this home. With the project, a taller wall will be built at the same location and will continue to be approximately 15 ft from this home.

It was determined that implementation of SCAQMD Rule 403 and other control measures will minimize construction emissions, resulting in less than significant localized construction impacts, as discussed in Section 4.2.2.2, Air Quality, on page 4-12 in the EIR/EIS. In addition, it was determined that the project would reduce criteria air pollutant and MSAT emissions locally and regionally, as discussed in the subsection titled “MSAT Analysis Results” in Section 3.14.3.2, Permanent Impacts, on page 3.14-35 in the EIR/EIS. Therefore, the project would not result in any air toxic impacts.

P-16-2
This property will not be a full or partial permanent acquisition under Alternatives 1 and 2. However, TCEs will be needed at this property during construction of Alternatives 1 and 2.

Although the property owned by the commenter is not proposed for acquisition, this response is provided to address the questions raised regarding the acquisition process. The RCTC will negotiate with property owners regarding the purchase of any land that may be needed, as well as any affected mobile home owners for the purchase of the actual mobile homes. Property appraisals will take into account improvements that have been made to the residences, among other evaluation criteria.

RCTC will follow the applicable laws governing the relocation of mobile home tenants. These laws and notification requirements will be reviewed with the property owners and tenants well in advance of needing to take possession of the property. If the property is purchased before it is needed, the tenant may be able to remain on the property (under lease from RCTC) until the property is required for construction. Refer also to Appendix D, Summary of Relocation Benefits, in the EIR/EIS.

Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, which provides a detailed discussion of the property acquisition process that will be used by RCTC.
The potential for short-term noise impacts during construction is addressed in Section 3.15.3.3, Temporary Impacts, on page 3.15-15 in the EIR/EIS, which indicates that construction noise will be substantially controlled based on compliance with the Department’s “Sound Control Requirements,” the applicable local jurisdictions’ noise ordinances, and Measures N-2 and N-3 in Section 3.15.4.2, Measures for Construction Noise, starting on page 3.15-17 in the EIR/EIS. The design/build contractor would be responsible for complying with the applicable ordinances for the Cities of Anaheim, Corona, Norco, and Riverside (all of which prohibit excessive noise between 7:00 p.m. and 7:00 a.m. during construction), and with the Department’s Standard Specifications Section 14 08.02, Noise Control, Standard Special Provision (SSP) S5-310 (which would substantially reduce noise impacts during the nighttime hours).

The potential for short-term air quality impacts during construction is addressed in Section 3.14.3.3, Temporary Impacts, on page 3.14-37 in the EIR/EIS. As shown, exhaust emission and fugitive dust impacts during construction would be substantially reduced based on compliance with the standard conditions for construction provided in Section 3.14.4.1, Standard Conditions, on page 3.14-39 in the EIR/EIS.

The following information was added to Section 3.15, Noise, regarding vibration effects:

- A new subsection, Construction-related Ground-borne Vibration Impacts, was inserted starting on page 3.15-16 in Section 3.15.3.3, Temporary Impacts, in the EIR/EIS to describe the potential for temporary vibration-related impacts during project construction.
- A new subsection, Ground-borne Vibration Impacts, was inserted in Section 3.15.3.3, Temporary Impacts, on page 3.15-16 in the EIR/EIS to describe the potential for temporary vibration-related impacts under the No Build Alternative.
- A new subsection, Ground-borne Vibration Impacts, was inserted in Section 3.15.3.2, Permanent Impacts, on page 3.15-14 in the EIR/EIS to describe the potential for permanent vibration-related impacts during project operations.
- A new subsection, Ground-borne Vibration Impacts, was inserted in Section 3.15.3.2, Permanent Impacts, on page 3.15-14 in the EIR/EIS to describe the potential for permanent vibration-related impacts under the No Build Alternative.
P-16-4

As indicated in response to comment P-16-2, above, this property is not proposed for acquisition for the project.

As noted in response to comment P-16-3, above, this property will be subject to short-term noise and air quality impacts that will be substantially mitigated.

The total construction duration for the project is anticipated to be 4 years. Construction in the immediate vicinity of this property will include construction of walls, drainage facilities, new roadway pavements, placement of signs, and other minor activities. Construction will be performed in several sequences with total construction time in this area not expected to exceed 1 year.
From: CARMEN PADILLA

Phone: 951-734-0172

Mailing Address: 1414 Ripchak Road

City, State: Corona

Zip: 92879

Comment/Question:

I just wanted to know if, my home is going to be effected with the new SR-91 improvements of expanding the lanes. Would like a feed back.

*You received this message because CARMEN PADILLA submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator
P-17-1
Alternatives 1 and 2 would not require the full or partial acquisition of this property (this is based on the mailing address provided in this commenter’s email). However, properties in the vicinity of the project segment of SR-91 may be subject to short- and/or long-term air quality, noise, traffic, or other impacts. The potential for those types of short- and/or long-term impacts on properties adjacent to or near the SR-91 corridor are evaluated in detail in Chapter 3, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and Mitigation Measures, starting on page 3-1 in the EIR/EIS.
1698 Bel Air Street  
Corona, CA 92881  
June 29, 2001  

Caltrans  
464 West Fourth Street  
San Bernardino, CA 92401  

Dear Sirs:  

I attended the public hearing concerning the 91 and I-15 freeway expansions. I am concerned with the I-15 between Old Temescal Rd and Magnolia Ave. Our home backs up to the I-15. We were aware of the safety railing installed on the I-15 above our home in this area when we bought the home.  

When looking at the photos of the area and speaking with two engineers about the railing, I was informed that the freeway was not going to be widened in this area, but an HOV lane will be installed in the center divider area. This to me is widening the freeway but to them widening means adding more area to the freeway itself.  

On the west side of the I-15 in this area, large cement industrial buildings have been built. We have found that these now reflect the sound to our side of the freeway. We can hear the truck up shifting, motorcycles and general traffic noise as the vehicles go up the hill going south on the I-15. The sound of these vehicles is reflected off the buildings. W  

The surface of the I-15 on the east side is cupped and causes the trailers to bounce making quite a bit of noise as they bounce down the freeway. Some of the box trailers bounce so much you can feel the air pressure change in the house. Other times, it will shake the house like an earth quake. We have had guests ask if we were having an earth quake when they visit. Noise from engine brakes can be horrendous at times. Some of the trucks are so loud, they can be heard for over ¼ mile before they come near our home. I have asked Caltrans to install a sign prohibiting the use of engine brakes in this area but to no avail. I was told it was not necessary. Many times, we have had to keep all the windows closed because of the noise so we can talk in the house.  

I realize that you have made sound tests in this area but you do not live with this.
Now, another aspect is the railing along the side of the freeway. We have had numerous accidents on this part of the I-15. The railing has done its job but this was for auto traffic. Our dread is that a truck will come on through the railing and take out one of our houses. I have had a tire come off a truck, hit the freeway fence (bent the fence), break a cement table and lodge under steps. If the steps had not been there, the tire would have gone through a sliding glass door and into the bedroom of our house. I have seen the videos about these railings but have also seen the damage the trucks can do to these and the cement barriers. Another neighbor had a truck tire land on his roof.

Litter is a third problem along this freeway. Numerous trash trucks traverse this road daily and trash is sometimes dropped one or two pieces at a time. The El Sobranted Super Dump can be open 24 hours a day and up to 750 trucks a day can use this dump. That means as many as 1500 truck passages can go North or South on the I-15 past our house as well as the regular traffic and truck traffic.

With the added HOV lane, more traffic is going to use the I-15 in this area which increases the possibility of accidents along this part of the freeway. It also increases the noise factor in our area. More noise reflecting off the industrial buildings and coming into our homes.

I ask that a safety barrier and sound wall be erected on the I-15 between Old Temescal Road and Magnolia Ave. off ramp on the East side of the freeway. This is for our safety and noise control.

Sincerely,

Dr. Bruce V. Armstrong
P-18-1
No response is necessary because this comment does not raise an issue within the context of CEQA or NEPA, and does not ask any questions related to the technical information or environmental analyses in the EIR/EIS.

P-18-2
"Widening" can be defined to mean widening on the outside of existing lanes/shoulders or on the inside, within an existing median. The project proposes widening I-15, in the median only, to add HOV lanes. Construction on the outside of the existing travel lanes and shoulders on I-15 will be limited to the construction of sound walls where deemed reasonable as discussed in the EIR/EIS, and signage revisions adjacent to the highway shoulder.

P-18-3
Field noise measurements were taken in the neighborhood that would also measure any reflected noise from across the freeway. The field noise measurements along with traffic counts gathered during the noise measurements were input into a traffic noise model representing the existing roads. This model was run and it verified that the modeled numbers and the measured numbers were within the margin of error allowed by the Department and FHWA guidance in the Department's Traffic Noise Analysis Protocol (August 2006).

Wall NB K1-A was modeled and found to be feasible for reducing noise at the homes along I-15, and the cost was determined to be reasonable. Based on commitments made during previous projects, RCTC decided to conduct a noise barrier survey for NB K1-A. Based on the results of the noise barrier survey, NB K1-A was approved and will be carried through to construction. Section 3.15.3.2, Permanent Impacts, on page 3.15-14 in the EIR/EIS includes a commitment by the RCTC that, if the proposed improvements for the I-15 project are not constructed within 5 years of the completion of the SR-91 CIP, RCTC will initiate a separate project to construct the remaining barriers along I-15. Refer also to Section O.5.6, Common Response Related to Noise Barriers on I-15, on page O-25, and Section 3.15.4.3, Mitigation for Operational Noise on I-15, on page 3.15-19 in the EIR/EIS for the measure added to Alternatives 1 and 2 describing RCTC's commitment regarding provision of this noise barrier in the future.

Refer also to Section O.5.3.1, Common Response Related to the Noise Process, on page O-8 in Section O.5, Common Responses, for additional discussion on the noise analysis process and the identification of sound walls included in the project.
P-18-4
The Build Alternatives include repaving of the project segments of I-15, which will reduce the amount of trailer bounce on those segments of the freeway. Engine brakes are a safety feature on trucks over which RCTC and the Department have no control. The purpose of the EIR/EIS is to analyze impacts and mitigate for the impacts of the SR-91 CIP Build Alternatives and not to address or mitigate for existing conditions.

Refer also to response to comment P-18-3, above.

P-18-5
Safety barriers are placed by the Department along the outside shoulders of freeways such as SR-91 and I-15 to prevent vehicles (including trucks) and vehicle debris (such as tires) from leaving the highway right-of-way. No changes to the existing bridge railings and safety barriers at this location are proposed as part of the proposed project. Existing accident rates were reviewed and found to be lower than the statewide average for similar facilities. Information regarding accident data for the project area is provided in Section 1.3.1.8, Safety, on page 1-39 in the EIR/EIS, and existing and projected traffic levels with and without the project are discussed in Section 3.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, starting on page 3.6-18 in the EIR/EIS.

P-18-6
The Department has an ongoing freeway maintenance program that includes collection and proper disposal of litter collected on freeways, including I-15, by Department maintenance staff, Special Programs personnel, and Adopt-A-Highway participants.

The California Vehicle Code requires that vehicles transporting loads must have their loads covered. However, RCTC and the Department have no control over trash trucks or other vehicles traveling on I-15 with uncovered or inadequately covered loads from which trash falls onto the freeway.

SR-91, as a major east-west freeway, provides critical connections for trucks coming from/going to the Ports of Los Angeles and Long Beach and to destinations across southern California and points to the east. Traffic on SR-91 and I-15, including trucks, is forecast to increase with or without the SR-91 CIP. It is possible that the amount of litter on these freeways could increase in proportion to future increases in vehicle volumes. However, those possible increases would be related to overall increases in traffic volumes, which would occur with or without the project, and
which, therefore, are not impacts of the project. Further, as noted above, the State Vehicle Code specifically requires covering loads on trucks and RCTC and the Department have no control over vehicles traveling on the freeways and whether they have covered loads or not.

**P-18-7**
The HOV lanes will improve traffic operations on I-15 because improved traffic operations generally result in fewer accidents, and fewer accidents translate to a safer corridor. Direct HOV connectors between HOV lanes on one freeway and HOV lanes on another freeway eliminate merges, diverges, and other weaving activity that deteriorates traffic operations. Elimination of these conflicting vehicle movements improves the overall safety of the facility. As discussed in detail starting on page 1-1 in Chapter 1, Project, and in Tables 1.6 through 1.10 in the EIR/EIS, traffic volumes on I-15 are projected to increase under the No Build Alternative and Alternatives 1 and 2. The HOV lanes will improve traffic operations on I-15.

HOV lane performance is forecast to continue to deteriorate under 2035 conditions, with two segments operating at LOS E and one segment (Green River Road to Auto Center Drive) continuing to operate at LOS F during the p.m. peak hour in the eastbound direction. Traffic LOS are discussed in Section 3.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, on page 3.6-19 in the EIR/EIS. Safety is discussed in Section 1.3.1.8, Safety, on page 1-39 in the EIR/EIS.

**P-18-8**
Refer to response to comment P-18-3, above, and to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, for a detailed discussion of the noise analysis and sound wall identification process.

**P-18-9**
Refer to response to comments P-18-3 and P-18-5, above, and to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, for a detailed discussion of the noise analysis and sound wall process.
Please print

Name: John Thalasinos
City: Corona - Ca
Zip: 92879

Comment: T&T Enterprises is a manufacturing company with extensive inventory and machinery. We will need a location that has enough electricity and been wired for the machinery prior to any relocation effort.

☐ Please add me to the project distribution list. My address is:

Address: 901 E. Third St.
City: Corona
Zip: 92879

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 494 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vincentia Avenue, 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.

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Please print

Name: John Thalassinos
City: 9016 Third St
Zip: 92879

Comment: We manufacture fasteners for the petro-chemical, nuclear power, industries, our inventory has to be traceable all the way back to the mill that produced the metal we started with. It is a major concern that if the traceability is lost, the inventory value is compromised and can not be used in the nuclear industry.

Address: 781 E. Third St
City: Corona
Zip: 92879

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicenlia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.
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P-19-1
Alternative 2f, the Preferred Alternative, would require only partial acquisition of the property at 901 East Third Street; therefore, the business will not need to be relocated. The adjacent property to the east is proposed as a full acquisition. That property will be acquired and may be used to provide replacement parking for the property at 901 East Third Street. Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, for a detailed discussion of the property acquisition process, including acquisition of partial parcels, that the RCTC will follow. Refer also to Appendix D, Summary of Relocation Benefits, in the EIR/EIS for a detailed description of relocation benefits for affected residents and businesses.

P-19-2
Refer to response to comment P-19-1, above.

P-19-3
Businesses with multiple sites, including parcels not affected by the project, will have the opportunity to seek reimbursement for related incidental damages. Refer also to response to comment P-19-1, above.

P-19-4
Refer to responses to comments P-19-1 through P-19-3, above.
Name: Stuart Johnson  City: Anaheim  Zip: 92804

Comment: We oppose a partial takeover/sale of our parcels #118-302-017, 018, 019 (27 units) – see email sent 7/11/11 to "feedback" section of SR91 website.

Thank you

Please add me to the project distribution list. My address is:
Address: 2860 W. Lynrose Dr  City: Anaheim  Zip: 92804

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 655 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmentaldraft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.
P-20-1
The existing driveway on Second Street will be reconstructed as part of the relocated Second Street. Alternatives 1 and 2 will result in the partial acquisition of this property but will not require the relocation of any of the uses on the site. Access to the cited property during the construction of the project road improvements and utility work on Second Street will be from the driveway on Buena Vista. One of the two driveways to this property will be open at all times to allow for access to and from the property.

Utility connections including sewer and water will be part of the Second Street relocation under Alternatives 1 and 2. Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, for information regarding the property acquisition process for the project.

P-20-2
The RTC searched all the emails submitted to the feedback site, including emails on July 1, 2011, and did not find an email from this commenter. Therefore, it is not possible to respond to any comments this commenter may have wished to submit in that email.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: BRENT THALASINOS City: CORONA Zip: 92879
Comment: WE ARE LOOKING FORWARD TO SEEING CONSTRUCTION
BEGIN ON THE 91 EAST BETWEEN THE MAIN STREET EXIT
AND THE 15 FREEWAY. IT WOULD BE IDEAL IF A START
DATE COULD BE IMPLEMENTED.

☐ Please add me to the project distribution list. My address is:
Address: ______________________ City: ______________________ Zip: ______________________

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 550 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8, by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.
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Appendix O Responses to Comments

P-21-1
Refer to Section O.5.4.1, Schedule, on page O-14 in Section O.5, Common Responses, for the schedule showing the environmental process for the project, the identification of the Preferred Alternative, and the anticipated date of the start of project construction.

In addition, note that consistent with the requirements of CEQA and NEPA, all comments received on the Draft EIR/EIS are included in this report and will be made available to the public and decision-makers prior to any action on the proposed project.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print **PLEASE UP-DATE YOUR CONTACT INFORMATION**

Name: ___________________________ City: ___________________________ Zip: ___________________________

Comment: **SUBJECT PROPERTY**: 1966 W. 6TH ST. CORONA 92882

**LIST OF OWNERS:**

SAL RIELA = CELL (714) 349-5686 HOME (949) 832-9288

RALPH KULAJIAN = CELL (949) 784-9598 HOME (949) 586-9377

VANE JEFNAVORIAN

☐ Please add me to the project distribution list. My address is:

Address: P.O. BOX 2368 City: LAKELAND HILLS Zip: 92654-2368

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public hearing or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.

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6/22/11
**P-22-1**

This commenter’s contact information was added on page 7-124 in Chapter 7.0, Distribution List, in the EIR/EIS, as requested.
From: jtinr@sbcglobal.net [mailto:jtinr@sbcglobal.net]
Sent: Thursday, July 07, 2011 8:23 AM
To: eechevarria@rctc.org
Cc: Info15
Subject: I-15 Corridor Improvement Comments/Feedback

From: John Reist

Phone:

Mailing Address: 8322 E. Loftwood Ln.

City, State: Orange, CA

Zip: 92867

Comment/Question:
What improvements do you plan to make for the northbound I-15 to the westbound 91 Fwy? This ramp needs to be fixed.

*You received this message because John Reist submitted feedback regarding the I-15 Corridor Improvement Project.

Regards,

System Administrator
P-23-1
As described in the subsection titled “Permanent Improvements at Main Street/I-15 under Alternative 1” on page 2-61 and shown on Figure 2-8 on page 2-63 in Section 2.3.2.1, Nonstandard Mandatory and Advisory Design Features, in the EIR/EIS, the northbound I-15 to westbound SR-91 would be improved by the addition of a collector-distributor road to merge and then separate I-15 traffic from the Main Street exit traffic prior to merging with SR-91. As described in the subsection titled “Permanent Improvements Under Alternative 2” on page 2-75 in Section 2.3.2.1, Alternative 2 would include the same collector-distributor road as under Alternative 1, with the addition of a separate connector provided for tolled express lane traffic only. The improvements under Alternative 2 would be provided for Alternative 2 with all its design variations, including Alternative 2f, which has been identified as the Preferred Alternative.
Sent: Friday, July 08, 2011 4:01 PM
To: echevarria@ctsc.org
Cc: infosr91@mbimedia.com; CDonahu@ArellanoAssociates.com; thomasd@pbworld.com; Michael
Amling; trahman@4mucinc.com; shawn_orizd@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: James Flournoy

Phone: 626-280-6335

Mailing Address: 8655 landis view
City, State: Rosemead ca
Zip: 91770

Comment/Question:

USGS Arkstorm data must be used for hydrology, storm drain, public works calculations. P-24-1

USGS Shakeout data must be used for liquefaction, landslide and Structural engineering. P-24-2

Long period long duration ground motion from a major earthquake on the San Andreas and San
Jacinto and Elsinore faults must be utilized in addition to the usual short duration higher frequency
data. P-24-3

Complete earthquake spectra must be developed and synthetic seismograms utilized. P-24-4

Existing bridges must be analyzed using these latest (since 2005) findings. P-24-5

Shakeout and later data is available from USGS. P-24-6

Recently the frequency and severity of an event on the southern San Andres has been scientifically
accepted. P-24-7

Multiple segment events must be considered for this critical project. P-24-8

This latest data must be utilized

sincerely yours

Jim Flournoy

secretary

*You received this message because James Flournoy submitted feedback regarding the SR-91
Highway Improvements.

Regards,

System Administrator
P-24-1
The hydrology and drainage designs will be prepared in accordance with applicable Department requirements, and will be reviewed and approved by the Department. Therefore, the USGS Arkstorm data do not apply to this project and will not be used in the final project design.

P-24-2
Geotechnical Design Reports and Foundation Reports will be prepared in accordance with applicable Department requirements, including the latest Department Seismic Design Criteria (SDC), and will be reviewed and approved by the Department.

P-24-3
The applicable Department requirements and SDC will be used in the designs of the project bridges and structure retaining walls. All structure designs will be reviewed and approved by the Department's Division of Structures in Sacramento.

P-24-4
Comments noted. Refer to response to comment P-24-3, above.

P-24-5
Existing bridges will be evaluated for seismic retrofit and upgraded per current Department requirements, if necessary.

P-24-6
The design of highway projects conducted by the Department, or by local agencies such as RCTC, is prepared using the latest approved design guidance, including maximum credible earthquake criteria.

P-24-7
Comments noted. Refer to the response to comment P-24-6, above.

P-24-8
Refer to response to comment P-24-3, above.
From: perezpr06@yahoo.com [mailto:perezpr06@yahoo.com]
Sent: Sunday, July 10, 2011 3:33 PM
To: eechevarria@rtc.org
Cc: infos91@mbimedia.com; CDonahue@ArellanoAssociates.com; thomasd@pworld.com; Michael Amling; trahimian@4rmcinc.com; shawn_oriaz@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: Christopher Perez

Phone: 951-279-3306

Mailing Address: 725 Meridian Circle

City, State: Corona, CA

Zip: 92882

Comment/Question:

This is the third time residents on Meridian have been contacted re: Soundwalls which are sorely needed for homes facing the 91 freeway. I have tried very hard in the past to help inform and engage residents but this has been difficult due to the fact there have been too many unanswered questions for residents to make proper decisions. It is VITAL that there is an opportunity for Caltrans, RTC, contractors, etc to address all resident questions individually and in-person. Please schedule a local neighborhood meeting (I am pleased to offer up my home), where we can have all questions addressed. We have NOT been able to get these questions answered in order for my neighbors and I to properly undersatnd what were we were "voting on" in you last mailer.

*You received this message because Christopher Perez submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator
P-25-1
Two meetings were held in August 2011 to discuss noise barriers at two locations, including the area cited by the commenter. Residents in all benefited residences in those two areas were invited to the meetings. Refer to Section 5.2.7, Noise Barrier Survey Public Outreach Efforts, starting on page 5-25 in the EIR/EIS and to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, for additional discussion regarding the process for surveying of private property owners at locations considered for sound walls and additional information regarding the August 2011 meetings.
From: metzfamily92882@yahoo.com [mailto:metzfamily92882@yahoo.com]
Sent: Monday, July 11, 2011 12:27 AM
To: eechevarria@rutc.org
Cc: infosr91@mbimedia.com; CDonahue@ArellanoAssociates.com; thomasd@poworld.com; MichaelAmling; tahlimian@4rmcinc.com; shawn_oriaz@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: Ryan Smith

Phone: 951-261-2037

Mailing Address: 638 Santa Paula St

City, State: Corona CA

Zip: 92882

Comment/Question:

Denying access to people by removing the carpool lane and taking more than 50 years to repay this project is NOT what's best for the citizens of Corona. It sickens me to think that I will no longer be able to get on the freeway and use the carpool lane, which I use 4 days a week. I do not want to see my money used to pay back any funding of a toll lane that will have no positive impact on the citizens of Corona. The way I see it, only the people who live in Riverside and all points east of where the toll lane will end will be the only ones who get to utilize these lanes. With the economy the way it is, do you really need to ask Corona citizens to pay for this expansion which is not beneficial to us? Also, what about the impact this is going to have on all of us with the added pollution, and there will be added pollution because fewer commuters will be able to carpool forcing more cars onto the freeway? I am asking that you please reconsider this proposed “expansion” which is simply an addition of toll lanes owned by OCTA and the negative impact it will have on us Corona residents who utilize a lane that will no longer be available which will also add to congestion on city streets as people flee the freeway to get away from the bumper to bumper traffic that will increase when people can't afford to use the toll lanes or can't use them because they can't exit them.

*You received this message because Ryan Smith submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator
P-26-1

Access to the Express Lanes would move west from the current location near Green River Road to a location near the SR-241 toll road. This will improve interchange and mainline operations on this segment of SR-91. The project would also provide Express Lane access to Corona residents along I-15 as well as serving communities to the north, south, and east. The tolled express lanes are described in the following sections in Chapter 2, Project Alternatives, in the EIR/EIS:

- Section 2.1, Project Description, page 2-1
- Section 2.3.3.2, Alternative 2: Add General-Purpose Lanes and Extend Tolled Express Lanes, page 2-67

It is acknowledged that some current users of the existing carpool lanes may be unable or choose not to use the tolled express lanes in Alternative 2f. However, the tolled express lanes will be open to three-or-more-person carpools, vanpools, and buses, as described in the subsection titled "Description of Alternative 2" on page 2-70 in Section 2.3.3.2.

It is not anticipated that the project would require 50 years to finance. As discussed in Chapter 2, Project Alternatives, Alternative 1 is a transportation project that was planned as part of the 2002 Measure A program. Measure A will generate revenue from a one-half-cent sales tax to construct one GP lane in each direction on SR-91, as described in the RCTC Measure A 10-Year Delivery Plan. The improvements in Alternative 1 will be funded primarily from Measure A funds. Alternative 2 would be funded in part by the Measure A sales tax revenue and in part by toll revenue bonds. The toll revenues generated under Alternative 2 would be used as the funding source for the construction and operation of the tolled express lanes under Alternative 2.

P-26-2

Refer to Section 3.14.3.1, Summary of Impacts, on page 3.14-13 in the EIR/EIS, which provides the following summary of the potential for the project to result in permanent and temporary air quality impacts:

"Alternatives 1 and 2 would improve traffic flow by reducing congestion in the project area. This improvement in traffic flow would reduce regional vehicle emissions. In addition, the Build Alternatives would not delay the attainment of CO, PM2.5, or PM10 standards. Therefore, Alternatives 1 and 2 and their design variations would not result in long-term adverse impacts related to air quality."
"The construction of Alternatives 1 and 2 has the potential to temporarily increase air quality emissions in the project area. Implementing the standard Department and SCAQMD measures would substantially reduce this short-term impact."

Refer to Section 3.14.4, Avoidance, Minimization, and Mitigation Measures, on page 3.14-39 in the EIR/EIS for the measures included in the Build Alternatives to address short-term air quality effects during construction.

Refer also to the response to comment letter P-16-1, on page O-466, which discusses short-term air quality and noise impacts and mitigation for those project impacts.

**P-26-3**

While the project would not deny any current users access to the HOV or tolled express lanes, it would change the access locations for those facilities compared to existing conditions. This may create an inconvenience for some current users although there is a greater overall benefit afforded by serving more users.
From: arcodude@aol.com [mailto:arcodude@aol.com]
Sent: Monday, July 11, 2011 2:32 PM
To: eechevarria@rcrtc.org
Cc: infos91@mbimedia.com; CDonahue@ArellanoAssociates.com; thomasd@pbworld.com; MichaelAmling; trahimian@4rmcinc.com; shawn_oriaz@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: Robert Kofdarali

Phone: 951-538-5931

Mailing Address: p.o. Box 2499

City, State: Corona, Cal

Zip: 92878-2499

Comment/Question:

I attended the public meeting regarding the 91 project on June 9, 2011 from 3pm until 5pm and here are some of my comments and I thank you in advance for considering my comments.

Someone at the meeting told me that they are proposing closing the northerly entrance next to the off ramp permanently because of grading issues they think, no one could tell me for sure why, I just wanted to say that we're a very busy Arco ampm gas station and also there is a well established McDonald's restaurant behind us as well and closing one of the entrances would be devastating to both our businesses and I wanted to be very clear that Caltrans and or any of the agencies working on the project are allowed at any time to go on my property and grade it or do whatever they need to do, to keep the northerly entrance open permanently.

There is a temporary easement on the other entrance and again no one could me why it's there, I was assuming to store equipment for the project, I would like to know the reason the easement is there.

After construction starts my off ramp and on ramps will be closed for months and I know that's going to affect my business, my bank is not going to care that there is a major project by my business, so my question is about loss of business goodwill and how it's going to work.

A big portion of my property behind McDonald's will be used according to the plans that I was shown and Caltrans is considering purchasing only a partial part of the property thus leaving me with a very small property that I could not develop, and this property is approved by the County of Riverside for a Popeye's chicken restaurant, I would like to see other options, a full purchase and a partial purchase and it would be nice for me to decide which option to choose.
Thank you,

Robert Koldarali, 800 Serfas Club Drive, Corona, Ca. 92882

July 11, 2011

951*596*5931 cell

*You received this message because Robert Koldarali submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator
**Appendix O Responses to Comments**

P-27-1
Refer to responses to comments P-27-2 through P-27-5, below.

P-27-2
The driveway will need to be relocated because Alternatives 1 and 2 would result in the partial acquisition of this parcel to accommodate the widening of Serfas Club Drive and SR-91 at this location. The SR-91 Build Alternatives would not directly affect the driveway, but the interchange reconfiguration will put that ramp intersection too close to the driveway, as shown on Figure 2-6 on page 2-55 in the EIR/EIS. This would lead to traffic conflicts with ramp traffic, so the driveway will be removed. This property currently has two driveway access points to Serfas Club Drive. As noted earlier, one will be closed in order to meet the Department’s access control requirements at the ramp intersection. The second driveway will need to be modified to provide the required width to provide the correct turning movements. The SR-91 CIP includes the modification and reconstruction of this driveway to the proper width to provide for the correct turning movements. Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5.1, Common Responses, for discussion of the RCTC property acquisition process for the project.

P-27-3
The cited TCE is needed to allow access to relocate and/or modify existing overhead power lines in this area.

P-27-4
The RCTC will monitor any problems related to construction, including dust, dirt, noise and access to businesses. RCTC will make every effort to reduce construction impacts and promote access to businesses during construction. Access will be provided to this business at all times, even when the Auto Center Drive eastbound off-ramp is closed. Those ramp closures are proposed for weekends. Detours will be provided during the periods of the ramp closures.

P-27-5
Refer to response to comment P-27-2, above, for discussion regarding the project impacts to this property. This property owner owns several parcels at this location. The particular lot noted in this comment would be a partial acquisition under Alternatives 1 and 2. If the remainder of this parcel is deemed unsuitable for future use or development, that issue and possible compensation for that effect would be addressed during the negotiations for the acquisition of the part of the parcel needed.
for the project. All property acquisition will be conducted in compliance with the Uniform Act. The issue of whether a specific property acquisition could be full rather than a partial acquisition at the request of the property owner would be addressed during negotiations between the RCTC and that property owner.
From: Mahmosadeg@aol.com [mailto:Mahmosadeg@aol.com]
Sent: Monday, July 11, 2011 4:09 PM
To: eechevarria@rctc.org
Cc: infosr91@mbimedia.com; CDonahue@ArellanoAssociates.com; thomasd@pbworld.com; Michael
Amling; trahimian@4rmcinc.com; shawn_oriaz@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: Mahmoud Sadeghi

Phone: 424-222-1600

Mailing Address: 465 Maravila Dr

City, State: Riverside

Zip: 92507

Comment/Question:

1) The draft EIR/EIS fails to provide a full range of reasonable build alteratives to fulfill the purpose and need of the proposed project.

An alternative to purchase/buy back the existing 2-tolled lanes on SR-91 and convert them to one mixed flow lane and one regular high occupancy lane (no-toll) in each direction, should be added to the range of build alternatives. The costs, impacts and the difference in the Level of Service implementing this alternative should be evaluated before any other alternative is selected. A significant reduction in environmental impacts, reduction in existing and future traffic congestion, as well as significant savings in project costs is anticipated, should this alternative is considered further. The draft EIR/EIS does not take into account the Average Daily Traffic and the existing and future level of Service on the existing tolled lanes, as if the existing tolled-lanes are not part of SR-91.

2) The draft EIR/EIS defines alterative 2 as adding one general purpose lane and extended two tolled expressed lane in each direction. Currently we have 2-tolled expressed lane in each direction throughout most of the tolled lanes; is the number of tolled lanes proposed to remain 2 or more in each direction?

*You received this message because Mahmoud Sadeghi submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator


P-28-1
Refer to Section O.5.7, Common Response Related to Alternatives, on page O-30 in Section O.5, Common Responses, for a description of how the range of alternatives was developed for the project, beginning with the MIS, which considered a broad range of alternative locations and alternative improvements to address traffic demand between Riverside and Orange Counties.

P-28-2
Converting the proposed toll lanes to a mixed HOV/GP lane facility in the future would be impractical because the express lanes are separated from SR-91 GP lanes by buffers and delineators. The conversion of express lanes to HOV and GP lanes would increase the environmental footprint and impacts. The effectiveness in reducing traffic congestion from converting the existing toll lanes to one HOV lane and one mixed-use lane would be limited by two factors:

1. The use of these lanes would be limited to users who would enter from the limited access points and exit at existing limited exit points (e.g., many potential users who would otherwise benefit from these facilities would be unable to access them or exit them at a point convenient to reaching their destination).
2. The tolled express lanes will be priced to provide the most efficient traffic operations. Converting to non-toll lanes would degrade the traffic operations of the facility.

Further, the traffic study for the project does provide LOS of the existing tolled lanes east of the current FasTrak terminus at the Orange/Riverside County line within the project limits. Due to an increase in costs, larger environmental footprint, increased environmental impacts, and no increase in traffic efficiency, this alternative is not considered reasonable.

P-28-3
The traffic data referenced in the EIR/EIS are based on the Traffic Study Report (July 2010). The major findings of the traffic analysis in that report are provided in Chapter 1, Project, and Section 3.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, in the EIR/EIS. The technical report itself is on file at the RCTC and the Department and is part of the record for the project EIR/EIS.

That study used best available traffic projections and properly takes into account ADT and LOS. The traffic analysis included consideration of all existing traffic on
the project segments of SR-91 and I-15, including vehicles traveling in the existing tolled express lanes.

**P-28-4**

There will be two tolled lanes in each direction, and one GP lane will be added in each direction. A key element of Alternative 2 is the eastern extension of the tolled lanes to Madison Street/Magnolia Avenue. The tolled express lanes, including the extension of those lanes to Madison Street/Magnolia Avenue, are described in the following sections in Chapter 2, Project Alternatives, in the EIR/EIS:

- Section 2.1, Project Description, page 2-1
- Section 2.3.3.2, Alternative 2: Add General-Purpose Lanes and Extend Tolled Express Lanes, page 2-67

The tolled express lanes will be open to three-or-more-person carpools, vanpools, and buses at a reduced toll or no toll, as described in the subsection titled “Description of Alternative 2” on page 2-70 in Section 2.3.3.2, Alternative 2: Add General-Purpose Lanes and Extend Tolled Express Lanes, in the EIR/EIS.
From: nedibrahim@gmail.com
Sent: Monday, July 11, 2011 4:35 PM
To: eechevarria@rctc.org
Cc: infosr91@mbimedia.com; CDonahue@ArellanoAssociates.com; thomasc@pbworld.com; Michael Amling; trahimian@4rmcnc.com; shawn_oriaz@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: Ned Ibrahim

Phone: 951-689-6350

Mailing Address: 3969 Rancho Del Oro Dr

City, State: Riverside

Zip: 92505

Comment/Question:

I am totally in support of this project and Alternate 2 (Toll Lanes Extension) is the way to go.

The following is my comments, as a Riverside resident, who lives in the La Sierra area, less than a ¼ mile from the 91 freeway:

I am concerned that the project easterly terminus does not seem to have received that close attention the rest of the project received, leaving critical design planning elements out which I hope will be addressed in the next level of design for this project.

Studies/plans for this project leave a gap with the previously completed RCTC project (Madison to La Sierra). There is a serious bottleneck in the this reach caused by three closely spaced interchanges and drastic geometrics including sharp s-curve. This bottleneck is going to be exacerbated by the proposed openings to the express lanes at Buchanan.

In Alternate 2, it is not clear why the westbound general purpose lane is not extended to the Pierce onramp as sown in Alt 1

Why is one alternate show Aux lane between Pierce and Magnolia?

The CHP turn around gate should be eliminated, similar to action taken by Caltrans in for the turn around at Serfas Club, to make room for a better express lane entrance/transition.
The transition between the express lanes and HOV lanes (Alt #2) needs to be carefully designed to mitigate potential traffic weaving impact, perhaps the location should be mid-point between McKinley and Pierce. Otherwise, project is duplicating the earlier flaws experienced at the OC/RC county line.

Noise: My immediate concern with this area is increase in noise during peak hours. Why leave a gap in noise attenuation between La Sierra and Peirce? Is there another project going to complete the sounds wall for this area?

Thank you.

*You received this message because Ned Ibrahim submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator
P-29-1
This comment does not raise an environmental issue within the context of CEQA and/or NEPA. Consistent with the requirements of CEQA and NEPA, comments that raised environmental issues under CEQA and NEPA are responded to in this report. In addition, all comments received on the Draft EIR/EIS are included in this report and will be made available to the public and decision-makers prior to any action on the proposed project.

P-29-2
The project design and traffic study, including the eastern project terminus, went through numerous reviews throughout the early phases of the project development process, including reviews by the project consultant engineer, the PDT, RTCV, Department, Value Analysis reviews, and public review of the Draft EIR/EIS. The project history is discussed starting on page 1-6 in Section 1.1.3, Planning History of the Project, in the EIR/EIS. “Logical termini,” a Department and FHWA requirement that all federally funded projects must meet, is discussed in Section 1.3.7, Independent Utility and Logical Termini, on page 1-51 in the EIR/EIS. Implementation of the SR-91 CIP as well as other SR-91 improvement projects east of La Sierra will improve overall corridor operations and efficiency, thereby reducing congestion and traffic bottlenecks.

A transition from HOV lanes to tolled lanes requires careful consideration. The project would not create a gap in the HOV lanes. The area between the end of the tolled facility and the beginning of the HOV lane (both eastbound and westbound) is required to provide sufficient length for eligible car pools to enter the non-tolled facility and for toll vehicles to avoid being forced into the carpool-only lane.

P-29-3
The greater complexity of weaving and lane transitions associated with the tolled lane option, as well as a greater total lane count (Alternative 2), result in additional auxiliary lanes and weaving control in comparison to the non-tolled lane alternative (Alternative 1). The features of the two Build Alternatives, including weaving lane transitions, are discussed starting on page 2-7 in Section 2.3, Range of Alternatives, in the EIR/EIS.

P-29-4
The eastbound auxiliary lane between Pierce Street and Magnolia Avenue in Alternative 2 exists for reasons similar to those noted in response to comment P-29-3, above. Separation of the Magnolia Avenue exit traffic will force exiting traffic off at
the Pierce Street location and prevent toll/HOV lane traffic from attempting an unsafe exit at Magnolia Avenue. The eastbound auxiliary lane between Pierce Street and Magnolia Avenue provided in Alternative 2 is described in Section 2.3.3.2, Alternative 2: Add General-Purpose Land and Extend Tolled Express Lanes, on page 2-67 in the EIR/EIS.

P-29-5
The elimination of the California Highway Patrol (CHP) median crossovers is not permissible for safety reasons. Those crossovers are being provided as requested by CHP to assist with enforcement and incident management.

P-29-6
As documented in the Project Report (September 2010), the transitions between the tolled express lanes and the HOV lanes will be designed in accordance with Department requirements. The presently proposed location conforms to those guidelines while maximizing benefits to be attained in the tolled facility alternative.

P-29-7
Noise barrier F1-A was modeled north of SR-91 between Pierce Street and Magnolia Avenue. However, the estimated construction cost of that barrier was above the reasonable cost allowance, so the barrier was not carried forward and is not part of the Build Alternatives. The feasibility and reasonableness of noise barrier F1-A is analyzed starting on page 3.15-8 in Section 3.15, Noise, in the EIR/EIS. Tables 3.15.14 (page 3.15-42) and 3.15.15 (page 3.15-45) for Alternative 1, Tables 3.15.16 (page 3.15-48) and 3.15.17 (page 3.15-51) for Alternative 2, and the supporting discussions for these tables document that analysis.

The eastern limit of the SR-91 CIP Build Alternatives is Magnolia Avenue. Because any noise abatement outside the project area, including east of Magnolia Avenue, is outside the scope of the project, it is not addressed in the Final Noise Study Report and the EIR/EIS. As a result, any noise abatement east of Magnolia Avenue is not addressed in the Final Noise Study Report and the EIR/EIS.
Aaron Burton  
Senior Environmental Planner  
Caltrans District 8 San Bernardino, Ca. 92401  

Dear Aaron,  

Apparently your office is too busy to respond to the citizen and their suggestions. I previously wrote you concerning the 91 Freeway project and have received no reply. It is disgusting when so called public officials will not listen to the public or respond to their comments.  

WHY DOESN'T CALTRANS LISTEN?  

Caltrans has its head in the sand. It is intent on widening the 91 Freeway. "Hwy. 91 toll work doesn’t get funds" Press Enterprise, 07/07/11. This plan requires buying a lot of expensive commercial and residential property. It also requires the demolition of existing sound walls, barriers and bridges to build. This is not a good plan and will now not receive the Federal funds needed to get started. This is good news!  

The 91 Freeway has been congested ever since it was built. Widening it will not solve the problem. Any one who drives the 91 freeway knows that at least 50 percent of the traffic comes from the south county. The transition from the south I-15 to the 91 is congested all day long. The only viable solution to the problem is to build an alternate route for the traffic. The ideal location is at Cajalco road. There are open fields, no commercial property or homes to buy. No existing construction to demolish and it is a short 12 miles over the mountains to the 241 Freeway. There is no need for an expensive and dangerous tunnel as previously suggested. Just an ordinary, less expensive, above ground freeway will provide the alternate route to Orange County and cut the traffic on the 91 Freeway by at least 50 Percent.  

Anyone with a little common sense knows that this is the best plan and would be a great improvement to access to the county. Objections of environmentalists and nearby home owners are unfounded. Damage to the environment would be minimal and the home owners can learn to live with it just like the commuters have to live with the congestion. Pull your heads out of the sand Caltrans and let's get started today. I would like to see it completed before I die.  

Glen Chaffin  
Corona  

Glen Chaffin  
1939 S. Main St.  
Corona, Ca. 92882  
951-735-4791
**P-30-1**

Refer to Section O.5.4.1, Schedule, on page O-14 in Section O.5, Common Responses, for an explanation of how individual comments received on the Draft EIR/EIS are addressed.

Consistent with the requirements of CEQA and/or NEPA, comments that raised environmental issues under CEQA and NEPA are responded to in this report. In addition, all comments received on the Draft EIR/EIS are included in this report and will be made available to the public and decision-makers prior to any action on the proposed project.

Refer also to Section O.5.7, Common Response Related to Alternatives, on page O-30 in Section O.5, Common Responses, which describes the project history and the wide range of alternatives previously evaluated for the SR-91 corridor, including routes over or through the Santa Ana Mountains to Orange County as suggested by the commenter.

Refer also to the responses to comment letter P-10, earlier in this report, which respond to this commenter’s previous letter raising similar issues.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print
Name: Robert Brockie  City: Corona  Zip: 92881

Comment: My wife & I are opposed to toll lanes on 91.
I thought the slip ramp to main thru the 15/91
interchange was a good idea. Should be reinstated.
The tight Diamond until E柠Lincoln will be
a nightmare. You need to widen Bridge, 2 Lanes for Lt
Turns Storage. Diamonds are too tight.

Address: 7370 Liberty Ave  City: Corona  Zip: 92881

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 484 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4380 Lemon Street, Third Floor, Riverside; the Corona Public Library, 659 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding stapling, and signing this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.

P:\PA20701\Public Outreach\Open House Public Comment Card.doc
**P-31-1**

The design for Alternatives 1 and 2 carefully considered the toll lanes, the Main Street slip ramp at SR-91/I-15, the tight diamond interchange at Lincoln Avenue, and many other operational and design issues. The design of Alternatives 1 and 2 is consistent with the required Department design standards. The design of Alternatives 1 and 2 provides for appropriate LOS for the 2035 traffic volumes, including at local interchanges such as Lincoln Avenue and Main Street. Each alternative design provides the necessary through and turning lanes at those interchanges to meet the required LOS.
From: tgreenemartin@yahoo.com [mailto:tgreenemartin@yahoo.com]
Sent: Monday, July 18, 2011 2:31 PM
To: echevarria@rctic.org
Cc: infosr91@mbimedia.com; CDonahue@ArellanoAssociates.com; thomasd@pbworld.com; Michael
Amling; trahimian@4rmcinc.com; shawn_oriacz@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: Tina Martin

Phone: (909) 913-2130

Mailing Address: 947 McCall Drive

City, State: Corona

Zip: 92881

Comment/Question:

How about adding more "non" tolled lanes on the 91 between Green River and the 15, where the bog
down is the worst, eastbound? Was there not monies already granted for road improvements? Why
should taxpayers have to more?

*You received this message because Tina Martin submitted feedback regarding the SR-91 Highway
Improvements.

Regards,

System Administrator
Appendix O Responses to Comments

P-32-1
This email was submitted after the close of the public comment period for the Draft EIR/EIS. Accordingly, for CEQA compliance purposes, no response to the comments in this letter is required (Section 15088 in the State CEQA Guidelines).

In compliance with the requirements of NEPA, responses to the comments in this comment letter are provided below.

As described in detail in Chapter 2, Project Alternatives, starting on page 2-1 in the EIR/EIS, Alternatives 1 and 2 include improvements that address existing congestion the project segment on SR-91. For maximum effectiveness, lane additions are typically provided over substantial distances. A GP lane in each direction for the full length of the project segment on SR-91 is provided in Alternatives 1 and 2. Auxiliary lanes and interchange improvements are also included to reduce the severity of localized congestion.

P-32-2
The project will use Riverside County approved sales tax revenue for part of the construction cost. The toll facilities provide an additional funding source and provide users with a more schedule-reliable option when necessary.
From: ed@vanguardproperty.com [mailto:ed@vanguardproperty.com]
Sent: Tuesday, July 19, 2011 2:19 PM
To: echeverria@rtc.org
Cc: info91@mbimedia.com; CDonahue@ArellanoAssociates.com; thomasd@pbworld.com; Michael
Amling, trahmian@4mccinc.com; shawn_oriz@dot.ca.gov
Subject: SR-91 Give Us Your Feedback

From: Ed Diaz

Phone: 714-401-2855

Mailing Address:

City, State:

Zip:

Comment/Question:

I am part owner of the subject property that the SR 91 Project intends to acquire a portion of. The subject property, parcel numbers 118-302-017, 018, 019, comprise a 1987 built 27 unit apartment building. Our understanding from the representative of your office is that the Project intends to acquire only the north building (there are three) which would also include the entry driveway/gate/parking spaces and the underground sewer pumps & sewer lines (which service the entire property). The immediate problem this would present to the tenants of the remaining 19 units is the access to the property and the sewer access. Additionally, the noise and disruption of the construction of a sound wall/freeway expansion that close to the existing apartment units would create significant tenant turnover and vacancy in an already very sensitive and weak rental market. This would create an undue economic hardship on the ownership of the apartment building beyond reasonability.

We oppose the 91 Corridor Project for the principal reason that the Project intends to take only a portion of our property and we think that would cause an undue economic hardship. Additionally, the property is laid out in such a way that the portion of property proposed for the freeway expansion posses key common building structural elements that would need to be rebuilt by the Project on the remaining portion of the property at quite an additional expense. The Project would be responsible for the expensive rebuild of a new driveway and gate, additional parking to replace the lost spaces (plus additional spaces to bring the property up to current parking code for the remaining units); and finally, new sewer lines & sewer pumps to service the property. For all the above reasons, we feel that the only viable option would be a complete acquisition of our property by the project at a mutually agreeable price. If you have any questions or concerns, please feel free to call me on my cell (714)401-2855. Thank you. Ed Diaz (owner)

*You received this message because Ed Diaz submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator
**P-33-1**

This email was submitted after the close of the public comment period for the Draft EIR/EIS. Accordingly, for CEQA compliance purposes, no response to the comments in this letter is required (Section 15088 in the State CEQA Guidelines).

In compliance with the requirements of NEPA, responses to the comments in this comment letter are provided below.

The existing driveway on Second Street will be reconstructed as part of the relocated Second Street. Access to the cited property during the construction of the project road improvements and utility work on Second Street will be from the driveway on Buena Vista. One of the two driveways to this property will be open at all times to allow for access to and from the property.

Utility connections including sewer and water will be part of the Second Street relocation under Alternatives 1 and 2.

Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6, and to Section O.5.2, Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses, on page O-7, for discussion regarding RCTC’s property acquisition process for the SR-91 CIP.

**P-33-2**

This comment raises concerns about noise and disruption during construction. Temporary impacts associated with the construction of noise barriers and other temporary construction-related noise impacts are addressed in Section 3.15.3.3, Temporary Impacts, starting on page 3.15-15. Mitigation for temporary construction-related noise impacts is provided in Section 3.15.4.2, Measures for Construction Noise (Measures N-2 and N-3), on page 3.15-18.

**P-33-3**

The property on the corner of Second Street and Buena Vista will be acquired as part of the project. That parcel may be offered to the apartment complex partially owned by the commenter to mitigate the loss of parking spaces at that complex. The apartment property owners will be compensated for the reconstruction of driveway, driveway gates, and loss of landscaping features. Reconstruction of the utility connections from the public street to the private driveway is included in the project and is included in the project costs.
From: cruth@publicstorage.com [mailto:cruth@publicstorage.com]
Sent: Thursday, July 21, 2011 11:36 AM
To: eechevarria@rctc.org
Cc: SR91 Info; CDonahue@ArellanoAssociates.com
Subject: SR-91 Give Us Your Feedback

From: Carolynn Ruth for Public Storage

Phone: 818-244-9080 x 1410

Mailing Address: 901 Western Avenue

City, State: Glendale, CA

Zip: 91201

Comment/Question:

Public Storage owns the property at 1510 Pomona Road in Corona (the Property).

Public Storage objects that it did not receive notice that the DEIS had been prepared and thus was unable to comment within the stated period. We did not learn that the DEIS had been prepared until July 13, 2011, when RCTC contacted Public Storage to discuss acquisition of the Property.

Public Storage objects to Alternatives 1 and 2 as causing undue damage to the Property and unnecessarily increasing the Project costs significantly.

Alternative 1 It is difficult to analyze the impact of Alternative 1 because we do not know exactly where the proposed Temporary Construction Easement (TCE) is relative to the existing improvements. It is apparent however that Alternative 1 would result in damage to two buildings and the temporary loss of much rentable space: a portion of one building is in the TCE, a portion of a second would have to be demolished to maintain access, and a portion of a third would have to be vacated because the TCE blocks its access. The severance damages would be considerable, including devaluation of the Property and construction costs.

Alternative 2 Alternative 2 would require a full economic take because it will destroy the economic viability of the current business operation on the Property. The two buildings taken account for almost 29% of the Property’s rentable area. As operating expenses do not decrease with the loss of units, the taking would make the business unviable and destroy the economic value of all the buildings.

Public Storage urges that the project adopt a plan that does not require damaging or destroying a multi-million dollar property.

Carolynn Ruth

Real Estate Paralegal

Public Storage

701 Western Avenue

Glendale, CA 91201-2349
Tel: 818.244.8080 x1410
Fax: 818.543.7341
Email: cruth@publicstorage.com

*You received this message because Carolynn Ruth for Public Storage submitted feedback regarding the SR-91 Highway Improvements.

Regards,

System Administrator
P-34-1

The public information/distribution records indicate that a notice of the June 9, 2011, public hearing and a Notice of Availability of the Draft EIR/EIS were sent to the following two addresses for Public Storage on May 20, 2011, prior to the start of the public review period for the Draft EIR/EIS:

Jennifer Angeloo
Public Storage Properties
1510 Pomona Road
Corona, CA 92880-6958

Public Storage Properties
P.O. Box 25025
Glendale, CA 91221

Those notices specifically included information regarding the availability of the Draft EIR/EIS and the comment period for the Draft EIR/EIS. In addition, as described in detail in Section 5.2.6.3, June 9, 2011, Public Hearing, on page 5-22 in the EIR/EIS, information regarding the public hearing and the availability of the Draft EIR/EIS was provided in a wide range of media forms, including postcards, emails, newspapers, the SR-91 CIP website, community access television, radio, Twitter, and Senator Bill Emmerson’s newsletter.

As noted in the comment letter, this letter was submitted after the close of the public comment period for the Draft EIR/EIS. Accordingly, for CEQA compliance purposes, no response to the comments in this letter is required (refer to Section 15088 in the State CEQA Guidelines).

In compliance with the requirements of NEPA, responses to the comments in this comment letter are provided below.

P-34-2

Alternatives 1 and 2 would result in both permanent and temporary impacts to this property. Part of the property will need to be acquired to accommodate a retaining wall. In addition, parts of two buildings and storage units will need to be removed to provide proper fire access to the property. A TCE will be required for construction of the retaining wall. During the period the TCE is needed, access to some storage units will be prohibited.
The RCTC will work with affected property owners to determine whether the project effects on a business, if any, would result in possible compensation under the Uniform Act. Refer also to Appendix D, Summary of Relocation Benefits, in the EIR/EIS for descriptions of possible benefits available for impacted businesses under the Uniform Act.

The property owner will be compensated for temporary and permanent impacts of the project on this property and business, including the permanent removal of storage units.

Additional information responding to the commenter's concern on property acquisition is provided in Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6.
From: cspenger@suddenlink.net [mailto:cspenger@suddenlink.net]
Sent: Monday, September 26, 2011 9:31 AM
To: eechevarria@rctc.org
Cc: infosr91@mbimedia.com; Cheryl Donahue
Subject: SR-91 Give Us Your Feedback

From: Constance Spenger
Phone: 760-938-2159
Mailing Address: 120 Olivia Lane
City, State: Big Pine, CA
Zip: 93513
Comment/Question:

Dear Riverside County Transportation officials:

My comments are for the Administrative Record of the State Route 91 Project. Although the designated date for submitting comments has passed, and you are not required to respond to my comments, they are still eligible to be included in the Administrative Record.

Of supreme importance is protection of the Coal Canyon wildlife corridor. Coal Canyon, on the north or south side of the Freeway, must not be used to store equipment or for other purposes that would disturb wildlife seeking passage across the freeway. This passage is essential for maintaining biological diversity in wildlife on both sides of SR 91.

CalTrans agreed 10 years ago to revegetate the Coal Canyon underpass to make it more inviting to wildlife, but no action has been taken. Please revegetate the Coal Canyon underpass.

*You received this message because Constance Spenger submitted feedback regarding the SR-91 Highway Improvements.

Regards,
System Administrator
**P-35-1**
This email was submitted after the close of the public comment period for the Draft EIR/EIS, and the commenting party did not request an extension of the review period from the Department. In compliance with the requirements of NEPA, responses to the comments in this comment letter are provided below.

Although for CEQA compliance purposes, no response to the comments in this letter is required (Section 15088 in the State CEQA Guidelines), they are provided here as noted above.

Because this letter is included in this responses to comments report in the Final EIR/EIS, it will automatically be included in the administrative record for the project.

**P-35-2**
Measures NC-6 through NC-14 and NC-16 are included in Alternatives 1 and 2 to minimize or avoid impacts to, and improve, wildlife movement through the region. Specifically, Measure NC-14 will allow staging at the eastbound off-ramp during construction work in Coal Canyon only. The eastbound off-ramp is outside the wildlife corridor fencing and will not be a barrier to wildlife movement in Coal Canyon.

**P-35-3**
Refer to response to comment S-3-17 on page O-114, for a discussion of plantings at Coal Canyon.
O.6.7  Comment Cards Received at the June 9, 2011 Public Hearing
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Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: ___________________________ City: Riverside Zip: 92507

Comment: Please provide direct access ramps to the tolled lanes from a location within the city of Corona. With such high % of Corona residents having toll transponders, if they are able to access directly it will reduce that traffic having to merge across all the regular lanes to get to the toll lanes. Great project! Much needed.

☐ Please add me to the project distribution list. My address is:

Address: ___________________________ City: ___________________________ Zip: ___________________________

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 603 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 403 S. Vicentia Avenue, 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.91project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-1-1
FasTrak access with a T-intersection at the Smith Avenue overcrossing bridge was evaluated and included in Alternative 2 Design Variations 2c, 2d, 2g, and 2h. It is not included in the Preferred Alternative, Alternative 2f. Refer to Chapter 2, Project Alternatives, starting on page 2-1 in the EIR/EIS, for discussion regarding the range of alternatives considered for the SR-91 corridor, including Build Alternatives 1 and 2. Refer also to Section 2.3.7.1, Identification of the Preferred Alternative, on page 2-124 in the EIR/EIS, and to Section O.5.9, Common Response Related to the Identification of the Preferred Alternative, on page O-38 in Section O.5, Common Responses, for discussion regarding the evaluation and comparison of the alternatives that resulted in the identification of Alternative 2f as the Preferred Alternative for implementation and an explanation as to why Design Variations 2c, 2d, 2g, and 2h were not included in the Preferred Alternative.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: Bruce Armstrong  City: Corona  Zip: 92881

Comment: East Side of 15 between Ontario Ave and Magnolia, a safety sound wall needs to be installed. Noise and vibration in our yard and home is very high. Myself have removed house and truck parts as well as increased time from our yards.

☐ Please add me to the project distribution list. My address is:
Address: 1688 13th St  City: Corona  Zip: 92881

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 404 W. 4th Street, 5th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Victoria Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.691project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.691project.info/index.php through the Feedback portal at the bottom of the webpage.
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C-2-1

NB N1-A was modeled for this area and found to be feasible, but due to the proposed I-15 corridor improvements, NB N1-A was not considered reasonable because it will not remain in place for the minimum lifespan of 20 years.

Noise walls along I-15 will be constructed as part of the future I-15 widening project. If the I-15 improvement project is not constructed within 5 years of the completion date of the SR-91 CIP, the RCTC will initiate a separate project to design and construct those sound walls. Refer also to Section O.5.6, Common Response Related to Noise Barriers on I-15, on page O-29 in Section O.5, Common Responses, for additional discussion regarding the noise wall on I-15.

Text was inserted starting on page 3.15-16 in Section 3.15.3.3, Temporary Impacts, in the EIR/EIS to describe the potential for vibration-related impacts during project construction, and in Section 3.15.3.2, Permanent Impacts, starting on page 3.15-14 in the EIR/EIS to describe the potential for vibration-related impacts during project operations. As discussed in those sections, the construction and operation of the SR-91 CIP is not expected to result in adverse impacts related to vibration. Refer also to response to comment P-16-3, earlier in this appendix, for the text related to vibration inserted in those sections of the EIR/EIS.
Please print

Name: [Insert Name]  City: [Insert City]  Zip: [Insert Zip]

Comment: Great project. My concern is that the materials will be using American made steel, cement, drainage, etc. No materials need to be from China, Korea, etc. Also delays should be minimized and limited night construction allowed whenever possible.

[Box for adding me to the project distribution list - check if you want to be added]

Address: [Insert Address]  City: [Insert City], CA  Zip: [Insert Zip]

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 9th Floor, San Bernardino; Riverside County Transportation Commission, 4880 Lemon Street, Third Floor, Riverside; the Corona Public Library, 600 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicente Avenue 2nd Floor, Suite 310, Corona. The document can be viewed online or downloaded at http://www.91project.info/environmental/draft-eir-eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending it card to the address on the reverse. In addition, comments can be e-mailed to: http://www.91project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-3-1
The RCTC will require all project contractors to comply with the Department’s standard construction requirements, which require inclusion of and compliance with a “Buy American” clause in the project specifications.

C-3-2
The staging of the construction activities will be developed to balance the duration of the construction activities against road user and community inconvenience. Night construction will be used in those instances that require road closures that can best be accommodated during hours of reduced traffic.

Refer to the subsection titled “Temporary Project Features” in Section 2.3.4.4, Phasing Plan for Alternative 2, on page 2-115 in the EIR/EIS for discussion regarding construction and materials staging, and the TMP, which is a committed mitigation measure as described in Measure T-1 in Section 3.6.4, Avoidance, Minimization, and/or Mitigation Measures on page 3.6-32 in the EIR/EIS.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: JACK BROWAI City: Corona Zip: 92883

Comment: WE NEED A SOUND WALL FOR OUR TRAFFIC

[OPEN VALLEY NR PAPER/DCE/MIX]

I Please add me to the project distribution list. My address is:

Address: 4849 PALOMAR DR City: Corona Zip: 92879

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District B, 484 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 659 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr1project.info/environmentalimpact_eis.htm.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District B by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr1project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-4-1

Noise barrier K1-A was modeled along the edge of shoulder of I-15 to protect the homes along Newhall Drive from noise impacts associated with traffic on I-15. Noise barrier K1-A was found to be feasible and within the reasonable cost allowance as discussed in Section 3.15.3.2, Permanent Impacts, on page 3.15-8 in the EIR/EIS. Based on commitments made during previous projects along this corridor, RCTC conducted a noise barrier survey. Based on the results of the survey, NB K1-A was approved and will be carried through to construction. NB K1-A will be constructed during the Initial Phase of Alternative 2f.

Refer to Section O.5.6, Common Response Related to Noise Barriers on I-15, on page O-29.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print
Name: Kevin Butler  City: Corona  Zip: 92879

Comment:

I WANT MARIE ALTERNATIVE #2
LINCOLN VALUATION 2

☐ Please add me to the project distribution list. My address is:
Address: 2073 Dana St  City: Corona  Zip: 92879

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 550 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.ar91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.ar91project.info/index.php through the Feedback portal at the bottom of the webpage.
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C-5-1
Refer to Section O.5.9, Common Response Related to the Identification of the Preferred Alternative, on page O-38 in Section O.5, Common Responses, which briefly explains the process used to evaluate the design variations and the identification of the design variations included in Alternative 2f, the Preferred Alternative, and cross references to the relevant sections of Chapter 2 for additional information describing that process. As discussed in that section, Alternative 2f includes the "f" design variations at Auto Center Drive/Maple Street and the Lincoln Avenue interchange as noted as the preference of this commenter.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: H.S. CHAPIN
City: CONONA
Zip: 92882

Comment: THIS PROJECT IS A TOTAL WASTE OF MONEY. FURTHER IMPROVEMENTS ON THE 91 CORRIDOR will only slightly
improve this situation. Let at least six
lanes be added to this road. This would cost less and reduce
traffic on the 91 B7 A7 LOCAL 50 92.

Please add me to the project distribution list. My address is:
Address: 1939 S. MAIN ST. CONONA, CA 92882

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at Caltrans District 8, 454 W. 4th Street, 8th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor; Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending the card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.
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C-6-1
The “Cajalco Freeway” referred to in this comment appears to be Corridor “B,” which was identified in the MIS as a needed improvement in addition to the SR-91 CIP. Corridor “B” is defined as south of and roughly parallel to SR-91, extending between I-15 and the SR-133/SR-241 interchange. A segment of Corridor “B” would be a standard freeway cross section. However, the alignment of Corridor “B” also crosses through the Cleveland National Forest, which would result in substantial environmental effects. As a result, the segment of Corridor “B” that would cross the Cleveland National Forest was proposed to be a tunnel to avoid those environmental impacts.

The MIS also included Corridors “A” and “D.” The MIS concluded that to alleviate the congestion on SR-91 in 2035, Corridors “A” and “B” and additional transit improvements would be necessary in addition to the SR-91 CIP. However, these projects are all separate and independent projects, beyond the scope of the SR-91 CIP and this EIR/EIS. Refer to Section 1.1.3.4, Riverside County-Orange County Major Investment Study, on page 1-8 in the EIR/EIS for discussion regarding the MIS and alternatives considered in that study, including improvements to SR-91, Corridors A and B, and improvements to SR-74 (Corridor “D” in the MIS).

Refer also to Section O.5.7, Common Response Related to Alternatives, on page O-30 in Section O.5, Common Response, for additional discussion of alternatives considered in the MIS.
Caltrans District 8
464 West Fourth St.
San Bernardino, Ca. 92401

I would like to make a suggestion supported my thousands of my fellow citizens. The proposed widening of the 91 freeway and addition of tole lanes is a waste of tax payer’s money. The 91 Freeway has been congested ever since it was opened. Adding tole lanes will not relieve the congestion as they only benefit a few. First, the freeway was built with tax payer’s money, therefore, all tole and car pool lanes should be eliminated and opened to the general public. This would help relieve the congestion without adding lanes. Second, what is really needed is an alternate route to the 91 Freeway. Environmental concerns about building the Cajalco Freeway are unfounded in reality. Most of the present 91 Freeway congestion comes from the south county. Building a short twelve mile freeway at Cajalco would cut the 91 Freeway congestion in half. It would not require building tunnels as some have suggested and cost much less than the proposed addition of lanes to the 91 Freeway. This is a common sense solution to the problem. Why can’t Caltrans listen to common sense instead of the environmentalists?

H.G. Chaffin

H.G. Chaffin
1939 S. Main St.
Corona, Ca. 92882
951-735-4791
91 FREEWAY

1. THE 91 FREEWAY HAS BEEN CONGESTED EVER SINCE IT WAS BUILT.

2. THE ONLY ROUTE BETWEEN ORANGE AND RIVERSIDE COUNTIES.

3. TRAFFIC AND CAR POOL LANES ONLY BENEFIT A FEW.

4. OPENING THESE LANES TO GENERAL PUBLIC WOULD HELP ALEVIATE THE PROBLEM WITHOUT ADDING NEW LANES.

5. THE REAL SOLUTION TO THE PROBLEM WOULD BE TO BUILD THE PROPOSED CAJALCO FREEWAY.

6. FIRST, THERE IS NO NEED TO BUILD TUNNELS.

7. SECOND, ENVIRONMENTAL CONCERNS ARE UNFOUNDED. BUILDING A FREEWAY THROUGH A WILDERNESS AREA WILL NOT DISPLACE MANY CRITTERS.

8. MOST NEW CONGESTION ON THE 91 FREEWAY COMES FROM THE SOUTH COUNTY.

9. ADDING A FREEWAY AT CAJALCO WOULD CUT CONGESTION ON THE 91 FREEWAY IN HALF AND COST MUCH LESS THAN WIDENING THE 91.

10. THIS IS A COMMON SENSE SOLUTION TO THE CONGESTION PROBLEM AND SHOULD BE GIVEN SERIOUS CONSIDERATION.

H.G. CHAFFIN
951-735-4791
C-7-1

Various funding sources, including federal, State, and local sources, have historically been used to construct highway improvements, including HOV lanes and facilities. Depending on the specific federal program that funded the individual HOV facilities, there may be federal regulations prohibiting the conversion of those existing HOV or toll facilities to GP facilities.

The SR-91 CIP will add HOV or tolled express lanes as well as GP lanes. If the HOV/tolled express lanes operate at capacity and the rest of the freeway is congested, the HOV/tolled express lanes will carry more people per lane per hour because an uncongested lane operating at LOS C or D carries more cars than a congested lane operating at LOS F.

Refer also to response to comment C-6-1 on page O-532, which discusses other MIS alternatives considered for western Riverside County and eastern Orange County, including the Cajalco Corridor.
Please print

Name: YATISH CHAUDHAR
City: Orange
Zip: 92867

Comment: How will you ensure that the $1.8 billion of public money does create jobs for local communities in Riverside, Orange and San Bernardino?

Address: 2367 E. CHADWICK PKWY
City: ORANGE, CA
Zip: 92867

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicente Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr9project.info/environmental/draft_or_oio.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr9project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-8-1

It is not possible to ensure that all the project jobs will be filled by people living in Riverside, Orange, and San Bernardino Counties. However, it is expected that the majority of the construction jobs will be filled from the existing local and regional labor pools. Table 3.4.18, Estimated Construction Employment, on page 3.4-50 in the EIR/EIS summarizes the anticipated direct and indirect jobs generated by the expenditure of funds for the project construction. As shown in Table 3.4.18, depending on the alternative and design variation, approximately 7,400 to 11,000 direct jobs would be created by construction expenditures. The expenditure of those funds for construction labor and materials is also forecast to generate approximately 14,300 to 20,800 indirect jobs, depending on the alternative and the design variation. As a result, the SR-91 Build Alternatives are expected to generate a large number of new direct construction jobs and indirect jobs that would be available to qualified workers in Orange, San Bernardino, and Riverside Counties.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: Vicky Vlahos City: Corona Zip: 92882

Comment: I'm a business owner located in the midst of this project. I would like to request that the project to leave 2G untouched. If the 2G is untouched, I would be able to keep my parking spaces located in the shopping center. Please consider leaving 2G untouched close to parking issues at location 401 S. Linden in Hot Corona at 92882.

Address: 401 S. Linden Ave. City: Corona Zip: 92882

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 454 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4030 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 213, Corona. The document can be viewed online or downloaded at: http://www.dotproject.info/environmental/draft_eir_eis.php.

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C-9-1
Alternative 2f, which has been identified as the Preferred Alternative, will require full acquisition of this parcel and the removal of the business on this parcel to accommodate the eastbound hook ramps at Lincoln Avenue. Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, for discussion on the RCTC process for property acquisitions.

Impacts to individuals and businesses are generally not considered an environmental impact and therefore are beyond the scope of the EIR/EIS. However, the RCTC and other involved agencies are committed to working with individuals and businesses to address their specific concerns regarding the impacts of this project.
Please print

Name: William H. Cortez  City: Corona  Zip: 92881

Comment: Cajalco/El Cerrito/Ontario/I-15 are greatly impacting the El Cerrito residential area. All surface streets need to be upgraded to accept/move traffic off I-15 exits in general.

Please add me to the project distribution list. My address is:

Address: 161 McKinley St. #120  City: Corona  CA  Zip: 92881

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at Caltrans District 8, 464 W. 4th Street, 8th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 659 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr1projectinfo/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr1projectinfo/index.php through the Feedback portal at the bottom of the webpage.
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C-10-1
The comment raises concerns over existing traffic conditions in the El Cerrito residential area. The SR-91 CIP will improve operations on SR-91 and connections to/from I-15, which will address some of those concerns; however, the improvements suggested in this comment are beyond the scope of this project. Nonetheless, the RCTC will continue to work with the City of Corona and the Riverside County Transportation Department to implement other unrelated projects that will improve Cajalco Road and other local roads.
Please print

Name: Sally Costa
City: 77 Highland Drive
Corona

Comment: I oppose the soundwall to be of cement block at the perimeter of my property line. This would have a severe detrimental effect on the view (panoramic) from our home. I am in favor of the soundbarrier to be of plexiglass only.

Address: 77 Highland Drive
City: Corona

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 8th Floor; San Bernardino; Riverside County Transportation Commission, 4080 Lemoine Street, Third Floor; Riverside; the Corona Public Library, 550 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmentaldraft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-11-1

NB I-2 at this location would not have to be constructed as a solid block wall. Refer to Section O.5.3.2, Common Response Related to Noise Barriers, on page O-10 in Section O.5, Common Responses, for discussion regarding alternative materials for sound barriers, a summary of the noise barrier survey process, and a description of the noise barrier meetings.

All (100 percent) of the private property owners must agree to have a noise barrier located on those private properties in order for the wall to be constructed. Based on the results of the noise barrier survey, NB I-2 did not receive 100 percent approval and was removed from further consideration.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: Kevin Lee Cruz  City: Corona  Zip: 92879

Comment: PUT VIDEO ON YOUTUBE

CAN A 7#ALTERNATIVE ROAD BE BUILT ALONG THE 91 BETWEEN GYPSUM CANYON ROAD AND GREEN RIVER.

☐ Please add me to the project distribution list. My address is:

Address:  City:  Zip:

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4060 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicenta Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-12-1
Refer to Section O.5.7, Common Response Related to Alternatives, on page O-30 in Section O.5, Common Responses, for discussion regarding alternatives considered for the SR-91 corridor. A Major Investment Study (MIS), described in Section O.5.7, reviewed several possible alignments generally parallel to the existing SR-91, including a corridor in the same general vicinity as the existing route. While the several alignments studied other possibilities for future expansion of the overall corridor, the Alternatives evaluated in the EIR/EIS were deemed to be the only practical methods of implementing service improvements in this corridor within 5 to 10 years. In addition, the area between Gypsum Canyon Road and Green River Road is constrained by existing parks and open space on the north and south sides of SR-91, and substantial topography on the south side of SR-91. A road extending between those two points would not address overall congestion on the project segment of SR-91. As a result, an alternative road between Gypsum Canyon Road and Green River Road was not analyzed in the EIR/EIS for the SR-91 CIP.

Refer to Section 5.2.6.3, June 9, 2011, Public Hearing, on page 5-22 in the EIR/EIS, which describes the various media used to inform the public about the project and the availability of the Draft EIR/EIS. The video was available at the public hearing. RCTC did not provide the video on YouTube.com because the project information was provided in a wide range of other media forms as explained in Chapter 5.
Please print

Name: ALMA JUEVAS 204 S. VICTORIA CORONA CAL.  Zip: 92879
Comment: *NECESITO SABER SI MI PROPIEDAD SE AFFECTARA Y QUE BA APARAR OCURRIRA SABER TODOS LOS DETALLES

☐ Please add me to the project distribution list. My address is: CORONA

Address: 204 S. VICTORIA  Zip: 92879

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4000 Lemon Street, Third Floor, Riverside; the Corona Public Library, 859 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 C. Wicomico Avenue, 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr9project.info/environmentalimpact_eir_eis.pdf.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr9project.info/index.php through the Feedback portal at the bottom of the webpage.

P:\P:\AZ\Public Outreach\Open House Public Comment Card.doc
Translation of comment card C-13:

**C-13-1**: I need to know if my property will be affected and what’s going to happen. I need to know all the details.

**C-13-1**
The property at 204 South Victoria in the City of Corona would be a full acquisition and the home on that parcel would be removed for the SR-91 CIP Build Alternatives.

The RCTC is committed to working with affected property owners during the property acquisition process, as described in detail in Section O.5.1, Common Response Related to the Property Acquisition Process, on page 0-6 and Section O.5.2, Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses, on page O-7 in Section O.5, Common Responses. Appendix D, Summary of Relocation Benefits, in the EIR/EIS, describes the benefits available to owners and tenants in property acquired for the project.
Name: CAN THUY DANG
City: CORONA
Zip: CA 92882
Comment: The project took away the whole parking lot and during the construction will affect my business. I will lose a lot of income. I am looking how they can help to cover the lost on the business during the construction.

Please add me to the project distribution list. My address is:
Address: 4015 LINColN AVE #1
City: CORONA
State: CA
Zip: 92882

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 454 W. 4th Street, 6th Floor, San Bernardino, Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 655 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.
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C-14-1

The property cited in this comment, at 401 South Lincoln Avenue, is a shopping center with several businesses. This property would be a full acquisition and those businesses would be removed under Alternatives 1 and 2. Business owners at this property will be eligible for relocation assistance.

Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 and Section O.5.2, Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses, on page O-7 in Section O.5, Common Responses, for information regarding impacts to businesses during construction.
John H. Brown
434 Palomar Drive
Corona, CA 91719

Dear Mr. Brown:

As you are aware, I have been in contact with Stan Lisiewicz, Director 8, CalTrans. Director Lisiewicz has been in contact with Mr. Paul Blackwater of Riverside County Transportation Committee (RCTC).

Director Lisiewicz would like me to pass on the information that he has given to RCTC. CalTrans conducted a noise study on February 23, 1999. The noise level measured at Corona Avenue was 86 dBA. The noise level was pronounced to traffic level of service C (peak noise hour) which raised the noise level to 67 dBA. This area qualifies for noise abatement.

A noise study was also done at Mesa Drive. The noise level measured 69 dBA. This is substantially lower than 87 dBA. As such, this section of the neighborhood does not qualify for noise attenuation.

To mitigate the noise, CalTrans is proposing a 14-foot noise barrier extending from just north of Corona Avenue to approximately 1,100 feet southeasterly (between Pike Drive and Newhall Drive). It is understood that RCTC will be attempting to program these projects into the STIP.

I hope this information is helpful. If you have any further questions, please contact the Director Lisiewicz's office at (909) 383-4851.

It is an honor to represent you in the State Assembly.

Very truly yours,

ROD PACHECO
Assemblyman,
64 District

Cc: D. Graham
R. Everhart

SERVING THE COMMUNITIES OF CORONA, JURUPA, MIRA Loma, NORCO, RIVERSIDE, RUBIDOUX AND MARCH AIR

Page 2 of 24
February 1, 1999

To: Ms. Jan Rudman, Mayor
Re: Sound wall on I-15 in northeast Corona

Enclosed please find copies of a petition signed by Corona residents in this northeast Corona neighborhood. These petitions were delivered to the Riverside County Transportation Commission on Monday, Feb. 1, 1999, requesting a sound wall be built on I-15, as described in the petition.

Few of us in this neighborhood, bordering Parkridge School and the I-15, are wealthy, or politically powerful, but we believe we deserve to be represented by our elected city officials. At times, residents in this area of Corona have expressed the feeling that we are under-represented, almost the step-children of Corona.

As the petition states, we have been promised relief from the sound and sight pollution from the I-15 Freeway for approximately 18 years. We are hoping that you will be our advocate in this before the RTC, and help us get that relief.

Thank you,

John H. Brown
454 Paloma Dr.
Corona, CA 92883
951-755-1775

Other contacts:
Don Graham
411 Bushmore Dr.
765-9801

Richard Evarkert
372 Atwood Dr.
737-5012

---

January 27, 1999

Dear Eric Haley and Members,

This letter is in response to a phone call I made to Cal Trans, 1-25-99. It is pertaining to sound walls along the west side of the I-15 from Yuma to Parkridge Ave., in Corona.

After talking with Mike Goodew, at Cal Trans, about the sound walls Mr. Goodew informed me that Cal Trans is no longer responsible for the sound walls. That RTC is now responsible for approval and building of them now.

I informed Mr. Goodew that Cal Trans was the ones who informed the residents of the Heritage Tract that these walls were to be installed when the freeway was built. As we waited and waited no walls were installed. We went back to Cal Trans to find out why. Their answer was they had to cut back on costs. No on and off ramps or sound walls were to be built until 1994.

We talked with Cal Trans and Corona - Norco Council, which at the time Karnon and Norco was to build the sound walls. Again costs came up, no funds. Corona traded land to Norco for their part of money's needed to build ramps and walls.

Several council meeting and a Cal Trans work shops at Norco, provided us again with the plans for ramps and walls at Yuma. Again money would not allow the sound walls until another lane was built between Yuma and the I-15 Freeway.

I talked with Mr. Goodew at Cal Trans and asked if the walls could be built before lanes were added in the place...
the walls needed to be. He said they could, but Cal Trans is not responsible for sound walls that AFTC is. He also said that I would need to send the request to you at AFTC.

So now without going into the hours, or should I say days, we have spent with Cal Trans and all the council meetings that we have been to. We are asking the AFTC to fund and build the sound wall on the west side of the I-15 from Yuma on ramp to the Parkridge overpass.

Sincerely,

Richard Everhart
372 Atwood Dr.
Corona CA. 91719
(909) 737-3312

Senator Haynes:

Please find attached copies of a petition circulated in this northeast Corona neighborhood. It was delivered to the Riverside County Transportation Commission on February 1, 1999.

It is realizing that a sound barrier be built along our side of the I-15 Freeway. Before the freeway was built, when Mr. Ken Steele was Director of CalTrans, we were told a high barrier would be built. Later we were led to believe a sound wall would be built when the Yuma Interchange was constructed. Neither have been built.

We are now requesting your help in convincing CalTrans and the AFTC of the need for such a barrier for our neighborhood.

Thank you for your consideration of this matter, which is of utmost importance to this area of Corona.

John N. Brown
909-736-1776

Other contacts in the neighborhood:

Don Graham
411 Rushmore Dr.
Corona, CA 91719
909-735-3881

Richard Everhart
372 Atwood Dr.
Corona, CA 91719
909-737-3312
Dear Mr. Sugita,

As per our phone conversation today, I have enclosed a copy of Assemblyman Rod Pacheco's letter, dated 4/20/99.

I have also attached copies of other correspondence of recent years re the sound wall for our neighborhood in northeast Corona, which you may have on file.

Thank you for your consideration of this matter.

Very truly yours,

John H. Brown
909-735-1775

Note: Other contacts from the neighborhood are listed in the letter to Assemblyman Pacheco.
TO: RIVERSIDE COUNTY TRANSPORTATION COMMISSION
RE: I-15 SOUND WALL

Various residents of this Corona neighborhood have been promised, by CalTrans officials, a high dirt berm and/or a sound wall prior to, and during the building of the I-15 Freeway, over a period of 10 years. We are still waiting. The I-15 has become a sound and sight nuisance to our once quiet neighborhood.

Therefore, on behalf of our entire neighborhood, the undersigned residents of northeast Corona again request that a sound wall or high berm be built a.s.a.p. along the southwest side of the I-15 Freeway, between (just north of) Corona Ave. and the Parkridge Overpass, a distance of approximately ¾ of a mile. All the undersigned share the same Corona zip code, 92882.

Thank you for your consideration of this matter.

[Signatures]

[Printed names]

[Street addresses]

[Additional text]

TO: RIVERSIDE COUNTY TRANSPORTATION COMMISSION
RE: I-15 SOUND WALL

Various residents of this Corona neighborhood have been promised, by CalTrans officials, a high dirt berm and/or a sound wall prior to, and during the building of the I-15 Freeway, over a period of 10 years. We are still waiting. The I-15 has become a sound and sight nuisance to our once quiet neighborhood.

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Thank you for your consideration of this matter.

[Signatures]

[Printed names]

[Street addresses]
TO: RIVERSIDE COUNTY TRANSPORTATION COMMISSION  
RE: I-15 SOUND WALL

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Thank you for your consideration of this matter.

[Signatures and printed names]

TO: RIVERSIDE COUNTY TRANSPORTATION COMMISSION  
RE: I-15 SOUND WALL

Various residents of this Corona neighborhood have been promised, by CalTrans officials, a high dirt berm and/or a sound wall prior to, and during the building of the I-15 Freeway, over a period of 10 years. We are still waiting. The I-15 has become a sound and sight nuisance to our once quiet neighborhood.

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Thank you for your consideration of this matter.

[Signatures and printed names]
TO: RIVERSIDE COUNTY TRANSPORTATION COMMISSION
RE: 1-15 SOUND WALL

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period of 10 years. We are still waiting. The I-15 has become a sound and sight nuisance
to our once quiet neighborhood.

Therefore, on behalf of our entire neighborhood, the undersigned residents of northeast
Corona again request that a sound wall or high berm be built s.a.p. along the southwest side
of the I-15 Freeway, between (just north of) Corona Ave. and the Parkridge Overpass, a
distance of approximately 3/4 of a mile. All the undersigned share the same Corona zip code,
92879.

Thank you for your consideration of this matter.

[Signatures and addresses]

[Signature]

[Printed name]

[Printed name]

[Address]

[Signature]

[Printed name]

[Printed name]

[Address]

[Signature]

[Printed name]

[Printed name]

[Address]

[Signature]

[Printed name]

[Printed name]

[Address]

[Signature]

[Printed name]

[Printed name]

[Address]
TO: RIVERSIDE COUNTY TRANSPORTATION COMMISSION  
RE: 1-15 SOUND WALL

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Therefore, on behalf of our entire neighborhood, the undersigned residents of northeast Corona again request that a sound wall or high berm be built a.s.a.p. along the southwest side of the I-15 Freeway, between (just north of) Corona Ave. and the Parkridge Overpass, a distance of approximately 3/4 of a mile. All the undersigned share the same Corona zip code, 92880.

Thank you for your consideration of this matter.

signature __________________________
printed name  JUANITA LORCA
street address  287 RUSHMORE DR.

signature __________________________
printed name  ROSA M. RODRIGUEZ
street address  2142 RUSHMORE DR.

signature __________________________
printed name  ROBERTO RODRIGUEZ
street address  2375 RUSHMORE DR.

signature __________________________
printed name  RONALD J. GARCIA
street address  2142 RUSHMORE DR.

signature __________________________
printed name  JERRY BUCK
street address  4105 RUSHMORE DR.

signature __________________________
printed name  JAMES NEWBERRY
street address  4105 RUSHMORE DR.

signature __________________________
printed name  JUAN EVANS
street address  212 RUSHMORE DR.

TO: RIVERSIDE COUNTY TRANSPORTATION COMMISSION  
RE: 1-15 SOUND WALL

Various residents of this Corona neighborhood have been promised, by Caltrans officials, a high dirt berm and/or a sound wall prior to, and during the building of the I-15 Freeway, over a period of 10 years. We are still waiting. The I-15 has become a sound and sight nuisance to our once quiet neighborhood.

Therefore, on behalf of our entire neighborhood, the undersigned residents of northeast Corona again request that a sound wall or high berm be built a.s.a.p. along the southwest side of the I-15 Freeway, between (just north of) Corona Ave. and the Parkridge Overpass, a distance of approximately 3/4 of a mile. All the undersigned share the same Corona zip code, 92880.

Thank you for your consideration of this matter.

signature __________________________
printed name  JULIO P. RAMOS
street address  620 WISNIOY DR.

signature __________________________
printed name  ESTHER BARBERA
street address  4415 WISNIOY DR.

signature __________________________
printed name  ANA DEL ROSA
street address  4415 WISNIOY DR.

signature __________________________
printed name  MARIAN S. HANCE
street address  4415 WISNIOY DR.

signature __________________________
printed name  S. M. GARCIA
street address  4415 WISNIOY DR.

signature __________________________
printed name  J. GARCIA
street address  4415 WISNIOY DR.

signature __________________________
printed name  M. R. JOHNSON
street address  4415 WISNIOY DR.

signature __________________________
printed name  M. R. JOHNSON
street address  4415 WISNIOY DR.

signature __________________________
printed name  M. R. JOHNSON
street address  4415 WISNIOY DR.

signature __________________________
printed name  M. R. JOHNSON
street address  4415 WISNIOY DR.

Page 15 of 24
TO: RIVERSIDE COUNTY TRANSPORTATION COMMISSION
RE: I-15 SOUND WALL

Various residents of this Corona neighborhood have been promised, by CalTrans officials, a high dirt berm and/or a sound wall prior to, and during the building of the I-15 Freeway, over a period of 10 years. We are still waiting. The I-15 has become a sound and sight nuisance to our once quiet neighborhood.

Therefore, on behalf of our entire neighborhood, the undersigned residents of northeast Corona again request that a sound wall or high berm be built asap along the southwest side of the I-15 Freeway, between (just north of) Corona Ave. and the Parkridge Overpass, a distance of approximately 3/4 of a mile. All the undersigned share the same Corona zip code, 92881.

Thank you for your consideration of this matter.

[Signatures]

[Names]

[Address]

[City, State, Zip Code]
TO: RIVERSIDE COUNTY TRANSPORTATION COMMISSION  
RE: I-15 SOUND WALL

Various residents of this Corona neighborhood have been promised, by CalTrans officials, a high dirt berm and/or a sound wall prior to, and during the building of the I-15 Freeway, over a period of 10 years. We are still waiting. The I-15 has become a sound and sight nuisance to our once quiet neighborhood.

Therefore, on behalf of our entire neighborhood, the undersigned residents of northeast Corona again request that a sound wall or high berm be built s.a.s.p. along the southwest side of the I-15 Freeway, between (just north of) Corona Ave. and the Parkridge Overpass, a distance of approximately 3/4 of a mile. All the undersigned share the same Corona zip code 92883. 2-28-79

Thank you for your consideration of this matter.

[Names and signatures]

Page 19 of 24

TO: RIVERSIDE COUNTY TRANSPORTATION COMMISSION  
RE: I-15 SOUND WALL

Various residents of this Corona neighborhood have been promised, by CalTrans officials, a high dirt berm and/or a sound wall prior to, and during the building of the I-15 Freeway, over a period of 10 years. We are still waiting. The I-15 has become a sound and sight nuisance to our once quiet neighborhood.

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Thank you for your consideration of this matter.

[Names and signatures]

Page 20 of 24
TO: RIVERSIDE COUNTY TRANSPORTATION COMMISSION
RE: I-15 SOUND WALL

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Therefore, on behalf of our entire neighborhood, the undersigned residents of northeast Corona again request that a sound wall or high berm be built e.a.p. along the southwest side of the I-15 Freeway, between (just north of) Corona Ave. and the Parkridge Overpass, a distance of approximately 3/4 of a mile. All the undersigned share the same Corona zip code, 92879.

Thank you for your consideration of this matter.

[Signatures]

February 1, 1999

To: Ms. Andrea Pugo
Re: Sound wall on I-15 in northeast Corona

Enclosed please find copies of a petition signed by Corona residents in this northeast Corona neighborhood. These petitions were delivered to the Riverside County Transportation Commission on Monday, Feb. 1, 1999, requesting a sound wall be built on I-15, as described in the petition.

Few of us in this neighborhood, bordering Parkridge School and the I-15, are wealthy, or politically powerful, but we believe we deserve to be represented by our elected city officials. At times, residents in this area of Corona have expressed the feeling that we are under-represented, about the step-children of Corona.

As the petition states, we have been promised relief from the sound and sight pollution from the I-15 Freeway for approximately 10 years. We are hoping that you will be our advocate in this before the RTCI, and help us get that relief.

Thank you.

[Signature]

John H. Brown
1234 Pala Bear Dr.
Corona, CA 92879
951-735-1775

Other contacts:

Don Graham
434 Rushmore Dr.
760-333-1

Richard Everhart
372 Atwood Dr.
760-333-12
February 1, 1999

To: Ms Karen Stein

Re: Sound wall on I-15 in northeast Corona

Enclosed please find copies of a petition signed by Corona residents in this northeast Corona neighborhood. These petitions were delivered to the Riverside County Transportation Commission on Monday, Feb. 1, 1999, requesting a sound wall be built on I-15, as described in the petition.

Few of us in this neighborhood, bordering Parkridge School and the I-15, are wealthy, or politically powerful, but we believe we deserve to be represented by our elected city officials. At times, residents in this area of Corona have expressed the feeling that we are under-represented, almost the step-children of Corona.

As the petition states, we have been promised relief from the sound and sight pollution from the I-15 Freeway for approximately 10 years. We are hoping that you will be our advocate in this before the RTCI, and help us get that relief.

Thank you,

John H. Brown
424 Palomer Dr.
Corona, CA 92819
909-735-1775

Other contacts:

Don Graham
111 Rushmore Dr.
795-3681

Richard Everhart
372 Alwood Dr.
781-3512

Assemblyman Rod Pacheco
9740 Mission Inn Ave.
Riverside, CA 92501

Assemblyman Pacheco:

Please find attached copies of a petition circulated in this northeast Corona neighborhood. It was delivered to the Riverside County Transportation Commission on February 1, 1999.

It is requesting that a sound barrier be built along our side of the I-15 Freeway. Before the freeway was built, when Mr. Ken Steele was Director of Caltrans, we were told a high barrier would be built. Later we were led to believe a sound wall would be built when the Vuna interchange was constructed. Neither have been built.

We are now requesting your help in convincing Caltrans and the RTCI of the need for such a barrier for our neighborhood.

Thank you for your consideration of this matter, which is of utmost importance to this area of Corona.

John H. Brown
909-735-1775

Other contacts in the neighborhood:

Don Graham
111 Rushmore Dr.
Corona, CA 92819
909-735-3681

Richard Everhart
372 Alwood Dr.
Corona, CA 92819
909-737-3012
C-15-1
Based on comments received during the public review of the Draft EIR/EIS and previous commitments made by the Department to build NB K1-A, the RCTC conducted a noise barrier survey for property owners impacted by proposed NB K1-A. Based on the results of the survey, NB K1-A was approved and will be implemented as part of the SR-91 CIP.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: Ramie Fernandez  City: Corona  Zip: 92882

Comment: I would like info on how close the lanes will be to my home @ 256 North Moor Dr because of health reasons my mom has many health issues incl lung removed / lung disease, heart disease, breast cancer. I am very concerned on the air quality also for my 2yr old. How close will it be purchased or only land?

☐ Please add me to the project distribution list. My address is:

Address: ____________________________  City: ____________________________  Zip: ____________________________

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 454 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicenita Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.srd1project.info/environmental/draft_eir_eis.php.

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P:\PA0791\Public Outreach\Open House Public Comment Card.doc
C-16-1
The property line at 2581 Northmoor Drive is currently approximately 340 ft from the nearest existing travel lane on SR-91. The proposed project will shift the closest travel lane to within about 290 ft of that property line. The property at 2581 Northmoor Drive will not be acquired for the project.

The EIR/EIS determined that the following of SCAQMD Rule 403 and the other control measures will minimize construction emissions, resulting in less than significant localized construction impacts. In addition, it was determined that the project would reduce criteria air pollutant and MSAT emissions locally and regionally. Therefore, the project would not result in any air toxic impacts. Refer to the subsection titled “Mobile Source Air Toxics” on page 3.14-28 in Section 3.14.3.2, Permanent Impacts, in the EIR/EIS for a detailed discussion regarding MSATs, the potential health risks of air toxics, and future projected MSAT levels with and without the proposed project.
Please print

Name: Jolene Henry  
City: Corona  
Zip: 92879

Comment: With the acquisition of partial building on 901 E. Third St., it would eliminate the functionality of our business to continue to operate. A full acquisition purchase would be preferred since we will have to relocate the whole company and all equipment and storage of materials. We are also concerned about limited property available in Corona to relocate to and please add me to the project distribution list. My address is that is where I am very concerned about our timeline.  
Address: 901 E. Third St.  
City: Corona  
Zip: 92879

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.srt91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, snapping, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.srt91project.info/index.php through the Feedback portal at the bottom of the webpage.

P:9AP29701Public Outreach/Open House Public Comment Card.doc
Alternative 2f, which has been identified as the Preferred Alternative, would require the partial acquisition of the property at 901 East Third Street. The adjacent property to the east is proposed as a full acquisition. Part of that property may be used to provide replacement parking for the property at 901 East Third Street. Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses for discussion regarding the RCTC property acquisition process.

Demographic research for the City of Corona from the Southern California Multiple Listing Service (MLS) and commercial and residential resources from Realquest.com and Loopnet.com, as documented in the FRIR (2011), has demonstrated ample availability of both commercial and residential inventory in the immediate project area. Attachments 3.4.A through 3.4.I to Section 3.4, Community Impacts, in this EIR/EIS identify a large number of residential and business replacement properties available for lease and/or purchase in the general vicinity of the SR-91 CIP as of July 2011.

Refer also to Section 3.4.2, Relocations and Real Property Acquisitions, starting on page 3.4-37, and Appendix D, Summary of Relocation Benefits, for discussion regarding the relocation process and potential benefits available to displaced business owners and tenants. All business are entitled to relocation benefits.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: Bokar | City: Corona
Zip: 92881

Comment:

1. No of lanes merging into hwy = No of lanes on hwy
   (see the map on Hwy 15 North merge at 715)

2. There shall be long acceleration lanes (to merge on hwy 91)

Address: 1679 Camino de Salvaon St | City: Corona | Zip: 92881

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 484 W. 4th Street, 2nd Floor, San Bernardino; Riverside County Transportation Commission, 4880 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 650 S. Vicentilla Avenue, 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91projectinfo/environmentaldraft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91projectinfo/index.php through the Feedback portal at the bottom of the webpage.

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C-18-1
The project would increase capacity on eastbound SR-91 east of I-15, which would ease the existing merging congestion in that area.

C-18-2
The merging and weaving distances in Alternatives 1 and 2 were developed in accordance with the required standards in the Caltrans *Highway Design Manual* (Chapter 500, Traffic Interchanges, Section 504.7, Weaving Sections) and therefore meet State standards.

C-18-3
The deceleration lane lengths in Alternatives 1 and 2 were developed in accordance with required standards in the Caltrans *Highway Design Manual* (Chapter 500, Traffic Interchanges, Section 504, Interchange Design Standards) and therefore meet State standards.
Usar letra de imprenta (molde)

Nombre: José & Sonia García  Ciudad: Corona  C.P.: 92882

Comentario: Nosotras somos dueñas de propiedad

y ahín que estamos recibiendo esta Información sabemos que no estamos recibiendo toda la información. Pedimos que consideren alumbrado público en la calle para esta calle.

Favor de añadírse a la lista de distribución del proyecto. Mi domicilio es:

Domicilio: 865 Bollero Pl  Ciudad: Corona  C.P.: 92882

PERIODO DE COMENTARIOS PÚBLICOS: Mayo 20, 2011 a Julio 11, 2011. El informe preliminar EIR/EIS y los estudios técnicos que lo respaldan se encuentran a su disposición para revisarlos y hacer comentaarios al respecto durante horas de oficina en la siguiente dirección: Caltrans District 8, 464 W. 4th Street, 6th piso, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Tercer Piso, Riverside; la biblioteca pública de Corona, 650 S. Main Street, Corona, CA; y en la ciudad de Corona en el departamento de obras públicas (Public Works Department), 400 S. Vicencia Avenue 2º. piso, Suite 210, Corona. El documento se puede obtener en línea y descargarlo por medio del enlace siguiente:
http://www.sr1project.info/environmental/draft_eir_eis.php.

COMENTARIOS POR ESCRITO: Se pueden entregar los comentarios por escrito durante la audiencia pública o enviar por correo la tarjeta de comentarios a Caltrans District 8, el domicilio que se indica en la página. Además, puede enviar sus comentarios por e-mail en el sitio siguiente:
http://www.sr1project.info/index.php por medio del portal "Feedback" al final de la página web.
Translation for comment card C-19:

C-19-1: We are owners of a property and now that we are receiving this information, we know that this information is not complete.

C-19-2: Please send a sound barrier letter.

C-19-3: Consider public lighting.

C-19-4: Please send a sound barrier letter.

C-19-5: Consider public lighting for this street.

C-19-1
This comment expresses the commenter’s concerns regarding the noise barrier information and the survey letters that were sent to homeowners at sensitive receivers. Additional noise barrier survey information was sent to this homeowner on June 21, 2011; the homeowner’s response to that survey was received on June 28, 2011. Refer to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, for additional information regarding the process for evaluating noise impacts and identifying locations for consideration of noise walls.

C-19-2
Refer to response to comment C-19-1, above.

Two meetings were held in August 2011 to discuss noise barriers at two locations, including the area cited by the commenter. Residents in all benefited residences in those two areas were invited to the meetings. Refer to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, for information about the two meetings regarding noise barriers and other information regarding noise barriers.

C-19-3
As discussed in Section 3.7.3, Affected Environment, on page 3.7-2 in the EIR/EIS, the existing lighting on existing streets and freeways would be modified or relocated under Alternatives 1 and 2. Except for safety lighting at the interchanges (e.g., additional lighting to minimize the tunnel effect where bridge decks would be widened), no new lighting is anticipated along the local streets. However, during final design, the RCTC will coordinate with the City of Corona to ensure that appropriate
lighting is included on local streets adjacent to the project improvements. Measure V-3 in Section 3.7 was modified as follows (changes shown in italics):

V-3 **Light and Glare.** To reduce glare, RCTC's Project Engineer will ensure that the project plans specify lighting fixtures with non-glare hoods and that lighting is designed to illuminate only the right-of-way.

The lighting plans will require the review and approval of the Department and applicable cities and counties before construction to assure compliance with their applicable policies regarding public street lighting. *RCTC's Project Engineer will coordinate with the City of Corona and other applicable cities and counties to ensure that sufficient lighting is provided as part of the improvements to local streets within the project limits, consistent with applicable local policies and street lighting codes.*

Increased glare from proposed walls, structures and pavement will be minimized by measures identified in V-1 and V-2.

RCTC's Resident Engineer will ensure that the project lighting plan included in the project specifications is implemented by the design/build contractor during construction.

**C-19-4**
Refer to response to comment C-19-2, above.

**C-19-5**
Refer to response to comment C-19-3, above.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: John N Hathaway  City: Corona  Zip: 92879

Comment: Why did use overlook A FLY OVER 91 E TO N-71? I saw a Duplex at 910 E 2nd Street on South Side. The Noise Side is Commercial, with R/W Activation 9:11:06. The Fly is 22 Lanes. The Noise Study M 128 does not Address Santa Ana Winds from the North About 30 days a Year. Please show me How the Noise Will Stay the Same when The Fly Doubles in Lane Width. The Grand Circle gets a Sound. Please add me to the project distribution list. My address is: 720 Aspen St., Corona, CA. 92879. Contact me for a Review.

Address: 820 Aspen St., Corona, CA 92879. Contact me for a Review.

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4315 Lennar Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicente Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmentaldraft_eir_eis.php.

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C-20-1
The RCTC is pursuing a separate project to improve the SR-91/SR-71 interchange. Construction of a flyover ramp for eastbound SR-91 to northbound SR-71 traffic is proposed to be included in that project. Because that entails a separate and distinct project, it is beyond the scope of work for the environmental review of the SR-91 CIP. Nonetheless, the design of the SR-91 CIP Build Alternatives could accommodate and be accommodated by the proposed improvements to the SR-91/SR-71 interchange.

C-20-2
Refer to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, and to Section 3.15.2.2, Noise Level Measurements, on page 3.15-6 in the EIR/EIS for discussions regarding the methodology for analyzing noise levels. NB W-1 was modeled for this area and found to be reasonable and feasible. The noise level in the area is predicted to increase by 1 dBA due to the operation of the new ramps on I-15. NB W-1 will serve as a noise shield for these homes. The noise was modeled assuming calm wind conditions, with all lanes operating with the maximum traffic traveling at the posted speed limits.

C-20-3
Refer to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, and to Section 3.15.2.2, Noise Level Measurements, on page 3.15-3 in the EIR/EIS for discussions regarding the methodology for analyzing noise levels. According to the TeNS, noise level measurements under certain meteorological conditions such as high wind conditions should be avoided. A no wind condition is the optimal condition for noise level measurements because the TNM 2.5 model input has no provisions to consider meteorological effects or reflection from buildings. This optimal condition was ensured during the monitoring for the proposed project. Refer also to Section O.5.3, Common Response Related to the Noise Process, on page O-8.

Protocols do not currently exist for measuring or modeling noise impacts under high wind conditions. Noise barriers are designed for locations where currently available modeling tools demonstrate a probable need under the Department noise abatement policy as described in the Traffic Noise Analysis Protocol (California Department of Transportation Division of Environmental Analysis, August 2006). The noise levels on Third Street are not predicted to be the same; the Noise Study Report shows a 3 dBA increase under Alternative 1 and a 5 dBA increase under Alternative 2. Sound
walls Q-1 (on the south side of SR-91 between Lincoln Avenue and Main Street) and W-1 (between Main Street and Grand Avenue) were found to be reasonable and feasible. Based on results of the noise barrier survey results, NB W-1 was approved and will be carried through to construction. NB W-1 will reduce predicted noise levels to the current noise levels or below.

C-20-4
Refer to response to comment C-20-2, above.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print:
Name: Roy Hungerford  City: Norco  Zip: 92860

Comment:
No Toll Lanes. Too Expensive already with existing tolls. Lower the tolls to a reasonable rate not to exceed $5.00.

Please add me to the project distribution list. My address is:
Address: 3201 Culverhouse Road  City: Norco  Zip: 92860

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 5th Floor, San Bernardino; Riverside County Transportation Commission, 4090 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.cr91project.info/environmentalDraft_eir_eis.php.

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C-21-1
Toll rates are, and would continue to be, set by economic conditions. To remain attractive and marketable, toll lanes must be free flowing in order to provide time savings to the user. For the project segments on SR-91 and I-15, tolls will be set at a level that will regulate demand and maintain that free flow condition.

Refer to Section 2.3.3.2, Alternative 2: Add General-Purpose Lanes and Extend Tolled Express Lanes, on page 2-67 in the EIR/EIS for discussion regarding the tolled express lanes included in Alternative 2.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print
Name: Eric Johnson City: Brea Zip: 92823

Comment: This project will impact wildlife movement. Mitigation should include improvements to the wildlife undercrossings at Coal Canyon, B Canyon, and Fresno Canyon. The improvements should include permanent sound walls and vegetation replacement.

Please add me to the project distribution list. My address is:
Address: 2245 Verdeana Lane City: Brea Zip: 92823

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4030 Lemon Street, Third Floor, Riverside; the Corona Public Library, 659 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Viceria Avenue, 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

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Section 3.17.4, Avoidance, Minimization, and/or Mitigation Measures, on page 3.17-26 in the EIR/EIS, includes measures to avoid, minimize, and compensate for potential project impacts to wildlife movement and wildlife corridors, including replacement of temporarily affected vegetation. Based on the NSR (April 2010) and NADR (July 2010) for the SR-91 CIP, the proposed project is not expected to substantially increase the level of noise already present at wildlife corridors. Therefore, the placement of sound walls at the locations suggested in this comment has been determined not to be necessary because the project noise is not expected to substantially increase noise levels at wildlife crossings and corridors.
Please print
Name: RON KATMEYER    City: CORONA    Zip: 92883

Comment: PLEASE KEEP THE IMPACT ON "LEUNG CANYON" "RANCHO "SAN JACINTO"
          "RAMONA EXPRY."
          C CITY LEND. ACH. FOR PERUS E "SAN JACINTO"
          WORK MY HUBIE HUTLER

☑ Please add me to the project distribution list. My address is:
Address: 1705 RAYNIN BVD    City: SAN JACINTO    Zip: 92583

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commissioner, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 659 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vichnaya Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

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C-23-1
The commenter requested to be added to the project distribution list. This commenter’s contact information was added to page 7-125 in Chapter 7.0, Distribution List, in the EIR/EIS.

C-23-2
The commenter requested that he be kept informed on projects that are not related to the SR-91 CIP. The commenter’s contact information was provided to the RCTC to be placed on RCTC’s distribution list for projects in the San Jacinto area.
Please print

Name: ROBERT L. LIND
City: CORONA
Zip: 92883

Comment: PLAN INADEQUATE TO SOLVE PROBLEM WITH TRAFFIC ON 3/3/15 AT ONTARIO IN FACT WILL EXACERBATE PROBLEM 5 LANES TO 3, NOW 4 BECOMES 3 AT ONTARIO AND CAUSES TRAFFIC BACK UP TO MAGNOLIA. MORE VEHICLES = MORE IDLING = MORE POLLUTION.

☐ Please add me to the project distribution list. My address is:

Address: <<ADDRESS>>
City: <<CITY>>
Zip: <<ZIP>>

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Please print

Name: ROBERT L. LIND
City: CORONA
Zip: 92883

Comment: INCREASING TRAFFIC ON 3/3/15 FROM 91 MUST HAVE AN ALTERNATIVE. TEMESCAL CYN RD IS NOT SUFFICIENT TO ACT AS AN ALTERNATIVE FOR I-15, A SECOND NORTH/SOUTH NON-FREeway ROUTE IS REQUIRED.

☐ Please add me to the project distribution list. My address is:

Address: <<ADDRESS>>
City: <<CITY>>
Zip: <<ZIP>>

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

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Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental
Impact Statement (EIR/EIS)

Please print
Name: ROBERT L. LIND
City: CORONA
Zip: 92883

Comment: ALT 1 SHIFTS BOTTLENECK AT S/B 15 AT ONTARIO
(64 LANES BECOME 3) MAKES 5 LANES S/B 15 TO
ONTARIO 3 LANES. IT CREATES A BOTTLENECK THAT
WILL SURPASS MESS NOW CREATED AT ONTARIO. ITS
MORE VEHICLES SITTING IDLE EQUALS MORE POLLUTION.

At Please add me to the project distribution list. My address is:
Address: 28914 LAWSON RD
City: CORONA
Zip: 92883

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 8th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 653 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 408 S. Victoria Avenue 2nd Floor, Suite 210, Corona. This document can be viewed online or downloaded at http://www.sr91project.inf/environmental/statement_eir_eis.php.

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C-24-1
The addition of HOV lanes on I-15 is expected to provide some congestion relief on that route. In addition, the RCTC is developing separate and independent projects to address problems related to the I-15 corridor as a whole.

C-24-2
RCTC is pursuing separate and independent projects to improve traffic flow on the I-15 corridor. The SR-91 CIP will implement HOV or tolled express lanes south and north of the SR-91/I-15 interchange, but no other improvements along the I-15 corridor are included or proposed in the SR-91 CIP improvements and, therefore, are beyond the scope of the EIR/EIS. The SR-91 CIP improvements (HOV or tolled express lanes) on I-15 would extend north to Hidden Valley Parkway and south to Cajalco Road, which would partially address the existing bottleneck at Ontario Avenue.

Refer to Table 3.6.22 on page 3.6-71 in Section 3.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, in the EIR/EIS for a comparison of traffic LOS on the segments of I-15 north and south of Cajalco Road. Table 3.6.22 shows that the LOS on those I-15 segments is the same for the 2035 No Build (without the project) condition as it is for the 2035 with project condition. This indicates that the project would not cause a bottleneck at Cajalco Road.

As discussed in Section 3.14.3, Environmental Consequences, on page 3.14-13 in the EIR/EIS, the analysis determined that the project would reduce criteria air pollutant and MSAT emissions locally and regionally. Therefore, the project would not result in any air toxic impacts.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: Jesus Reyes City: Corona Zip: 92882
Comment:
Both alternatives affect my mobile home directly. I do not own the mobile home but I rent space. Would you deal or negotiate with land lord or mobile home owners?

Address: 995 Amona Rd City: Corona Zip: 92882

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C-25-1
Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, for information on the RCTC property acquisition process.

The RCTC will negotiate with the property owner regarding the purchase of the land, as well as the mobile home owner for the purchase of the actual mobile home. Tenants of rental properties, including mobile homes, may be eligible for relocation benefits. If the property is purchased before it is needed for construction, the tenant may be able to remain in the property (under lease from RCTC) until the property is required for construction. Refer to Appendix D, Summary of Relocation Benefits, in the EIR/EIS for discussion regarding potential benefits for tenants.
Name: Tim Lynch  City: Ontario  Zip: 91761

Comment: We own 2 digitized billboards north of 91 just west of 15. Wondering if we are selecting the signs onsell out.

Please add me to the project distribution list. My address is:

Address: 631 South Hope Ave  City: Ontario, CA  Zip: 91761

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C-26-1
C-26-1

The two cited billboards would require relocation by the SR-91 CIP Build Alternatives. Refer to Table O.5 on page O-36 in Section O.5.8, Common Response Related to Billboard Relocation, which shows the impacts of Alternatives 1 and 2 on individual billboards, including the billboard cited in this comment. Section O.5.8 describes the process the RCTC will follow to relocate any billboards that must be moved to accommodate the project, including appropriate coordination with the billboard/property owner, the City of Corona, and the Department. As shown in Table O.5, it is anticipated that this billboard can be relocated to another location on the parcel on which it is currently located. The relocation of billboards and compensation for billboards that cannot be relocated will be conducted by RCTC consistent with the requirements of the Uniform Act.

Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, which describes the process RCTC will follow for the acquisition of any privately owned property for the project, including full and partial acquisitions.
Name: Mary Mendoza  City: Corona  Zip: 91720

Comment: Noise concern - Will there be a soundwall built between my home and freeway.
C-27-1

NB K1-A was modeled at this location to protect the adjacent property from noise impacts associated with freeway traffic. That noise barrier was found to be feasible and within the reasonable cost allowance as discussed in Section 3.15.3.2, Permanent Impacts, on page 3.15-8 in the EIR/EIS. Based on commitments made on previous Department projects, the RCTC conducted a noise barrier survey. Based on the results of the survey, NB K1-A was approved and will be carried through to construction. NB K1-A will be constructed during the Initial Phase of Alternative 2f.
Please print
Name: Paul & Cheryl Ramirez   City: Corona   Zip: 92882

Comment:

* Addition/contraction of Bollem Pl. from Buena Vista to Grand Blvd
will eliminate privacy along our property.
* Acquisition of a portion of our property will eliminate
one of two required access points by Corona Fire Department

☐ Please add me to the project distribution list. My address is:
Address: ______________________ City: ______________________ Zip: ______________________

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Please print
Name: Paul & Cheryl Ramirez   City: Corona   Zip: 92882

Comment:

* existing water and gas lines are located
in the area that is to be acquired by CT.

☐ Please add me to the project distribution list. My address is:
Address: ______________________ City: ______________________ Zip: ______________________

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr9project.info/environmental/draft_eir_eis.php.

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C-28-1
The extension of Bollero Place to connect to Vicentia Avenue will result in the removal of the private access road into this property. Access will be provided by two new driveways located on the new Bollero Place. The property owner can provide walls along the street right-of-way as allowed under City code; those walls are not part of the proposed SR-91 CIP. Issues related to driveway access will be addressed through consultation with the City of Corona and the affected property owners. The RCTC is working closely with the City to evaluate measures to minimize potential impacts to property owners. Project impacts, if any, to an individual property will be evaluated during the appraisal process. Damages, if any, will be compensated.

Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses for additional discussion regarding the RCTC property acquisition process.

C-28-2
Refer to response to comment C-28-1, above. By providing two new driveways along Bollero Place, the property will meet City of Corona Fire Department codes.

C-28-3
Existing utility facilities that cannot be preserved in their present locations will be relocated within the existing or new local road rights-of-way. Refer also to response to comment C-28-1, above.
Please print

Name: Jesus Reyes City: Corona Ca Zip: 92882

Comment: I'm not in favor of the widening of my street. I have had several incidents where cars have driven onto my house and parked vehicles. With this new change, the risk of danger to my children is increasing. I am for the Riverside County of Transportation to purchase my home at my address is 203 S. Bell Corona City: Corona Ca Zip: 92882

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 850 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-29-1

NB Q-1 (on the south side of SR-91 between Lincoln Avenue and Main Street) was found to be reasonable and feasible. Based on the noise barrier survey results, NB Q-1 will be carried through to construction.

The relocation of Second Street will be designed to City of Corona Standards. The intersection of Second Street and Bella Avenue will be reconstructed to address the safety concerns. It is acknowledged that this commenter is opposed to a sound wall in the vicinity of this property. Refer to Section O.5.3, Common Responses Related to Noise, on page O-8 and Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, for information regarding the noise wall and RCTC property acquisition processes.

Issues related to safety and the realignment of Second Street will be addressed through consultation with the City of Corona. The City of Corona is actively engaged with the RCTC in evaluating measures to minimize potential impacts from the realignment of this street and to reduce safety concerns.

This commenter also provided verbal comments at the public hearing. Refer to comment T1-8-1, on page O-654.

The SR-91 CIP Build Alternatives would require the partial acquisition of this property because full acquisition is not needed to accommodate the Build Alternatives. However, when RCTC initiates the property acquisition for this partial acquisition, the property owner can request that RCTC consider a full acquisition of this parcel, based on the concerns cited in this comment related to the potential for increased accidents affecting this property as a result of the SR-91 CIP Build Alternatives.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental
Impact Statement (EIR/EIS)

Please print

Name: [ILLEGAL] Ben Rayna
City: Corona
Zip: 92882

Comment:
I LIKE A NEW SIGNAL AT RIGDEVIEW TERRACE & FRONTIER TO MAKE LEFT TURN TO FRONTIER CAME FROM RIGDEVIEW TERRACE

☐ Please add me to the project distribution list. My address is:
Address: 2232 Ridgeview Terrace
City: Corona
Zip: 92882

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 434 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4680 Lemon Street, Third Floor, Riverside; the Corona Public Library, 850 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicantia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91projectinfo/environmentalDraft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by labeling, stamping, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91projectinfo/index.php through the Feedback portal at the bottom of the webpage.
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C-30-1
This comment concerns existing conditions and a requested signal that would be at the intersection of two local streets, which is outside the project limits of the SR-91 CIP. For these reasons, it is outside the scope of the project and the EIR/EIS. The commenter's request should be referred to the City of Corona.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: Martin & Vicky Rivera
City: Corona
Zip: 92882

Comment:
Our property is located where all rain water drains thru our property to the back which intends to flood us. Concern is: Flooding our house when new wall/Fwy is built. How far well from our property? How far Fwy from our prop?

Health issues: 8 yr old heart patient at property concerned about health enviro quality for new Fwy expansion/construction.

Please add me to the project distribution list. My address:

Address: 641 Colonial Drive
City: Corona
Zip: 92882

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C-31-1
The project would maintain existing drainage patterns to accommodate the project improvements. There are no drainage improvements associated with the SR-91 CIP that are planned outside the State right-of-way for SR-91 or along Colonial Drive. The drainage issue described in this comment is a local drainage issue largely related to existing conditions that are outside the scope of the project and EIR/EIS and should be referred to the City of Corona.

There is a brief discussion of drainage and drainage features in Section 2.3.2.2, Permanent Project Features, on page 2-12 in the EIR/EIS. Specifics regarding individual drainage facilities for the project are addressed in greater detail in the Draft Preliminary Drainage Report (RBF Consulting/RMC, Inc., April 2010).

The project will result in the freeway and noise barrier moving closer to the cited property. Proposed Noise Barrier K-1 will be approximately 20 ft from the east end of the cited property and 64 ft from the west end of the cited property. Refer to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, and to Section 3.15, Noise, starting on page 3.15-1 in the EIR/EIS for discussion of the noise evaluation process, including the evaluation of possible noise barriers.

C-31-2
Refer to response to comment P-16-1, on page O-466, which discusses the potential health effects of the short-term construction and long-term operation of the proposed project and the determination that the project would reduce criteria air pollutants and MSAT emissions locally and regionally in the long term, as discussed in the subsection titled “MSAT Analysis Results” on page 3.14-35 in Section 3.14.3.2, Permanent Impacts, in the EIR/EIS.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print
Name: John Rejo
City: Corona
Zip: 92879

Comment: The information I received is not the same as the info presented at this hearing. I don't want the wall to be close to my home, that will block my views and it will bring my value of my home down. I do not want to buy a home that is next to a sound wall only 3 to 6 feet away from my home. We are being misled.

Please add me to the project distribution list. My address is: 2910 Via Milane, Corona, CA 92879.

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Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print
Name: John Rejo
City: Corona
Zip: 92879

Comment: Some of my friends voted due to getting the certified letter but others never even seen the letters to vote. We need someone to come and talk to the community and board members so we can discuss the wall that should be placed only 6 feet away from my home. I do not approve this wall to be that close to my home.

Please add me to the project distribution list. My address is: 2910 Via Milane, Corona, CA 92879.

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C-32-1

Two meetings were held in August 2011 to discuss noise barriers at two locations, including the area cited by the commenter. Residents in all benefited residences in those two areas were invited to the meetings.

Refer to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, for additional information regarding the process for evaluating noise impacts, identifying locations for consideration of noise walls, and discussion about the two public meetings regarding noise barriers in August 2011.

Refer to response to comment P-1-1 on page O-430 in this appendix for information regarding the potential visual/aesthetic impact of noise walls. Refer also to Section 3.7.4, Environmental Consequences, on page 3.7-12 in the EIR/EIS for more detailed information on the visual impacts of the project features and measures incorporated in the project to partially, but not completely, mitigate those effects.

Property values are affected by a wide range of factors, including land use changes, regional economics, housing-market cycles, population inflows and outflows, and local levels of development activity. As a result, it is difficult to assess the potential effect of a transportation project on the values of individual properties. Six factors related to transportation projects may affect property values: accessibility, safety, noise, visual quality, community cohesion, and business productivity. For residential properties, only the first five factors are applicable. Changes in these factors may, but not necessarily would, result in a change in property values. Additionally, the degree to which a transportation project will affect property values depends in part on the location of the property (either adjacent to or in the vicinity of a project) and the land use (residential, commercial, or industrial). The analyses in the environmental consequences sections in the EIR/EIS indicate the SR-91 CIP Build Alternatives will result in effects on community character and cohesion in the areas in Corona along SR-91 (Section 3.4.1.3 on page 3.4-21), will improve mobility and potentially reduce congestion in areas in Corona along SR-91 (Section 3.6.3 on page 3.6-14), will result in changes in views of the area along SR-91 (Section 3.7.4 on page 3.7-12), and will result in noise impacts along the project segment of SR-91 (Section 3.15.3 on page 3.15-14). Avoidance, minimization, and mitigation measures included in the project would substantially reduce the effects of the Build Alternatives related to community character and cohesion (Section 3.4.2.5 on page 3.4-50), traffic (Section 3.6.4 on page 3.6-31), aesthetics (Section 3.7.5 on page 3.7-30), and noise (Section 3.15.4 on page
3.15-17). As a result, the SR-91 CIP Build Alternatives are not expected to affect property values in areas along SR-91.

**C-32-2**
Refer to response to comment C-32-1, above.
Name: RITA SANDER
City: CORONA
Zip: 92882

Comment: we can SAVE SO MUCH in tax DOLLARS by making TOLL LANES ALONG to O.C. 3 HOUR in AM RUSH TIME. THEN REVERSING THIS TO ALL TOLL LANES going FROM OC to LA CAN MORE PEOPLE WOULD sign up FOR TOLL ROAD

Address: 3095 TIMBERLINE AVE CORONA 92882

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4000 Lenoir Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicente Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.s91projectinfo/environmental/draft_eir_eis.php.

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C-33-1
Refer to response to comment S-3-18 on page O-114, which discusses reversible lanes and why they were determined not to be a feasible solution for the present problem.

C-33-2
This comment does not raise an environmental issue within the context of CEQA and/or NEPA or ask a question regarding the technical analyses in the EIR/EIS. Consistent with the requirements of CEQA and NEPA, comments that raised environmental issues under CEQA and NEPA are responded to in this report. In addition, all comments received on the Draft EIR/EIS are included in this report and will be made available to the public and decision-makers prior to any action on the proposed project.
Please print

Name: Claire Schlotterbeck City: Brea Zip: 92823

Comment:

1. Why have sound walls not been considered for Cole Canyon (related to noise and light impacts for wildlife)?
2. Why did Caltrans put in an off ramp (Westbound green line) that is not in compliance with standards. And now they need to rip it out to put in a huge elevated off ramp using State Park land to do so.

☐ Please add me to the project distribution list. My address is:

Address: 110 Cega de Oro City: Brea Zip: 92823

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C-34-1

The Department’s noise abatement policy as described in the Traffic Noise Analysis Protocol (California Department of Transportation Division of Environmental Analysis, August, 2006) is to consider noise abatement in areas of frequent human activity that would experience substantial project-related noise impacts. Noise abatement is not typically considered to mitigate noise effects on wildlife. In addition, noise walls are not provided to address light impacts. The Coal Canyon crossing already experiences noise and light associated with existing SR-91. As a result, noise barriers were not considered in the vicinity of the Coal Canyon crossing.

The only cause of indirect effects such as noise and lighting at Coal Canyon would be traffic. As described in Table 3.6.22 on page 3.6-71, the total daily traffic volumes will be the same in 2035 with or without the project. Because traffic levels will remain relatively the same, indirect effects caused by traffic (e.g., noise and lighting) will remain relatively the same with or without the project.

Noise data were not available for the Coal Canyon undercrossing. Noise data from other nearby similarly situated monitoring locations (refer to Receiver IDs 2M and 3M in Table 3.15.13) and future year with and without project traffic data were reviewed to identify the potential for increased noise from traffic volumes in this area. Based on that information, traffic on SR-91 in the vicinity of the Coal Canyon undercrossing is forecast to be similar or better with the project in design year 2035 as discussed in Chapter 1, Project, and Section 3.6, Traffic and Transportation/Pedestrian and Bicycle Facilities. As a result, the noise level at the Coal Canyon undercrossing is not expected to increase as a result of the SR-91 CIP Build Alternatives. Although noise will not increase as a result of the SR-91 CIP, noise impacts are expected to extend into the surrounding natural habitat by approximately the same distance that SR-91 is being widened.

For additional discussion regarding potential noise and light impacts on wildlife at Coal Canyon, refer to response to comment O-8-31 on page O-397.

C-34-2

The recently completed reconstruction of the Green River Road interchange was designed prior to planning for the SR-91 CIP and to a different design year for the traffic analysis. The newly constructed overcrossing is adequate to accommodate widening of SR-91, but modifications to the interchange ramps will be required to accommodate the proposed mainline freeway widening. The proximity of the BNSF railroad tracks requires removal of the existing Green River Road westbound
off-ramp and realignment onto a viaduct structure north of the location of the existing off-ramp.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print
Name: Beatriz A. Segura          City: Corona          Zip: 92882

Comment:

Never received the sound wall packet.

Address: 815 Bolero Pl          Phone: 714-631-5540
          Corona CA 92882

☐ Please add me to the project distribution list. My address is:

Address:                      City:                      Zip:

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Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print
Name: Beatriz A. Segura          City: Corona          Zip: 92882

Comment:

We need in our area for more accommodations to our needs due to the construction in the future:

- street lights
- reduce or minimize construction during school working hrs.
- more property privacy

☐ Please add me to the project distribution list. My address is:

Address:                      City:                      Zip:

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4980 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 499 S. Vicentina Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

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Name: Beatriz A. Segura  City: Corona  Zip: 92882

Comment: Send all the information that we need, we haven't received all the information that needs to be provided a.s.a.p. This affects all Pollero Pl. Home owners. 9715 Pollero Pl. Corona CA 92882

Please add me to the project distribution list. My address is:
Address:  City:  Zip:

PUBLIC COMMENT PERIOD: May 30, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vinita Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

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C-35-1
A noise wall package including the noise wall survey form was sent to this commenter in August 2011. NB P-1 is the wall adjacent to this property. Based on the results of the noise barrier survey, NB P-1 will be carried through to construction.

Refer to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, for additional information regarding the process for evaluating noise impacts, identifying locations for consideration of noise walls, and discussion about the two public meetings regarding noise barriers in August 2011.

C-35-2
Existing local street lighting affected by the project will be replaced in kind. Requests for new local street lighting should be referred to the City of Corona.

C-35-3
The installation of speed bumps or other traffic calming devices on local streets would be outside the purpose of the SR-91 CIP and would be at the discretion of the local agency, in this case the City of Corona.

C-35-4
Privacy is generally not considered an environmental concern. Existing conditions are outside the scope of the EIR/EIS, which addresses only impacts from the project. However, the project will include sound walls, retaining walls, and landscaping that may provide a limited increase in privacy for properties adjacent to the freeway.

C-35-5
Construction work schedules are developed to minimize adverse effects to traffic flows on the freeways and adjacent local streets to the extent possible. The majority of the project construction activities will occur during daylight hours and, as a result, will likely overlap with school start/end times and worker commutes in the area. The construction work procedures will include coordination with local schools, emergency services providers, and transit operators to minimize disruptions to their activities, ensure the safety of students and pedestrians, and provide appropriate access through the construction areas for emergency services providers and transit services. Refer to Measure T-1 on page 3.6-31 in Section 3.6.4, Avoidance, Minimization and/or Mitigation Measures, in the EIR/EIS for a description of the TMP that will be implemented during the construction phase of the project, which will include coordination with emergency services providers, schools, and transit operators.
C-35-6
Refer to response to comment C-35-1, above, regarding the noise package and survey form sent to this commenter and the noise survey process.

C-35-7
This commenter's contact information was added to page 7-20 in Chapter 7, Distribution List, in the EIR/EIS.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: Himanshu Shah  City: Corona  Zip: 92883

Comment: Re: plan on S. Lincoln Ave. 18th Alternative plan 1B, 1D, 2B, 2D, 2F, 2H are not good, because it taking away parking lot. If parking lot go away then it will hurt all retail businesses. If more lane need to be added than may use some land from opposite side (by Miler, McDonald's etc.) and do narrower sidewalk.

☐ Please add me to the project distribution list. My address is:

Address: 401 S. Lincoln Ave, Ste # 1K  City: Corona  Zip: 92883

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Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: Himanshu Shah  City: Corona  Zip: 92883

Comment: Tham parking lot can be saved.

☐ Other suggestions may take hangover from the property, because it is very wide and no parking lot there. Facing property of tenant. So please save us make parking lot for all our about 311 business. Our business is our bread and butter. So please please... Thank you.

☐ Please add me to the project distribution list. My address is:

Address: 401 S. Lincoln Ave, Ste # 1K  City: Corona  Zip: 92883

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C-36-1
The property at 401 South Lincoln Avenue would be a full property acquisition and the businesses on this parcel would be removed under Alternatives 1 and 2. Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6, for discussion regarding RCTC’s property acquisition process for the SR-91 CIP. Refer also to Appendix D, Summary of Relocation Benefits, in the EIR/EIS for discussion regarding benefits for displaced businesses.

C-36-2
Refer to response to comment C-36-1, above.

C-36-3
Refer to response to comment C-36-1, above.

C-36-4
Refer to response to comment C-36-1, above.
Please print

Name: Shaoli Shanak
City: Corona
Zip: 92882

Comment:

I would like to get all the contact info for the project managers or construction companies will be involved. Anyone will need lodging during the project.

P: 951-335-6408.
M: 6069100@omotelie.com.

Please add me to the project distribution list. My address is:

Address: 200 N Lincoln Ave
City: Corona, CA
Zip: 92882

PUBLIC COMMENT PERIOD: May 26, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4050 Lassen Street, Third Floor, Riverside; the Corona Public Library, 550 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentiis Avenue, 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr9project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr9project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-37-1
This information is not available at this time and is outside the scope and intent of the environmental process for the SR-91 CIP.
Please print

Name: Angela Scherer
City: Corona
Zip: 92879
Comment: I am confused about what has been proposed and so are my neighbors. Some have received certified mail -other have not (including me!) Some neighbors were under the impression (1.5 yrs ago) that our property would be purchased -now that has changed. There is miscommunication about the sound wall. Someone needs to come and speak to Homeowners Assoc.
Address: 2920 Via Milano #201
City: Corona
Zip: 92879

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4000 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicenza Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr9project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 3 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr9project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-38-1
A meeting was held in August 2011 to discuss NB D1-B. All property owners affected by NB K1-A were invited to attend this meeting.

Refer to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, for additional information regarding the process for evaluating noise impacts, identifying locations for consideration of noise walls, and discussion about the two public meetings regarding noise barriers in August 2011.

An additional meeting with the Homeowners Association and interested residents was held in November 2011. During this meeting, the Homeowners Association voted in support of NB K1-A. Therefore, NB K1-A will be carried through to construction. Refinements to aesthetics of the noise barrier will be finalized during the design phase.

Refer to also to Section 3.15.3.2, Permanent Impacts, on page 3.15-5 in the EIR/EIS for discussion of the use of sound barriers to minimize project-related noise impacts as well as unusual and extraordinary noise abatement measures that would potentially be used at locations that would experience a severe project-related traffic noise impact of 75 equivalent continuous sound level measured in A-weighted decibels (dBA $L_{eq}$) or higher. Those types of other abatement measures, such as improvements to buildings, would be studied on a case-by-case basis during final design.

C-38-2
A noise barrier survey package was sent to this commenter on June 1, 2011.

Refer also to response to comment C-38-1, above.
Please print

Name: GREG TESDAHL City: CORONA Zip: 92879

Comment: I OWN 3920 VIA MILANO #203, CORONA 92879. THE LETTER TO VOTE YES OR NO IS NOT ACCURATE TO WHAT IS PROPOSED AT THE HEARING. MY NEIGHBORS HAVE VOTED ON MISLEADING INFORMATION. IF THIS IS NOT ADDRESSED IMMEDIATELY LEGAL ACTION WILL BE TAKEN. A REPRESENTATIVE FOR THE PROJECT NEEDS TO MEET WITH MY COMMUNITY.

Please add me to the project distribution list. My address is:

Address: 3920 VIA MILANO City: CORONA Zip: 92879
Please print

Name: GREG TESTANI City: CORONA Zip: 92879

Comment: I OWE 2920 VIA MILANO #202. AS STATED I NEVER RECEIVED THE CERTIFIED LETTER TO VOTE YES OR NO ON THE SOUND WALL MY NEIGHBOR SHOWED ME HERE AND THE LETTER INFORMATION DOES NOT MATCH THE INFO AT THE HEARING MY COMMUNITY HAS BEEN MISLED A REPRESENTATIVE FROM THIS PROJECT NEEDS TO MEET WITH MY COMMUNITY IN PERSON.

Address: 2920 VIA MILANO City: CORONA Zip: 92879

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 406 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 406 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr9project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Please provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr9project.info/index.php through the Feedback portal at the bottom of the webpage.

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A meeting was held in August 2011 to discuss noise barriers at two locations, including the area cited by the commenter. Affected property owners and other interested residents were invited to this meeting. Survey letters were sent to the owners of townhomes located along the freeway, including this commenter.

An additional meeting with the Homeowners Association and interested residents was held in November 2011. During this meeting, the Homeowners Association voted in support of NB K1-A. Therefore, NB K1-A will be carried through to construction. Refinements to aesthetics of the noise barrier will be finalized during the design phase.

Refer to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, for additional information regarding the process for evaluating noise impacts, identifying locations for consideration of noise walls, and discussion about the two public meetings regarding noise barriers in August 2011.

Refer also to Section 3.15.3.2, Permanent Impacts, on page 3.15-5 in the EIR/EIS for discussion of the use of sound barriers to minimize project-related noise impacts as well as unusual and extraordinary noise abatement measures that would potentially be used at locations that would experience a severe project-related traffic noise impact of 75 dBA $L_{eq}$ or higher. Those types of other abatement measures, such as improvements to buildings, would be studied on a case-by-case basis during final design.

Property values are affected by a wide range of factors, including land use changes, regional economies, housing-market cycles, population inflows and outflows, and local levels of development activity. As a result, it is difficult to assess the potential effect of a transportation project on the values of individual properties. Six factors related to transportation projects may affect property values: accessibility, safety, noise, visual quality, community cohesion, and business productivity. For residential properties, only the first five factors are applicable. Changes in these factors may, but not necessarily would, result in a change in property values. Additionally, the degree to which a transportation project will affect property values depends in part on the location of the property (either adjacent to or in the vicinity of a project) and the land use (residential, commercial, or industrial). The analyses in the environmental consequences sections in the EIR/EIS indicate the SR-91 CIP Build Alternatives will result in effects on community character and cohesion in the areas in Corona along SR-91 (Section 3.4.1.3 on page 3.4-21), will improve mobility and potentially reduce...
congestion in areas in Corona along SR-91 (Section 3.6.3 on page 3.6-14), will result in changes in views of the area along SR-91 (Section 3.7.3 on page 3.7-2), and will result in noise impacts along the project segment of SR-91 (Section 3.15.3 on page 3.15-4). Avoidance, minimization, and mitigation measures included in the project would substantially reduce the effects of the Build Alternatives related to community character and cohesion (Section 3.4.2.5 on page 3.4-50), traffic (Section 3.6.4 on page 3.6-31), aesthetics (Section 3.7.5 on page 3.7-30), and noise (Section 3.15.4 on page 3.15-60). As a result, the SR-91 CIP Build Alternatives are not expected to affect property values in areas along SR-91.

Refer to Measure V-1 on page 3.7-30 in Section 3.7.5, Avoidance, Minimization, and Mitigation Measures, in the EIR/EIS, which addresses the potential aesthetic impacts of sound walls.

**C-39-2**

Refer to response to comment C-39-1, above.

**C-39-3**

An additional community meeting was held on November 12, 2011, at the community pool in this residential complex. Noise barrier options were presented to the Homeowners Association. The community voted yes to accept a noise barrier on private property. Refinements to the noise barrier design will be presented to the Homeowners Association during the design phase.

Refer also to response to comment C-39-1, above.
Charlie Webb  |  Corona, CA  |  Zip: 92882

Comment: Our affected property is 2000 W. Frontage Rd, Corona. We did not receive a survey letter regarding soundwalls. Our property would be pushed by the addition of a soundwall between us and the freeway.

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 659 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicenita Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr9project.info/environmental/craft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr9project.info/index.php through the Feedback portal at the bottom of the webpage.

Charlie Webb  |  Corona, CA  |  Zip: 92882

Comment: Our affected property, 2000 W. Frontage Rd, is scheduled for full acquisition. However, we wish to be reclassified as partial acquisition, as we have been in the same spot 17 years and relocation would be next to impossible due to the nature of our business.

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 659 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicenita Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr9project.info/environmental/craft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr9project.info/index.php through the Feedback portal at the bottom of the webpage.
C-40-1
This property was not identified as a property that would benefit from a recommended sound wall. As a result, this commenter did not receive the noise barrier survey package.

A noise barrier was evaluated along the eastbound Maple Avenue off-ramp which has determined to be feasible but not reasonable. That noise barrier is no longer included in the SR-91 CIP.

C-40-2
This property is currently identified as a full-parcel acquisition and the business on this parcel would be removed under Alternative 2f, the Preferred Alternative. The RCTC will work with each affected property owner during the design/build process to identify opportunities to either avoid acquisition of individual parcels or to reduce a full acquisition to a partial acquisition. However, at the current level of design, it is not certain that this particular full-parcel acquisition can be reduced to a partial acquisition, so the EIR/EIS evaluation considered the worst case, which is full acquisition of this property. Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, for additional discussion regarding the RCTC property acquisition process for the project.

Demographic research for the City of Corona from the Southern California MLS and commercial and residential resources from Realquest.com and Loopnet.com, as documented in the FRIR (2011), has demonstrated ample availability of both commercial and residential inventory in the immediate project area. Attachments 3.4.A through 3.4.I to Section 3.4, Community Impacts, in the EIR/EIS identify a large number of residential and business replacement properties available for lease and/or purchase in the general vicinity of the SR-91 CIP as of July 2011.

Refer also to Section 3.4.2, Relocations and Real Property Acquisitions, starting on page 3.4-36, and Appendix D, Summary of Relocation Benefits, for discussion regarding the relocation process and potential benefits available to displaced business owners and tenants. All businesses are entitled to relocation benefits.
Name: Don Wilkie City: Corona, CA Zip: 92879

Comment: I request that a sound wall go up along the 91 freeway where the Villa Pacifica condominium project along Via Altuna that faces the proposed expansion in general purpose lanes on the 91 due to increased noise levels from the 91.

Address: 380 Via Capri, #202 City: Corona, CA Zip: 92879

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino, Riverside County Transportation Commission, 4030 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicantia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.91project.info/environmental/EIR_EIS.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.91project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-41-1

A wall is planned on the north side of SR-91. It is tentatively planned as an extension of the existing wall, west of the Buchanan overcrossing. This wall is included in sound wall package 11.

Two meetings were held in August 2011 to discuss noise barriers at two locations, including the area cited by the commenter. Residents in all benefited residences in those two areas were invited to the meetings.

Refer to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, for additional information regarding the process for evaluating noise impacts, identifying locations for consideration of noise walls, and discussion about the two public meetings regarding noise barriers in August 2011.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: Richard Winn  City: Corona Historic Preservation Society  zip: 92879-2904

Comment: Please update Historic Property Survey Report. PG 6 notes Grand Blvd Streetscape as "not eligible" when in fact it has been named as an Historic District by Calif. Historic Resources Commission and National Register.

Please add me to the project distribution list. My address is:
Address: PO Box 2904  City: Corona  CA  zip: 92879-2904

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4000 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.

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A Finding of Effect (FOE) was prepared (2011) to evaluate the project effects to the National Register-eligible Grand Boulevard Historic District. Refer to Section 3.8.2.6, Results, on page 3.8-8 in the EIR/EIS for an updated discussion of the Grand Boulevard Historic District as a National Register-listed property and the potential project effects on that property.
Please print: Check into Cash

Name: Brenda Urquieta  City: Corona  Zip: 92872

Comment: I am a tenant for corona center on southside of Lincoln according to map our parking lot will be gone, so please if you accommodate our parking on far side of the property if you designate your parking lot on other side if you designate our landlord know if you can designate.

☐ Please add me to the project distribution list. My address is:

Address: 401 S Lincoln St. City: Corona  Zip: 92872

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 405 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4030 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr9project.info/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr9project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-43-1

The property at 401 South Lincoln Avenue would be a full property acquisition and the businesses on this parcel would be removed under Alternatives 1 and 2. Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 and Section O.5.2, Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses, on page O-7 in Section O.5, Common Responses, for discussion regarding the RCTC property acquisition process. Refer also to Appendix D, Summary of Relocation Benefits, in the EIR/EIS, for a description of the potential benefits for property owners and tenants affected by the property acquisition for the project.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: JIM OGLE
City: CORONA
Zip:

Comment: PROPERLY 1401 POMONA RD CORONA. IT APPEARS THAT WORST CASE, POMONA RD WILL BE REALIGNED UP TO BUILDING. IT IS A SET BACK IS WANTED WE WOULD NOT HAVE TO DO ANY REMOVAL OR THE BUILDING. THIS WOULD SAVE MONEY & DISRUPTION OR TENANTS.

Please add me to the project distribution list. My address is:

Address: 1570 E. BRIGHT AVE #12
City: SANTA ANA
Zip: 92705

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 484 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 400 Lemon Street, Third Floor, Riverside; the Corona Public Library, 630 S. Main Street, Corona; and the City of Corona Public Works Department, 400 S. Vicencia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr9project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr9project.info/index.php through the Feedback portal at the bottom of the webpage.
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C-44-1

The relocation of Pomona Road will not result in impacts to the cited building; it will only result in modifications to the landscaping, sidewalks, and driveways at this property. A setback waiver would not be required to provide these improvements on Pomona Road.

Alternatives 1 and 2 would require partial acquisition of the cited property as well as the use of part of the property for TCEs during construction.

Issues related to building setback requirements will be addressed through consultation with the City of Corona. The City of Corona is actively engaged with the RCTC to evaluate measures to minimize potential impacts to businesses due to the realignment of Pomona Road. Every effort will be made to reduce the impact to the building and its occupants. RCTC also must ensure that the project design meets public safety standards related to line-of-sight for drivers in this area.

Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, for discussion regarding the RCTC property acquisition process. Refer also to Appendix D, Summary of Relocation Benefits, in the EIR/EIS, for a description of the potential benefits for property owners and tenants affected by the property acquisition for the project.

This commenter (Mr. Ogle) provided additional comments in an email, which are provided as P-14 earlier in this appendix.
Name: Jose Gallegos  City: Corona  Zip: 92879
Comment: El Taco Lucas

I own an Mexican Restaurant in Corona where center on limon Ave. according to me our parking lot will be gone. So please accommodate our parking lot on fluming or side of property. If you design.
Please add me to the project distribution list. My address is:
Address: 15 Limo Ave, Suite 6, City: Corona, Zip: 92872

PUBLICATION PERIOD: May 30, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 8th Floor, San Bernardino; Riverside County Transportation Commission, 4088 Lemos Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicewita Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91projectinfo/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91projectinfo/index.php through the Feedback portal at the bottom of the webpage.

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C-45-1

The property at 401 South Lincoln Avenue would be a full property acquisition and the businesses on this parcel would be removed under Alternatives 1 and 2. Refer to Section 0.5.1, Common Response Related to the Property Acquisition Process, on page O-6, for discussion regarding RCTC’s property acquisition process for the SR-91 CIP. Refer also to Appendix D, Summary of Relocation Benefits, in the EIR/EIS for discussion regarding benefits for displaced businesses.

Demographic research for the City of Corona from the Southern California MLS and commercial and residential resources from Realquest.com and Loopnet.com, as documented in the FRIR (2011), has demonstrated ample availability of both commercial and residential inventory in the immediate project area. Appendix Q, Residential and Commercial Relocation Opportunities, identifies a large number of residential and business replacement properties available for lease and/or purchase in the general vicinity of the SR-91 CIP as of July 2011.

Refer also to Section 3.4.2, Relocations and Real Property Acquisitions, starting on page 3.4-36, and Appendix D, Summary of Relocation Benefits, for discussion regarding the relocation process and potential benefits available to displaced business owners and tenants.
Please print

Name: Frank (PRO-DENT LAB, inc. Corona) Zip: 92880

Comment: I would like to see the same kind of railing over the railroad pass (old one) & not the new fenced ones. It obstructs the visibility of our signs & business please, thank you.

☑ Please add me to the project distribution list. My address is:

Address: 3125 Palisades Dr. City: Corona Zip: 92880

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4060 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr31project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr31project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-46-1

In many cases, railings on existing bridges do not meet current Department standards and are not used for new construction. Railings on new or widened bridges will conform to current Department bridge railing standards.

Refer to Section O.5.2, Common Response Related to Loss of Parking and Other Potential Impacts to Businesses, on page O-7 in Section O.5, Common Responses, for additional discussion regarding the process for addressing potential impacts to businesses.
Please print

Name: Truyen Nguyen / Gala Nails  City: Corona  Zip: 92882

Comment: The project took away the whole parking lot and during the construction, it will be lost a lot of income. The business got big impact with the construction. I am looking how they can help to cover the lost in the business during the construction!

☐ Please add me to the project distribution list. My address is:

Address: 401 S Lincoln Ave #4  City: Corona  Zip: 92882

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 494 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicente Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr9project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr9project.info/index.php through the Feedback portal at the bottom of the webpage.

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C-47-1
The property cited in this comment, at 401 South Lincoln Avenue, is a shopping center with several businesses. This property would be a full acquisition and the businesses on this parcel would be removed under Alternatives 1 and 2. Business owners at this property will be eligible for relocation assistance.

Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 for discussion regarding RCTC’s property acquisition process for the SR-91 CIP.

Demographic research for the City of Corona from the Southern California MLS and commercial and residential resources from Realquest.com and Loopnet.com, as documented in the FRIR (2011), has demonstrated ample availability of both commercial and residential inventory in the immediate project area. Attachments 3.4.A through 3.4.I to Section 3.4, Community Impacts, in the EIR/EIS identify a large number of residential and business replacement properties available for lease and/or purchase in the general vicinity of the SR-91 CIP as of July 2011.

Refer also to Section 3.4.2, Relocations and Real Property Acquisitions, starting on page 3.4-36, and Appendix D, Summary of Relocation Benefits, for discussion regarding the relocation process and potential benefits available to displaced business owners and tenants. All businesses are entitled to relocation benefits.

C-47-2
Refer to response to comment C-47-1, above.
Public Comment Card
State Route 91 Corridor Improvement Project
Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)

Please print

Name: Nancy Gonzalez
City: Corona
Zip: 92882

Comment: I am tenant for Corona Center on the Southside of Lincoln according to maps. Our parking lot will be gone so please let you comment on parking on the hang overside of property if you design the parking lot on the other side. You talk to the land lord if you can design.

Address: 401 Lincoln St
City: Corona
Zip: 92882

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4850 Lemon Street, Third Floor, Riverside; the Corona Public Library, 650 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmentaldraft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.

P:\PA20701\Public Outreach\Open House Public Comment Card.doc
The property at 401 South Lincoln Avenue would be a full property acquisition and the businesses on this parcel would be removed under Alternatives 1 and 2. Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 and Section O.5.2, Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses, on page O-7 in Section O.5, Common Responses, for discussion regarding the RCTC property acquisition process.

Demographic research for the City of Corona from the Southern California MLS and commercial and residential resources from Realquest.com and Loopnet.com, as documented in the FRIR (2011), has demonstrated ample availability of both commercial and residential inventory in the immediate project area. Attachments 3.4.A through 3.4.I to Section 3.4, Community Impacts, in the EIR/EIS identify a large number of residential and business replacement properties available for lease and/or purchase in the general vicinity of the SR 91-CIP as of July 2011.

Refer also to Section 3.4.2, Relocations and Real Property Acquisitions, starting on page 3.4-36, and Appendix D, Summary of Relocation Benefits, for discussion regarding the relocation process and potential benefits available to displaced business owners and tenants. All businesses are entitled to relocation benefits.
Please print

Name: Limon Smoke Shop City: CORONA Zip: 92882
Comment: Thank you very much for taking our comments. We want to address the comments about our parking lot. According to map our parking lot will be gone by adding some on Limon Ave so we will.

☐ Please add me to the project distribution list. My address is:
Address: 401 S. Limon Ave Suite City: CORONA Zip: 92882

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P:\PA20701\PublicOutreachOpenHousePublicCommentCard.doc

Please print

Name: Mala Shah City: CORONA Zip: 92882
Comment: not have parking for our customer so that will make our business slow or we will be out of business so please if you design Alternative B, E, 2E, 2G then our parking lot will not effect could you please consider one. both Alternative.

☐ Please add me to the project distribution list. My address is:
Address: 401 S. Limon Ave Suite City: CORONA Zip: 92882

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 464 W. 4th Street, 6th Floor; San Bernardino; Riverside County Transportation Commission, 4080 Lemon Street, Third Floor, Riverside; the Corona Public Library, 659 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

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P:\PA20701\PublicOutreachOpenHousePublicCommentCard.doc
Please print L'Imal Cafe.

Name: MALA SHAH  City: CORONA  Zip: 92882

Comment: I am tenement for Corona crown center.

on South side of Limonol according to map.

our parking lot will be gone. So please if you

can accommodate our parking on hang overside.

of the building. If you design the parking lot

on the other side and let our landlord know if you

can design on that side. 92882

PUBLIC COMMENT PERIOD: May 20, 2011 to July 11, 2011. The Draft EIR/EIS and supporting technical studies are available for review and comment during regular business hours at: Caltrans District 8, 454 W. 4th Street, 6th Floor, San Bernardino; Riverside County Transportation Commission, 4030 Lemon Street, Third Floor, Riverside; the Corona Public Library, 850 S. Main Street, Corona, CA; and the City of Corona Public Works Department, 400 S. Vicentia Avenue 2nd Floor, Suite 210, Corona. The document can be viewed online or downloaded at: http://www.sr91project.info/environmental/draft_eir_eis.php.

WRITTEN COMMENTS: Provide written comments during the public meeting or mail this comment card to Caltrans District 8 by folding, stapling, and sending this card to the address on the reverse. In addition, comments can be e-mailed to: http://www.sr91project.info/index.php through the Feedback portal at the bottom of the webpage.
C-49-1
The property at 401 South Lincoln Avenue would be a full property acquisition and the businesses on this parcel would be removed under Alternatives 1 and 2. Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 for discussion regarding RCTC’s property acquisition process for the SR-91 CIP.

Demographic research for the City of Corona from the Southern California MLS and commercial and residential resources from Realquest.com and Loopnet.com, as documented in the FRIR (2011), has demonstrated ample availability of both commercial and residential inventory in the immediate project area. Attachments 3.4.A through 3.4.I to Section 3.4, Community Impacts, in the EIR/EIS identify a large number of residential and business replacement properties available for lease and/or purchase in the general vicinity of the SR-91 CIP as of July 2011.

Refer also to Section 3.4.2, Relocations and Real Property Acquisitions, starting on page 3.4-36, and Appendix D, Summary of Relocation Benefits, for discussion regarding the relocation process and potential benefits available to displaced business owners and tenants. All businesses are entitled to relocation benefits.

C-49-2
Refer to response to comment C-49-1, above.
O.6.8 Public Hearing Transcripts Comments
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STATE ROUTE 91
IMPLEMENTATION PLAN

PUBLIC HEARING ON
DRAFT ENVIRONMENTAL IMPACT REPORT

502 SOUTH VICENTIA AVENUE
CORONA
THURSDAY, JUNE 9, 2011

CORONA, CALIFORNIA, THURSDAY, JUNE 9, 2011
3:30 - 7:30 P.M.
-000-

PUBLIC COMMENTS

PUBLIC SPEAKER: Sally, S-a-l-l-y, C-o-t-a, C-o-t-a. 777 Highland View Drive, Corona, 92882.
I'd like to -- first of all, I'm very adamantly opposing the sound barrier block wall to be built at my property only. I am in favor of a sound barrier wall that would be made of Plexiglass content or something that will not hinder the view that we have from our view home. It would be very detrimental to our family and my relatives that come and visit us as they enjoy panoramic view that we have of the mountains, the city lights. We enjoy the trains that are down below. And we are just very upset with the blockage of our home. I just would like to make a comment that I feel that it's not fair that we would not be able to get the wall built if one or two of our neighbors is opposed to it.

PUBLIC SPEAKER: Victor Quintana,
I have several concerns. One of them, I’m already up against the freeway right now with a barrier wall that is maybe 20 feet away from my home, so how much closer can they get, you know. Plus, we don’t own the land that the mobile home is on. We lease it. So I mean, I want to know if it’s going to depend on what the owners of the mobile home lot decide, whether we’re going to lose our home, what is going to happen? Do they purchase our home? Do they take away our yard, because I have a large corner lot.

Another concern is having the freeway right there and all that work going on if they’re not taking our land. They say they might just take part of the yard and this project is supposed to go on for four years, noise. I’d like to know once the project is approved, whichever plan they go with, how much time do we have if, say, we were to be asked to leave? Since we don’t own the land, how do they appraise our house saying they are going to have to move us or buy it or remove the mobile home or replace it to another park even. I don’t know.

PUBLIC SPEAKER: Mala, M-a-l-a, Shah, S-h-a-h.

According to two different plan on page 34 and No. 111, Section No. 18270038, improvement project for Lincoln Avenue, taking parking lot away on 401 South Lincoln Avenue, Suite K, between Freeway 91 to South Lincoln Avenue.

By taking parking lot away, there will be no parking for customers on 401 South Lincoln Avenue, Suite K. That will cause very financial hardship on our business. There is no parking in back of our business either. So basically it will make us out of business. In this bad economy and high rent, all of our business is not doing well. To all of that, taking away parking lot and construction, our business will hurt more. So please try to design lane adding that our parking lot will not go away. So please consider all these aspects while you’re design adding lane on Lincoln Avenue by our property, 401 South Lincoln Avenue, Suite K. We would really appreciate. Thank you.

While I was looking at the map at City Hall, I like Alternate 2A, 2C, 2E, and 2G, but I don’t like Alternate 2B, 2D, 2F, and 2H.

Thank you,

Lincoln Smoke Shop

Joy Massage

Cash & Check
petition who have talked to Caltrans, ROTC, the City of
Corona, the City of Norco. As of today, the neighborhood
next to this one is getting a sound wall and we are not.
A sound wall should extend from Hidden Valley along the
west side of the 15 to the 91 freeway.

PUBLIC SPEAKER: Jim Lane, L-a-n-e. 1424 Opal,
0-p-a-l, Street, Corona, 92882.

From its inception, I've been against this
project. I feel this project was designed and thought of
at a time when the economy was good. And now that the
economy is downturned or major recession, depression-type
thing, major projects like this should be put off or
completely cancelled. This project does not address the
actual problem with the freeway. The problem is the
freeway is congestion. There is too many cars not moving
them faster is not the solution but getting rid of the
cars. A better alternative should be looked at and
exercised further, such as increased rail service,
mandatory car pooling, or really emphasizing car pooling
to a stronger education, or even going to the point of
having various counties such as Orange, L.A., and
Riverside actively try to bring businesses where people
commute a lot back to their county to avoid that. I
believe the cost is too much at $65 million per mile.
It's only going to create temporary construction jobs and will not create any long-term jobs, no matter how many lanes they add or how much money they spend or how much they charge for their tolls. Congestion is still going to be around. I feel that the toll roads are basically looked at by public entity as a major source of income in a down economy to replace their shorten funds from tax revenues. These freeways were bought, paid for for many decades by the taxes of the people of the State of California, and that they should not be privatized and profiteered by any entities strictly as a way to create revenues for their agencies to use on other projects. Freeways in California were created to be free and they should stay free.

PUBLIC SPEAKER: Greg, G-r-e-g, Tesdahl, T-e-s-d-a-h-l. 2920 Via Miliano, Unit 202, 92879. Nancy Radillo, R-a-d-i-l-l-o, for John Rojo. 2910 Via Miliano, No. 201, Corona, 92879.

Greg: I was not even sent this voting -- I don't know what you call this. I wasn't sent the letter that we can actually vote yes or no on the sound barrier. I just received the notice that this hearing was going on. So I wasn't even able to vote on this. My neighbors, I was told, some got them, some did not, and what it looks like on this pamphlet, the letter to vote on the wall, yes or no, it's not accurate as to what we're being told here today. So some people have voted yes in our community that Nancy knows that they voted yes, but they were voting off what was stated in the letter and not what we're being shown today. So it seems that people were being misled, and we need to some someone from the city or freeway project to come out and actually talk to our association directly.

Nancy: I was sent this letter to vote and we voted yes because -- thinking that the wall was going to be way down at the gutter area, but now they are saying that it's going to be three to six feet away from our home and so that's -- that's telling us false information because now it's one thing on paper that they certified, sent it to us certified letter, and then so now they're showing something different that it's going to be really basically close to our home. So some of my friends voted yes thinking that it was going to be down at the bottom, but now it's going to be three to six feet closer, and now I'm going to have to tell them that it's not really going to be that because that's false information. And some of my friends didn't get this letter, because my neighbor, he didn't get a letter saying that he needed to vote yes or no for the wall. And all he got was, you
know, that there was a public hearing. So I think we're all being misled.

Greg: Yeah. And we're going to have an emergency meeting with our homeowners association regarding this, and like I stated, this needs -- we need a representative from the freeway project to come out and speak with us to our units, to our homeowners association specifically, because communication isn't clear to us.

At this point people are signing things that aren't accurate to this hearing.

Nancy: And board members did have this form saying it was going to be way down to the gutter so they were urging people to vote yes to it, and find out today it's not going to be way down here. It's going to be next to our home. We do have to address the board with this.

PUBLIC SPEAKER: Gloria Salgado, S-a-l-g-a-d-o.

676 Green Gate, Corona, 92879.

My property is located where they're going to have the freeway north Victoria Avenue. They're going to have a supposed wall, but I'm concerned because I have two rental properties there and they're the only two that are going to stay on that side of the street. I'm going to have difficulty finding renters that are going to be so isolated and become more of a depressed neighborhood.

There isn't going to be anyone there. We have a Metrolink across the street and the buses and it's all commercial. And then they have that parking lot also where everybody park. And they don't find room there, they park on the street where we live and you're cutting off even more. And they throw all their litter. They're not very clean when it comes to it's not their property and anything. So you always have this. And I'm just concerned that they're going to take away my livelihood. I'm not going to be able to rent them out, and it's going to cause an economic pressure on our part. That's it.

PUBLIC SPEAKER: Jesus and Esperanza Reyes, 203 South Belle, Corona, 92882.

To whom it may concern: No, I'm not in favor of a sound barrier near my property. I'm extremely stressed out about the way my home will be affected with this change. I have had several incidents where cars have driven into my fence and parked vehicles. With this new change, the risk of danger to my children is increasing. Once the street is aligned, it will lead cars right into my home. What I want is for the Riverside County of Transportation to purchase my home; after that, you may plan to your best interest. Thank you for your
PUBLIC SPEAKER: Angela Scherer, S-c-h-e-r-e-r, 2920 Via Millano, Unit 201, Corona, 92879.

First of all, the certified mail notifications have been mailed to the address to the previous owner.

She hasn’t been there for at least three years because I’ve owned the property for three years. So I haven’t received anything until I got the postcard in the mail and then I put two and two together she was getting certified mail from the State Route 91 project and I probably should look into this. So I want to make sure that I receive all notifications in the future.

The second thing is that there seems to be confusion. Some of my neighbors were here, and when I looked online and I spoke to a couple of people -- I spoke to Cheryl Donahue at Right of Way and Eliza Schervish regarding -- she was the first person I contacted. This Aaron Burton doesn’t answer the phone. He refers it -- his phone refers it to somebody else. So that is kind of misleading that you can contact this person. They said that we are not in the right-of-way but probably the notification was for a sound barrier. And then I looked online, and from what I could tell, it looked like it just came to the bottom of the property.

Now, the sound guy is telling me that now the sound wall is being proposed to be built right on the slope and it would actually be six feet from our unit. So it's confusing. Some of the neighbors have received notifications. Others haven’t. And we’re -- nobody can tell us exactly what's happening at this point. So we would like somebody to come and speak to the homeowners association about that. My neighbor in the unit next to me, she came to a meeting a year and a half ago and her understanding was that they were going to purchase that strip of condos right there. Now she said it’s changed where it’s going to be a sound wall. The sound guy says no, it wasn't that way. I don't know what is going on. But before I vote on anything, I want to know what's really happening.


**Sally Cota (T1-1)**

*T1-1-1*

The noise barrier at this location would not have to be constructed as a solid block wall. Refer to Section O.5.3.2, Common Response Related to Noise Barriers, provided on page O-10 in Section O.5, Common Responses, for discussion regarding alternative materials for sound barriers, a summary of the noise barrier survey process, and a description of the noise barrier meetings. It should be noted that 100 percent of the private property owners must agree to have a noise barrier located on their private properties in order for the wall to be constructed.

**Victor Quintana (T1-2)**

*T1-2-1*

The existing sound wall will be replaced with a longer and higher sound barrier under Alternatives 1 and 2. The new sound barrier would start west of the mobile home park and continue east to Main Street. The replacement wall is proposed to be 14 ft high. This replacement barrier, P-1, is shown on Figure 3.15-1, Sheets 7 through 9, starting on page 3.15-69 in Section 3.15, Noise, in the EIR/EIS.

*T1-2-2*

This property will not be a full or partial permanent acquisition under Alternatives 1 and 2. However, TCEs will be needed at this property during construction of Alternatives 1 and 2. After construction in this area is complete, the part of the property used for a TCE will be restored to its original condition and returned to the owner.

Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, provided on page O-6 in Section O.5, Common Responses, for a discussion of the RCTC property acquisition process, including TCEs.

The RCTC will negotiate with the property owner regarding the purchase of any land as well as the mobile home owner for the purchase of the actual mobile home, if that is required for the project. Tenants of rental properties, including mobile homes, may be eligible for relocation benefits. If the property is purchased before it is needed, the tenant may be able to remain on the property (under lease from RCTC) until it is required for construction.
**T1-2-3**

Section 3.15.3.3, Temporary Impacts, on page 3.15-15 in the EIR/EIS discusses the potential for construction-related noise impacts on the same receivers that could experience freeway noise. That section also indicates that the design/build contractor will be required to comply with local and Department noise control requirements. Those requirements are described in Measures N-2 and N-3 starting on page 3.15-60 in Section 3.15.4.2, Measures for Construction Noise, in the EIR/EIS and will be included in the contract specifications.

Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process, provided on page O-6 in Section O.5, Common Responses, and to Appendix D, Summary of Relocation Benefits, in the EIR/EIS for further explanation of the property acquisition process. Acquisition of property by public agencies must follow strict requirements and must provide for minimum notification periods and appropriate appeals processes.

**Mala Shah (T1-3)**

**T1-3-1**

The property cited in this comment, at 401 South Lincoln Avenue, is a shopping center with several businesses. This property would be a full acquisition, and those businesses would be removed under Alternatives 1 and 2. Business owners at this property will be eligible for relocation assistance.

Refer to Section O.5.1, Common Response Related to the Property Acquisition Process on page O-6, and Section O.5.2, Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses, on page O-7 in Section O.5, Common Responses, for discussion regarding property acquisition, including acquisition of parking spaces.

**T1-3-2**

These comments do not raise an environmental issue within the context of CEQA and/or NEPA, or comment on the adequacy of the technical analyses in the EIR/EIS. Consistent with the requirements of CEQA and NEPA, comments that raised environmental issues under CEQA and NEPA are responded to in this report. In addition, all comments received on the Draft EIR/EIS are included in this report and will be made available to the public and decision-makers prior to any action on the proposed project.
Alternative 2f has been identified as the Preferred Alternative, as described briefly in detail in Section O.5.9, Common Response Related to the Identification of the Preferred Alternative, on page O-38, and in cross references to the sections in Chapter 2 where that process and the results of the evaluation are discussed in detail. Alternative 2f was identified as the Preferred Alternative compared to Alternative 1 and the No Build Alternative because it meets the defined purpose for the project, it provides the best travel times savings, it does not result in substantially different impacts than Alternative 1, and it is consistent with adopted regional transportation plans. Design variation f was identified as the preferred design variation for Alternative 2 because the City of Corona indicated a strong preference for design variation f at the Auto Center Drive/Maple Street, Smith Avenue/Mid-City Access, and Lincoln Avenue interchanges based on the effects of the design variations for those interchanges in the City.

Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process on page O-6, Section O.5.2, Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses on page O-7, and Section O.5.9, Common Response Related to the Identification of the Preferred Alternative, on page O-38 in Section O.5, Common Responses.

*Richard Everhart (T1-4)*

**T1-4-1**

This commenter provided the cited petition as part of his written comments. Refer to comment letter C-15-1 starting on page O-562. As discussed in the response to that comment, NB K1-A was modeled along the edge of shoulder I-15 to protect the homes along Newhall Drive from noise impacts associated with traffic on I-15. NB K1-A was found to be feasible and within the reasonable cost allowance as discussed in Section 3.15.3.2, Permanent Impacts, starting on page 3.15-18 in the EIR/EIS. Based on a commitment to build NB K1-A as a part of previous Department projects along I-15, RCTC conducted a noise barrier survey for property owners that may be affected by the construction of NB K1-A. Based on the results of the survey, NB K1-A was approved and will be carried through to construction.

Refer to Section O.5.3, Common Responses Related to Noise, on page O-8 in Section O.5, Common Responses, for additional discussion regarding the process for identifying the need for sound walls and the minimum lifecycle requirement for that type of improvement. Refer also to Section O.5.6, Common Response Related to Noise Barriers on I-15, on page O-29 for additional discussion regarding the 20-year
lifecycle and RCTC’s commitment to provide this wall if other planned improvements on I-15 are not constructed within 5 years of completion of the construction of the SR-91 CIP.

**Jim Lane (T1-5)**

*T1-5-1*

Refer to responses to comments T1-5-2 to T1-5-4, below.

*T1-5-2*

As described in Chapter 2, Project Alternatives, starting on page 2-1 in the EIR/EIS, the SR-91 CIP is one component of a wide range of transportation and transit improvements proposed to meet the demand for east-west travel in this region. One of the purposes of the project is to reduce congestion and associated impacts as described in Section 1.2, Purpose of the Project, on page 1-11 in the EIR/EIS. While the SR-91 CIP addresses some components of the demand and mobility needs in this corridor, other transit improvements that are separate and apart from the SR-91 CIP have also been or will also be implemented by the appropriate agency to address, in part, demand in the SR-91 corridor including:

- **Express Bus Service:** To provide connections to employment centers in Anaheim, Costa Mesa, Fullerton, and Irvine. Service on the Galleria at Tyler to South Coast Metro line was implemented in 2006. Four additional Express Bus routes are planned for implementation in 2016. These routes would originate in the Riverside and Temecula areas with destinations to employment centers in Anaheim and Orange in Orange County.

- **North Main Street Corona MetroLink Parking Structure Improvements:** Completed in June 2009, the MetroLink parking structure provides MetroLink riders a convenient place to park, which should help to increase MetroLink ridership, thereby diverting trips from SR-91.

- **MetroLink Short-Term Expansion Plan:** Currently a total of 23 trains per day operate on the IEOC and 91 Lines. The number of trains will increase to a total of 31 daily trains by 2016.

- **MetroLink Long-Term Expansion Plan:** Will increase the total trains on the IEOC and 91 Lines to a total of 40 trains per day by 2020.

Because these are separate transit projects, they are beyond the scope of the EIR/EIS for the SR-91 CIP. In addition, in the future, as demand increases, carpool lanes will be less desirable because they can become just as congested as the general-purpose...
lanes and, as a result, would not offer any travel time savings for users. These transit projects are included in the cumulative impacts analysis in Section 3.25, Cumulative Impacts, starting on page 3.25-1 in the EIR/EIS.

The relocation of businesses to move jobs to different areas is not within the purview of RCTC or the Department, and is not consistent with the defined project purpose for the SR-91 CIP and the need for improvements on SR-91.

T1-5-3
No response is necessary because this comment does not raise an environmental issue within the context of CEQA and/or NEPA, or comment on the adequacy of the technical or environmental analyses in the EIR/EIS.

T1-5-4
Riverside County approved sales tax revenues will be used for part of the project construction costs. The inclusion of toll facilities in the project provides an additional funding source as well as providing users a more schedule-reliable option when necessary. Qualified HOVs with three or more persons would be allowed to use the facility. Revenues generated from the tolled express lanes will be used to retire bonds used to fund the construction of the tolled express lanes and long-term maintenance costs for those lanes. The revenues generated by the tolled express lanes are not intended to be used as a source of funds for other public agency operating or capital expenditures.

Greg Tesdahl and Nancy Radillo for John Rojo (T1-6)
T1-6-1
Refer to response to comment C-39-1, on page O-616, which discusses the noise barrier meeting held for NB D1-B in August 2011. Comments in C-39-1 and T1-6-1 are similar and were provided by the same commenter (Mr. Tesdahl). Refer also to Section O.5.3.3, Common Response Related to Noise Barrier Survey Process, on page O-13 in Section O.5, Common Responses, for discussion regarding the noise survey process and the August 2011 meetings. Noise barrier surveys were only sent to property owners adjacent to the freeway. An additional community meeting, described in Section O.5.3.3, was held on November 12, 2011, to discuss the noise barrier options at this location. Based on the results of the meeting, NB D1-B was approved and it will be carried through to construction. Aesthetic treatments and/or refinements to the design of the noise barrier will be determined during final design.
T1-6-2
Refer to response to comment T1-6-1, above.

_Gloria Salgado (T1-7)_

_T1-7-1_
The cited properties will not be acquired under Alternatives 1 and 2. The value of the property, including rental income, will not be directly impacted by the project.

Litter removal on State highways is the responsibility of the Department. Litter removal on other public streets and rights-of-way is the responsibility of the City of Corona.

_Jesus & Esperanza Reyes (T1-8)_

_T1-8-1_
It is acknowledged that this commenter is opposed to a sound wall in the vicinity of this property. Refer also to Section O.5.3, Common Responses Related to Noise, on page O-8 and Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, for discussion regarding the noise barrier survey process and the property acquisition process for the project.

Issues related to safety and the realignment of Second Street have been addressed through consultation with the City of Corona. The City of Corona has approved the preliminary design of the realignment of Second Street. The design for the realigned Second Street will meet the City’s standards for the street width, sidewalk widths, street light locations, fire hydrant spacing, handicapped access ramps, and other street and safety features.

This commenter also provided written comments on a comment card at the public hearing. Refer to comment C-29-1, on page O-591 in this appendix, for the responses to those comments.

_T1-8-2_
Refer to response to comment T1-8-1, above.

_T1-8-3_
Refer to response to comment T1-8-1, above.
Angela Scherer (T1-9)

T1-9-1

Refer to comments C-38-1 and C-38-2, on page O-615, which are similar to the verbal comments provided by this commenter (Ms. Scherer). Those comments are regarding the noise barrier survey process. Refer also to Section O.5.3.2, Common Response Related to Noise Barriers, on page O-10 in Section O.5, Common Responses, for a summary of the noise barrier survey process.
RIVERSIDE COUNTY TRANSPORTATION COMMISSION

SR-91 CORRIDOR IMPROVEMENT PROJECT

Public Scoping Meeting

Thursday, June 9, 2011
Corona, California

CORONA, CALIFORNIA, THURSDAY, JUNE 9, 2011

MR. RIVERA: Martin and Vicki Rivera. Martin, M-a-r-t-i-n, Vicki, Rivera, R-i-v-i-c-r-a. We're at 641 Colonel Drive, Corona, 92882. There's a few issues that we have. First of all, where our property is located right now we tend to get all the rain from the neighborhood in our property and next door neighbors. So we have a tendency to flood out when it's really bad.

So right now we're thinking if they put the new wall closer to our property and the freeway, that will block the drainage more and it will flood our house more and we're going to be constantly flooded out because that's where the drainage is going right now. So we're wondering what they're going to do with that. If they remove that and stop the drainage we will flood out. Every year we do flood out. We have to sand bag everything.

We need to now -- we wanted to know how far the new wall is from our property because we have a wall there, but we wanted to know how close the wall is going to be and how far -- how close the freeway is going to be from our property because we're like -- our wall is facing the freeway right now. And then we have some
health issues. We have an eight year old granddaughter that's with us and she has heart issues. She's had three heart surgeries already and our concern is about -- our main concern is the quality of the air -- environmental air quality and we're concerned it's going to be a heart issue for her health. If we have to move or do something. So we need to know about that. That's our main concern mainly. That's it.

**MS. RAMIREZ:** Cheryl Ramirez, 101 North Vicentia Avenue. So the addition or construction of Valero Place from Buena Vista to the Grand Boulevard would eliminate driveways along our property. The second one is acquisition of a portion of our property will eliminate one of two required driveways by the Corona Fire Department because they can't get in -- the traffic on one of the other driveways. It's too steep.

The existing water and gas lines are located there in the area that is to be required by Caltrans. So I don't know how they're going to do that. It's worrying me. We can't get our RV out of that other driveway. So we need another one. I don't know how they're going to put another one with the electrical pole that's there and storm drain that's there. I know they know what they're doing, but I'm stressed over it. It looks pretty on the maps, but it's not for me.

**MS. URRUTIA:** My name is Brenda Urrutia, U-r-r-u-t-i-a. 401 South Lincoln. And then our property is our parking -- like they want to take the whole parking lot and right now we don't even have parking. Like we have customers that complain because there's no parking. So once they take that out, you know, where are the customers going to park. And then if they park on the other side or opposite side, they're not going to want to come to the business because it's going to be a waste of time for them. If they go somewhere else where there's parking, they're going to go there.

**MS. NGUYEN:** T-z-u-y-e-n, N-g-u-y-e-n. 401 South Lincoln, Corona, California 92882. The business is Gala Nails. My comment is I heard the parking lot will be took away in front of my business and my business is facing the street. So we have a lot of customer and we do business with that. So when the parking lot took away, we lost business. Number two, construction about -- I don't know how many years, but with the construction that we might be really, really bad. We cannot make any income about that. So that is what we worry about. What are we going to do and with damage like that. So do we get anything to repay or help us to get out of that. So this is my comment. We still in lease so we have to stick with the business. So what are
we going to do during the construction. So my business
will be affected with that with no income coming and we
don't know how to deal with that. If someone can help us
to survive with the construction like that. So we want
to know someone will help us about that.

MS. TANTEH: First name is Canthauy, C-a-n-t-h-a-u-y, T-a-n-t-e-h. 401 South Lincoln Avenue.
Same question as the parking lot front and back for the
business. If no parking, there's no business because
rent very high. That's why.

MS. HARAIR: Judy Haraka, H-a-r-a-k-a. My
address is 1721 Merrywood Lane. That's
M-e-r-r-y-w-o-o-d, one word, and the zip is 92882. My
comment is I can't understand why they can't fix it to be
like when you go to San Diego. When -- before you get to
San Diego, they open up a couple more lanes to get to San
Diego when there's a lot of traffic and then they
close -- you know, they add lanes so -- and then when
there's less traffic, you know, they reverse it.

And coming home -- when people are coming home
from work, they open more -- two lanes when there's more
crowd and shut the other two lanes down. What I can't
understand is why don't they do it that way instead of
thinking about a toll lane right away. People have to
pay for it and they're getting to work. Another thing is

when they have all these connectors like the I-15, 215,
or whatever is right here and you're coming from Elsinore
to get on the 91, you're coming from Riverside, you're on
the 91, you're coming from Hesperia to get on the 91,
you're going like this. It's all connected together.

You're trying to watch the traffic that's coming
from every direction to get on the 91 and they got these
stupid gigantic billboards. They're all bright at night
and you're trying to watch the traffic. Why do they put
them all there where all the congestion is? I don't
know. Whoever designed that in the first place, the
connector that connects onto the freeway in the first
place, they did not plan for the future at that time.

They probably get money to design this because
it's just one congested mess right there to get onto the
91 from the 15 here from all directions and then it goes
to Elsinore. You're coming off the freeway and trying to
get on the 91 and it's all a bottleneck there. So,
hopefully, they plan better for the future and don't make
a mess.

MR. BOWKER: It's Don Bowker, B-o-w-k-e-r.
3201 Cutting Horse Road in Norco, California 92860. So
in discussing with them about the toll road option they
said just like in Orange -- the Orange County section at
the peak period you could be paying another $10 to go to
the Riverside area and I'm not in favor of doubling my
tolls at the cost of this project. That's ridiculous.
We pay enough every day. We can't afford another five
bucks to go another five miles or whatever.

MR. CHAUDHRI: Yatish Chaudhri, Y-a-t-i-s-h-r-i,
C-h-a-u-d-h-r-i. My address is 8367 E. Chadwick Pkwy.,
Orange, 92867. I'm affected like -- I'm the community.
I'm the local resident. I'm the local business but what
happens we hear these 1.3 billion, 20 billion going to
big businesses, big contractors. These are public money
going to big federal government back the corporation that
they are supposed to subcontract to small businesses and
local communities, but it never happens.

It goes back to the big corporations and they're
affiliated with small firms, which they control and own
whether it's through SPA or anything. I've seen that
many, many, many times. So what is the guarantee this
time this money -- public money is being put in there it
goes back to the small businesses, local business, and
real small businesses not like AT&T and Boeing and IBM.
These big corporations buy small companies, majority
stakes, and they're the ones that subcontract, but it
goes to small businesses. But they are like -- AT&T, IBM
is qualified as small business. So it's just a wash.

California unemployment is 25 percent. I have

three degrees and I'm unemployed. I'm educated, have a
law degree, real estate license, accounting degree, and
I'm not counted as unemployed because I was never on
unemployment roll. So this is a fake system of reporting
unemployment data. Local community, local businesses in
California is hurting. Unemployment rate 12.3 percent,
you can just double it easily. All the realtors are kind
of unemployed in this housing market. They don't count.

All the small businesses who don't have
corporation don't own corporation, they don't have W-2
form from the corporation, they're self-employed, if they
lose the job or business, they don't count in
unemployment because they had W-2. They never paid
unemployment insurance, they don't count. I don't count.
I was never counted, but I'm affected with this economy,
this government policy, public money. Billions come and
go. It goes to the just 5 percent to 20 percent of top
big corporations who control federal government, state
government, local government and all the things. My name
is public. I am the public. I am 80 percent. We need
to answer. If the jobs are not going to be here, we
don't need these billion dollars of tax payers money.

Thank you.

MR. TEUSDALL: Greg, G-r-e-g, T-e-s-d-a-h-l. My
address is 2920 Via Milani, Unit 202, Corona, 92879.
main issue is the sound. As is my -- I own my condo and I'm on the freeway. I would be west -- I guess just west of Pierce. So the expansion is going to fully creep the freeway closer to my unit. As is, the sound is terrible. Like I said, I'm afraid that it's going to get worse. I talked to the gentleman about the sound and he said they're proposing to put a sound wall just a couple feet away from my unit, which would now block light, and I just think it would be an eye sore. So I'm just -- and I actually think it's going to bring my property value down as well. So I'm just greatly concerned with the whole project.

MR. WEBB: Charlie, C-h-a-r-l-i-e, Webb, W-e-b-b. Address is 2000 West Frontage Road, Corona, 92882. My property will be affected by the new freeway and it would be affected in two ways. First of all, my property is shown as being full acquisition, but I don't want to do that. I just want a partial acquisition because there would be enough property for me to work and we've been there for 17 years. We intend to pass our business over to our family. So it's very important for us to stay where we are. I also just noticed today that they show a sound wall in front of my property. I spoke to the gentleman here and he showed me a form -- a sound wall form and I did not receive one. They told me to be sure to make that statement official. We would be damaged by a sound wall or a total acquisition, either one. That's the two things that we don't want.

(End of comment period.)
Martin & Vicki Rivera (T2-1)

T2-1-1
Refer to the response to comment C-31-1, on page O-597 for discussion regarding the noted drainage issues and the sound wall location. Comment C-31 was provided by the same commenters (the Riveras) and raised the same issues as in comment T2-1-1.

T2-1-2
The project will result in the freeway and noise barrier moving closer to the cited property. Proposed noise barrier NB K-1 will be approximately 20 ft from the east end of the cited property and 64 ft from the west end of the cited property.

T2-1-3
The air quality analysis in Section 3.14, Air Quality, starting on page 3.14-1 in the EIR/EIS determined that implementation of SCAQMD Rule 403 and other control measures will minimize construction emissions, resulting in less than significant localized construction impacts. This analysis is also discussed in Section 4.2.2.2, Air Quality. In addition, it was determined that the project would reduce criteria air pollutant and MSAT emissions locally and regionally, as discussed in the subsection titled “MSAT Analysis Results” on page 3.14-35 in Section 3.14.3.2, Permanent Impacts, in the EIR/EIS. Therefore, the project would not result in any air toxic impacts.

Cheryl Ramirez (T2-2)

T2-2-1
Refer to the responses to comments C-28-1 through C-28-3, on page O-589 for discussion regarding property access and other issues. Comment card C-28 was provided by the same commenter (Ms. Ramirez) and raised the same issues as comments T2-2-1 through T2-2-3.

Refer also to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, for a discussion regarding the RCTC property acquisition process for the project.

T2-2-2
Existing utilities that cannot be preserved in their present locations will be relocated within existing or new local road rights-of-way. Refer also to response to comment T2-2-1, above.
T2-2-3
Refer to response to comment T2-2-1, above.

Brenda Urrutia (T2-3)
T2-3-1
The property cited in this comment, at 401 South Lincoln Avenue, is a shopping center with several businesses. This property would be a full acquisition, and those businesses would be removed under Alternatives 1 and 2. Business owners at this property will be eligible for relocation assistance.

Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6, and Section O.5.2, Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses, on page O-7 in Section O.5, Common Responses, for discussion of the property acquisition process, including the acquisition of parking spaces.

Truyen Nguyen – Gala Nails (T2-4)
T2-4-1
The property cited in this comment, at 401 South Lincoln Avenue, is a shopping center with several businesses. This property would be a full acquisition, and those businesses would be removed under Alternatives 1 and 2. Business owners at this property will be eligible for relocation assistance.

Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6, and Section O.5.2, Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses, on page O-7 in Section O.5, Common Responses, for a discussion of the RCTC property acquisition process.

T2-4-2
It is planned that Lincoln Street will remain open throughout the project construction, except for minor periods of less than 24 hours when traffic may be switched from one side of the street to another. Freeway ramps are also planned to be open during construction except for some closures affecting each ramp for not more than two weekends. The actual timing of any closures will be determined during construction and will involve coordination among the contractor, the Department, and the Construction Liaison, who will work with business owners to minimize inconveniences. Refer also to response to comment T2-4-1, above.
Canthayu Tanteh (T2-5)

T2-5-1

The property cited in this comment, at 401 South Lincoln Avenue, is a shopping center with several businesses. This property would be a full acquisition, and those businesses would be removed under Alternatives 1 and 2. Business owners at this property will be eligible for relocation assistance.

Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 and Section O.5.2, Common Response Related to the Loss of Parking and Other Potential Impacts to Businesses, on page O-7 in Section O.5, Common Responses, for discussion of the property acquisition process, including the acquisition of parking spaces.

Judy Haraka (T2-6)

T2-6-1

Refer to Table 2.39 on page 2-143 in the EIR/EIS for a discussion of reversible managed lanes and why that type of alternative would not effectively meet the travel demand needs on SR-91, which does not have a sufficiently large directional split in demand for reversible lanes to be effective.

T2-6-2

The project as proposed will not impact the existing outdoor advertising/billboard in the area cited in this comment and, therefore, will not result in changes in the current situation. The EIR/EIS identifies, analyzes, and mitigates the impacts of the proposed project but not the existing environmental or safety issues outside the right-of-way for the existing and proposed SR-91 facilities. The cited billboards are outside the right-of-way for the proposed project and, therefore, are outside the scope of the project improvements and the EIR/EIS. If this commenter believes there are safety concerns related to the existing billboards, the commenter should contact District 8 of the Department’s Traffic Operations Branch and/or the local jurisdiction in which the billboards are located. Refer also to Section O.5.8, Common Response Related to Billboard Relocation, on page O-35 for additional discussion regarding project effects on and relocation of billboards, including the identification of billboards that would be relocated by the project and those that would not be relocated by the project.

Don Bowker (T2-7)

T2-7-1

On June 7, 2012, the RCTC formally adopted the “RCTC 91 Express Lanes Toll Policy.” That policy is the same as the policy for the existing 91 Express Lanes. The
toll policy for the existing 91 Express Lanes and the future SR-91 CIP Express Lanes is based on the concept of congestion management pricing. The policy is designed to optimize traffic flow in the express lanes at free-flow speeds. To accomplish this, tolls are adjusted when traffic volumes consistently reach a trigger point where traffic flow can become unstable. These are known as “super peak” hours. Given the capacity constraints during these hours, pricing is used to manage demand. Once an hourly toll is adjusted, it is frozen for 6 months. Other (non-super peak) toll prices are adjusted annually by inflation. The toll policy also allows vehicles with three or more persons to travel the 91 Express Lanes for free during most hours, except when eastbound Monday through Friday between the hours of 4:00 p.m. and 6:00 p.m. At those times, carpools of three or more can still save money by earning a 50 percent discount on the posted toll.

**Yatish Chaudhri (T2-8)**

*T2-8-1*

This comment does not raise an environmental issue within the context of CEQA and/or NEPA, or ask any questions related to the technical analysis in the EIR/EIS. Consistent with the requirements of CEQA and NEPA, comments that raised environmental issues under CEQA and NEPA are responded to in this report. In addition, all comments received on the Draft EIR/EIS are included in this report and will be made available to the public and decision-makers prior to any action on the proposed project.

**Greg Tesdahl (T2-9)**

*T2-9-1*

Refer to responses to comments C-39-1 through C-39-3, starting on page O-618, which were submitted by the same commenter (Mr. Tesdahl) and which are the same as comment T2-9-1.

**Charlie Webb (T2-10)**

*T2-10-1*

Refer to Section O.5.1, Common Response Related to the Property Acquisition Process, on page O-6 in Section O.5, Common Responses, for discussion of RCTC’s property acquisition process for the project.

*T2-10-2*

Refer to response to comment C-40-1, on page O-621. Comment C-40-1 was submitted by the same commenter (Mr. Webb) and asks the same questions regarding the noise barrier survey process. As noted in response to comment C-40-1, this
property was not identified as a residence that would benefit from a sound wall and, therefore, this commenter did not receive the noise barrier survey package.
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