Interstate Routes 10/605 Direct Connector Project
Mitigated Negative Declaration/
Finding of No Significant Impact

LOS ANGELES COUNTY, CALIFORNIA
DISTRICT 7 – LA – 10 (PM 31.1/31.3)/605 (PM R20.2/20.6)
EA 245400

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 assumption of responsibility pursuant to 23 U.S.C. 327.

January 2009
CALIFORNIA DEPARTMENT OF TRANSPORTATION
FINDING OF NO SIGNIFICANT IMPACT

Project to Construct a Direct Connector from the Southbound Interstate Route 605 to the Eastbound Interstate Route I-10 in Los Angeles County

FOR

The California Department of Transportation (Caltrans) has determined that Alternative 4, which proposes to construct a one-lane direct bridge connector with standard width lanes and shoulders will have no significant impact on the human environment. This Finding of No Significant Impact is based on the attached Environmental Assessment, which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an EIS is not required. Caltrans takes full responsibility for the accuracy, scope and content of the attached EA (and other documents as appropriate).

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 assumption of responsibility pursuant to 23 U.S.C. 327.

Notwithstanding any other provision of law, a claim arising under federal law seeking judicial review of a permit, license or approval issued by a federal agency for a highway or public transportation project shall be barred unless it is filed within 180 days after publication in the Federal Register announcing that the permit, license or approval is final pursuant to the law under which the agency action is taken, unless a shorter time is specified in the federal law pursuant to which judicial review is allowed.

RON KOSINSKI
Deputy District Director
District 7, California Department of Transportation

Jan 30, 2009
Date
Mitigated Negative Declaration  
Pursuant to: Division 13, Public Resources Code

Project Description  
The California Department of Transportation (Caltrans) proposes to construct a one-lane fly-over direct connector branching off the southbound Interstate Route 605 and spanning eastward towards the Interstate Route 10 mainline freeway.

Determination  
This Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans intent to adopt an MND for this project. This MND has been modified based on comments received by interested agencies and the public.

The proposed project would have no effect on:
- Agricultural Resources
- Hydrology
- Mineral Resources
- Public Services
- Recreation

In addition, the proposed project would have no significant effect on:
- Aesthetics
- Air Quality
- Cultural Resources
- Land Use and Planning
- Biological Resources
- Noise
- Population and Housing
- Mandatory Findings of Significance
- Water Quality
- Transportation/Traffic
- Geology and Soils
- Hazardous Materials
- Utilities and Service System

In order to reduce effects to the above-mentioned resource areas, the proposed project would incorporate avoidance, minimization, and compensatory measures for the resource areas affected. A summary of the measures follows, but would be developed further during the design phase of the project. The Environmental Commitment Record in Appendix G contains further details these on measures.

- Pre-construction surveys
- Construction of soundwalls
- Aesthetic treatment application to soundwalls and bridge structure
- Fugitive Dust-control measures
- Relocation Impact Benefits
- Temporary and Permanent BMP's
- Traffic Management Plan
- Traffic Management Plan

Ron Kosinski  
Deputy District Director  
District 7, Division of Environmental Planning  
California Department of Transportation

Jan 30, 2009  
Date
TABLE OF CONTENTS

CHAPTER 1 – PROPOSED PROJECT 8

1.1 INTRODUCTION 8
1.2 THE PROPOSED PROJECT PURPOSE AND NEED 2
1.3 DESCRIPTION OF PROPOSED ACTION 8
1.4 PROJECT ALTERNATIVES 9

CHAPTER 2 - AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION &/OR MITIGATION MEASURES 14

2.1 HUMAN ENVIRONMENT 14
2.1.1 LAND USE PLANNING 14
2.1.2 GROWTH 17
2.1.3 COMMUNITY IMPACTS 18
2.1.4 UTILITIES / EMERGENCY SERVICES 26
2.1.5 TRAFFIC & TRANSPORTATION / PEDESTRIAN AND BICYCLE FACILITIES 27
2.1.6 VISUAL / AESTHETICS 31
2.1.7 CULTURAL RESOURCES 36
2.2 PHYSICAL ENVIRONMENT 40
2.2.1 HYDROLOGY AND FLOODPLAIN 40
2.2.2 WATER QUALITY AND STORM WATER RUNOFF 41
2.2.3 GEOLOGY / SOILS / SEISMIC / TOPOGRAPHY 43
2.2.4 HAZARDOUS WASTE/MATERIALS 46
2.2.5 AIR QUALITY 48
2.2.6 NOISE 61
2.3 BIOLOGICAL ENVIRONMENT 68
2.3.1 NATURAL COMMUNITIES 69
2.3.2 WETLANDS AND OTHER WATERS 71
2.3.3 PLANT SPECIES 72
2.3.4 ANIMAL SPECIES 75
2.3.5 THREATENED AND ENDANGERED SPECIES 76
2.3.6 INVASIVE SPECIES 81
2.4 CONSTRUCTION IMPACTS 82
2.5 CUMULATIVE IMPACTS 83
2.6 CLIMATE CHANGE 89

CHAPTER 3 – COMMENTS AND COORDINATION 92
CHAPTER 4 – CALIFORNIA ENVIRONMENTAL QUALITY ACT EVALUATION

4.1 DETERMINING SIGNIFICANCE UNDER CEQA
4.2 DISCUSSION OF CEQA CHECKLIST RESPONSES

CHAPTER 5 - LIST OF PREPARERS & SUPPORTING TECHNICAL STUDIES

CHAPTER 6 - DISTRIBUTION LIST

CHAPTER-7 REFERENCES

APPENDICE

Appendix A: CEQA Checklist
Appendix B: Title VI Policy Statement
Appendix C: Summary of Relocation Benefits
Appendix D: Project Plan Layouts
Appendix E: Noise Levels & Soundwall Locations
Appendix F: Letters of Support
Appendix G: Draft Environmental Commitments Record
Appendix H: Lease Agreement for Roadside Park
Appendix I: Public Hearing Record
Appendix J: FHWA Project-Level Conformity Determination
Appendix K: Discussion of Information that is Incomplete or Unavailable for MSAT impacts
LIST OF FIGURES and TABLES

- Figure 1. Project Area Map ................................................................. 2
- Figure 2. Intersection Deficiencies ...................................................... 5
- Figure 3. Levels of Service Chart ......................................................... 7
- Figure 4. Existing Land Use ................................................................. 15
- Figure 5. Median Income in Project Vicinity ........................................ 21
- Figure 6. White Alone Population ..................................................... 25
- Figure 7. Hispanic/Latino Population .................................................. 25
- Figure 8. Viewpoint Locations .......................................................... 32
- Figure 9a. Existing Conditions from Viewpoint 1 at Dalewood Street .......... 33
- Figure 9b. Proposed Conditions from Viewpoint 1 at Dalewood Street ........ 34
- Figure 9c. Existing Conditions from Viewpoint 2 at Garvey Avenue ............. 34
- Figure 9d. Proposed Conditions from Viewpoint 2 at Garvey Avenue ........... 35
- Figure 10. Location of Fault Lines ....................................................... 45
- Figure 11. Projected Percent Reduction in Diesel PM Cancer Risk from year 2000 58
- Figure 12. Noise Levels of Common Activities ...................................... 63
- Figure 13. Biological Study Areas A and B .......................................... 69

- Table 1a. I-10 and I-605 Mainline Volumes .......................................... 6
- Table 1b. Connector Traffic Volumes with No-Build Conditions ................. 6
- Table 1c. Connector Traffic Volumes with Build Conditions (All Build Alternatives) 6
- Table 2. Accident Rate Data for I-10/I-605 Interchange Compared to State Averages 8
- Table 3. Comparison of Alternatives .................................................... 11
- Table 4. Value Analysis Alternatives ................................................... 12
- Table 5. Population Growth ................................................................. 17
- Table 6. Demographics of Project Area ................................................. 20
- Table 7. Socioeconomic Indicators ....................................................... 20
- Table 8. Proposed Property Acquisitions .............................................. 23
- Table 9a. Public Services in I-10/605 Project Area .................................. 26
- Table 9b. Public Utilities in I-10/605 Project Area .................................. 26
- Table 11. Designations of Criteria Pollutants in the SCAB ....................... 50
- Table 12. State and Federal Criteria Air Pollutant Standards, Effects and Sources 52
- Table 13. Highest 4 Daily Maximum 8-Hour CO (ppm) Averages ............. 53
- Tables 14 a-d: Peak Hour Volumes ....................................................... 54
- Table 15: Average Daily Traffic for Existing, Operational Year, and Horizon Year 57
- Table 16. Noise Abatement Criteria ..................................................... 61
- Table 17. Traffic Noise Measurements & Modeling Results – Route 10 ........ 66
- Table 18. Plant Species Identified in Biological Study Areas ..................... 74
- Table 19. Animal Species Observed in Biological Study Areas .................. 76
- Table 20. CNDDDB Query Results for Baldwin Park Quadrangle ............ 78
- Table 21. Caltrans Projects in the RSA ............................................... 85
- Table 22. Vicinity Projects Considered for Cumulative Impact Analysis .......... 87
- Table 23. Coordination Meetings ......................................................... 93
- Table 24. Statements Filed During Public Hearing .................................. 94
CHAPTER 1 – PROPOSED PROJECT

1.1 INTRODUCTION

Interstate Route 10 (I-10) and Interstate Route 605 (I-605) intersect in the San Gabriel Valley, to the northeast Los Angeles Metropolitan region where they connect two important transportation corridors. I-10 is a major urban freeway traversing Southern California in an east-west direction. I-10 provides commuter access to the Los Angeles Central Business District from Riverside County, San Bernardino County and San Gabriel Valley. Where I-10 intersects I-605, the facility contains four mixed-flow lanes in each direction. In addition, a project to add one HOV lane in each direction from the I-10/I-605 interchange to State Route 57 is currently underway along the I-10. The first segment of the HOV addition on the I-10 is scheduled to begin construction in March 2009, which may overlap with the proposed project. However, close coordination between the I-10 HOV project and the proposed I-10/I-605 Direct Connector Project has been ongoing to avoid delays and minimize impacts.

I-605 traverses an urbanized area between the San Gabriel Valley and the City of Long Beach in a north - south direction. I-605 functions as a major collector/distributor route feeding lateral Routes 91, 405, 10, 60, 210, and 105. I-605 contains six mixed-flow lanes and two HOV lanes. The existing HOV lanes along I-605 have greatly improved the people carrying efficiency of the route (see Figure 1 for the project location).

The existing southbound (S/B) I-605 to eastbound (E/B) I-10 connector is an at-grade one-lane connector, which combines with the westbound I-10 to southbound I-605 connector for a short tangent section before separating into individual connectors. This joint section creates the most substantive circulation deficiency for the intersection. Traffic from westbound (W/B) I-10 to S/B I-605 must merge to the next lane, while traffic traveling on the S/B I-605 to E/B I-10 must do the opposite. The resulting weave segment between the two connectors has led to queuing, and a higher than statewide average rate of accidents. Another section of the intersection experiencing merge conflicts, as well as queuing, is the merge sections of S/B I-605 to E/B I-10 connector combining with the northbound (N/B) I-605 to E/B I-10 connector. The two connectors merge from three lanes to two lanes just before joining the I-10 mainline. At the confluence of the connectors and the I-10 mainline, a third connector conflict occurs when one of the two connector lanes becomes an auxiliary lane. The auxiliary lane forces traffic from the connector to merge off the auxiliary lane to avoid exiting the Frazier/Bess off-ramp while exiting traffic from the I-10 mainline is attempting to merge on to the off-ramp. See Figure 2 for an illustration of these circulation deficiencies.

To resolve the previously described circulation deficiencies, and improve safety, the California Department of Transportation (Caltrans) proposes to construct a fly-over direct connector from S/B I-605 to E/B I-10 separating the at-grade connectors into individual connectors. To conduct the development of the direct connector project, funding has been allocated from the State Highway Operation and Protection Program (SHOPP). In addition, to assure regional planning and air quality conformity compliance, the project has been incorporated into the 2006 Regional Transportation Implementation Plan and the 2008 Regional Transportation Plan.
Changes have been made to this environmental document since the circulation of the draft environmental document. Public and Agency comments received during the circulation of the IS/EA, the Public Hearing process, and subsequent agency consultations have resulted in refinements that have been incorporated in this final environmental document. A vertical line in the outside margin indicates changes in the document.

Figure 1. Project Area Map

![Project Area Map](image)

1.2 THE PROPOSED PROJECT PURPOSE AND NEED

Existing Transportation Facility
The existing I-10 mainline consists of four-mixed flow lanes in each direction with one HOV (High Occupancy Vehicle) lane in each direction existing west of the interchange and a current HOV project scheduled for construction in 2009. These new HOV lanes would be fully operational by September 2014. I-605 consists of three mixed flow lanes in each direction and one HOV lane in each direction. At the interchange, I-10 crosses I-605 at grade, whereas the I-605 crosses over the I-10 on an elevated bridge structure. The proposed improvements would occur at the northeast and southeast quadrants of the I-10/I-605 interchange.
The existing W/B I-10 to S/B I-605 connector has two through lanes, which intersect with the S/B I-605 to the E/B I-10 one-lane connector. The joint segment of these two connectors is 321.4 ft. (98m) in length. Shortly after this joint segment separates, the S/B I-605 to E/B I-10 continues E/B to merge with the N/B I-605 to the E/B I-10 two-lane connector. This joint segment begins as three lanes and then merges into two. Just before the connectors meet the E/B I-10 mainline, the outside lane becomes an auxiliary lane forcing traffic, which is not attempting to exit, to merge over one lane so they may continue on the E/B I-10. At the same time E/B I-10 mainline traffic exiting at the Bess/Frazier off-ramp merges onto the same auxiliary lane. The series of weaves and merge segments create the deficiencies within the connectors. Figure 2 illustrates these deficiencies.

PURPOSE OF THE PROJECT
Caltrans proposes to construct a one or two-lane fly-over direct connector branching off the S/B I-605 and spanning eastward towards I-10. Constructing the direct connector would provide crucial improvements to the I-10/I-605 interchange. The Improvements would provide the following:

- Improve the safety and operation of the S/B I-605 and N/B I-605 to E/B I-10 and W/B I-10 to S/B I-605 connectors
- Eliminate weave and merge conflicts at the joint segments of the W/B I-10 to S/B I-605 with the S/B I-605 to E/B I-10 and at the S/B I-605 to E/B I-10 with the N/B I-605 to E/B I-10.
- Reduce queuing on the outside lanes of W/B I-10 and N/B I-605 just before entering the S/B I-605 and E/B I-10 connectors respectively.

NEED OF THE PROJECT
Under the build alternatives for the proposed project, the existing weave segments would be eliminated and queuing would be reduced allowing for improved travel speed throughout the connectors. The proposed interchange improvement would considerably improve traffic circulation and safety within the interchange.

Operational Deficiencies
If no improvements are made to the I-10/I-605 Interchange, the higher than average traffic accidents and congestion would continue to occur and with projected traffic volumes for year 2030 increasing, the issues with accidents and congestion would only be exacerbated. Projected traffic volumes for year 2030 are expected to approach and even exceed capacity on the I-10 and I-605 mainlines, adding further traffic hazards to the interchange. Under the proposed build alternatives; traffic volume within the connectors would be sustained below capacity. However, under the no-build alternative, capacity would be exceeded by year 2030.

Both the I-10 and I-605 experience congestion throughout the day. Traffic on mainlines during peak hours, is at or exceeds capacity (Table 1a-c). High demand on mainlines is a primary cause for congestion within the affected connectors. During AM peak flow, traffic is heavy for W/B I-10 and S/B I-605, with the opposite occurring during PM traffic flow. Existing traffic volumes range between 5,327 and 8,052 vehicles per hour (vph) during the AM peak flow on W/B I-10
and between 7,616 and 9,074 vph during PM peak flows on E/B I-10. The AM and PM peak flows reach close to and even exceed capacity for the I-10 mainline. On I-605 traffic volumes range between 5,645 vph and 5,724 vph on the N/B I-605 during AM/PM peak flows and between 4,022 and 4,828 on S/B I-605 during AM/PM peak flows.
Figure 2. Intersection Deficiencies
### Table 1a. I-10 and I-605 Mainline Volumes

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>2005 Capacity</th>
<th>Lanes</th>
<th>AM</th>
<th>PM</th>
<th>ADT</th>
<th>2005 Capacity</th>
<th>Lanes</th>
<th>AM</th>
<th>PM</th>
<th>ADT</th>
<th>2030 Capacity</th>
<th>Lanes</th>
<th>AM</th>
<th>PM</th>
<th>ADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainline E/B I-10 PM (30.30)</td>
<td>8000</td>
<td>4</td>
<td>5950</td>
<td>7616</td>
<td>114119</td>
<td>10000</td>
<td>4+HOV</td>
<td>7735</td>
<td>9902</td>
<td>148355</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainline W/B I-10 PM (30.30)</td>
<td>8000</td>
<td>4</td>
<td>7644</td>
<td>6544</td>
<td>115727</td>
<td>10000</td>
<td>4+HOV</td>
<td>9085</td>
<td>8830</td>
<td>150445</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainline E/B I-10 PM (31.22)</td>
<td>8000</td>
<td>4</td>
<td>4381</td>
<td>6234</td>
<td>115659</td>
<td>12000</td>
<td>5+HOV</td>
<td>6320</td>
<td>6910</td>
<td>150356</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainline W/B I-10 PM (31.22)</td>
<td>8000</td>
<td>4</td>
<td>5327</td>
<td>4552</td>
<td>91625</td>
<td>10000</td>
<td>4+HOV</td>
<td>6925</td>
<td>4740</td>
<td>118709</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainline E/B I-10 PM (32.01)</td>
<td>10000</td>
<td>5</td>
<td>6776</td>
<td>9074</td>
<td>158655</td>
<td>12000</td>
<td>5+HOV</td>
<td>9470</td>
<td>9680</td>
<td>170345</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainline W/B I-10 PM (31.72)</td>
<td>8000</td>
<td>4</td>
<td>8052</td>
<td>7241</td>
<td>110897</td>
<td>10000</td>
<td>4+HOV</td>
<td>8890</td>
<td>8900</td>
<td>137265</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainline N/B I-605 PM (19.50)</td>
<td>8000</td>
<td>4</td>
<td>5645</td>
<td>5724</td>
<td>86784</td>
<td>8000</td>
<td>4</td>
<td>9920</td>
<td>10460</td>
<td>154300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainline S/B I-605 PM (22.04)</td>
<td>8000</td>
<td>4</td>
<td>4282</td>
<td>4022</td>
<td>61477</td>
<td>8000</td>
<td>4</td>
<td>8530</td>
<td>7635</td>
<td>111850</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Taken from Traffic Impact Analysis, November 2005  
Note: Traffic on the Mainlines will not be affected by constructing any of the build alternatives

### Table 1b. Connector Traffic Volumes with No-Build Conditions

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>2005 Capacity</th>
<th>Lanes</th>
<th>AM</th>
<th>PM</th>
<th>ADT</th>
<th>2030 Capacity</th>
<th>Lanes</th>
<th>AM</th>
<th>PM</th>
<th>ADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector S/B 605 to E/B 10</td>
<td>2000</td>
<td>1</td>
<td>795</td>
<td>867</td>
<td>12873</td>
<td>2000</td>
<td>1</td>
<td>975</td>
<td>1185</td>
<td>16100</td>
<td></td>
</tr>
<tr>
<td>Connector W/B 10 to S/B 605</td>
<td>4000</td>
<td>2</td>
<td>2533</td>
<td>2185</td>
<td>37872</td>
<td>4000</td>
<td>2</td>
<td>3275</td>
<td>2960</td>
<td>44500</td>
<td></td>
</tr>
<tr>
<td>Connector N/B 605 to E/B 10</td>
<td>4000</td>
<td>2</td>
<td>2256</td>
<td>2918</td>
<td>40334</td>
<td>4000</td>
<td>2</td>
<td>2960</td>
<td>3275</td>
<td>69300</td>
<td></td>
</tr>
<tr>
<td>Connector N/B 605 &amp; to E/B 10</td>
<td>4000</td>
<td>2</td>
<td>3051</td>
<td>3785</td>
<td>53207</td>
<td>4000</td>
<td>2</td>
<td>3935</td>
<td>4460</td>
<td>85400</td>
<td></td>
</tr>
</tbody>
</table>

Source: Taken from Traffic Impact Analysis, November 2005

### Table 1c. Connector Traffic Volumes with Build Conditions (All Build Alternatives)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>2005 Capacity</th>
<th>Lanes</th>
<th>AM</th>
<th>PM</th>
<th>ADT</th>
<th>2030 Capacity</th>
<th>Lanes</th>
<th>AM</th>
<th>PM</th>
<th>ADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector S/B 605 to E/B 10</td>
<td>2000</td>
<td>1</td>
<td>795</td>
<td>867</td>
<td>12873</td>
<td>2000</td>
<td>1</td>
<td>975</td>
<td>1185</td>
<td>16100</td>
<td></td>
</tr>
<tr>
<td>Connector W/B 10 to S/B 605</td>
<td>4000</td>
<td>2</td>
<td>2533</td>
<td>2185</td>
<td>37872</td>
<td>4000</td>
<td>2</td>
<td>3275</td>
<td>2960</td>
<td>44500</td>
<td></td>
</tr>
<tr>
<td>Connector N/B 605 to E/B 10</td>
<td>4000</td>
<td>2</td>
<td>2256</td>
<td>2918</td>
<td>40334</td>
<td>4000</td>
<td>2</td>
<td>2960</td>
<td>3275</td>
<td>69300</td>
<td></td>
</tr>
<tr>
<td>Connector N/B 605 &amp; to E/B 10</td>
<td>4000</td>
<td>2</td>
<td>2256</td>
<td>2918</td>
<td>40334</td>
<td>4000</td>
<td>2</td>
<td>2960</td>
<td>3275</td>
<td>69300</td>
<td></td>
</tr>
</tbody>
</table>

Source: Taken from Traffic Impact Analysis, November 2005
Level Of Service
LOS (Level of Service) identifies travel speed, freedom to maneuver and proximity to other vehicles as important factors in determining the level of service on a road. Figure 3 below illustrates LOS and the corresponding conditions. LOS was analyzed using the no-build and the build alternatives under current conditions and forecasted 2030 projected traffic conditions. The analysis was based on AM and PM observations conducted on the I-10 mainline and affected connectors. The Traffic Impact Analysis showed current and forecasted LOS levels to be the same under build and no build conditions for existing and future traffic volumes. LOS ranges from B to F with insignificant changes if the project is implemented. In conclusion of the analysis, construction of the proposed project would not improve LOS, but would make improvements to reduce weaving on merge segments and queuing on the outer lanes of the W/B I-10 and N/B I-605 mainlines, thereby reducing the hazardous conditions, which lead to traffic accidents.

Figure 3. Levels of Service Chart

### LEVELS OF SERVICE
for Freeways

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Flow Conditions</th>
<th>Operating Speed (mph)</th>
<th>Technical Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td>70</td>
<td>Highest quality of service; no delays, free flow, moderate speeds or maneuverability; no delays</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>70</td>
<td>Traffic is ample and flows freely; the ability to maneuver in traffic is only slightly restricted; no delays</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>67</td>
<td>Four restrictions on speed; freedom to maneuver is restricted; there are moderate delays; minimal delays</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>62</td>
<td>Speeds decline slightly and density increases; freedom to maneuver is noticeably limited; minimal delays</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td>53</td>
<td>Vehicles are closely spaced, with little room to maneuver; driver comfort is poor; significant delays</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>&lt;53</td>
<td>Very congested traffic with traffic jams, especially in areas where vehicles have to merge; considerable delays</td>
</tr>
</tbody>
</table>

Connector Deficiencies
The W/B I-10 to S/B I-605 connector experiences heavy traffic queuing during AM peak flow with longer queuing occurring during off-peak hours. This unlikely occurrence is due to traffic entering the connector at moderately fast speeds during off-peak or free flow traffic periods on W/B I-10. The fast moving traffic from the mainline creates a build-up of vehicles, since the operational speed is currently 35mph. In contrast, during peak flow, vehicles enter the W/B I-10 to S/B-I-605 connector at a slower timed pace, similar to the flow of a metered ramp due to the congestion upstream. However, problematic weaving and merging are still present in the connector during off-peak hours as well as queuing. Weaving extends outside the connector into the outside lane of the W/B I-10 mainline. During PM hours congestion and queuing occur on
the N/B and S/B I-605 connectors to the E/B I-10. The tangent segment of these two connectors creates a merge segment followed by a weave conflict shortly after entering the mainline I-10.

Under existing conditions, projected traffic volumes for year 2030 are expected to approach and exceed capacity on the I-10 and I-605 mainlines, which would affect the safety and operation of the connectors.

Safety
The conditions created by weaving traffic and queuing has led to the occurrence of a considerably high rate of accidents. Based on the Traffic Accident Surveillance and Analysis System (TASAS), accident rates afflicting the project connectors ranged from exceeding the total State average to being four times higher than the State average. Of all accidents that occurred, most are congestion related, such as rear end or sideswipe. The confluence of the S/B I-605 to E/B I-10 and W/B I-10 to S/B I-605 connector section is the most prone to the aforementioned types of accidents. The high frequency of traffic accidents is the primary deficiency creating the need for the proposed project (Table 2).

<table>
<thead>
<tr>
<th>Location</th>
<th>Total No. of Accidents</th>
<th>I-10 and I-605 Interchange Average Accident Rates</th>
<th>California Average Accident Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Fat¹</td>
<td>F+1²</td>
</tr>
<tr>
<td>W/B I-10 to S/B I-605</td>
<td>22</td>
<td>0.000</td>
<td>0.08</td>
</tr>
<tr>
<td>S/B I-605 to E/B I-10 at Confluence with W/B I-10 to S/B I-605</td>
<td>62</td>
<td>0.000</td>
<td>0.17</td>
</tr>
<tr>
<td>S/B I-605 to E/B I-10</td>
<td>11</td>
<td>0.000</td>
<td>0.37</td>
</tr>
<tr>
<td>N/B I-605 to E/B I-10</td>
<td>56</td>
<td>0.000</td>
<td>0.14</td>
</tr>
</tbody>
</table>

Table 2. Accident Rate Data for I-10/I-605 Interchange Compared to State Averages
(July 1, 2002 through June 30, 2005)

Source: Caltrans, District 7 Traffic Accident Surveillance and Analysis System
Notes:  1) Fat - accidents involving at least one fatality.
       2) F+1 - accidents involving either a fatality or injury.
       3) Total - all reported accidents, which includes accidents with fatalities, injuries, and property damage only

1.3 DESCRIPTION OF PROPOSED ACTION

The proposed project is located in Los Angeles County at the I-10 and I-605 interchange within the City of Baldwin Park. Project limits are from the northwest quadrant of the interchange to 1.2 miles east of the interchange. The proposed elevated bridge structure would contain either one or two 11.8 foot (3.6 meter) vehicle lanes with 4.9 foot (1.5 meter) left and 9.8 foot (3.0 meter) right shoulders. Once completed, the bridge would span approximately 3,937 foot (1200
meters) east of the I-10/I-605 interchange, at which point it would merge with E/B I-10 mainline traffic. Constructing the proposed project would prompt the elimination of the existing tangent sections of the connectors.

Construction is scheduled to begin October 2012 to October 2014.

1.4 PROJECT ALTERNATIVES

Several Alternatives were developed and evaluated in a Project Study Report (PSR). A range of proposed build alternatives were evaluated for constructability, cost, and environmental impacts. The studied project alternatives were also reviewed to ensure that the purpose and need would be addressed by each alternative. Below is a summary of the project alternatives and their proposed actions:

Alternative 1- No Build
Alternative 2- Construct a single lane fly over bridge structure
Alternative 3- Construct a two lane fly over bridge structure
Alternative 4- Construct a single lane fly over bridge connector with an alignment further south than Alternative 2

Alternative 1- No Build
Alternative 1 assumes that no improvements would be made to the interchange. Alternative 1 is the baseline option, by which all other alternatives are based on. Under this alternative, existing traffic conditions involving the weaving and merging of vehicles within the interchange would continue. Queuing along the outside lanes of W/B I-10 and N/B I-605, right before the interchange would continue and worsen as future projections indicate an increase in traffic volume. This alternative would make no change in the higher than Statewide average rate of accidents within the intersection and would likely lead to an increase in accidents with projected traffic volume increases.

Alternative 2
Alternative 2 proposes to construct a single lane fly over bridge structure spanning over the interchange. The bridge would provide a direct connector for traffic traveling from S/B I-605 to E/B I-10, and would convert the existing affected connectors into individual connectors. At the highest point the bridge connector would stand at approximately 90 feet over the interchange, and then gradually slope downward to the outside lane of E/B I-10. Retaining wall structures near the approach and departure of the bridge connector would be constructed to support the connector. Dalewood Street would need to be realigned throughout a length of 3,500 feet adjacent to the proposed connector. The realignment of Dalewood Street would require (12) full and partial acquisitions. Alternatives 3 and 4 would require a similar number of acquisitions. The existing sound wall between just west of Athol Street and west of Baldwin Park Boulevard would need to be reconstructed due to the realignment of Dalewood Street for the length of 3,500 feet.
The cost of Alternative 2 is estimated at $77.9 million in 2008 dollars.

**Alternative 3**
Alternative 3 is similar to Alternative 2 in regards to geometry and alignment, except that the direct connector would involve a two-lane instead of a one-lane structure. Safety and operational improvements would be the same with added volume capacity on the bridge connector.

The soundwall along Dalewood Street would be reconstructed for a length of 4,900 feet, a longer length than Alternative 2. This soundwall reconstruction would need to occur as a result of the realignment of Dalewood Street further south than Alternative 2. Property acquisitions would be required as in Alternative 2 and also require further air and subsurface easements for the two-lane structure.

The cost of Alternative 3 is estimated at $126.9 million in 2008 dollars.

**Alternative 4 (preferred alternative)**
Alternative 4 incorporates the same design features as Alternative 2 with the exception of a further southward alignment on the south side of I-10. A southern alignment was incorporated into the alternative design in order to maintain standard width shoulders on the E/B I-10 mainline. Under Alternatives 2 and 3, the bridge columns would create non-standard shoulder widths between the bridge columns and the outside lane shoulders on the E/B I-10 mainline.

Alternative 4 would impact a similar land area to Alternative 3, however, a larger portion of Dalewood Street would need to be acquired and realigned to make space for two bridge columns that would be placed between the soundwall and Dalewood Street. The number of property acquisitions needed would remain the same as in Alternatives 2 and 3. The existing soundwall on the south side of I-10 would be reconstructed for a length of 4,900 feet from just west of Athol Avenue to just west of Baldwin Park Boulevard.

The cost of Alternative 4 is estimated at $74 million in 2008 dollars.

A summary of these alternatives can be found in Table 3.
<table>
<thead>
<tr>
<th>Project Alternatives</th>
<th>Issues Associated with Alternative</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| Alternative 1 (No Build) | • Deteriorating safety and operation of interchange with future traffic projections  
  • Longer queuing on W/B I-10 mainline before W/B I-10 to S/B I-605 connector, and N/B I-605 mainline before the N/B I-605 to E/B I-10 connector | • No new visual impacts  
  • No impacts to private property  
  • No affect to eligible historic transmission lines. |
| Alternative 2 | • Visual effect  
  • Modification of historical transmission lines  
  • Right-of-way acquisition from private properties  
  • Non-standard features  
  • Temporary construction noise impacts  
  • Temporary traffic detours and circulation impacts  
  • Non-standard width shoulder on E/B I-10 | • Improved safety  
  • Decreased congestion in the interchange  
  • Improved travel speed  
  • Reduce air emissions and energy consumption  
  • Meet traffic demand forecasted for 2030 |
| Alternative 3 | • Visual effect  
  • Modification of historical transmission lines  
  • Right-of-way acquisition to private properties  
  • Non-standard features  
  • Temporary construction noise impacts  
  • Temporary traffic detours and circulation impacts  
  • Non-standard width shoulder on E/B I-10 | • Improved Safety  
  • Decreased congestion in the interchange  
  • Improved travel speed  
  • Reduce air emissions and energy consumption  
  • Meet the traffic demands forecasted for 2030 |
| Alternative 4 | • Visual effect  
  • Modification of historical transmission lines  
  • Right-of-way acquisition of private properties  
  • Temporary construction noise impacts  
  • Temporary traffic detours and circulation impacts | • Standard shoulder width and connector landing on E/B I-10  
  • Improved Safety  
  • Decreased congestion in the interchange  
  • Improved travel speed  
  • Reduce air emissions and energy consumption  
  • Meet the traffic demands forecasted for 2030  
  • Less non-standard features |

Source: California Department of Transportation, Project Study Report September 2005
Alternatives Considered but Eliminated from Further Discussion

Traffic Systems Management Alternative
Transportation Systems Management (TSM) measures including ramp metering and the addition of auxiliary lanes have been or are currently being implemented for adjacent sections of I-10 and I-605 mainlines. Current viable and necessary TSM measures have been completed within the I-10 and I-605 corridors. Additional TSM measures as a stand-alone alternative would not fulfill the purpose and need for this project. TSM measures alone could not fulfill the purpose and need for the following reasons:

- TSM alone would not improve future safety within the interchange
- TSM alone would not provide adequate capacity for projected traffic volumes
- TSM alone would not eliminate queuing on affected connectors and mainline

Value Analysis Alternatives
A complete Value Analysis (VA) was completed by a team of the Caltrans technical specialists to evaluate if the project could be improved in the areas of design, risk factors, and cost savings. The analysis produced eight VA alternatives that improved the deficiencies of the affected connectors. The Value Analysis alternatives could be considered design refinements and they are summarized in Table 4.

Table 4. Value Analysis Alternatives

<table>
<thead>
<tr>
<th>VA Alternatives</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (combination of alternatives)</td>
<td>Eliminate Flyover (Alternatives 1.4, 2.1, 4.0)</td>
</tr>
<tr>
<td>2 (combination of alternatives)</td>
<td>Modify Flyover (Alternatives 2.1, 4.0)</td>
</tr>
<tr>
<td>1.1</td>
<td>Reconstruct the W/B I-10 to S/B I-605 Connector Over Both I-10 And the S/B I-605 to E/B I-10 Connector</td>
</tr>
<tr>
<td>1.4</td>
<td>Reconstruct the S/B I-605 to E/B I-10 Connector Over the W/B I-10 to S/B I-605 Connector and I-10</td>
</tr>
<tr>
<td>2.1</td>
<td>Close the Existing Isolated E/B I-10 Off-Ramp to Frazier Street and Reduce Length of Flyover</td>
</tr>
<tr>
<td>2.3</td>
<td>Widen the Frazier Street Off-Ramp and Modify Striping</td>
</tr>
<tr>
<td>3.0</td>
<td>Construct Standard Cast-In-Place/Prestressed Structure in lieu of Cast-In-Place Segment for Flyover</td>
</tr>
<tr>
<td>4.0</td>
<td>Maintain Existing Ramp for Use as Maintenance or CHP Pullout</td>
</tr>
</tbody>
</table>

Source: Value Analysis Final Value Analysis Study Report I-605 / I-10 Connector Ramp, October 2008

The VA Study was intended to focus on alternatives that would help finalize the scope of the project and identify cost-saving alternatives that would help provide a fundable project and satisfy the local stakeholders. In addition, any alternatives that would help reduce or mitigate the project risks would be considered beneficial.
After reviewing the VA study report, the alternatives were considered inadequate compared to the PSR proposed build-alternatives, which resolve all the operational deficiencies within the affected interchange and address the project purpose and need. The VA alternatives do not completely resolve all the issues associated with the weave and merge conflicts. This is why even though the VA analysis produced viable cost effective alternatives, they did not completely address the purpose and need.

Preferred Alternative
Public and agency comments were given serious consideration to address any concerns with the three proposed build alternatives (Chapter 3 Comments and Coordination). Alternative 4 was selected as the preferred alternative because it resolved the safety and circulation deficiencies in the affected connectors, while maintaining standard width lanes and shoulders along the E/B I-10 mainline. Alternatives 2 and 3 minimized the width of the E/B I-10 mainline lanes and shoulder with the placement of columns within the shoulder width. Alternatives 2 and 3 would minimize the width of the lanes and shoulders to non-standard widths. The amount of properties to be acquired for right-of-way would be the same for all build alternatives, although alternative 3 requires further aerial and subsurface easements for the larger bridge structure.

Permits and Approvals Needed
No resource permits or approvals by natural resource agencies are anticipated at this time. A Jurisdictional Determination request submitted to the U.S. Army Corps of Engineers (ACOE) resulted in no 404 permits needed to implement the proposed project. Construction of the direct connector would take place on previously disturbed ground developed by roadway and urban infrastructure. There are no applicable drainages, significant wildlife habitat, or jurisdictional waters within the project footprint.
CHAPTER 2 - AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION &/OR MITIGATION MEASURES

Introduction
The following sub-chapters describe any environmental resources that may potentially be affected by the project. The existing physical environment is largely urbanized. It is composed of residential, commercial, and some open space. The project site lies northeast of two major waterways: the Upper San Gabriel River and Walnut Creek. The primary affected community is the City of Baldwin Park due to the project’s location with the City’s boundaries. The project vicinity is also part of the study area where applicable.

As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document:

- Coastal Zone – The project area is not located within the coastal zone.
- Wild and Scenic Rivers – There are no wild or scenic rivers located within the project area.
- Farmlands/Timberlands – There are no farmlands located within the project area. The project will not irreversibly convert farmland directly or indirectly to non-agricultural use.
- Paleontology – Paleontological resources would not be affected by the proposed project.

2.1 HUMAN ENVIRONMENT

2.1.1 LAND USE PLANNING

Affected Environment
Existing and Future Land Use
Existing land use within the project site is primarily mixed residential, open space and commercial/institutional parcels. The area defining the project site has already been heavily disturbed by construction of the existing Interstate Route (I-10), adjacent housing development, construction of local streets and utilities. Small tracts of undeveloped land exist as open space: underneath the transmission lines, Roadside Park, and small buffer tracts of land between I-10 and Dalewood Avenue.

The project area is made up of single family and multi-family residences along the frontage road known as Dalewood Street and other adjacent local streets. Roadside Park, an open space property along Dalewood Street, acts as a green buffer and passive use park. The property is owned by Caltrans and leased to the City of Baldwin Park under an approved lease agreement.
A nursery utilizing undeveloped land underneath the Department of Water and Power’s transmission lines, occupies another narrow parcel of open space. At the eastern edge of the project site, Kaiser Permanente Hospital occupies a commercial/institutional parcel. The project area is largely urbanized and built out. Local residential streets and Baldwin Park Boulevard provide the means of circulation within the area. Based on the 2020 Baldwin Park General Plan, current land use trends are anticipated to remain the same. Baldwin Park has not made any new land use designations within the project area (Figure 4).

Future land uses in the project area are planned with I-10 as a center point. The I-10 HOV, which will widen existing I-10 into the project area, is planned for completion in 2014. Based on the 2020 General Plan, Baldwin Park plans to consolidate parcels for commercial development opportunities along I-10, improve access to I-10, and improve local streets. Baldwin Park would like to maintain high visibility for area businesses as well as create new commercial opportunities. To implement these and other redevelopment opportunities, Baldwin Park developed the Sierra Vista Redevelopment Site.

Environmental Consequences
The Sierra Vista Redevelopment site would be affected by the proposed project. The Sierra Vista Redevelopment site is a designated area for development improvements. In this case redevelopment is intended to take advantage of the I-10 and the constant flow of motorists along the busy highway. A few vacant land redevelopment opportunities are inside this redevelopment area, and of these, one site is within the project impact area. This site has been recently developed into 11 single-family garden homes.

Consistency with State, Regional and Local Plans
According to the 2020 General Plan, Baldwin Park would like to work closely with Caltrans to improve the I-10 corridor through the City of Baldwin Park. Under the plan, the I-10 corridor is of major value for the city as a means of attracting economic activity. Baldwin Park seeks to develop commercial activity along the I-10 corridor by attracting motorist to its commercial centers.

The project area is located within the Sierra Vista Redevelopment Site, a focus area identified by the City’s General Plan to improve blighted areas and promote economic activity. The proposed improvements for the area focus on creating a commercial corridor along I-10 to take advantage of the high number of motorists who can potentially invest in local business. According to the 2020 General Plan, there are four sites identified for redevelopment within the Sierra Vista Redevelopment Area. All four sites are outside the project footprint area, east of Baldwin Park Boulevard. Unlike the discussion on available vacant land for development in the previous section, the identified sites for redevelopment in this section focus on key sites to revitalize and enhance the I-10 corridor for commercial uses.
Affected Environment
Parks and Recreational Facilities
A property belonging to Caltrans of approximately 1 acre exists along Dalewood Avenue adjacent to E/B I-10. The property, identified as Roadside Park by the City of Baldwin Park, has been leased to the City of Baldwin Park for the purposes of improving the view and light of the corridor. Roadside Park is an incidental low use public property comprised of minor recreational amenities, some large shade trees and green turf in between. Under Section 104.15 of the Streets and Highways Code, Caltrans is authorized to lease land to local agencies for park purposes. Under the lease agreement, the City of Baldwin Park and Caltrans entered into a 50-year (1974-2024) agreement to maintain the land with certain conditions in place. One of these conditions stipulates that if Caltrans should need to acquire the land for highway purposes, the lease would terminate and the land acquisition would occur. This provision in the lease agreement distinguishes that the land, which is now Roadside Park, shall be prioritized for Caltrans highway needs. Therefore, the property identified as Roadside Park does not qualify as a Section 4(f) resource. See Appendix H for a copy of the lease.
Environmental Consequences
Alternative 2 and 3 of the I-10/605 Direct Connector project would acquire 5,400 square feet (0.12 acre) of Roadside Park, whereas Alternative 4 will utilize 18,000 square feet (0.41 acre) of the Park. The property may continue to function as a passive use park after the implementation of any of the proposed project alternatives, if Baldwin Park agrees to a new lease agreement for the remaining land.

2.1.2 GROWTH

Regulatory Setting
The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969, requires evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations, 40 CFR 1508.8, refer to these consequences as secondary impacts. Secondary impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project’s potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents “…discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment…”

Los Angeles County has the largest population of southern California counties. Regionally, Los Angeles County is expected to increase in population at a rate of 1.2% annually between the years of 2000 and 2025. Population growth, in the City of Baldwin Park, is expected grow steadily between 2000 and 2025 by 0.8% annually. Table 5 below depicts regional growth patterns between 1990 and 2025.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles County</td>
<td>9,519,338</td>
<td>9,948,081</td>
<td>12,273,835</td>
<td>1.2%</td>
</tr>
<tr>
<td>Baldwin Park</td>
<td>75,837</td>
<td>79,476</td>
<td>91,131</td>
<td>0.8%</td>
</tr>
<tr>
<td>El Monte</td>
<td>115,965</td>
<td>113,605</td>
<td>146,429</td>
<td>1.1%</td>
</tr>
<tr>
<td>City of Industry</td>
<td>777</td>
<td>Not Available</td>
<td>811</td>
<td>0.2%</td>
</tr>
<tr>
<td>West Covina</td>
<td>105,080</td>
<td>112,809</td>
<td>132,745</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

Source: 2000 U.S. Census Bureau, American Fact finder and SCAG’s 2008 Integrated Growth Forecast
Environmental Consequences
Continued development and population growth in Baldwin Park as well as in surrounding communities would increase the number of vehicle trips within the project area. The proposed project would not influence projected growth, but may facilitate otherwise projected growth by providing safety for the movement of vehicles throughout the interchange. Therefore, construction of the direct connector would not directly induce growth, but is expected to serve the same volume of traffic.

Since the City of Baldwin Park is largely built out, additional growth potential is limited for development. However, to accommodate the new growth Baldwin Park has identified redevelopment as the primary strategy to accommodate future growth within the area. The project site lies within the Sierra Vista Redevelopment Site. Very little or no vacant land is available to construct new housing stock, since most housing units are occupied and little is available for new inhabitants. Furthermore, the housing vacancy rate is 2.9%; considerably lower than the national rate of 11.6%.

2.1.3 COMMUNITY IMPACTS

COMMUNITY CHARACTER AND COHESION

Regulatory Setting
The National Environmental Policy Act of 1969 as amended (NEPA), established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 U.S.C. 4331[b][2]). The Federal Highway Administration in its implementation of NEPA (23 U.S.C. 109[h]) directs that final decisions regarding projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as, destruction or disruption of human-made resources, community cohesion and the availability of public facilities and services.

Under the California Environmental Quality Act, an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project’s effects.

Affected Environment
The Community of Baldwin Park is bounded by I-605 on the west, Walnut Creek Channel to the south, Puente Avenue and Azusa Canyon on the east and Santa Fe Dam on the north. Major arterials within the city are laid out so that they converge at its center. Central Baldwin Park, containing its civic center, post office, library and other public services is located in the north central part of the city. I-10 transects the lower portion of the city.
The affected project area lies in the southwest corner of the community. This area is primarily mixed residential with a few commercial and institutional facilities. Residents within the affected project area must travel north across I-10 to access most of the vicinity schools, Baldwin Park City Hall, and larger commercial areas. The Kaiser Permanente Hospital is located on the eastern end of the project area. Access to this hospital is through Baldwin Park Boulevard and Bess Avenue. Residents travel back and forth across the I-10 overcrossings to access schools, the civic center, commercial areas, the hospital, and their homes.

The affected community and adjacent populations in the vicinity have similar distribution of racial characteristics, homeownership, and families (Tables 6 and 7). The cities of Baldwin Park, El Monte, West Covina, and City of Industry are primarily made up of a Hispanic/Latino population in comparison to the encompassing area of Los Angeles County, which is comprised of a White majority. The surrounding cities are predominantly family households. The median income in Baldwin Park is $41,629 just below Los Angeles County’s median income of $42,189. To illustrate the median income in the project area, see Figure 5 and Table 7 on the following pages.

Community character between the census tracts (#4047.01, #40047.02, #4047.03) affected by the project and the whole of Baldwin Park are comparable more so than other communities in the project vicinity. The affected area is comprised of Hispanic/Latino families primarily earning low to moderate incomes. Households are a mixture of owner occupied and renter occupied households with the majority being owner occupied households. Most households contain an average of 4.46 to 4.65 members. Of the 79,476 residents living in Baldwin Park, 78.8% are Hispanic/Latino, 11.6% are Asian, 7.3% are White, and 1.6% are Black. The patterns of racial distributions and socioeconomic factors are similar in the affected community census tracts (4047.01, 4047.02, and 4047.03) as to the City of Baldwin Park as a whole.

Environmental Consequences
The neighborhood is comprised of low to moderate-income households made up dominantly of minorities. The median age ranges between 26.5 and 27.7 years throughout the surrounding communities. There is a large youth population and lack of affordable housing. Public services, such as safety, public transportation, schools, and commercial areas are all within a two to five mile radius of the project site. The availability of public services is sufficient in the public area. There are no environmental consequences related to land use planning, growth, or community cohesion.

Avoidance, Minimization and Compensatory Measures
At this time no measures are anticipated to minimize effects to land use, growth, and cohesion, except for the coordination of the Traffic Management Plan with affected agencies.
Table 6. Demographics of Project Area

<table>
<thead>
<tr>
<th></th>
<th>Total Population</th>
<th>Hispanic / Latino (%)</th>
<th>White Alone (%)</th>
<th>Black or African American (%)</th>
<th>Asian (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldwin Park</td>
<td>79,476</td>
<td>59,660 (78.7)</td>
<td>5,508 (7.3)</td>
<td>1,219 (1.6)</td>
<td>8,826 (11.6)</td>
</tr>
<tr>
<td>*Census Tract #4047.01 (%)</td>
<td>5,975</td>
<td>4,987 (83.5)</td>
<td>257 (4.3)</td>
<td>105 (1.8)</td>
<td>594 (9.9)</td>
</tr>
<tr>
<td>*Census Tract #4047.02 (%)</td>
<td>6,307</td>
<td>4,987 (83.5)</td>
<td>332 (5.3)</td>
<td>109 (1.7)</td>
<td>1,007 (16.0)</td>
</tr>
<tr>
<td>*Census Tract #4047.03 (%)</td>
<td>3,406</td>
<td>4,987 (83.5)</td>
<td>163 (4.8)</td>
<td>45 (1.3)</td>
<td>91 (2.7)</td>
</tr>
<tr>
<td>El Monte</td>
<td>115,965</td>
<td>83,945 (72)</td>
<td>8,542 (7)</td>
<td>640 (1)</td>
<td>21,465 (18.5)</td>
</tr>
<tr>
<td>City of Industry</td>
<td>777</td>
<td>468 (60)</td>
<td>209 (27)</td>
<td>32 (4)</td>
<td>30 (3.9)</td>
</tr>
<tr>
<td>West Covina</td>
<td>112,809</td>
<td>59,984 (48.7)</td>
<td>40,639 (36.0)</td>
<td>4,550 (4.0)</td>
<td>23,849 (22.7)</td>
</tr>
<tr>
<td>County of Los Angeles</td>
<td>9,519,338</td>
<td>4,242,213 (44.6)</td>
<td>4,637,062 (48.7)</td>
<td>930,957 (9.8)</td>
<td>1,137,500 (11.9)</td>
</tr>
</tbody>
</table>

Source: U.S. 2000 Census, American Factfinder.  *: Census Tracts within project footprint

Table 7. Socioeconomic Indicators

<table>
<thead>
<tr>
<th></th>
<th>Family Households (%)</th>
<th>Average Family Size</th>
<th>Owner Occupied (%)</th>
<th>Renter Occupied (%)</th>
<th>Median Household Income</th>
<th>Individuals Below Poverty level %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldwin Park</td>
<td>15,476 (85.3)</td>
<td>4.63</td>
<td>11,227 (61.8)</td>
<td>6,916 (38.1)</td>
<td>$41,629</td>
<td>18.2</td>
</tr>
<tr>
<td>*Census Tract #4047.01 (%)</td>
<td>1,171 (91.6)</td>
<td>4.65</td>
<td>906 (70.9)</td>
<td>372 (29.1)</td>
<td>$37,847</td>
<td>25.9</td>
</tr>
<tr>
<td>*Census Tract #4047.02 (%)</td>
<td>1,287 (90.5)</td>
<td>4.46</td>
<td>792 (55.7)</td>
<td>630 (44.3)</td>
<td>$43,652</td>
<td>22.0</td>
</tr>
<tr>
<td>*Census Tract #4047.03 (%)</td>
<td>666 (89.9)</td>
<td>4.57</td>
<td>304 (41.0)</td>
<td>437 (59.0)</td>
<td>$30,875</td>
<td>27.9</td>
</tr>
<tr>
<td>El Monte</td>
<td>22,995 (85.1)</td>
<td>4.43</td>
<td>11,073 (41.0)</td>
<td>15,961 (59.0)</td>
<td>$38,021</td>
<td>17.3</td>
</tr>
<tr>
<td>City of Industry</td>
<td>93 (76.9)</td>
<td>4.60</td>
<td>48 (39.7)</td>
<td>73 (60.3)</td>
<td>$49,423</td>
<td>14.5</td>
</tr>
<tr>
<td>West Covina</td>
<td>25,261 (80.4)</td>
<td>3.67</td>
<td>20,894 (66.5)</td>
<td>10,517 (33.5)</td>
<td>$66,897</td>
<td>8.8</td>
</tr>
<tr>
<td>Los Angeles County</td>
<td>2,137,301</td>
<td>3.8</td>
<td>1,564,640 (78.7)</td>
<td>1,607,392 (81.5)</td>
<td>$42,189</td>
<td>17.9%</td>
</tr>
</tbody>
</table>

Source: U.S. 2000 Census, American Factfinder  Note: *Census Tracts within project footprint
Figure 5. Median Income in Project Vicinity

Source: 2000 U.S. Census Bureau
RELOCATION IMPACTS

Regulatory Setting
Caltrans Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix C for a summary of the RAP.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 U.S.C. 2000d, et seq.). Please see Appendix B for a copy of Caltrans Title VI Policy Statement.

Affected Environment
A Draft Relocation Impact Report (DRIR) was prepared by the Right of Way Division on April 11, 2008 to assess the impact of the direct connector project on residential and non-residential occupants under each project alternative. The following section is based on the DRIR and current design plans.

The affected area is comprised of urban/suburban residences. Most of the homes that would be affected by right-of-way acquisition for the direct connector project would be homes along Dalewood Street. These properties would be directly affected from realigning the street to acquire land for the proposed project. Most residences are single-family homes ranging from between 1,035 square feet to over 2,000 square feet. The multi-family residences range from one-bedroom units to three bedroom units. Average household sizes range between 4.1 and 4.34 persons. The quality of homes varies between well-maintained homes and homes in disrepair. These homes were built during the mid 1940’s and early 1960’s.

Environmental Consequences
Approximately (12) residential properties and a narrow strip of land belonging to the Los Angeles Department of Water and Power (PN# 8564-002-270) would be affected from property acquisition for the proposed project. All of the proposed build alternatives would require a similar number of acquisitions, but varying amounts of land. Further development of design plans will yield an accurate delineation of the property to be acquired. No business properties would need to be acquired by the proposed project (Table 8). The Appendix D Project Plan Layout sheets show the alignments of alternatives 2, 3, and 4 over the affected area.
Table 8. Proposed Property Acquisitions

<table>
<thead>
<tr>
<th>Address</th>
<th>Type of Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>12758 Dalewood Street (MFR)</td>
<td>Full</td>
</tr>
<tr>
<td>12764 Dalewood Street (SFR)</td>
<td>Full</td>
</tr>
<tr>
<td>12770 Dalewood Street (SFR)</td>
<td>Full</td>
</tr>
<tr>
<td>12800 Dalewood Street (SFR)</td>
<td>Partial</td>
</tr>
<tr>
<td>12806 Dalewood Street (SFR)</td>
<td>Partial</td>
</tr>
<tr>
<td>12812 Dalewood Street (SFR)</td>
<td>Partial</td>
</tr>
<tr>
<td>12818 Dalewood Street (SFR)</td>
<td>Partial</td>
</tr>
<tr>
<td>12839 Via Van Cleave (SFR)</td>
<td>Full</td>
</tr>
<tr>
<td>12846 Dalewood Street (SFR)</td>
<td>Full</td>
</tr>
<tr>
<td>No Address</td>
<td>Partial</td>
</tr>
<tr>
<td>Assessor’s Parcel Number 8564-003-020</td>
<td></td>
</tr>
<tr>
<td>12836 Dalewood Street (MFR)</td>
<td>Partial</td>
</tr>
<tr>
<td>13011 Judith Street (MFR)</td>
<td>Partial</td>
</tr>
<tr>
<td>No Address (Los Angeles Department of Water and Power)</td>
<td>Partial</td>
</tr>
<tr>
<td>Assessor’s Parcel Number 8564-002-270</td>
<td></td>
</tr>
</tbody>
</table>

Properties Already Acquired by Caltrans

<table>
<thead>
<tr>
<th>Address</th>
<th>Type of Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>12776 Dalewood Street (SFR) was already acquired for the I-10 HOV project</td>
<td>Full</td>
</tr>
<tr>
<td>12844 Dalewood Street was already acquired for the I-10 HOV project</td>
<td>Full</td>
</tr>
</tbody>
</table>

Source: Caltrans, Division of Design October 2008

Avoidance, Minimization, and Compensatory Measures
Over the last year rising foreclosure activity has lead to a decrease of home sales and a drop in the median price of homes. This in turn means that there is a larger inventory of homes increasing the availability of replacement housing that would be comparable in amenities, public utilities, accessibility to public services, transportation and shopping. Currently, adequate replacement housing properties exist and are presently available. All displacees will be treated in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended).

Business property relocation may be more difficult due to the low availability of comparable and existing properties. However, the re-alignment of Dalewood Avenue is anticipated to affect residential and state owned land only. Therefore, the risk of relocating a commercial property is not anticipated.
ENVIRONMENTAL JUSTICE

Regulatory Setting
All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by President Clinton on February 11, 1994. This Executive Order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2008, this was $21,200 for a family of four.

Affected Environment
All build alternatives would affect the community in the southeast quadrant of the interchange; therefore all the impacts from the build-alternatives are addressed together. The majority of residents in Baldwin Park and adjacent cities are predominantly Hispanic/Latino residents followed by Asian, White, and African. The City of Baldwin Park and vicinity are similar in demographic and socioeconomic characteristics. Hispanic/Latinos make up the highest concentration of race in these communities. Most households are moderate income to low-income households (Tables 6 and 7).

Environmental Consequences
The Hispanic/Latino ethnic group represents a minority in the U.S. However, the proposed project is not expected to result in disproportionate impacts to this or other minority or low-income communities. As shown in Table 6 and 7, adjacent communities to the project area reflect similar racial and socioeconomic backgrounds. Therefore, any other type of alignment or build-alternative within the interchange area would likely affect minority or low-income populations. The proposed improvement is anticipated to have a beneficial impact on all study area residents, including minority and low-income populations, by providing traffic improvements that increase the operational efficiency of existing transit services and provide additional transit services throughout the affected communities. Figures 6 and 7 compare the differences in populations between the national majority of White populations and Hispanic/Latino populations.

Avoidance, Minimization, and Compensatory Measures
All build alternatives propose construction of the direct connector just south of the I-10 mainline in order to meet the project purpose and need. The community that would be affected by the construction of the direct connector is unavoidable due to their location adjacent to the facility.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. Caltrans’ commitment to upholding the mandates of Title VI is evidenced by the Title VI Policy Statement, signed by the Director, which can be found in Appendix B of this document. Based on the above discussion and analysis, the build alternative(s) will not cause disproportionately high and adverse effects on any minority or low-income populations as per E.O. 12898 regarding environmental justice.
Figure 6. White Alone Population

Source: U.S. Census Bureau 2000

Figure 7. Hispanic/Latino Population

Source: U.S. Census Bureau 2000
2.1.4 UTILITIES / EMERGENCY SERVICES

Affected Environment
Impacts to public utilities and emergency services are determined based on such factors as noise, air quality, safety, circulation, accessibility, and disruption of operation during both the construction and the operation of the proposed project alternatives. Many of the public facilities, such as police stations, fire departments, civic center, and schools are located north of the project area. See Tables 9 a-b for a list of public services, emergency services, and utilities in the project area.

<table>
<thead>
<tr>
<th>Table 9a. Public Services in I-10/605 Project Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Law Enforcement/Police Stations</td>
</tr>
<tr>
<td>Baldwin Park Police Station</td>
</tr>
<tr>
<td>California Highway Patrol</td>
</tr>
<tr>
<td>Fire Departments</td>
</tr>
<tr>
<td>Los Angeles County Fire Department – Station 29</td>
</tr>
<tr>
<td>Los Angeles County Fire Department – Station 87</td>
</tr>
<tr>
<td>Schools</td>
</tr>
<tr>
<td>De Anza Elementary School</td>
</tr>
<tr>
<td>Foster Avenue Elementary School</td>
</tr>
<tr>
<td>Learning Center</td>
</tr>
<tr>
<td>Sierra Vista Junior High School</td>
</tr>
<tr>
<td>Sierra Vista Senior High School</td>
</tr>
<tr>
<td>Tracy Elementary School</td>
</tr>
<tr>
<td>West Covina Education Center</td>
</tr>
<tr>
<td>Medical Facilities</td>
</tr>
<tr>
<td>Golden State Care Center</td>
</tr>
<tr>
<td>Kaiser Permanente</td>
</tr>
<tr>
<td>Park</td>
</tr>
<tr>
<td>Roadside Park</td>
</tr>
</tbody>
</table>

Source: Mitigated Negative Declaration/Finding of No Significant Impact for I-10 HOV, Caltrans January 2003

<table>
<thead>
<tr>
<th>Table 9b. Public Utilities in I-10/605 Project Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility</td>
</tr>
<tr>
<td>Sewer</td>
</tr>
<tr>
<td>Domestic Water</td>
</tr>
<tr>
<td>Natural Gas</td>
</tr>
<tr>
<td>Electricity</td>
</tr>
<tr>
<td>Cable Television</td>
</tr>
</tbody>
</table>

Source: Mitigated Negative Declaration/Finding of No Significant Impact for I-10 HOV, Caltrans January 2003

Environmental Consequences
All the build alternatives would temporarily impact various utilities within the project footprint. The existing transmission lines located east of the interchange, would be elevated to provide minimum vertical clearance for the proposed fly-over structure. Caltrans has been working...
closely with the Los Angeles Department of Water and Power to coordinate this effort. Other affected utility companies may include, but are not limited to, Southern California Edison, and the Southern California Gas Company.

Shifting Dalewood Street south would cause temporary impacts to subsurface and surface utilities. The specific utilities to be affected cannot be identified at this phase. A Traffic Management Plan (TMP) will be prepared to deal with the effects to emergency access/services during construction activities. Details of the TMP would be developed further during the final design phase before project construction begins. A discussion on the TMP is also incorporated into the following Traffic & Transportation/Pedestrian and Bicycle Facilities Section 2.1.5. Existing emergency services would not be adversely affected. No emergency services exist within the project footprint. The Kaiser Permanente east of the project limits lies outside of the project footprint. Access to the hospital would not be blockaded during construction. Adequate access detour roads would be provided. Police and fire stations are located north and east of the project site. Access to these emergency services will be planned and incorporated to the project in TMP.

Avoidance, Minimization and Compensatory Measures
Utility infrastructure that is impacted by project construction would be relocated prior to and during construction, protected in place, or abandoned. Those utilities that must be relocated as a part of project construction would be relocated in such manner as to minimize any disruption of services those utilities provide. Caltrans would work with existing utilities and emergency services identified within Caltrans right-of-way and the affected service area. Coordination and appropriate measures would be in place to eliminate or minimize any disruption to services.

The impact to fire, police and emergency services response times would be minimized by implementation of the TMP, which would contain detailed plans of access routes and detours during construction. The TMP should be reviewed and approved by the County Fire Department and any potentially affected fire or law enforcement agency. Caltrans would maintain contacts with the community, police and fire protection services through public outreach during the construction phase.

2.1.5 TRAFFIC & TRANSPORTATION /PEDESTRIAN AND BICYCLE FACILITIES

Regulatory Setting
The Federal Highway Administration (FHWA) directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 CFR 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.
Caltrans and FHWA are committed to carrying out the 1990 Americans with Disabilities Act (ADA) by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public will be provided to persons with disabilities.

**Affected Environment**
This section is based on the November 2005 Traffic Impact Analysis prepared by the Caltrans Office of Freeway Operations. The Traffic Impact Analysis follows the guidance established by the 2000 Highway Capacity Manual prepared by Transportation Research Board. Note: Recreational trails, such as equestrian trails, are covered under the Parks and Recreation section of the document.

The existing I-10 and I-605 interchange connect vehicle circulation in four directions of the San Gabriel Valley. I-10 is a major urban freeway traversing Southern California in an east-west direction. I-10 provides commuter access to Los Angeles Central Business District from Riverside County, San Bernardino County and San Gabriel Valley. I-605 traverses an urbanized area between the San Gabriel Valley and the City of Long Beach in a north to south direction. I-605 functions as a major collector/distributor route feeding freeway routes: 91, 405, 10, 60, 210, and 105.

Traffic on the I-10 and I-605 mainlines, during peak hours, currently is close to or exceeds capacity. During AM peak flow, traffic is heavy for W/B I-10 and S/B I-605 traffic, the opposite occurs during PM traffic flow. During AM hours the W/B I-10 to S/B I-605 connector experiences heavy traffic queuing. This queuing extends outside the connector onto the outside lane of the W/B I-10 mainline. During PM hours congestion and queuing occur on the N/B and S/B I-605 connectors to the E/B I-10 (Figure 2 in Chapter 1).

The weave conflict between N/B and S/B I-605 with the E/B I-10 considerably affects the existing traffic circulation within the I-10/I-605 interchange. During AM hours, observation shows that long delays and queuing exist on the W/B I-10 to S/B I-605 connector and during PM hours, congestion and queuing exists on the N/B I-605 and S/B I-605 connectors to E/B I-10. The two weaves (S/B I-10 to W/B I-605 and N/B I-605 to E/B I-10) in the intersection create queuing and heavy congestion during peak and even off-peak hours throughout corresponding connectors and the W/B I-10 mainline. Outdated design features occurring at the merge segments add to the deficiency of the connectors.

Projected traffic volumes for year 2030 are expected to approach and even exceed capacity on the I-10 and I-605 mainlines. A few segments of the I-10 and I-605 mainlines are already approaching and exceeding capacity during peak hours. Under the proposed build alternatives, traffic volume within the connectors would be sustained below capacity.

The conditions created by weaving traffic and queuing has led to the occurrence of a considerably high rate of accidents. Based on the Traffic Surveillance and Analysis System (TASAS), accident rates afflicting the subject connectors ranged from exceeding the total State average to being four times higher than the State average. Of all accidents that occurred, most
are congestion related, such as rear end or sideswipe. The confluence of the S/B I-605 to E/B I-10 and W/B I-10 to S/B I-605 connector section is the most prone to the aforementioned types of accidents. The high frequency of traffic accidents is the primary deficiency creating the need for the proposed project (Table 2).

**Environmental Consequences**

Local roads including Frazier Street, Dalewood Street, Baldwin Park Boulevard, and the Athol Street Overcrossing, would be directly affected by the project. Circulation on these roads and other local roads would remain the same, since the project would not induce new demand on local roads. Dalewood Street would be realigned as a result of the direct connector, but would remain a two-lane frontage road. During construction adequate temporary traffic circulation measures would be implemented to ensure that temporary impacts are mitigated during construction.

LOS was analyzed using the no-build and the build alternatives under current conditions and forecasted projected traffic conditions for year 2030. The analysis was based on AM and PM observations conducted on the I-10 mainline and affected connectors. LOS generally would not improve with construction of the proposed project. The Traffic Impact Analysis showed current and forecasted LOS levels to be the same under build and no build conditions for existing and future traffic volumes. In conclusion of the analysis, construction of the project will not improve LOS, but would make improvements to reduce weaving on merge segments and queuing on the outer lane of the W/B I-10 mainline, thereby reducing the hazardous conditions, which lead to traffic accidents.

A preliminary simulation study was completed to analyze the flow of traffic within the interchange. Based on the simulation, freeway connector travel speeds and time would improve considerably with the build alternatives (Table 9). Travel speeds would increase from the existing 30.5 mph to 46.6 mph on the S/B I-605 to E/B I-10. Similarly, travel speeds would increase from 17.7 mph to 42.8 mph on the W/B I-10 to S/B I-605 connector (Table 10).

<table>
<thead>
<tr>
<th>Intersection Connector</th>
<th>Existing Conditions Travel Speed (miles per hour)</th>
<th>Existing Conditions Travel Time (seconds per vehicle)</th>
<th>Proposed Conditions Travel Speed (miles per hour)</th>
<th>Proposed Conditions Travel Time (seconds per vehicle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/B I-605 to E/B I-10</td>
<td>30.5</td>
<td>56.4</td>
<td>46.6</td>
<td>32.6</td>
</tr>
<tr>
<td>W/B I-10 to S/B I-605</td>
<td>17.7</td>
<td>141</td>
<td>42.8</td>
<td>45</td>
</tr>
<tr>
<td>N/B I-605 to E/B I-10</td>
<td>N/A</td>
<td>228.2</td>
<td>N/A</td>
<td>63.8</td>
</tr>
</tbody>
</table>

Source: Preliminary Simulation Study, Travel Forecasting and Micro simulation, November 3, 2005

Constructing the direct connector project would primarily improve safety on the corresponding connectors by removing the weave conflict in three areas of the interchange. In addition, traffic flow within the improved connectors would circulate more freely. Under the build alternatives
vehicles circulating through the affected connectors would move more freely, without the existing weave conflicts, while also reducing the merge problems. This in turn will reduce queuing and congestion which, under the no-build conditions, extends upstream of the W/B I-10.

The proposed project would not improve the LOS analysis based on the volume to capacity ratio (V/C) on either the mainline or the connectors. However, the corridor would be improved by:

- Eliminating the heavy weaving pattern at the merge segment of S/B I-605 to E/B I-10 and W/B I-10 to S/B I-605 connectors, which is considered a major choke point for both connectors.
- Eliminating the weaving at the merge location of S/B and N/B I-605 to E/B I-10 connectors. This merge elimination effect would be more obvious during the PM peak hours.
- Relieving the heavy weaving pattern at the merging location of I-605 collector with E/B I-10 and Frazier Street off-ramp, by reducing the current weaving flow on S/B I-605 to E/B I-10 connector. Currently this weaving segment of E/B I-10 functions at a LOS F (Attachment C).
- The proposed project would improve the mobility, operation, and safety on the affected connectors and mainline.

Construction Activities
Traffic during construction will be carefully managed to allow traffic circulation patterns to continue, and reduce disruptions to the greatest extent possible. To ensure this, Caltrans will coordinate with local agencies that would be affected, which include but are not limited to the City of Baldwin Park, El Monte, South El Monte, and the County of Los Angeles. To achieve this and to reduce temporary impacts to traffic flow, a Transportation Management Plan will be prepared during the following phase of project development (Design Phase).

Consequences to other Modes of Transportation
A single Foothill Transit bus line circulates through the project site along Dalewood Street. During the realignment of Dalewood, under all the build alternatives, the bus line will temporarily need to be detoured from Dalewood. The coordination for this temporary rerouting will be addressed in the TMP. The TMP is discussed further in the Avoidance, Minimization, and Compensatory section that follows.

All of the existing or planned bikeways in the City of Baldwin Park lie outside the project area. Therefore, no impacts to these facilities are anticipated based on reviewing the Transportation element of the Baldwin Park General Plan 2020.

Avoidance, Minimization, and Compensatory Measures
During construction, temporary impacts to local roads from detours and traffic circulation will be offset with the implementation of the TMP. Funds have been allocated in order to provide a TMP, which is developed and incorporated as part of the project design prior to construction to minimize disruption to the existing traffic flow conditions. Details of the TMP would be outlined during final design for this project. It is Caltrans’ and the Contractors responsibility to
provide for the safety of traffic and public during construction. The development of the TMP would be coordinated with local emergency services and local agencies.

Caltrans is recommending the incorporation of metering on the proposed elevated direct connector and the W/B to S/B I-605 connector in order to maintain a steady flow down stream of the mainlines of both freeways during high volume flows.

All other construction-related impacts are addressed in Construction Impacts Section 2.4.

2.1.6 VISUAL / AESTHETICS

Regulatory Setting
The National Environmental Policy Act of 1969 as amended (NEPA) establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. To further emphasize this point, the Federal Highway Administration in its implementation of NEPA [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, the California Environmental Quality Act (CEQA) establishes that it is the policy of the State to take all action necessary to provide the people of the State “with…enjoyment of aesthetic, natural, scenic and historic environmental qualities.” [CA Public Resources Code Section 21001(b)]

Affected Environment
The Caltrans Office of Landscape Architecture prepared a Visual Impact Assessment (VIA) in December 2008 for the proposed project. This section is based on the VIA. The purpose of the VIA is to assess the visual impacts of the proposed project and to recommend measures that minimize any adverse visual impacts associated with the construction of a new direct connector and soundwalls.

Assessment Method
The assessment of visual resources was conducted using the guidelines set forth by the Federal highway Administration’s “Visual Impact Assessment for Highway Projects” publication (FHWA), March 1981. Methods for assessing visual resources consist of identifying the visual setting, establishing key viewpoints, and conducting a qualitative analysis of the viewshed based on vividness, intactness, and unity. Thereafter, determinations are made on the effects of the proposed project and any potential minimization measures are added to compensate for visual impacts.
To prepare the VIA the following six steps provide the guidance needed to assess visual impacts. They are as follows:

- Define the project setting and viewshed
- Identify key views for the visual assessment
- Analyze existing visual resources and viewer response
- Depict the visual appearance of project alternatives
- Assess the visual impacts of project alternatives
- Propose methods to mitigate adverse visual impacts.

**Visual Resources**

The affected viewshed lies east of I-10/I-605 interchange. This is where the primary viewers, consisting of motorists and residents are going to be affected by the direct connector. Views of the San Gabriel Mountains dominate the viewshed north of I-10. No noise barriers exist along this section of I-10, which allows visibility for viewers on both sides of the highway, which makes views of the San Gabriel Mountains possible on clear days. Outside the highway, the predominant land use is residential and commercial. The terrain is flat and composed of mostly man-made features in the vicinity.

The viewpoints identified for the study are located on the south side of I-10 at Dalewood Street and on the north side of I-10 at Garvey Avenue. Because it is not feasible to analyze all the views in which the proposed project would be seen, it is necessary to select a number of key viewpoints that would most clearly display the visual effects of the project and also represent the primary viewers that would potentially be affected (Figure 8).

![Figure 8. Viewpoint Locations](image)
Environmental Consequences
Visually all three build alternatives would have the same visual effect. Although Alternative 3 involves a wider bridge structure, the profile and height is similar to Alternative 2 and 4. The VIA evaluates all three build alternatives together since the visual effects are essentially the same. The existing visual quality from viewpoints 1 and 2 were given a measurement of below average and average due to the exposure of I-10 and man-made surroundings. The San Gabriel Mountains are a dominant natural visible resource to the north that can be viewed on clear days (Figure 8).

The most apparent visual impact would occur to the viewer from Viewpoint 1. The proposed visual quality of Viewpoint 1 is evaluated below average. The foreground visual quality is slightly improved. The soundwall would create a unifying man-made element. On clear days the San Gabriel Mountains would no longer be visible in the background. Resident views were analyzed to determine how their view would likely be affected by the proposed project. Viewer’s sensitivity to visual change at Viewpoint 1 is expected to be moderately low (Figures 9a-b).

With the direct connector in place, the proposed visual quality of Viewpoint 2 is evaluated as slightly below average. The introduction of the direct connector bridge structure introduces a higher impact of the man-made elements, slightly decreasing the visual quality. The terrain is not affected by the improvements, and vegetation is only moderately affected. Viewer sensitivity from Viewpoint 2 is expected to be moderately low (Figures 9c-d).

Figure 9a. Existing Conditions from Viewpoint 1 at Dalewood Street
Figure 9b. Proposed Conditions from Viewpoint 1 at Dalewood Street

Figure 9c. Existing Conditions from Viewpoint 2 at Garvey Avenue
Viewer response is utilized in the assessment of visual impacts to predict how the public might react to visual changes from the direct connector project. From both viewpoints, it was determined that the visual impact would be moderately low. Moderately low is defined as minor to moderate adverse change to the existing visual resource with moderately low viewer response, and any impact can be minimized in five years using conventional practices.

There would be no effect to National Scenic Highways. I-10 and I-605 are not designated National Scenic Highways. State Route 2 is the nearest designated Scenic Highway, and it is approximately 15 miles northwest from the I-10/I-605 Interchange.

Implementing any of the proposed build alternatives would have a minimal effect due to the below average and average existing visual resources present. At Viewpoint 1, constructing of the soundwall along Dalewood Street would unify the man-made elements of the project area, improving the foreground view while reducing the background view. At Viewpoint 2 the visual quality will be reduced only slightly. The incorporation of minimization measures to enhance the visual quality of the project structures would reduce impacts to less than significant.

**Avoidance, Minimization, and Compensation Measures**

In order to minimize visual impacts to viewers, the VIA recommends several minimization measures that would soften the appearance of the direct connector bridge and soundwalls. Recommendations made by Caltrans’ Office of Landscape Architecture to minimize visual impacts are as follows:

- Plant vines on soundwall adjacent to Dalewood Street to deter graffiti and enhance visual quality
- Sound wall aesthetics should match adjacent sound walls along Route 10
- Structural and textured concrete used in the gore areas should be of natural color
- Bridge aesthetics should match the remaining bridges on the interchange
- Vegetation that is removed would be replaced where space allows and where necessary, irrigation would be installed.
2.1.7 CULTURAL RESOURCES

Regulatory Setting
“Cultural resources” as used in this document refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act of 1966, as amended, (NHPA) sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800). On January 1, 2004, a Section 106 Programmatic Agreement (PA) between the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA implements the Advisory Council’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. FHWA responsibilities under the PA have been assigned to Caltrans as part of the Surface Transportation Project Delivery Pilot Program (23 CFR 773) (July 1, 2007).

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historic Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way.

Affected Environment
The project area is situated in the City of Baldwin Park within the San Gabriel Valley, part of the greater Los Angeles basin, and lies within the upper San Gabriel River basin. This area of the San Gabriel Valley has experienced rapid urbanization growth over the last 50 years, which was facilitated with the completion of the I-10 in 1956. The I-10 provided access to the region while maintaining connectivity to Los Angeles and the Inland Empire. Within the project area, land is developed with primarily residential and some commercial/institutional structures.

The Area of Potential Effects (APE) is the maximum geographic extent of the proposed project alternatives. The APE delineates the study area for evaluating the impacts to cultural resources. Project plans, Los Angeles County Office of the Assessor parcel maps, and a field survey were used to identify properties that may be affected by the undertaking. The APE for archeology and architecture vary in that only the project footprint is studied for archeology whereas for architecture the project properties affected directly and indirectly are studied.

A single historic property was identified within the APE – Boulder Dam-Los Angeles Transmission Line Historic District, a high-voltage power line connecting the City of Los
Angeles with the Hoover Dam, in Clark County Nevada. The line was built between the years 1933 and 1936. The transmission line was determined eligible for the National Register in 1999 under Criterion A for its association with the construction of the Boulder Dam, both as a reclamation and irrigation project of immense importance to the American Southwest and as it relates to the development of metropolitan Los Angeles during the mid-1930’s through the 1940’s. It was also eligible under Criterion C for its unique engineering and structural characteristics within the context of development of point-to-point high voltage power transmission in California. The resource is also composed of other contributing elements such as the transmission line cables, single and double circuit towers carrying the cables, the access road serving the towers, two switching stations and two transformer stations. This resource should also be considered a historical resource for the purposes of CEQA.

The remaining resources within the APE were exempt from evaluation under Attachment 4 of the PA.

Methodology
Caltrans’ Professionally Qualified Staff (PQS) prepared a Historic Resources Evaluation Report (HRER) and Archeology Survey Report (ASR) in August 2008. The HRER documents the inventory and evaluation of the built environment identified within the APE, and the ASR is its counterpart for archeological resources. Following the completion of the HRER and the ASR, the two reports were included and summarized in the Historic Property Survey Report (HPSR), which is used as its consultation and decision-making document. A Finding of Effect (FOE) document, used to determine what effects the proposed interchange improvement will have on historic properties, was also prepared.

The following were reviewed as part of the study methods:

- Cultural resource records on file with the Caltrans District 7 Division of Environmental Planning
- South Central Coastal Information Center at California State University Fullerton
- National Register of Historic Places
- National Historic Landmarks
- California Register of Historical Resources (current)
- California Historical Landmarks (current)
- Statewide Historic Bridge Inventory Update, 2006
- Exemption Regarding Historic Preservation Review Process for Effects to the Interstate Highway System
- Final List of Nationally and Exceptionally Significant Features of the Federal Interstate Highway System.

PQS Staff contacted the Environmental Services branch of the City of Los Angeles Department of Water and Power (LADWP), since they are the agency with ownership of the Boulder Dam-Los Angeles Transmission Line. However, no issues were identified in relation to the National Register. Staff also contacted the Baldwin Park Historical Society (BPHS) on May 2, 2007 for information related to the project area, however no response was received.
In addition, both the Nevada State Historic Preservation Office and the California Office of Historic Preservation were contacted for information regarding the Boulder Dam-Los Angeles Transmission Line. On June 20, 2007, staff from The Nevada State Historic Preservation Office responded that the Bureau of Land Management (BLM) submitted a National Register nomination to both the Nevada State Historic Preservation Office and the California Office of Historic Preservation and both offices agreed the Transmission Line was eligible for inclusion on the National Register. A similar response was received from a representative of the California Office of Historic Preservation on July 11, 2007.

To understand historical land use in the area and to create appropriate historical background documentation for resources located within the APE, other historical documentation produced for transportation projects in the region, state, and western states as well as related resources were consulted. Historical geographical information was reviewed, such as historic era USGS quadrangle maps, Los Angeles County parcel maps, and property–specific data in order to identify construction dates of buildings and other recorded land uses. Right-of-way maps and as-built drawings were reviewed for information related to the investigation.

Field methods were employed to obtain existing conditions. During the field review the entire project area was reviewed to understand the quantity, quality and distribution of resources that might require evaluation, as well as to gain an understanding of the project area in total.

Archeological Methodology
On June 13, 2007, Caltrans archaeologist conducted a Phase I cultural resources investigation within the proposed project limits located along I-10 and I-605. The area investigation encompassed the entire extent of the APE for the proposed project. The purpose of the investigation was to determine the presence or absence of cultural material within the APE and to ascertain the degree of potential disturbance to any identified resources.

A windshield field survey took place along the entire project area, while a foot survey took place within the I-10 and I-605 interchange area to the best extent possible in two-meter increments. No cultural resources were observed at the time of the survey.

Environmental Consequences
All of the proposed project build alternatives would require raising the cable height of the Boulder Dam-Los Angeles Transmission Line, which intersects I-10 within the project area, by approximately 40 feet. The existing towers are galvanized steel latticework and are approximately 144 feet tall. Raising the line would require the replacement of up to four towers, two to the north and two to the south of I-10 Tower replacement will be completed by LADWP. Two tower design options have been identified for the replacements: (1) a latticework design nearly identical to the existing, only 40 feet taller; they would be galvanized steel with three cross arms supporting the transmission cables and a “V” shaped cross arm at the top of the tower, supporting the ground wires. (2) The second design option uses a single vertical steel pole to support three cross arms, which hold the transmission cables, and a simple horizontal bar at the top of the pole to carry the ground wires. The lattice tower design is preferred, however because
of engineering demands it may not be feasible. If the lattice tower design proves deficient, the replacement towers will be the steel pole design.

Impact to the historic property as a result of this project would minimally alter aspects of the Boulder Dam-Los Angeles 287.5 kV Transmission Line Historic District. These alterations represent a minimal change to the nearly 270 mile transmission line as a whole, and should be viewed within the context of the entire historic property. The proposed project would not alter the characteristics of the historic property in a manner that would diminish the integrity of the historic district; it will continue to be eligible for inclusion in the National Register. Changes to the historic property will be made in a manner consistent with the Secretary of the Interior’s Standards for the Treatment of Historic Properties – Rehabilitation. The proposed project would result in a finding of no adverse effect for the Boulder Dam-Los Angeles 287.5 kV Transmission Line Historic District.

The ASR, HRER, HPSR and FOE describing the findings (in this case, a Finding of No Adverse Effect) under NHPA and CEQA were received by SHPO on December 30, 2008. On January 29, 2009 the SHPO concurred with the finding of no adverse affect. This completed the Section 106 process.

**Avoidance, Minimization, and Compensatory Measures**

Any impact to the Boulder Dam-Los Angeles Transmission Line would be minor because only a minor part (four towers at a maximum) of a system extending 270-miles would be modified. The lattice tower design is preferred, however because of engineering demands it may not be feasible. If the lattice tower design proves deficient, the replacement towers will be the steel pole design.

If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature and significance of the find.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the Caltrans District 7, Heritage Resource Coordinator, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.
2.2 PHYSICAL ENVIRONMENT

2.2.1 HYDROLOGY AND FLOODPLAIN

Regulatory Setting
Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 CFR 650 Subpart A. In order to comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments
- Risks of the action
- Impacts on natural and beneficial floodplain values
- Support of incompatible floodplain development
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values impacted by the project.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

Affected Environment
A Location Hydraulics Study (LHS) was prepared by the Caltrans, Office of Hydraulics on December 12, 2007 to determine if the proposed project would impact or encroach any floodplains or watersheds. The project site is located near the San Gabriel River and Walnut Creek floodplains, northeast of the confluence of these two drainages. No natural watercourses cross the project site besides concrete lined storm drains. This section is based on the LHS.

Regional flooding hazards are evaluated by the Federal Emergency Management Agency (FEMA) and presented in community Flood Insurance Rate Maps (FIRMs) as part of the floodplain mapping program. The project area is classified under the National Flood Insurance Program as Zone C, defined as areas of minimal flood hazard. A significant impact from highway encroachment and any direct support of likely base floodplain development would involve one or more of the following construction or flood related impacts:

- A significant potential for interruption or termination of a transportation facility that is needed for emergency vehicles or provides a community's only evacuation route
- A significant risk (to life or property), or
- A significant adverse impact on natural and beneficial floodplain values.

Environmental Consequences
The LHS revealed that there would be no significant impact to floodplains per 23 CFR 650.105. The risks associated with this project are minimal and would not encroach on floodplains or wetlands. According to preliminary FIRMs prepared by FEMA in 2007 for the area encompassing the Project site, the Project site is not located within a 100-year flood hazard therefore, no flood insurance is required (FEMA, 2007).
Avoidance, Minimization, and Compensatory Measures
Avoidance, minimization, and compensatory measures are not proposed at this time since the project would not encroach on floodplains or create significant impacts to local watersheds.

2.2.2 WATER QUALITY AND STORM WATER RUNOFF

Regulatory Setting
Section 401 of the Clean Water Act (CWA) requires water quality certification from the State Water Resources Control Board (SWRCB) or from a Regional Water Quality Control Board (RWQCB) when the project requires a CWA Section 404 permit. Section 404 of the CWA requires a permit from the U.S. Army Corps of Engineers (Corps) to discharge dredged or fill material into waters of the United States.

Along with CWA Section 401, CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

The SWRCB has developed and issued a statewide NPDES permit to regulate storm water discharges from all Caltrans activities on its highways and facilities. Caltrans construction projects are regulated under the statewide permit. Projects performed by other entities on Caltrans right-of-way (encroachments) are regulated by the SWRCB’s Statewide General Construction Permit. All construction projects over 1 acre require a Storm Water Pollution Prevention Plan (SWPPP) to be prepared and implemented during construction. Caltrans activities less than 1 acre require a Water Pollution Control Program.

Affected Environment
Caltrans’ Office of Project Development is preparing a Storm Water Data Report (SWDR) as of October 2008. The SWDR describes the project and any water quality issues, impacts, and compensation measures for the proposed project. To ensure adequate compliance with the National Pollutant Discharge Elimination System (NPDES) permit (Order No. 99-06-DWQ) (Caltrans Permit) issued by the California State Water Resources Control Board (SWRCB) on July 15, 1999, Caltrans’ Stormwater Unit reviews and approves the SWDR. This section is based on the SWDR. Furthermore, all proposed build alternatives are evaluated together, since they are anticipated to have similar impacts to water quality.

The Project site is located within the San Gabriel River watershed. The San Gabriel River watershed has its headwaters in the San Gabriel Mountains, approximately 15 miles northeast of the project site, and flows south through the western San Gabriel Valley before emptying into the Pacific Ocean near the City of Long Beach. Approximately 26 percent of the 689 square-mile watershed is developed. Major tributaries include Big Dalton Wash, San Dimas Wash, Walnut Creek, San Jose Creek, Fullerton Creek, and Coyote Creek. The San Gabriel River lies
approximately 500 feet from the western edge of the proposed direct connector and Walnut Creek lies 1,300 feet to the south of the proposed direct connector.

The San Gabriel River is on the Clean Water Act’s 303(d) list for impairments from toxicity. There is a trash Total Maximum Daily Load (TMDL’s) for the East Fork of the San Gabriel River, and a future TMDL that would create new standards in the future. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant’s sources. The established TMDL is the “Trash TMDL” for the East Fork of the San Gabriel River and the future TMDL is the “San Gabriel River and Impaired Tributaries Metals and Selenium TMDL”. Walnut Creek is also on the 303(d) list for pH and toxicity.

The topography of the site is generally flat with man-made slopes developed to support the I-10/I-605 interchange in the project vicinity.

**Environmental Consequences**

Run-off from the project site would primarily flow into the existing storm drain system on the I-605 and Dalewood Street. Surface run-off does not flow directly into the water bodies, but through a drainage system before discharging into the San Gabriel River and Walnut Creek waterways. These existing drainage systems are adequate to handle runoff from the proposed project. The proposed connector would be mostly elevated and the runoff would be contained on the bridge itself and thereafter flow to points of concentration. There would be a slight increase in volume of flow due to an increase of the impervious surface area (0.24 acre). However, the effect would be minimal on the downstream flow to the affected waterways.

The total area of disturbed surface area is 5.78 acres (2.34 hectares). This estimate is based on preliminary plans, which includes footing and column locations, local street relocation, freeway widening, and temporary Best Management Practices (BMP). Most of the disturbed surface area would be caused from creating or modifying man made slopes to support the direct connector. In either case the slope would be reconstructed to match the existing slope and thereafter paved or re-vegetated to prevent soil erosion. Part of the surface disturbance; approximately 0.60 acres (0.24 hectares) would convert pervious surfaces to impervious surfaces. This is based on the private lawn area abutting the private properties, which would need to be acquired to realign Dalewood Street further south. Also, the project would involve clearing and grubbing, but the project would replace vegetation removed due to construction according to Caltrans policy.

During construction activities, impacts to receiving water bodies would be minimal since the total impervious area from the bridge construction is limited to the column footprints located at the I-10/605 interchange median and the outer shoulder of E/B I-10. The project would comply with National Pollution Discharge Elimination System general permit No. CAS000002 and NPDES permit No. CAS000003.

The San Gabriel River and Impaired Tributaries Metals and Selenium TMDL is anticipated to become effective in the near future. Caltrans will be working with groups of Responsible Agencies to jointly comply with the TMDL. Targeted pollutants are copper, lead, zinc and
selenium. Project Engineers shall consider treatment controls for the project and consult with the District Storm Water Coordinator.

Avoidance, Minimization and Compensatory Measures
In order to minimize impacts to water quality from the surface runoff of the proposed connector, permanent and temporary Best Management Practices (BMP) are proposed. Proposed BMP’s consist of the following categories: Pollution Prevention, Treatment, Construction, and Maintenance BMP's. Caltrans’ Storm Water Unit provides guidance for the implementation of each of these BMP's. Selection and design of permanent project BMP’s is refined as the project progresses through the planning stage and into final design.

To address pollution prevention, any cut slopes or exposed pervious ground would be vegetated to minimize erosion and protect water quality. For the permanent treatment BMP’s, a bioswale is currently being studied for treating runoff from the proposed connector. A potential site at the northwest quadrant of the I-10/605 separation has been identified, but details on the final location of the bioswale and other permanent BMP’s will be determined later during final design. Currently, other permanent BMP’s are not viable due to space constraints or the available infrastructure.

During construction, temporary construction site BMP’s are proposed for the project. Temporary BMP’s that may be used during the construction phase of this project are as follows:
- Temporary Silt fence
- Temporary Drainage Inlet Protection
- Street Sweeping
- Temporary Concrete Washout (Portable)
- Construction Site Management
- Prepare Storm Water Pollution Prevention Plan
- Water Pollution Control Maintenance Sharing
- Additional Water Pollution Control
- Storm Water Sampling and Analysis
- Dewatering

Caltrans’ Construction Storm Water Unit will assure the Temporary BMP’s are implemented during the construction phase.

2.2.3 GEOLOGY / SOILS / SEISMIC / TOPOGRAPHY

Regulatory Setting
For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.” Topographic and geologic features are also protected under the California Environmental Quality Act.
This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Caltrans’ Office of Earthquake Engineering is responsible for assessing the seismic hazard for Caltrans projects. The current policy is to use the anticipated Maximum Credible Earthquake (MCE), from young faults in and near California. The MCE is defined as the largest earthquake that can be expected to occur on a fault over a particular period of time.

**Affected Environment**
The Caltrans Office Engineering Services completed a Preliminary Geotechnic Investigation in January 2008. The report is based on the surface and subsurface land area in and around the project location. This section is based on the Preliminary Geotechnic Investigation. Impacts associated with all build alternatives would be similar. All the build alternatives would require minor changes to the topography immediately adjacent to the freeway.

The soil at the project site is comprised of alluvial gravel, sand, and silt associated with San Gabriel Valley soil conditions. Land surfaces in the project area are relatively flat, aside from the built up land surfaces under the highway interchange. Seismic activity in the project area is common. The closest earthquake fault zone under the auspices of the Alquist-Priolo Earthquake Fault Zoning Act is the East Montebello fault and is located 4.6 miles to the west of the proposed project (see Figure 10).

**Environmental Consequences**
The investigation concluded that low to very low risks exist in constructing the proposed project over the geologic setting.

The project site is located in a seismically active area; this would be normal for Southern California. No fault traces or lines are located directly below the proposed connector. The closest earthquake fault-trace is the East Montebello fault located 4.6 miles west of project site and the Raymond Fault system approximately 6.1 miles away. The absence of fault lines also reduces the potential for ground rupture, which was determined to be very low.

Liquefaction has a low to very low potential to occur based on observations from two previous major earthquake events. Erosive impacts are minimal due to location of site on gradually sloping to flat terrain. After project completion there would be no change in the rate of erosion as a result of this project.

The potential for groundwater contamination from excavation activities was evaluated based on boring explorations conducted for previously built structures in the project vicinity. Contamination is not anticipated based on past structural work; however, additional analysis shall be conducted to make a complete determination during the final design phase.

**Avoidance, Minimization, and Compensatory Measures**
Currently no compensatory measures are proposed for geologic resources, since the impact to surface and subsurface resources are minor.
Figure 10. Location of Fault Lines

Aerial of Faults in the Project Area

Map Created by Robert Wang, Division of Environmental Planning
2.2.4 HAZARDOUS WASTE/MATERIALS

Regulatory Setting
Many state and federal laws regulate hazardous materials and hazardous wastes. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for “cradle to grave” regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety & Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

Affected Environment
The Caltrans Office of Environment Engineering and Corridor Studies (OEECS) prepared a Preliminary Hazardous Waste Assessment on March 11, 2008. This section is based on the assessment. Impacts associated with hazardous waste would be similar under all the build alternatives.

Based on OEECS reports from adjacent projects, locations containing hazardous waste may be present within the project limits. The surrounding area has a history of underground storage
tanks (UST’s) and above ground storage tanks (ASTs). Of these identified tanks, some have been reported to be leaking. Furthermore, the project is located in the San Gabriel Valley National Priority List (NPL); a list of areas with groundwater contamination caused by Volatile Organic Compounds (VOC). Soil and groundwater contamination was also identified in the surrounding area based on OEECS reports.

**Environmental Consequences**

Aerially Deposited Lead (ADL) is anticipated to be present in unpaved areas of the interchange. This is due to the lead containing gasoline widely used before the mid 1980’s. The degree of ADL present will determine the work activity guidelines for working, treating, and disposing of ADL contaminated soil.

Yellow traffic striping and pavement markings applied before 2006 are suspected of having a high lead and/or chromium content and will be treated as hazardous waste. The presence of lead and/or chromium in the yellow thermoplastic traffic stripe and pavement markings will indicate the appropriate measures to contain, test, transport, and dispose of hazardous materials in accordance with Local, State, and Federal regulations.

Based on the scope of work, dewatering may be needed to construct the deep foundations for the direct connector. Installation of the structure piles and abutments may impact the existing groundwater table and thus require remediation. If dewatering is required, the excess wastewater shall be properly contained, tested, transported, and disposed of at a permitted disposal facility in accordance with Local, State, and Federal regulations.

Aerially Deposited Lead (ADL) in soils, yellow traffic striping and pavement marking, and groundwater contamination are all potential hazardous waste sources that may need to be remediated if identified on the project site. The determination for the presence of hazardous waste onsite will be made through a Site Investigation, which will be prepared when the design plans (Project Specifications and Estimates) have been further developed.

The Site Investigation would reveal whether groundwater would have to be remediated in the area. If contaminated groundwater is found, appropriate remediation and measures will be implemented to prevent exacerbation or contribution to the existing contamination. The appropriate regulatory agency will be consulted and an indemnification agreement shall be obtained to limit Caltrans’ future liability.

**Avoidance, Minimization, and Compensation Measures**

Proper off-site disposal of any soil containing unsafe levels of lead or other contaminants shall be implemented. Lead safe-work practices will be in place when workers conduct construction activities involving lead contaminated material in conformance with the Practices established by Local, State, and Federal regulations. Contaminated groundwater may be exposed during excavation of foundations. Whereby proper measures involving containing, testing, transporting, and disposing of contaminated water will take place. Detailed compensatory measures will be included in the project once more developed plans and the Site Investigation are completed.
2.2.5 AIR QUALITY

Regulatory Setting
The Clean Air Act as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns; the criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), lead (Pb), and sulfur dioxide (SO₂).

Under the 1990 Clean Air Act Amendments, the U.S. Department of Transportation cannot fund, authorize, or approve Federal actions to support programs or projects that are not first found to conform to State Implementation Plan for achieving the goals of the Clean Air Act requirements. Conformity with the Clean Air Act takes place on two levels—first, at the regional level and second, at the project level. The proposed project must conform at both levels to be approved. Regional level conformity in California is concerned with how well the region is meeting the standards set for carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), and particulate matter (PM). California is in attainment for the other criteria pollutants.

At the regional level, Regional Transportation Plans (RTP) are developed to include all of the transportation projects planned for a region over a period of years, usually at least 20. Based on the projects included in the RTP, an air quality model is run to determine whether or not the implementation of those projects would conform to emission budgets or other tests showing that attainment requirements of the Clean Air Act are met. If the conformity analysis is successful, the regional planning organization, such as The Southern California Association of Governments (SCAG) and the appropriate federal agencies, such as the Federal Highway Administration, make the determination that the RTP is in conformity with the State Implementation Plan for achieving the goals of the Clean Air Act. Otherwise, the projects in the RTP must be modified until conformity is attained. If the design and scope of the proposed transportation project are the same as described in the RTP, then the proposed project is deemed to meet regional conformity requirements for purposes of project-level analysis.

Conformity at the project-level also requires “hot spot” analysis if an area is “non-attainment” or “maintenance” for CO and/or particulate matter. A region is a “non-attainment” area if one or more monitoring stations in the region fail to attain the relevant standard. Areas that were previously designated as non-attainment areas but have recently met the standard are called “maintenance” areas. “Hot spot” analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA purposes. Conformity does include some specific standards for projects that require a hot spot analysis. In general, projects must not cause the CO standard to be violated, and in “non-attainment” areas the project must not cause any increase in the number and severity of violations. If a known CO or particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.
Affected Environment
This section is based on the Air Quality Report (AQR) prepared in May 2008 by Office of Environmental Engineering and Corridor Studies to address compliance with state and federal Clean Air regulations. The report addresses all pertinent aspects of conformity and adheres to the Transportation Conformity Rule. All the build alternatives are evaluated together, since they would have similar impacts to air quality.

Local Setting
The I-10/I-605 interchange area lies in the South coast Air Basin (Basin), which is made up of Orange, Los Angeles (non-desert portions), and the urban areas of Riverside and San Bernardino Counties. Air Quality regulation in this basin is administered by the South Coast Air Quality Management District (SCAQMD).

Climate in the basin is determined by the terrain and geographical location. The Basin is comprised of a coastal plain with connecting broad valleys and low hills near the Pacific Ocean. The region lies in the semi-permanent high-pressure zone of the eastern Pacific. The resulting climate is rather constant being mild and tempered with cool ocean breezes, although periods of extremely hot weather, winter storms, and high wind conditions do occur.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high, a high pressure system, which creates the constant climate. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground.

Wind patterns in the Basin are driven by coastal conditions and the surrounding landmass. During the day, wind direction is onshore, and at night, the wind direction will reverse and flow slowly in the opposite direction. A southern wind direction is dominant between the transitions of one wind pattern to another. Wind speeds average 4 miles per hour (6.4 kilometer per hour) throughout the year. Low average wind speeds are another contributing factor limiting the vertical dispersion of air pollutants throughout the Basin.

The previous climate and meteorology information was reported from a climate monitoring station (#047785) in the San Gabriel Valley maintained by the Western Regional Climate Center.

Several sensitive receptors are present within the project impact area. Sensitive Receptors are members of the community, facilities, or land uses, which air pollutants can adversely affect. They can be children, the elderly, and people with illnesses. The project area is made up of residential, commercial, and industrial uses. Within this environment the sensitive land uses are one and two story-detached residences. These residences are located as close as 65 feet from the E/B I-10 shoulder. Other potentially sensitive receptor land uses in the vicinity, but not within project footprint, include a park, hospital, schools, motels, and retail stores. Schools in the proximity of the project site are Tracy Elementary, Sierra Vista High School, and Sierra Vista Jr. High School, which are approximately 0.5 to 1 mile north of the project’s eastern limit. Kaiser Permanente Medical Center is located 0.5 mile from the project’s eastern limit. Parks, consisting of recreational facilities, are found within 0.5 mile of the project location.
Environmental Consequences

Regional Air Quality Conformity

The proposed project is fully funded and incorporated in the 2008 Regional Transportation Plan (RTP ID # LA0F098), which was adopted by the Southern California Association of Governments (SCAG) in March 2008; and was found to conform by FHWA and FTA in May 2008. The project is included in the 2008 Regional Transportation Improvement Program (RTIP) which was adopted by the Southern California Association of Government (SCAG) on July 17, 2008 and approved by the Federal Highway Administration (FHWA) on November 17, 2008. The project’s open to the public year is consistent with (within the same regional emission analysis period as) the construction completion date identified in the federal TIP and/ or RTP. The design concept and the scope of the proposed project is consistent with the project description in the 2008 RTP and RTIP that are based on the latest planning assumptions.

Project Level Conformity

Monitored air contaminants in the Basin have various designated state and federal standards as shown on Table 12. Of the six air pollutants, two are in attainment: lead and sulfur dioxide; two are in attainment-maintenance: CO and NO₂; and two are in non-attainment: Ozone (1-hour and 8-hour) and PM (PM₂,5, PM₁₀). These contaminants exceeded the thresholds established by the NAAQS. “Non-attainment” occurs if one or more monitoring stations in the region obtain measurements for a criteria pollutant that fail to attain the relevant standard. Areas that were previously designated as non-attainment areas but have recently met the standard are called “maintenance” areas. NO₂ and CO are designated in attainment-maintenance, which means that the pollutant meets the standard established by the NAAQS, but it must remain at an attainment level or better for a specified amount of time. For each pollutant in non-attainment or maintenance a State Implementation Plan (SIP) has been prepared (Table 11).

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>Federal</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>O₃ (1-hour)</td>
<td>Revoked by EPA (June 15, 2005)</td>
<td>Extreme non-attainment</td>
</tr>
<tr>
<td>O₃ (8-hour)</td>
<td>Severe-17 non-attainment</td>
<td>Non-attainment</td>
</tr>
<tr>
<td>CO</td>
<td>Attainment-maintenance</td>
<td>Attainment</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>Serious non-attainment</td>
<td>Non-attainment</td>
</tr>
<tr>
<td>PM₂,5</td>
<td>Non-attainment</td>
<td>Non-attainment</td>
</tr>
<tr>
<td>NO₂</td>
<td>Attainment-maintenance</td>
<td>Attainment</td>
</tr>
</tbody>
</table>

Source: California Air Resources Board, (www.arb.ca.gov/desig.htm)

A project-level analysis (also referred to as “hot-spot analysis”) is conducted to determine whether the project conforms to the purpose of SIPs and goals established for the criteria pollutants on an individual project basis. The project-level analysis is constrained in scope and is limited to a particular project. The criteria pollutants analyzed do not consist of all pollutants in non-attainment. The analysis is restricted to CO, PM₁₀, and PM₂,5. A hot-spot analysis for PM₁₀ and PM₂,5 is qualitative in scope until EPA releases its modeling guidance, while a hot-spot analysis for CO is conducted using the CO Protocol. When conducting a hot-spot analysis for
CO, PM$_{10}$, and PM$_{2.5}$, it typically analyzes the no build and build alternatives for the opening and horizon year.

Results of the last three years for highest CO concentrations indicate if there have been any violations at the nearby monitoring station. All results have resulted in being lower than the federal standard of 9 parts per million (ppm). This determination is based on an underlying screening assumption of higher traffic volumes yielding higher emissions. Results based on the comparison among the no-build and build alternatives in the opening year (2014) and horizon year (2035) indicate that traffic volumes for the no-build and build alternatives would not change considerably, thereby indicating no meaningful impact to the ambient CO concentrations (Table 13).
The ARB has identified lead, vinyl chloride, and the particulate matter fraction of diesel exhaust as toxic air contaminants. Diesel exhaust particulate matter is a known toxic air contaminant. Many aerosol and solid compounds are part of PM2.5 size range. Many aerosol and solid compounds are part of PM10.

Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.

Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical (including photochemical) reactions involving other pollutants including NOx, sulfur oxides (SOx), ammonia, and ROG.

Primary: lead-based industrial process like paint, leaded gasoline. Moderate to high levels of aerially deposited lead from gasoline may still be present in soils along major roads, and can be a problem if large amounts of soil are disturbed.

Disturb gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also considered a toxic air contaminant.

Motor vehicles and other mobile sources; refineries; industrial operations.

Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing.

Low-altitude ozone is almost entirely formed from reactive organic gases (ROG) and nitrogen oxides (NOx) in the presence of sunlight and heat. Major sources include motor vehicles and other mobile sources, solvent evaporation, and industrial and other combustion processes. Biologically-produced ROG may also contribute.

Combustion, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.

Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical (including photochemical) reactions involving other pollutants including NOx, sulfur oxides (SOx), ammonia, and ROG.

Primary: lead-based industrial process like paint, leaded gasoline. Moderate to high levels of aerially deposited lead from gasoline may still be present in soils along major roads, and can be a problem if large amounts of soil are disturbed.

Disturb gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also considered a toxic air contaminant.
The proposed project is not anticipated to result in an increase in traffic volumes or in deterioration of traffic flow. On the contrary, traffic flow is anticipated to improve. As a result, it was determined that the project would not cause or contribute to any new violation of the federal CO standard (Tables 14a-d).

To meet the statutory requirements for PM (PM$_{10}$ & PM$_{2.5}$), a PM hot-spot analysis has been performed using the EPA and FHWA guidance for analysis titled *Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM$_{2.5}$ and PM$_{10}$ Non-attainment and Maintenance Areas*. It has been determined that the proposed project does not meet the criteria to be a Project of Air Quality Concern (POAQC); and an interagency consultation, the SCAG Transportation Conformity Working Group, has reviewed and concurred with this determination on March 25, 2008. Therefore, the proposed project (ID# LA0F098) has met the requirements set forth in 40 CFR 93 without any further qualitative or quantitative hot-spot analyses. “Hot-spot” analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA and CEQA purposes.

Conformity does include some specific standards for projects that require a hot-spot analysis. In general, projects must not cause the CO standard to be violated, and in “non-attainment” areas the project must not cause any increase in the number and severity of violations. If a project creates a known CO or PM violation located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well. Results from the comprehensive analysis shown in Table 13 for project-level CO conclude that the proposed project is not likely to result in an adverse impact on the ambient air quality in the project vicinity.

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>3.47</td>
<td>2.41</td>
<td>2.71</td>
</tr>
<tr>
<td>2nd High</td>
<td>2.97</td>
<td>2.36</td>
<td>2.67</td>
</tr>
<tr>
<td>3rd High</td>
<td>2.97</td>
<td>2.34</td>
<td>2.32</td>
</tr>
<tr>
<td>4th High</td>
<td>2.90</td>
<td>2.17</td>
<td>2.29</td>
</tr>
</tbody>
</table>

Source: California Air Resources Board, (http://www.arb.ca.gov)
### Tables 14 a-d: Peak Hour Volumes

#### Table 14a. Peak Hour Mainline Traffic Volumes for 2014:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>No-build</th>
<th>Build (Alternatives 2, 3, &amp; 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Mainline</td>
<td>EB I-10 PM (30.30)</td>
<td>6486</td>
<td>8301</td>
</tr>
<tr>
<td>Mainline</td>
<td>WB I-10 PM (30.30)</td>
<td>8332</td>
<td>7133</td>
</tr>
<tr>
<td>Mainline</td>
<td>EB I-10 PM (31.22)</td>
<td>4775</td>
<td>6795</td>
</tr>
<tr>
<td>Mainline</td>
<td>WB I-10 PM (31.22)</td>
<td>5806</td>
<td>4962</td>
</tr>
<tr>
<td>Mainline</td>
<td>EB I-10 PM (32.01)</td>
<td>7386</td>
<td>10577</td>
</tr>
<tr>
<td>Mainline</td>
<td>WB I-10 PM (31.72)</td>
<td>8777</td>
<td>7893</td>
</tr>
<tr>
<td>Mainline</td>
<td>NB I-605 PM (19.05)</td>
<td>5984</td>
<td>6067</td>
</tr>
<tr>
<td>Mainline</td>
<td>SB I-605 PM (22.04)</td>
<td>4539</td>
<td>4263</td>
</tr>
</tbody>
</table>

Source: Caltrans District 7, Division of Operations, January 2008

#### Table 14b. Peak Hour Connector Traffic Volumes for 2014:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>No-build</th>
<th>Build (Alternatives 2, 3, &amp; 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Connector</td>
<td>SB 605 to EB 10</td>
<td>867</td>
<td>945</td>
</tr>
<tr>
<td>Connector</td>
<td>WB 10 to SB 605</td>
<td>2761</td>
<td>2382</td>
</tr>
<tr>
<td>Connector</td>
<td>NB 605 to EB 10</td>
<td>2459</td>
<td>3181</td>
</tr>
<tr>
<td>Connector</td>
<td>NB &amp; SB 605 to EB 10</td>
<td>3326</td>
<td>4126</td>
</tr>
</tbody>
</table>

Source: Caltrans District 7, Division of Operations, January 2008

#### Table 14c. Peak Hour Mainline Traffic Volumes for 2035:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>No-build</th>
<th>Build (Alternatives 2, 3, &amp; 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Mainline</td>
<td>EB I-10 PM (30.30)</td>
<td>7735</td>
<td>9901</td>
</tr>
<tr>
<td>Mainline</td>
<td>WB I-10 PM (30.30)</td>
<td>9937</td>
<td>8507</td>
</tr>
<tr>
<td>Mainline</td>
<td>EB I-10 PM (31.22)</td>
<td>5695</td>
<td>8104</td>
</tr>
<tr>
<td>Mainline</td>
<td>WB I-10 PM (31.22)</td>
<td>6925</td>
<td>5918</td>
</tr>
<tr>
<td>Mainline</td>
<td>EB I-10 PM (32.01)</td>
<td>8809</td>
<td>12615</td>
</tr>
<tr>
<td>Mainline</td>
<td>WB I-10 PM (31.72)</td>
<td>10468</td>
<td>9413</td>
</tr>
<tr>
<td>Mainline</td>
<td>NB I-605 PM (19.05)</td>
<td>6774</td>
<td>6869</td>
</tr>
<tr>
<td>Mainline</td>
<td>SB I-605 PM (22.04)</td>
<td>5138</td>
<td>4826</td>
</tr>
</tbody>
</table>

Source: Caltrans District 7, Division of Operations, January 2008

#### Table 14d. Peak Hour Connector Traffic Volumes for 2035:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>No-build</th>
<th>Build (Alternatives 2, 3, &amp; 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Connector</td>
<td>SB 605 to EB 10</td>
<td>1034</td>
<td>945</td>
</tr>
<tr>
<td>Connector</td>
<td>WB 10 to SB 605</td>
<td>3293</td>
<td>2382</td>
</tr>
<tr>
<td>Connector</td>
<td>NB 605 to EB 10</td>
<td>2933</td>
<td>3181</td>
</tr>
<tr>
<td>Connector</td>
<td>NB &amp; SB 605 to EB 10</td>
<td>3966</td>
<td>4126</td>
</tr>
</tbody>
</table>

Source: Caltrans District 7, Division of Operations, January 2008
FHWA Conformity Determination
The finalized conformity analysis and identified preferred alternative were submitted to FHWA for the final conformity determination on January 26, 2009. Interagency consultation and public involvement required before requesting the final determination were completed. A copy of the FHWA conformity determination is attached to the MND/FONSI as Appendix J.

Construction Impacts
Construction-related activities would create temporary air quality impacts. Project construction is anticipated to occur from the years 2011 to 2013.

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and various other activities. Emissions from construction equipment also are anticipated and would include CO, nitrogen oxides (NOx), volatile organic compounds (VOCs), directly emitted particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NOx and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction would involve clearing, cut-and-fill activities, grading, removing or improving existing roadways, and paving roadway surfaces. Construction-related effects on air quality from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. If not properly controlled, these activities would temporarily generate PM<sub>10</sub>, PM<sub>2.5</sub>, and small amounts of CO, SO<sub>2</sub>, NOx, and VOCs. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. PM<sub>10</sub> emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM<sub>10</sub> emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Construction activities for large development projects are estimated by the Environmental Protection Agency (EPA) to add 1.09 tonne (1.2 tons) of fugitive dust per acre of soil disturbed per month of activity. If water or other soil stabilizers are used to control dust, the emissions can be reduced by up to 50 percent. Caltrans' Standard Specifications (Section 10) pertaining to dust minimization requirements requires use of water or dust palliative compounds and will reduce potential fugitive dust emissions during construction.

In addition to dust-related PM<sub>10</sub> emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO<sub>2</sub>, NOx, VOCs and some soot particulate (PM<sub>10</sub> and PM<sub>2.5</sub>) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.
SO₂ is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Off-road diesel fuel meeting Federal Standards can contain up to 5,000 parts per million (ppm) of sulfur, whereas on-road diesel is restricted to less than 15 ppm of sulfur. However, under California law and Air Resources Board regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel, so SO₂-related issues due to diesel exhaust would be minimal. Some phases of construction, particularly asphalt paving, would result in short-term odors in the immediate area of each paving site(s). Such odors would be quickly dispersed below detectable thresholds as distance from the site(s) increases.

MSAT Analysis

An air toxic analysis for mobile source air toxics (MSAT) emissions was prepared for the “Build” and “No Build” Alternatives in accordance with the Interim Guidance on Air Toxic analysis for NEPA Documents by FHWA dated February 3, 2006. MSAT’s are air toxics that originate from human-made sources consisting of on-road and non-road equipment such as automobiles, airplanes, local businesses, and factories. Based on the Interim Guidance on Air Toxic Analysis for NEPA, the project was categorized as “Category 2” due to the low potential for MSAT effects. “Category 2” requires a qualitative analysis which considers the following factors:

- For projects on an existing alignment, MSAT’s are expected to decline unless vehicle miles traveled (VMT) more than double by 2020 (due to the effect of new EPA engine and fuel standards).
- Projects that result in increased travel speeds will reduce emissions of the volatile-organic-compounds (VOC)-based MSAT’s (acetaldehyde, benzene, formaldehyde, acrolein, and 1, 3-butadiene); the effect of speed changes on diesel particulate matter is unknown. This speed benefit may be offset somewhat by increased VMT if the more efficient facility attracts additional vehicle trips.
- Projects that facilitate new development may generate additional MSAT emissions from new trips, truck deliveries, and parked vehicles (due to evaporative emissions). However, these may also be activities that are attracted from elsewhere in the metro region (thus, on a regional scale there may be no net change in emissions).
- Projects that create new travel lanes, relocate lanes, or relocate economic activity closer to homes, schools, businesses, and other sensitive receptors may increase concentrations of MSAT’s at those locations relative to no action.

The EPA is the lead Federal Agency for administering the FCAA and has certain responsibilities regarding the health effects of MSAT’s. The EPA issued a Final Rule on Controlling Emissions of Hazardous Air Pollutants from Mobile Sources, 66 FR 17229 (March 29, 2001) that examined the impacts of existing and newly promulgated mobile source control programs. Besides federal programs to decrease MSAT’s in the air environment, California has very stringent MSAT control requirements, so the effect of toxics combined with State and Federal regulations is expected to result in greater emission reductions, more quickly, than FHWA analysis shows.

Evaluating the environmental and health impacts from MSAT’s with the construction of the proposed highway project would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling in order to estimate human exposure to the estimated emissions.
concentrations, and then final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the MSAT health impacts of this project. See Appendix K for a discussion of information that is incomplete or unavailable for a project specific assessment of MSAT impacts.

The analysis of MSAT emissions to assess impacts on human health and approximate quantities of MSAT’s cannot be accurately obtained due to the technical shortcomings of emissions and dispersion models that are currently available. However, a qualitative analysis is possible based on the MSAT’s emitted in proportion to the annual daily traffic (ADT) counts. FHWA’s MSAT analysis guidance; *Interim Guidance on Air Toxics Analysis in NEPA Documents*, February 3, 2006 provides information on comparing MSAT emissions for each alternative after comparing the ADT for each project alternative. The results of the qualitative analysis showed the project had low potential differences in MSAT’s among the project alternatives. As indicated in Table 15, the projected ADT for the proposed project are expected to remain the same between the build and no-build alternatives on the connector(s) and mainline.

### Table 15: Average Daily Traffic for Existing, Operational Year, and Horizon Year

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Existing Year (2005)</th>
<th>Opening Year (2014)</th>
<th>Horizon Year (2035)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>No-build</td>
<td>Build Alt. 2, 3, &amp; 4</td>
</tr>
<tr>
<td>Mainline</td>
<td>EB I-10 PM (30.30)</td>
<td>114,119</td>
<td>124,390</td>
<td>124,390</td>
</tr>
<tr>
<td>Mainline</td>
<td>WB I-10 PM (30.30)</td>
<td>115,727</td>
<td>126,142</td>
<td>126,142</td>
</tr>
<tr>
<td>Mainline</td>
<td>EB I-10 PM (31.22)</td>
<td>115,659</td>
<td>126,068</td>
<td>126,068</td>
</tr>
<tr>
<td>Mainline</td>
<td>WB I-10 PM (31.22)</td>
<td>91,625</td>
<td>99,871</td>
<td>99,871</td>
</tr>
<tr>
<td>Mainline</td>
<td>EB I-10 PM (32.01)</td>
<td>158,655</td>
<td>172,934</td>
<td>172,934</td>
</tr>
<tr>
<td>Mainline</td>
<td>WB I-10 PM (31.72)</td>
<td>110,879</td>
<td>120,858</td>
<td>120,858</td>
</tr>
<tr>
<td>Mainline</td>
<td>NB I-605 PM (19.05)</td>
<td>86,784</td>
<td>91,991</td>
<td>91,991</td>
</tr>
<tr>
<td>Mainline</td>
<td>SB I-605 PM (22.04)</td>
<td>61,477</td>
<td>65,166</td>
<td>65,166</td>
</tr>
<tr>
<td>Connector</td>
<td>SB 605 to EB 10</td>
<td>12,873</td>
<td>14,032</td>
<td>14,032</td>
</tr>
<tr>
<td>Connector</td>
<td>WB 10 to SB 605</td>
<td>37,872</td>
<td>41,280</td>
<td>41,280</td>
</tr>
</tbody>
</table>

Source: Advanced Planning Modeling Unit, December 2007

Because the estimated ADT for each of the build alternatives is expected to be the same as the no-build alternative, it is expected that there would be no appreciable difference in overall MSAT emissions among the alternatives. Also, regardless of the alternative chosen, emissions
would likely be lower than present levels in the design year as a result of EPA and California’s Control programs that are projected to reduce MSAT emissions by at least 57 to 87 percent from 2000 to 2020.

**Toxic Air Contaminants (TAC’s)**

TAC’s associated with diesel exhaust have been found to contain more than 40 toxic air contaminants. Of these, many are known to be cancer-causing substances. People living or spending time near roads, freeways, other transportation uses powered by diesel equipment and machinery are more susceptible to the health hazards associated with TAC’s.

In order to reduce this harmful contaminant, the ARB has adopted a Diesel Risk Reduction Plan (DRRP) that would reduce the overall diesel PM emissions by about 85% from 2000 to 2020. Continued implementation of the DRRP, along with updated State and Federal regulations will reduce TAC’s greatly during future operation years of the project (Figure 11).

**Figure 11. Projected Percent Reduction in Diesel PM Cancer Risk from year 2000 Levels With and Without ARB Risk Reduction Plan (RRP) Implemented**

![Figure 11. Projected Percent Reduction in Diesel PM Cancer Risk from year 2000 Levels With and Without ARB Risk Reduction Plan (RRP) Implemented](http://www.arb.ca.gov)

**Naturally Occurring Asbestos**

Naturally Occurring Asbestos (NOA) is a toxic air contaminant found in mineral rocks such as serpentineite and ultramafic rocks. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. When released, asbestos becomes airborne which causes air quality and human health hazards.

Control measures have not been identified for NOA because the proposed project is not located in an area identified as potentially containing serpentineite and ultramafic rocks. In Los Angeles
County, Catalina Island is the only area identified to contain such rocks; therefore, the proposed project is not anticipated to result in potential impacts from NOA during project construction.

Avoidance, Minimization, and/or Mitigation Measures
Most of the construction impacts to air quality are short-term in duration and, therefore, will not result in adverse or long-term conditions. Implementation of the following measures will reduce any air quality impacts resulting from construction activities:

- The construction contractor shall comply with Caltrans’ Standard Specifications Section 7-1.01F and Section 10 of Caltrans’ Standard Specifications (1999).
  - Section 7, "Legal Relations and Responsibility," addresses the contractor's responsibility on many items of concern, such as: air pollution; protection of lakes, streams, reservoirs, and other water bodies; use of pesticides; safety; sanitation; and convenience of the public; and damage or injury to any person or property as a result of any construction operation. Section 7-1.01F specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.
  - Section 10 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18.

- Water or dust palliative will be applied to the site and equipment as frequently as necessary to control fugitive dust emissions.
- Soil binder will be spread on any unpaved roads used for construction purposes, and all project construction parking areas.
- Trucks will be washed off as they leave the right of way as necessary to control fugitive dust emissions.
- Construction equipment and vehicles shall be properly tuned and maintained. Low-sulfur fuel shall be used in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.
- Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- Locate equipment and materials storage sites as far away from residential and park uses as practical. Keep construction areas clean and orderly.
- To the extent feasible, establish ESAs for sensitive air receptors within which construction activities involving extended idling of diesel equipment would be prohibited.
- Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic.
- Cover all transported loads of soils and wet materials prior to transport, or provide adequate freeboard (space from the top of the material to the top of the truck) to reduce PM10 and deposition of particulate during transportation.
- Remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease particulate matter.
• To the extent feasible, route and schedule construction traffic to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
• Install mulch or plant vegetation as soon as practical after grading to reduce windblown particulate in the area.
• All the South Coast Air Quality Management District’s Fugitive Dust control Rules should be observed by the contractor during construction to minimize construction related air pollution.

Conclusion
In conclusion, the project-level analysis addresses all pertinent aspects of conformity and adheres to the Transportation Conformity Rule. In addition, the project will not interfere with the timely implementation of TCM’s, which are transportation development projects created to improve air quality and provide efficient transportation. Inclusion in the approved 2008 RTP and 2006 RTIP shows the project has complied with conformity requirements which apply in areas that either do not meet or previously have not met certain air quality standards. A comprehensive analysis of project-level CO and PM (PM$_{2.5}$, PM$_{10}$) concluded that the proposed project is not likely to result in an adverse impact on the ambient air quality in the project vicinity. Project-level analysis of CO compared no-build/build opening and horizon year traffic data to analyze impacts to air quality. The CO analysis concluded that the project would not contribute to the ambient CO level to violate NAAQS.

PM$_{2.5}$ and PM$_{10}$ hot-spot analysis was reviewed by the SCAG TCWG, and concurred on March 25, 2008 that the project would not be a POAQC.

MSAT analysis acknowledges that the project may result in increased exposure to some receptors nearby and in higher localized MSAT effects when compared to the no-build project conditions. However, the analysis indicates that the projected ADT’s for the proposed project are expected to remain the same between the build and no-build Alternatives on the connector(s) and mainline. Because the estimated ADT for each of the build alternatives is expected to be reduced or the same as the no-build alternative, it is expected that there would be no appreciable difference in overall MSAT emissions among the alternatives. Also when compared to the no build alternative, the build alternatives are anticipated to result in reduced MSAT emissions in the immediate area of the project due to: reduction in congestion and improvement in the operations and the EPA’s and California’s control programs. Research into the health impacts of MSAT’s is ongoing. Although some studies have reported that proximity to roadways is related to adverse health impact, the FHWA cannot evaluate the validity of these studies at this time.

Therefore, MSAT concentrations or exposures created by the project cannot be predicted with enough accuracy to be useful in estimating health impacts.

Fugitive dust control measures are included into the project’s Environmental Commitment Record (see Appendix G).
2.2.6 NOISE

Regulatory Setting
The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

California Environmental Quality Act
CEQA requires a strictly no-build versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless such measures are not feasible.

National Environmental Policy Act and 23 CFR 772
For highway transportation projects with FHWA involvement, the federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations contain noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA [*A-weighted decibels]) is lower than the NAC for commercial areas (72 dBA). The following table lists the noise abatement criteria for use in the NEPA-23 CFR 772 analysis (Table 16).

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>NAC, Hourly A-Weighted Noise Level, dBA $L_{eq}(h)$</th>
<th>Description of Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>57 Exterior</td>
<td>Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose</td>
</tr>
<tr>
<td>B</td>
<td>67 Exterior</td>
<td>Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.</td>
</tr>
<tr>
<td>C</td>
<td>72 Exterior</td>
<td>Developed lands, properties, or activities not included in Categories A or B above</td>
</tr>
<tr>
<td>D</td>
<td>–</td>
<td>Undeveloped lands.</td>
</tr>
<tr>
<td>E</td>
<td>52 Interior</td>
<td>Residence, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums</td>
</tr>
</tbody>
</table>

Source: Noise Study March 2008
*A-weighted decibel is a sound weighting network utilized to measure the frequency response of the human ear. Noise levels for traffic noise reports are typically reported in terms of A-weighted decibels (dBA).
In accordance with Caltrans’ *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, August 2006*, a noise impact occurs when the future noise level with the project results in a substantial increase in noise level (defined as a 12 dBA or more increase) or when the future noise level with the project approaches or exceeds the NAC.

Approaching the NAC is defined as coming within 1 dBA of the NAC.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

Caltrans’ *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. A minimum 5 dBA reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access requirements, other noise sources and safety considerations. The reasonableness determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include: residents acceptance, the absolute noise level, build versus existing noise, environmental impacts of abatement, public and local agencies input, newly constructed development versus development pre-dating 1978 and the cost per benefited residence.

Figure 12 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise-levels discussed in this section with common activities.
Affected Environment

A traffic noise study report has been prepared to comply with the Code of Federal Regulations Title 23 Part 772, (23CFR772). “Procedures for Abatement of Highway Traffic Noise and Construction Noise,” the traffic noise analysis policy of the California Department of Transportation (Caltrans) as described in the Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects (Protocol), and Section 216 of the Streets and Highways Code. This section is based on the traffic Noise Study Report.

Existing land use within the project site is primarily mixed residential, open space, and commercial/institutional parcels. An open space parcel, identified as Roadside Park, also lies in the impact area of the proposed project. Residential areas and parks are considered Noise-sensitive land uses that would be affected by the direct connector. Under 23 CFR Part 772, existing land uses at the project site are categorized in Activity level B of the NAC table, which indicates that the corresponding threshold for noise impact is 67 dBA (Table 16). The noise environment in the area is dominated by I-10 traffic flow. Currently, no noise barriers exist within the project site, but soundwalls are already proposed as part of the I-10 HOV project (EA 117071). For noise modeling purposes only, existing conditions reflect a fully completed I-10 HOV project. With the direct bridge connector in place, noise levels would be elevated in the predominantly residential area affected by the project. However, the noise levels would be reduced considerably with noise abatement in place.

In order to obtain accurate readings from freeway-generated noise, representative sites within the sensitive receptor areas were chosen to place the sound measuring instruments. These sites were
chosen based on their proximity to the existing Interchange and where the new direct connector would be constructed. The entire area within the project limits was acoustically represented by 12 noise measurement site locations. See Appendix E for the exact locations. Traffic noise readings were taken at 7 of the 12-site locations. The other 5 sites were modeled based on existing field noise measurements from the closest sites. In other words, results from the existing noise levels would be used to model noise results for the other 5 sites.

A Metrosonics Model MS3080 sound level meter (serial numbers 3127, 3193, and 3194) was placed at the seven locations for short-term (10-minute) and long-term (24-hour) monitoring to obtain sound readings. 24-hour monitoring of noise levels was conducted to determine the noisiest hour noise level and noisiest hour of the day (worst-hour noise level). Five of the seven surveyed sites were selected because they provided a good representative of the affected environment. The other two sites were selected to conduct community background noise readings. Background noise is the total of all noise generated within a community and is measured away from the freeway where freeway traffic noise does not contribute to the total noise level. Background noise levels are typically measured to determine the acoustical feasibility (noise reducibility of 5 dBA) of noise abatement and to ensure that noise reduction goals can be achieved.

To ensure accurate noise readings, Caltrans staff attended the sound-level meter during short-term readings. All readings were recorded while avoiding sound level contamination from sources other than the freeway traffic. During the short-term noise monitoring sessions, meteorological and traffic data was documented to determine if those factors affected the noise readings and to obtain readings during optimum conditions.

In addition, a calibration of the sound meters was checked before and after the field measurements using the Metrosonics CL 304 calibrators (CL304-7457, CL304-7458, and CL304-7459). It was determined that no adjustment in calibration was necessary.

The TNM 2.5 traffic noise prediction computer program was used for all sites. The computer model incorporated all relevant physical features of the project site to analyze existing and future conditions. TNM 2.5 is calibrated by comparing the actual measured noise conditions to modeled results.

Existing ambient noise in the project area is dominated by I-10 traffic. Noise readings showed noise levels in the impact area between 65 and 75 decibels (dBA). 24-hour noise readings were taken at Site #A, 12846 Via van Cleave Street (Appendix E), and the noisiest hour was found to be between 8:50 p.m. and 9:50 p.m. in the evening. The community background noise readings revealed noise levels between 53 and 56 dBA in surrounding areas where highway noise had dissipated. The community background test is completed to provide noise levels away from the source of the dominant noise, in this case the I-10. The background noise readings were taken from 710 North Frazier Avenue and 3288 Cosbey Avenue.

Table 17 summarizes the traffic noise modeling results for existing conditions and design-year conditions or with and without the project completion. Predicted design year traffic noise levels with the project completed are compared to existing conditions and to design-year (2013) no-
build conditions. The comparison to existing conditions is included in the analysis to identify traffic noise impacts as directed under NEPA 23CFR 772. The comparison to no-build conditions indicates the effects of the project. In this project’s case, and for noise modeling purposes only, the existing conditions reflect the I-10 HOV project and soundwalls in place.

Environmental Consequences
A total of 12 receptor locations for measuring and modeling noise were utilized within the project limits. Of the (12) locations selected, seven were used for live recordings and five were modeled. Current ambient noise levels at the project site, recorded between 65 and 75 dBA at different locations. See Table 17 or Appendix E for receptor locations. A 24-hour test determined the noisiest hour, which was revealed to be between 8:50pm and 9:50 pm.

Based on the measurements listed on Table 17, a traffic noise impact has been identified within the project limits. According to 23 CFR 772, noise abatement must be considered where noise impacts have been identified. Based on the NAC, the project area is identified as category B. A traffic noise impact occurs because predicted noise levels approach or exceed the NAC for category B (67 dBA) by 1 dBA. Noise impacts are evaluated based on the Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, August 2006 and CEQA. Based on these results noise abatement is proposed in the form of soundwalls on the E/B side of I-10.

Future noise levels are projected to reflect future traffic volumes and any vertical or horizontal highway development, such as the I-10 HOV project. Predicted increases in traffic noise under design-year conditions for year 2030 compared to existing worst-hour conditions are generally in the range of 0-1 dBA with the incorporation of soundwalls from the I-10 HOV project. Future noise levels were predicted using traffic characteristics that would yield the worst hourly traffic noise impact on a regular basis which is approximately 1950 vehicles per lane per hour at 65 mph. With the incorporation of noise abatement, noise levels would only increase by 0-1 dBA from existing noise levels to future noise levels with the proposed project in place. See Table 17 for the measured and projected noise levels.

Construction of the direct connector, as proposed by all the build alternatives, designates the project as a Type I. A Type I project is any project that creates a completely new noise source or any project that increases the volume or speed of traffic or moves the traffic closer to a receiver. Traffic noise impacts as defined by 23 CFR 772 occur when the predicted noise level at design year approaches or exceeds the NAC, or when a predicted noise level substantially exceeds the existing noise levels. A noise level is considered to approach the NAC for a given activity Category if it is within 1 dBA of the NAC. A substantial noise increase occurs when the project’s predicted worst-hour design-year noise level exceeds the existing worst-hour noise level by 12 dBA-L\text{eq}(h)$ or more. Noise abatement must be considered if future noise impacts are predicted. Under the proposed build alternatives, noise studies indicated that noise levels approached or exceeded FHWA’s Noise Abatement Criteria (NAC) standards by 0-1 dBA. Since the project noise levels approach or exceed the NAC, noise abatement must be considered. However, noise levels would be reduced from 5-12 dBA for 42 residences under all build alternatives with the soundwalls in place.
Table 17. Traffic Noise Measurements & Modeling Results – Route 10

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Site #24*</td>
<td>Eastbound</td>
<td>12946 Waven Cleave</td>
<td>66.2</td>
<td>69.2</td>
<td>70</td>
<td>76.9</td>
<td>6.0</td>
<td>79.5</td>
<td>8.5</td>
<td>-</td>
<td>-</td>
<td>78.5</td>
<td>8.5</td>
</tr>
<tr>
<td>Site #1</td>
<td>Eastbound</td>
<td>042 Syracuse Ave.</td>
<td>64.6</td>
<td>67.2</td>
<td>67.1</td>
<td>67.1</td>
<td>0.0</td>
<td>67.5</td>
<td>0.4</td>
<td>67.4</td>
<td>0.3</td>
<td>67.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Site #2</td>
<td>Eastbound</td>
<td>12714 Dalewood St.</td>
<td>66.0</td>
<td>68.6</td>
<td>67.5</td>
<td>68.9</td>
<td>1.4</td>
<td>70.0</td>
<td>2.5</td>
<td>70.0</td>
<td>2.5</td>
<td>70.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Site #3</td>
<td>Eastbound</td>
<td>12760 Dalewood St.</td>
<td>72.1</td>
<td>72.8</td>
<td>75.4</td>
<td>77.3</td>
<td>1.2</td>
<td>78.5</td>
<td>3.4</td>
<td>-</td>
<td>-</td>
<td>78.8</td>
<td>3.4</td>
</tr>
<tr>
<td>Site #4</td>
<td>Eastbound</td>
<td>12800 Torch St.</td>
<td>67.5</td>
<td>67.8</td>
<td>70.6</td>
<td>77.5</td>
<td>7.1</td>
<td>79.4</td>
<td>8.6</td>
<td>-</td>
<td>-</td>
<td>79.4</td>
<td>8.6</td>
</tr>
<tr>
<td>Site #11*</td>
<td>Eastbound</td>
<td>12761 Valene St.</td>
<td>-</td>
<td>66.1</td>
<td>-</td>
<td>66.9</td>
<td>0.3</td>
<td>-</td>
<td>-</td>
<td>74.0</td>
<td>7.9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Site #12*</td>
<td>Eastbound</td>
<td>12642 Via Van Cleave</td>
<td>-</td>
<td>67.2</td>
<td>-</td>
<td>68.2</td>
<td>1.0</td>
<td>-</td>
<td>-</td>
<td>76.8</td>
<td>9.8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Site #13*</td>
<td>Eastbound</td>
<td>12602 Torch St.</td>
<td>-</td>
<td>60.0</td>
<td>-</td>
<td>67.6</td>
<td>1.0</td>
<td>-</td>
<td>-</td>
<td>76.4</td>
<td>9.8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Site #14*</td>
<td>Eastbound</td>
<td>13019 Judith St.</td>
<td>-</td>
<td>69.5</td>
<td>-</td>
<td>70.7</td>
<td>1.2</td>
<td>-</td>
<td>-</td>
<td>75.8</td>
<td>6.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Site #15*</td>
<td>Eastbound</td>
<td>13018 Dalewood St.</td>
<td>-</td>
<td>75.2</td>
<td>-</td>
<td>78.0</td>
<td>1.7</td>
<td>78.2</td>
<td>3.0</td>
<td>-</td>
<td>-</td>
<td>78.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Site #5</td>
<td></td>
<td>12767 Garvey Ave.</td>
<td>74.8</td>
<td>76.1</td>
<td>76.3</td>
<td>76.1</td>
<td>0.0</td>
<td>76.3</td>
<td>0.2</td>
<td>76.2</td>
<td>0.1</td>
<td>76.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Site #6</td>
<td></td>
<td>12843 Garvey Ave.</td>
<td>72.4</td>
<td>76.5</td>
<td>76.1</td>
<td>76.1</td>
<td>0.0</td>
<td>76.3</td>
<td>0.2</td>
<td>76.2</td>
<td>0.1</td>
<td>76.3</td>
<td>0.2</td>
</tr>
</tbody>
</table>

---

* 24 Hours noise measurement site
* 24 Hours noise measurement site
* Modeled Site
* Future Noise Level is adjusted to existing worst-hour noise level because THM model predicted noise level is less than existing worst-hour noise level
* Site #5D also represent adjacent small park.

Construction Noise
During construction activities noise from the project work may intermittently dominate the noise environment in the immediate area of construction. However, to minimize these short-term noise impacts during construction the Caltrans standard specifications, Section 7-1.01l, Sound Control Requirements, will be required as part of the project. The requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.

Construction equipment is expected to create noise ranging between 70-90 dBA at a distance of 50 feet. For each doubling of the distance from the construction site noise is reduced by 6 dBA. However, no adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans standard specifications and would be short-term, intermittent, and dominated by local traffic noise.

Caltrans Sound Control Requirements include the following measures for minimization of noise impacts:

1. Equipment Noise Control should be applied to revising old equipment and designing new equipment to meet specified noise levels.
2. In-Use Noise Control where existing equipment is not permitted to produce noise levels in excess of specified limits.
3. Site Restrictions is an attempt to achieve noise reduction through modifying the time, place, or method of operation of a particular source.
4. Personal Training of operators and supervisors is needed to become more aware of the construction site noise problem, and are given instruction on methods that they can implement to improve conditions in the local community.

Avoidance, Minimization, and Abatement Measures
Noise abatement is only considered for areas with frequent human activity where noise impacts are predicted or where a lowered noise level would be of benefit. Abatement is only considered for places where traffic noise approaches or exceeds the applicable criteria and where people are exposed to highway noise for at least one hour on a regular basis. At those sites where a noise impact is predicted, the estimated noise level reduction for different height noise barriers was estimated. As part of the reasonableness analysis, additional modeling sites were selected representing second-row receivers, or sites immediately behind the primary receivers, where noise impacts are predicted. Based on the feasibility analysis, 10’-14’ foot high soundwalls were determined to be adequate for providing the minimum required noise reduction of 5 dBA noise reduction.

Based on the studies completed to date, Caltrans and FHWA intend to incorporate noise abatement in the form of (3) soundwalls on the south side of I-10 between Dalewood Street and the southern part of I-10. Overall the length of recommended soundwalls are approximately 3,500 ft. for alternative 2 and 4,000 ft. for alternatives 3 and 4. The locations chosen for soundwall installation are due to the proximity of direct connector to sensitive receptors. Soundwalls proposed as part of the I-10 HOV project (EA 117071), would be removed where they overlap the proposed soundwalls along Dalewood Street. Soundwall locations are shown in Appendix E.
Sound abatement measures must reduce noise levels by a minimum of 5 dBA in order to be considered acoustically feasible. Calculations based on preliminary design data indicate that the noise barriers will reduce noise levels by 5 to 12 dBA for 42 residences at a cost of $2,082,000 for alternatives 2 and 4 and $1,968,000 for alternative 3. The aforementioned costs represent an allowance for noise abatement based on the benefit to residents.

If during final design, conditions have substantially changed, noise abatement may also change. The final decision of the noise abatement will be made upon completion of the project design and the public involvement processes.

2.3 BIOLOGICAL ENVIRONMENT

INTRODUCTION

A Natural Environmental Study Report (NESR) was prepared to assess the biological resources that would be affected by the build alternatives. Biological resources refer to drainages, plant and animal species, wetlands, and natural communities. The NESR was prepared in May 2007 based on spring surveys conducted during 2005 and 2007. Caltrans’ staff biologists conducted the biological studies. Chapter 3.0 is divided into the following subsections, which summarize the results of the NES:

- Natural Communities
- Wetlands and Other Waters
- Plant Species
- Animal Species
- Threatened & Endangered Species
- Invasive Species

Field Reviews were based on the biological study area (BSA) (Figure 13). To simplify surveying methods, the biological study area was divided into two sub-areas; BSA-A and BSA-B. BSA-A and B consist of areas within the project footprint and the adjacent area. BSA-A is the area east of the interchange, while BSA-B is made up of the area north of the interchange.
2.3.1 NATURAL COMMUNITIES

Affected Environment
Natural Communities are groups of species sharing similar developmental conditions such as climate, soil, and terrain. The focus of this section is on Natural Communities of Concern, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

No habitat areas that have been designated as critical habitat under the Federal Endangered Species Act were found to be present in the project area. This subject is further discussed in the Threatened and Endangered Species section 2.3.5.

This section of the environmental document focuses on the issues covered in Section 4.2 of the Natural Environment Study (NES). Three natural communities of special concern; California Walnut Woodland, Walnut Forest, and Riversidian Alluvial Fan Sage Scrub, are found within the Baldwin Park topographic quadrant. Historically these habitats were widespread throughout the Baldwin Park quadrant. However, since then, much has been lost to urban expansion. None of the identified natural communities exist within the limits of the project footprint. Therefore,
none of identified natural communities would be affected by the project. Following is a description of each of the natural communities identified in the vicinity.

**California Walnut Woodland**
The California Walnut Woodland is a native plant community of concern that is listed in the CNDDB search for the project area. Southern California Walnut occurs in a Mediterranean climate, characterized by mild, wet winters and hot, dry summers. Trees generally occur on mesic sites such as north slopes, creek beds, canyon bottoms and alluvial terraces. Trees grow best in deep, alluvial soils with high-holding capacity. California Walnut Woodlands were formerly most abundant in the Puente Hills, but now the last remaining patches occur in the San Jose Hills south and east of Covina. Much of the ecoregion has been lost to agricultural and urban expansion. The project footprint does not affect areas supporting this habitat.

**Walnut Forest**
The Walnut Forest is a native plant community of concern that is listed in the CNDDB search for the project area. The plant community generally consists of coastal sage and chaparral area. The dominant species in this habitat is *Juglans californica* (California Walnut). Tonner Canyon and Soquel Canyon once had well-developed Walnut Forests, but these have been rapidly destroyed. The project footprint does not affect areas supporting this habitat.

**Riversidian Alluvial Fan Sage Scrub**
The Riversidian Alluvial Fan Sage Scrub is a native plant community of concern that is listed in the CNDDB search for the project area. Riversidian Alluvial Fan Sage Scrub grows on sandy, rocky alluvial soil deposited by streams that experience periodic flooding. The soils in these areas are well drained to excessively drained and have low water holding capacity and low fertility. Vegetation consists of drought-deciduous sub shrubs and large evergreen woody shrubs adapted to these soil characteristics and survival of, or rapid recruitment after, intense, period flooding and erosion. The common subshrubs species include coastal sagebrush, California buckwheat, chamise, brittlebush, hairy yerba santa, sugarbush, birch-leaved mountain mahogany and deerweed.

**Environmental Consequences**
California Walnut Woodlands and Walnut Forests have been identified in the San Jose Hills of the Baldwin Park quadrant. The San Jose Hills are located east of the project site. Construction of the direct connector is located in the western portion of the quadrant. No Walnut Forest trees were observed in or adjacent to the project area during field surveys. The isolated stands of Walnut Forests in the vicinity would not be affected by the direct connector project.

Riversidian Alluvial Fan Sage Scrub, a plant community of concern, occurs in the Santa Fe flood control basin and the San Gabriel River. No occurrences of Riversidian Alluvial Fan Sage Scrub were found in the project study area during field surveys. No impacts are anticipated to affect the surrounding occurrences of this natural community of concern.

**Avoidance, Minimization, and Compensatory Measures**
Avoidance, minimization, and compensatory efforts are not proposed at this time due to the absence of the natural communities in the project impact area.
2.3.2 WETLANDS AND OTHER WATERS

Regulatory Setting
Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Clean Water Act (33 U.S.C. 1344) is the primary law regulating wetlands and waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act establishes a regulatory program that provides that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation’s waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (ACOE) with oversight by the Environmental Protection Agency (EPA). Caltrans submitted a jurisdictional determination request to the U.S. Army Corps of Engineers (ACOE). A request for jurisdictional determination is submitted to recognize if the project will need a Clean Water Act, Section 404 Nationwide Permit, Individual Permit, or to determine that the project will not affect jurisdictional waters. ACOE replied with a determination completed regarding the project on July 21, 2008. The determination states that based on the scope of work the project is not subject to ACOE jurisdiction under Section 404 of the Clean Water Act and a Section 404 permit would not be required.

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

Wetlands and Jurisdictional waters are regulated primarily by the California Department of Fish and Game (CDFG) and the Regional Water Quality Control Boards (RWQCB) at the state level. In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission) may also be involved. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFG before beginning construction. If CDFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. The tops of the stream or lake banks, or the outer edge of riparian vegetation, usually define CDFG jurisdictional limits. Whichever riparian feature is wider will mark the jurisdiction. Wetlands under jurisdiction of the ACOE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.
The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of the Clean Water Act. Please see the Water Quality section for additional details.

Affected Environment
A Natural Environment Study Report was prepared in May 2007 to evaluate the presence of wetlands and other jurisdictional water that may be affected by the proposed project.

During the biological field evaluations, no wetland or other jurisdictional waters were identified within the project area. The San Gabriel River lies 500 feet to the west, and Walnut Creek is 1,400 feet from the project area. Even though the San Gabriel and Walnut Creek drainages lie close to the project site, they are outside the project footprint.

Environmental Consequences
Based on a review of the current preliminary design plans and a field review, there are no potential impacts to jurisdictional waters, such as the San Gabriel River and Walnut Creek. In addition, a jurisdictional consultation with the U.S. Army Corps of Engineers (U.S. ACOE) was completed on July 21, 2008. U.S. ACOE determined that based on the Caltrans studies, the project is unlikely to impact jurisdictional waters and therefore, is not subject to Section 404 of the Clean Water Act and a Section 404 permit.

During the biological field evaluations, no wetland or other jurisdictional waters were identified within the project area. The San Gabriel River lies 500 feet to the west, and Walnut Creek is 1,400 feet from the project area. Any surface run-off resulting from new bridge structure or temporary construction would be treated before entering storm drains by utilizing all appropriate storm-water Best Management Practices (BMP’s). Even though the San Gabriel and Walnut Creek drainages lie close to the project site, they are outside the project footprint.

Avoidance, Minimization, and Compensatory Measures
Avoidance, minimization, and compensatory efforts are not proposed at this time due to the anticipated absence of wetlands and protected waters from the project impact area.

2.3.3 PLANT SPECIES

Regulatory Setting
The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) share regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the
The California Endangered Species Act (CESA). Please see the Threatened and Endangered Species Section 2.3.5 in this document for detailed information regarding these species.

This section of the document discusses all the other special-status plant species, including CDFG fully protected species and species of special concern, USFWS candidate species, and non-listed California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et. seq. See also 50 CFR Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et. seq. Department projects are also subject to the Native Plant Protection Act, found at Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

**Affected Environment**

A Natural Environment Study Report was prepared in May 2007 to evaluate the presence of plant species that may be affected by the proposed project.

Plant species were limited to small strips of unpaved surfaces, interchange islands, and Roadside Park. The field vegetation survey identified various ornamental, ruderal and minor amounts of native vegetation. The project area is mostly developed and disturbed by human use. Existing vegetation has grown in the project area as a result of either human induced landscaping or natural establishment by invasive and native species. Roadside Park and the landscaped areas within the interchange are the more considerable areas to receive clearing and grubbing for constructing the connector. Table 18 lists the observed plant species occurring inside the biological study area.

After conducting a California Natural Diversity Database (CNDDB) Query for special status species, two special status plant species were identified to potentially occur inside the project limits. Brand’s phacelia (*Phacelia stellaris*) and Parish’s gooseberry (*Ribes divaricatum Douglas var. parishii*) are both plant species that have been found to occur within the United States Geological Survey (USGS) Baldwin Park quadrangular 7.5-minute map. However, multiple field surveys were conducted to evaluate the presence of these species and they did not result in any identifications of the species. See Table 20 for rationale on this determination.

Native vegetation such as a willow woodland clump was identified adjacent to the S/B I-605 to E/B I-10 connector. The location of the willow woodland is south of the southeast interchange quadrant where the proposed project would not affect the woodland. No other naturally occurring native trees were found to occur within the project area.

Western sycamore (*Plantanus racemosa*) and Valley oak (*Quercus lobata*), native California trees, were identified respectively at Roadside Park and at the interchange island just south of I-10. Both of these native trees are not naturally occurring, but were physically planted through landscape projects. The replacement of these trees is not required.
### Table 18. Plant Species Identified in Biological Study Areas

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Sycamore</td>
<td>Platanus racemosa</td>
</tr>
<tr>
<td>Silk-y Oak/ Silver Oak</td>
<td>Grevillea robusta</td>
</tr>
<tr>
<td>Mulberry</td>
<td>Morus alba</td>
</tr>
<tr>
<td>Oleander</td>
<td>Nerium oleander</td>
</tr>
<tr>
<td>Pepper trees</td>
<td>Schinus sp.</td>
</tr>
<tr>
<td>Chinese Elms</td>
<td>Ulmus parvifolia</td>
</tr>
<tr>
<td>Suncup</td>
<td>camissonia californica</td>
</tr>
<tr>
<td>Black Mustard</td>
<td>Brassica nigra</td>
</tr>
<tr>
<td>Bigherons Bill</td>
<td>Erodium botrys</td>
</tr>
<tr>
<td>Datura discolor</td>
<td>Desert thornapple</td>
</tr>
<tr>
<td>Crimson Bottlebushes</td>
<td>Callistemon citrinus</td>
</tr>
<tr>
<td>Common Ragweed</td>
<td>Ambrosia artemisiafollia</td>
</tr>
<tr>
<td>Honeysuckle</td>
<td>Lonicera sp.</td>
</tr>
<tr>
<td>Tree Tobacco</td>
<td>Nicotiana glauca</td>
</tr>
<tr>
<td>Puncture Vine</td>
<td>Tribulus terrestris</td>
</tr>
<tr>
<td>Palm Tree</td>
<td>N/A</td>
</tr>
<tr>
<td>Cheeseweed</td>
<td>Malvaceae parviflora</td>
</tr>
<tr>
<td>Timothy-grass</td>
<td>Phleum pratense</td>
</tr>
<tr>
<td>Wild Oat</td>
<td>Avena fatua</td>
</tr>
<tr>
<td>Castor Bean</td>
<td>Ricinus communis</td>
</tr>
<tr>
<td>Peruvian Peppertree</td>
<td>Schinus molle</td>
</tr>
<tr>
<td>Brazilian Peppertree</td>
<td>Schinus terebinthefolius</td>
</tr>
<tr>
<td>Annual grasses</td>
<td>Various</td>
</tr>
<tr>
<td>Pomegranate</td>
<td>Punica granatum</td>
</tr>
<tr>
<td>Mexican Elderberry</td>
<td>Sambucus mexicana</td>
</tr>
<tr>
<td>Eucalyptus</td>
<td>Eucalyptus sp.</td>
</tr>
<tr>
<td>Valley Oak</td>
<td>Quercus lobata</td>
</tr>
<tr>
<td>Willow</td>
<td>Salix sp.</td>
</tr>
<tr>
<td>Sumac</td>
<td>Rhus sp.</td>
</tr>
<tr>
<td>Primrose</td>
<td>Camissonia vbistorta</td>
</tr>
</tbody>
</table>

Source: NESR, 2007

**Environmental Consequences**

Clearing and grubbing throughout the project footprint is restricted to narrow strips of previously disturbed ground that has been artificially landscaped or volunteered by ruderal vegetation. Any disturbed surfaces created from construction activities would be treated with BMP’s, which include revegetating and hydroseeding.

**Avoidance, Minimization, and Compensation Measures**

Any naturally occurring native trees or vegetation shall be replaced by Caltrans at a ratio that facilitates survival of the species at the site. Naturally existing native trees having a 4-inch (10 centimeter) diameter, at a height of 1.37 meters (4.5 feet) above grade also known as the measurement of Diameter at Breast Height (DBH) shall be replaced at a 5:1 ratio. Tree replacement shall be coordinated between the District Landscape Architect and District Biologist and incorporated into the plans. This native tree replacement ratio is limited to naturally occurring trees impacted by the project.

The location of the willow woodland is south of the southeast interchange quadrant where the proposed project would not affect the woodland. No other naturally occurring native trees were found to occur within the project area, and so there are no proposed replacement ratios for trees or other native vegetation.
Native trees, which have been planted as a component of the freeway landscaping, particularly in the southeast quadrant of the center cloverleaf change (the area between the eastbound I-10 and the on-ramp of merging segment of the southbound and northbound of I-605 to eastbound I-10), would be replaced in accordance with District Landscape Architecture Policies.

2.3.4 ANIMAL SPECIES

Regulatory Setting
Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration (NOAA) Fisheries and the California Department of Fish and Game (CDFG) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with wildlife not listed or proposed for listing under the state or federal Endangered Species Act. No threatened or endangered species are anticipated in the project area. The proceeding section discusses the evaluation for threatened or endangered species. All other special-status animal species are discussed here, including CDFG fully protected species and species of special concern, and USFWS or NOAA Fisheries candidate species.

Federal laws and regulations pertaining to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act
- State laws and regulations pertaining to wildlife include the following:
  - California Environmental Quality Act
  - Sections 1600 – 1603 of the Fish and Game Code
  - Section 4150 and 4152 of the Fish and Game Code

Affected Environment
A NESR was prepared in May 2007 to evaluate the presence of animal species that may be affected by the proposed project. The habitat value for wildlife species in the project area and vicinity is considered to be of low value due to the highly urbanized environment. Multiple field surveys were conducted by Caltrans to evaluate the presence of protected animal species and their habitat. Results of those surveys yielded no occurrences of the species listed on Table 19. In addition, current lists of regional species and habitats of concern maintained by CDFG and USFWS were reviewed to determine the potential occurrence of protected animal species within the project area.

Environmental Consequences
No sensitive, threatened or endangered wildlife species, or their habitat, were found to occur in the project study area. The preceding determination was based on past occurrences of protected species and field studies. No Endangered Species Act consultation was initiated due to the absence of threatened and endangered species and their associated habitats within the project footprint.
Environmental Consequences
During field observations, several species of birds were identified within project site (Table 19). Of these, none are special status species.

Avoidance, Minimization, and Compensation Measures
Nesting birds are protected under the Migratory Bird Treaty Act (16 U.S.C. 703-711) and Department of Fish and Game Code 3505 and 3505.5. In order to minimize impacts to nesting birds, pre-construction surveys would be conducted at least two weeks before the start of construction. If clearing and grubbing occurs during the bird-nesting season (March 1st thru September 1st), surveys, and if needed bird exclusionary measures, would be implemented to prevent nesting during construction activities.

2.3.5 THREATENED AND ENDANGERED SPECIES

Regulatory Setting
The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC), Section 1531, et seq. See also 50 CFR Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NOAA Fisheries) to ensure that they are not undertaking, funding, permitting or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 is a Biological Opinion or an incidental take permit. Section 3 of FESA defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct.”

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to
develop appropriate planning to offset project caused losses of listed species populations and their essential habitats. The California Department of Fish and Game (CDFG) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFG. For projects requiring a Biological Opinion under Section 7 of the FESA, CDFG may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Affected Environment
An NESR was prepared in May 2007 to evaluate the presence of threatened and endangered species that may be affected by the proposed project. As part of the NESR a query of the California Natural Diversity Database (CNDDB) for the Baldwin Park USGS 7.5 minute map, resulted in occurrences of listed species and species of concern. Species with potential for occurrence or their associated habitat are documented in Table 20. The habitat value is rated as low due to largely paved surroundings and urban environment.

Environmental Consequences
Based on the CNDDB query and field observations, it was determined that no species or the critical habitat of threatened, endangered, or species of concern are found to occur within or immediately adjacent to the project limits. See table 20 for rationale on these determinations.

Endangered Species Act consultation was not initiated due to the absence of threatened and endangered species and their associated habitats from the project area.

Avoidance, Minimization, and Compensation
Avoidance, minimization, and compensatory efforts are not proposed at this time due to the anticipated absence of any threatened or endangered species from the project impact area.
<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
<th>General Habitat Description</th>
<th>Present/Absent (HP/A)</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mesa Horkelia</td>
<td>Horkelia cuneata ssp. Puberula</td>
<td>CNPS List: 1B.1</td>
<td>chaparral, cismontane woodland, coastal scrub; sandy or gravelly sites</td>
<td>A</td>
<td>Habitat associated with this species occurs adjacent or outside the project area. However, surveys of the project footprint did not result in the observation of this species. Due to the disturbed condition of the project footprint, this species is not expected to be affected by the proposed project.</td>
</tr>
<tr>
<td>Lyon's pentachaeta</td>
<td>Pentachaeta lyonii</td>
<td>FE; SE; CNPS List: 1B.1</td>
<td>Chaparral, valley and foothill grassland; edges of clearings in chap., usually at the ecotone between grassland and chaparral or edges of firebreaks.</td>
<td>A</td>
<td>Habitat associated with this species occurs adjacent or outside the project area. However, surveys of the project footprint did not result in the observation of this species. Due to the disturbed condition of the project footprint, this species is not expected to be affected by the proposed project.</td>
</tr>
<tr>
<td>Coastal California Gnatcatcher</td>
<td>Polioptila Californica Californica</td>
<td>FT; SC</td>
<td>obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California; low, coastal sage scrub in arid washes, on mesas and slopes, not all areas classified as coastal sage scrub are occupied.</td>
<td>A</td>
<td>Habitat associated with this species has the potential adjacent to or outside the project area. However, surveys of the project footprint did not result in the observation of this species and historic occurrences have not been recorded in the project area. As a result, this species is not anticipated to be present and will not be impacted by the proposed project.</td>
</tr>
<tr>
<td>California Least Tern</td>
<td>Sterna antillarum browni</td>
<td>FE; SE</td>
<td>(nesting colony) nests along the coast from San Francisco Bay South to Northern Baja California; Colonial breeder on bare or sparsely vegetated, flat substrates; sand beaches, alkali flats, land fills, or paved areas.</td>
<td>A</td>
<td>Some habitat associated with this species occurs adjacent to the project area. However, surveys of the project footprint did not result in the observation of this species and historic occurrences have not been recorded in the project area. Due to the disturbed condition of the project footprint this species is not anticipated to be present and affected by the proposed project.</td>
</tr>
<tr>
<td>Yellow-Breasted Chat</td>
<td>Icteria Virens</td>
<td>SC</td>
<td>(nesting) summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses; nests in low, dense riparian, consisting of willow, blackberry, wild grape; forage and nest within 10 ft of ground.</td>
<td>A</td>
<td>Habitat associated with this species has the potential adjacent to or outside the project area. However, surveys of the project footprint did not result in the observation of this species and historic occurrences have not been recorded in the project area. As a result, this species is not anticipated to be present and will not be impacted by the proposed project.</td>
</tr>
<tr>
<td>Copper's Hawk</td>
<td>Accipiter Copperii</td>
<td>SC</td>
<td>(nesting) woodland, chiefly of open, interrupted or marginal type; nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms or river floodplains; also, live oaks.</td>
<td>A</td>
<td>Habitat associated with this species has the potential adjacent to or outside the project area. However, surveys of the project footprint did not result in the observation of this species and historic occurrences have not been recorded in the project area. As a result, this species is not anticipated to be present and will not be impacted by the proposed project.</td>
</tr>
<tr>
<td>Species</td>
<td>Scientific Name</td>
<td>Endemism</td>
<td>Description</td>
<td>Category</td>
<td>Impacts</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------------------------------------</td>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Burrowing Owl</td>
<td><em>Athene Cunicularia</em></td>
<td>SC</td>
<td>(Burrow Sites) Open, dry annual or perennial grasslands, deserts and Scrublands characterized by low-growing vegetation; subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.</td>
<td>A</td>
<td>Habitat for this species is not present on-site. As a result, impacts to this species are not expected with this project.</td>
</tr>
<tr>
<td>Southwestern Pond Turtle</td>
<td><em>Emys (Clemmys) Marmorata pallida</em></td>
<td>SC</td>
<td>Inhabits permanent or nearly permanent bodies of water in many habitat types; require basking sites such as partially submerged logs, vegetation mats, or open mud banks, need suitable nesting sites.</td>
<td>A</td>
<td>Suitable habitat for this species does not exist within the project footprint. Due to the absence of the species habitat this species is not expected to be in the project area and in turn is not expected to be affected by the project.</td>
</tr>
<tr>
<td>Big Free-Tailed Bat</td>
<td><em>Nyctinomops macrotis</em></td>
<td>SC</td>
<td>Low-lying arid areas in Southern California; need high cliffs or rocky outcrops for roosting sites; feeds principally on large moths.</td>
<td>A</td>
<td>Habitat for this species is not present on-site. As a result, impacts to this species are not expected with this project.</td>
</tr>
<tr>
<td>California Orcutt Grass</td>
<td><em>Orcuttia californica</em></td>
<td>FE; SE; CNPS List: 1B.1</td>
<td>Vernal pools</td>
<td>A</td>
<td>Habitat for this species is not present on-site. As a result, impacts to this species are not expected with this project.</td>
</tr>
<tr>
<td>California Brown Pelican</td>
<td><em>Pelecanus occidentalis californicus</em></td>
<td>FE; SE</td>
<td>(Nesting Colony) Colonial Nester on coastal islands just outside the surf line; nests on coastal islands of small to moderate size which afford immunity from attack by ground-dwelling predators</td>
<td>A</td>
<td>Habitat for this species is not present on-site. As a result, impacts to this species are not expected with this project.</td>
</tr>
<tr>
<td>Pacific Pocket Mouse</td>
<td><em>Perognathus longimembris pacificus</em></td>
<td>FE; SC</td>
<td>inhabits the narrow coastal plains from the Mexican border North to El Segundo, Los Angeles County; seems to prefer soils of fine alluvial sands near the ocean, but much remains to be learned.</td>
<td>A</td>
<td>Little information for this unlisted species is currently available. Background research and onsite surveys conducted did not identify the presence of this species in the project area; this species is not expected to be affected by the proposed project.</td>
</tr>
<tr>
<td>Species</td>
<td>Scientific Name</td>
<td>Status</td>
<td>Description</td>
<td>Project Impact</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
<td>--------</td>
<td>-------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>Brand's Phacelia</td>
<td>Phacelia stellaris</td>
<td>FE; CNPS List: 1B.1 coastal scrub, coastal dunes; open areas</td>
<td>A</td>
<td>Habitats associated with this species are not present in the project area. This species is not expected to be affected by this project.</td>
<td></td>
</tr>
<tr>
<td>Coast (San Diego) Horned Lizard</td>
<td>Phrynosoma coronatum (blainvillii population)</td>
<td>SC</td>
<td>Inhibits coastal sage scrub and chaparral in arid and semi-arid climate condition; prefers friable, rocky, or shallow sandy soils.</td>
<td>A</td>
<td>Habitats associated with this species are not present in the project area. This species is not expected to be affected by this project.</td>
</tr>
<tr>
<td>American Badger</td>
<td>Taxidea taxus</td>
<td>SC</td>
<td>most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils, need sufficient food, friable soils and open, uncultivated ground, prey on burrowing rodents, dig burrows.</td>
<td>A</td>
<td>Habitats associated with this species are not present in the project area. This species is not expected to be affected by this project.</td>
</tr>
<tr>
<td>Least Bell's Vireo</td>
<td>Vireo bellii pusillus</td>
<td>FE; SE</td>
<td>(Nesting) Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; nests placed along margins of bushes or on twigs projecting into pathways, usually willow, baccharis mesquite</td>
<td>A</td>
<td>Habitats associated with this species are not present in the project area. This species is not expected to be affected by this project.</td>
</tr>
<tr>
<td>San Diego Black-Tailed Jackrabbit</td>
<td>Lepus californicus bennettii</td>
<td>SC</td>
<td>intermediate canopy stages of shrub habitats and open shrub/ herbaceous and tree/ herbaceous edges; coastal sage scrub habitats in Southern California</td>
<td>A</td>
<td>Habitats associated with this species are not present in the project area. This species is not expected to be affected by this project.</td>
</tr>
<tr>
<td>Parish’s Gooseberry</td>
<td>Ribes divaricatum var. parishii</td>
<td>CNPS List: 1A Riparian Woodland</td>
<td>A</td>
<td>Habitat associated with this species occurs adjacent or outside the project footprint. Due to the disturbed condition of the project footprint, this species is not expected to be affected by the proposed project.</td>
<td></td>
</tr>
</tbody>
</table>

Source: California Natural Diversity Database, California Department of Fish and Game

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is, or may be present. The species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Candidate (SC); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS), etc
2.3.6 INVASIVE SPECIES

Regulatory Setting
On February 3, 1999, President Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.” Federal Highway Administration guidance issued August 10, 1999 directs the use of the state’s noxious weed list to define the invasive plants that must be considered as part of the NEPA analysis for a proposed project.

Affected Environment/Environmental Consequences
The existing biological environment is of low value due to the dominance of human land use. Most of the area is paved, built-up with housing or commercial development, and sparse or no vegetation. None of the special status plant or animal species or their habitat was found to occur within the project footprint. None of the historic natural communities or wetlands were found to occur neither. Only minor impacts are anticipated to occur to the biological environment of this area from clearing and grubbing and ground disturbance. However, to compensate any minor impacts to the biological environment, minimization measures would be implemented.

Avoidance, Minimization, and Compensatory Measures
Chapter 5.5 and Table 5 of the NES discuss the potential impact of invasive species and appropriate avoidance measures to incorporate into the project scope of work.

Several common invasive species such as Castor Bean *Ricinus communis*, Peppertree *Schinus sp.*, and Tree Tobacco *Nicotiana glauca* were found growing within the biological study area. To prevent the spread of these species after clearing and grubbing, the vegetation will be appropriately disposed of at an approved waste disposal facility.

In compliance with the Executive Order on Invasive Species, E.O. 13112, and subsequent guidance from the Federal Highway Administration, landscaping and erosion control planting included in the project will not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.
2.4 CONSTRUCTION IMPACTS

Construction Noise
During construction activities noise from the project work may intermittently dominate the noise environment in the immediate area of construction. However, to minimize these short-term noise impacts during construction the Caltrans standard specifications, Section 7-1.01l, Sound Control Requirements, will be required as part of the project. The requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.

Construction equipment is expected to create noise ranging between 70-90 dBA at a distance of 50 feet. For each doubling of the distance from the construction site, noise is reduced by 6 dBA. However, no adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans standard specifications and would be short-term, intermittent, and dominated by local traffic noise. See Appendix E for soundwall locations.

Caltrans Sound Control Requirements include the following measures for minimization of noise impacts:

1) Equipment Noise Control should be applied to revising old equipment and designing new equipment to meet specified noise levels.
2) In-Use Noise Control where existing equipment is not permitted to produce noise levels in excess of specified limits.
3) Site Restrictions is an attempt to achieve noise reduction through modifying the time, place, or method of operation of a particular source.
4) Personal Training of operators and supervisors is needed to become more aware of the construction site noise problem, and are given instruction on methods that they can implement to improve conditions in the local community.

Water Quality Impacts Related to Construction Activities
In compliance with the Clean Water Act (Section 402), an NPDES permit will be obtained from the SWRCB. The NPDES permit contains requirements that protect water quality at the project location. The permit requires Caltrans to maintain and implement an effective Storm Water Management Plan (SWMP) that identifies and describes the BMP’s used to reduce or eliminate the stormwater runoff discharge of pollutants to waters of drainage conveyances and waterways. Caltrans construction BMP’s (SWRCB approved), SWPPP, and WPCP also incorporate the requirements of the SWRCB NPDES permit to be implemented jointly by both Caltrans, and the contractor hired to construct the project, prior to construction.

Air Quality Impacts Related to Construction Activities
Construction-related activities would create temporary air quality impacts during the construction activities. Project construction is anticipated to occur from the years 2011 to 2013. During activities such as grading/trenching, new pavement construction, and re-striping exhaust emissions dust are anticipated to create short-term impacts to air quality. These short-term impacts consist of emissions of CO, NO*, ROG* (*ozone precursors), and PM10 from construction equipment. Even though minor air quality impacts are anticipated, the emissions
are temporary and not substantial. Therefore, project construction will not create adverse pollutant emissions for any of the build alternatives.

In order to minimize construction-related emissions, several minimization measures are required as part of the project. They include:

- State-mandated emission control devices on all construction vehicles and equipment
- SCAQMD, Rule 403 Fugitive Dust Control Measures, which are attached as Appendix G
- Caltrans Standard Specifications for construction (Section 10 and 18 [Dust Control] and Section 39-3.06[Asphalt Concrete Plants] must also be adhered to.

**Hazardous Waste**
During construction, any disturbed materials, potentially containing hazardous materials, will be treated in accordance with Local, State, and Federal Regulations to ensure the safety of workers and the public. Proper off-site disposal of any soil containing unsafe levels of lead or other contaminants shall be implemented. Lead safe-work practices will be in place when workers conduct construction activities involving lead contaminated material in conformance with the Practices established by Local, State, and Federal regulations. Contaminated groundwater may be exposed during excavation of foundations. Proper measures involving containing, testing, transporting, and disposing of contaminated water will take place. Detailed compensatory measures will be included in the project once more developed plans and the IS are complete.

### 2.5 CUMULATIVE IMPACTS

**Regulatory Setting**
Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive types of agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.
CEQA Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts, under CEQA, can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts, under NEPA, can be found in 40 CFR, Section 1508.7 of the CEQ Regulations.

For this analysis of the potential cumulative effects of the I-10/605 Direct Connector project, the following definition of cumulative impact in the Council on Environmental Quality (CEQ) regulations governing the implementation of the National Environmental Policy Act (NEPA) (40 CFR 1508.7) was used:

“…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.”

**Affected Environment**

This section discusses the cumulative impacts on given resources, defined by Resource Study Areas (RSA). Each resource has a specific RSA, which is delineated to include the project area as well as areas outside of the project where the proposed project’s activities, in combination with activities in the other projects in the area, could contribute to cumulative impacts on the resource. Potential cumulative impacts on each resource are evaluated for both construction and operation of the proposed project. Because the build-alternatives for this project are similar in geometry and project footprint, the build alternatives are considered to have similar cumulative impacts in this analysis.

Projects creating cumulative effects are projects within the study area of similar nature, affecting similar resources, and located in close geographic proximity to the proposed project. These projects have the potential to generate environmental impacts that, when considered collectively with the proposed project, could result in, or contribute to, cumulative adverse environmental impacts. The following Cumulative Impact discussions were provided for the affected resources that may be potentially affected in an indirect way by the proposed project and other projects.

Of the projects referenced in Table 21, the I-10 HOV (EA 117070) is the only project that may overlap with the proposed project. Most of the construction for the I-10 HOV would occur before the proposed project. In addition, close coordination between the two projects is taking place to minimize short-term impacts to the local environment. The subsequent work activities may create a cumulative impact from continuous construction activities occurring one right after the other. However, close coordination between the two projects is taking place to minimize short-term impacts to the local environment.

Another project in the vicinity, the I-10 High Occupancy Toll (HOT) Lane project was approved to begin studies in October 2008, just after this IS/EA went into circulation (Table 21). Therefore, it was not included in this document previously in cumulative impact review. The I-10 HOT Lane project is scheduled to be developed in enough detail before the I-10/605 Direct Connector project begins construction. To avoid conflicts with this project, construction of the I-
10 HOT Lane project ends west of the project area for this project. Neither project will conflict with the other.

**Table 21. Caltrans Projects in the RSA**

<table>
<thead>
<tr>
<th>Route</th>
<th>Post miles</th>
<th>Project Description</th>
<th>Construction Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-10 (*EA 117071)</td>
<td>31.2/33.4</td>
<td>Construct (1) HOV lane in each direction along I-10 between I-10/605 Interchange and Puente Avenue</td>
<td>03/2009-04/2012</td>
</tr>
<tr>
<td>I-10 (*EA 111721)</td>
<td>33.4/37.5</td>
<td>Construct soundwalls along I-10 between Puente Avenue and Citrus Street</td>
<td>03/2010-04/2012</td>
</tr>
<tr>
<td>I-10 (*EA 117081)</td>
<td>33.4/37.5</td>
<td>Construct (1) HOV lane in each direction between Puente Avenue and Citrus Street</td>
<td>05/2011-05/2014</td>
</tr>
<tr>
<td>I-605 (*EA 23310)</td>
<td>11.4/20.2</td>
<td>Construct S/W’s between 0.1 mile south of Slauson Avenue to I-10</td>
<td>06/2010-06/2012</td>
</tr>
<tr>
<td>I-605 (*EA 250501)</td>
<td>0.1/16.6R</td>
<td>Install Metal Beam Guardrails between the Coyote Creek Bridge and N/B Peck Road Off ramp</td>
<td>10/2012-03/2015</td>
</tr>
<tr>
<td>I-605 (*EA 26760K)</td>
<td>29.9/32.2</td>
<td>Construct a Direct Connector from N/B I-605 to W/B I-10</td>
<td>No schedule currently</td>
</tr>
<tr>
<td>I-10 (*EA 27440K)</td>
<td>17.12/32.6</td>
<td>Conversion of existing HOV lane to HOT Lane and restriping of existing facility to include an additional HOT Lane.</td>
<td>12/2010-10/2011</td>
</tr>
</tbody>
</table>

Source: California Department of Transportation, District 7 Project Management

*EA: Expenditure Authorization Number

**Environmental Consequences**

**Air Quality**

The Basin is a 6,600 square mile area encompassing all of Orange County and non-desert parts of Los Angeles, Riverside and San Bernardino Counties. Of the six air pollutants, two are in attainment: lead and sulfur dioxide; two are in attainment-maintenance: CO and NO₂; and two are in non-attainment: Ozone (1-hour and 8-hour) and PM (PM₂.₅, PM₁₀). These contaminants exceeded the thresholds established by the NAAQS. The RSA consists of the South Coast Air Basin.

Construction produced emissions from the proposed project and the I-10 HOV project (EA 117071) may overlap and create temporary impacts, but this impact would only be temporary and would be minimized by complying with SCAQMD rules and regulations during construction. Under CFR 93.123(c)5 temporary increase in emissions are those occurring no more than five years in a specific site. Moreover, once complete the project would reduce congestion within the interchange, increase travel speeds and safety, which altogether reduce vehicle emissions leading to air quality improvement.
The build alternatives would not contribute to cumulative effects on quality or toxic air emissions, since the alternatives are not expected to cause a substantial increase of toxic air constituents.

**Noise**
The RSA for cumulative noise impacts is the project site and the area beyond where the community background noise surveys were taken.

The noise environment within the project site is dominated by I-10 traffic. The affected noise environment consists of primarily mixed residential, open space, and commercial/institutional properties. Residential areas and parks are considered noise-sensitive land uses under 23 CFR Part 772. Existing land uses at the project site are categorized in Activity level B of the NAC table, which indicate that the areas’ threshold for noise impact is 67 dBA. It is anticipated that implementing the proposed project alternatives would generally increase future predicted noise levels by 0 to 1 dBA. This increase is not substantial and takes into account future traffic projections.

The proposed project Noise study evaluated the project with I-10 HOV project in place. Other projects identified in Table 11 and 12 are either too far away or noise attenuation projects that would not contribute to a cumulative effect. Short-term construction activities would be temporary and include minimization measures during construction. Therefore, no cumulative impacts would occur as a result of this project.

**Visual**
The RSA for Visual impacts is the viewshed identified in the VIA.

Currently the viewshed of the project area is comprised of mostly man made elements with the only natural environment element being the San Gabriel Mountains to the north. The viewshed was evaluated for a rating of below average to average. The completion of the direct connector will only slightly reduce the visual quality of the viewshed.

A second bridge similar connector to the proposed project is in the PID phase currently to connect the N/B I-605 to the W/B I-10 (EA 26760K). The visual impacts of constructing this 2nd connector have not been fully studied yet. However, a cumulative effect can be expected from creating a new visual obstruction to the San Gabriel Mountains for the viewsheds on the west part of the I-10/1-605 Interchange.

Cumulatively the proposed project together with other similar projects would have a minor adverse cumulative effect due to the below average and average existing visual resources of the viewsheds. Implementing the proposed project would unify the man-made elements of the project area, improving the foreground view while reducing the background view.

**Land Use and Community Impacts**
To analyze cumulative impacts from the proposed project’s build alternatives, a list of past, present and probable future projects in the study area were identified. The RSA for Land Use
Cumulative impacts are not anticipated since the project is limited to an area mostly within the existing highway corridor. The impact of realigning Dalewood Avenue would affect a small number of residents along the Avenue, but would not have a community wide negative impact to Baldwin Park or the surrounding communities.

For impacts to land use, it is expected that most related projects in the area would be required to comply with adopted land use plans and zoning requirements. It is also anticipated that related projects would generally be consistent with the overall land use policies and goals of the Los Angeles County General Plan and other area specific plans. Consequently, the proposed project and related development are not expected to result in substantial unplanned changes in the long-term pattern of land use, or substantial unplanned changes in the rate or amount of development. No substantial cumulative land use impacts are anticipated with the implementation of the proposed project.

### Table 22. Vicinity Projects Considered for Cumulative Impact Analysis

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Project Name</th>
<th>Location</th>
<th>Description</th>
<th>Proposed (or) Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldwin Park</td>
<td>Baldwin Park Redevelopment</td>
<td>Intersection of Ramona and Main Avenue, Baldwin park Metro link station, and Morgan Park</td>
<td>Comprehensive redevelopment of Baldwin Park’s downtown area is proposed in two phases. Project work will involve redeveloping Baldwin Park’s northeast into a mixed used, pedestrian and transit oriented urban village.</td>
<td>Phase I: 2013 Phase II: 2025</td>
</tr>
<tr>
<td>Baldwin Park</td>
<td>Baldwin Park Market Place</td>
<td>North of I-10 at the northwest corner of Puente Avenue and Merced Avenue</td>
<td>24-acre commercial retail center development</td>
<td>May 2004</td>
</tr>
<tr>
<td>Baldwin Park</td>
<td>Villa Ramona</td>
<td>Ramona Avenue between Francisquito and Corak Street</td>
<td>71-unit affordable housing complex with a mix of senior and family units.</td>
<td>May 2004</td>
</tr>
<tr>
<td>El Monte</td>
<td>El Monte Transit Village</td>
<td>Surrounding the existing El Monte Transit Station, just north of I-10</td>
<td>65 acre mix use transit oriented village just north of I-10</td>
<td>Predevelopment No proposed completion date currently</td>
</tr>
<tr>
<td>West Covina</td>
<td>West Covina Sportsplex</td>
<td>Approximately 5 miles southeast from the project site</td>
<td>315-acre redevelopment of recreational and commercial use on a previous landfill site.</td>
<td>Recreational, Commercial-retail is complete. Office and additional recreational development is currently under review.</td>
</tr>
</tbody>
</table>

Source: Cities of Baldwin Park, El Monte, and West Covina

**Growth**

Growth was evaluated using the same RSA as in Land Use and Community Impacts. The proposed project and other projects in the vicinity evaluated for cumulative effects are not...
anticipated to induce growth individually or cumulatively. The I-10/605 will provide a safety and circulation improvement for existing and future uses. Other highway projects in the RSA would improve traffic deficiencies such as congestion and safety without inducing new growth into a particular area of the RSA.

The Baldwin Park Downtown Redevelopment and El Monte Transit Village projects would provide new housing stock for residents, but this new housing serves to accommodate the needs of those cities. The Cities in the RSA area largely built out with little if any vacant land for development. The aforementioned projects are methods of providing housing needs for the cities moderate growth patterns.

Cultural
The RSA consists of the Boulder Dam-Los Angeles 287.5 kV Transmission Line within the project vicinity.

The determination from following the U.S. DOT Section 106 process is that no adverse effect would occur. Based on past, present and future projects listed in Tables 11 and 12, this eligible historical resource would not be adversely affected.

Traffic and Transportation
The RSA consists of traffic and transportation infrastructure within Baldwin Park, El Monte, West Covina, and City of Industry.

Temporary disruption of normal daily use of the interchange and mainlines within the project vicinity may result in delays and traffic diversions to other arterial and minor streets. However, mainline traffic will not be impeded during peak hour traffic. Careful traffic management and coordination with local agencies during the preparation of the TMP will help minimize disruption to traffic circulation in the vicinity. Impacts to mainline, arterial, and minor streets in surrounding communities are anticipated to be minimal, however, some delays and congestion are unavoidable. Traffic on Dalewood Avenue and other intersecting streets may be affected temporarily during construction, but the impact will only be temporary.

Since the proposed project will follow after completion of the I-10 HOV (EA 117071) and the I-10 HOT Lane (27440K) project, temporary disruption of normal daily transportation use in the project vicinity may be prolonged. As stated earlier, the proposed project along with the I-10-HOV and the I-10 HOT Lane projects will be closely coordinated to minimize traffic and transportation disruptions. To accomplish this the TMP would be prepared through close coordination with affected agencies. Once the project is complete, the improvement will be positive for people using the interchange and arterials.

Utilities and Emergency Services
The RSA consists of the utilities and emergency services in the project area and the corresponding affected service area.

Projects in the cumulative study area collectively could result in adverse impacts on utilities related to increased demand for facilities, requiring new or expansion of facilities, and/or the
need to relocate or modify utilities to accommodate proposed development. Build out of the land uses assumed in the development utilities could require upgrading of existing anticipated demand. Where feasible, appropriate minimization measures have been identified to reduce individual project impacts to utilities either through relocation, upgrading of facilities or payment of in-lieu fees.

Collectively, projects in the RSA can result in a short-term effect on emergency services such as fire protection, law enforcement, and medical services. This short-term impact would be minimized by implementation of a traffic management plan (TMP) that would contain detailed plans of access routes and detours during construction.

Avoidance, Minimization and/or Mitigation Measures
With implementation of standard minimization measures and mitigation measures proposed in this IS/EA, project contributions to cumulative impacts would be considered less than cumulatively considerable, and no additional mitigation measures are required.

2.6 CLIMATE CHANGE

Regulatory Setting
While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization’s Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions; these regulations will apply to automobiles and light trucks beginning with the 2009 model year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California’s GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80% below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that ARB create a plan, which includes market mechanisms, and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state’s Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California’s transportation fuels is to be reduced by at least 10 percent by 2020.

1 Greenhouse gases related to human activity, as identified in AB 32, include: Carbon dioxide, Methane, Nitrous oxide, Tetrafluoromethane, Hexafluoroethane, Sulfur hexafluoride, HFC-23, HFC-134a*, and HFC-152a*.
Climate change and GHG reduction is also a concern at the federal level; at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. However, California, in conjunction with several environmental organizations and several other states, sued to force the U.S. Environmental Protection Agency (EPA) to regulate GHGs as a pollutant under the Clean Air Act (Massachusetts vs. Environmental Protection Agency et al., U.S. Supreme Court No. 05–1120. 549 U.S. ________. Argued November 29, 2006—Decided April 2, 2007). The court ruled that GHGs do fit within the Clean Air Act’s definition of a pollutant, and that EPA does have the authority to regulate GHGs. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting greenhouse gas emissions.

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California’s GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans (December 2006).

One of the main strategies in Caltrans Climate Action Program to reduce GHG emissions is to make California’s transportation system more efficient. The highest levels of carbon dioxide from mobile sources such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 mph. Relieving congestion by enhancing operations and improving travel time in high congestion corridors will lead to an overall reduction in GHG emissions.

Traffic volumes are forecasted to increase by 8.4% from the base year of 2005 to opening year 2014, and 18.2% form 2014 to 2035. Without the proposed project, the interchange deficiencies would continue leading to reduced safety and operation. Queuing and congestion beyond the connectors would increase with the forecasted traffic volumes (see Table 15).

Caltrans recognizes the concern that carbon dioxide emissions raise for climate change. However, modeling and gauging the impacts associated with an increase in GHG emissions levels, including carbon dioxide, at the project level is not currently possible. No federal, state or regional regulatory agency has provided methodology or criteria for GHG emission and climate change impact analysis. Therefore, Caltrans is unable to provide a scientific or regulatory based conclusion regarding whether the project’s contribution to climate change is cumulatively considerable.

Caltrans continues to be actively involved on the Governor’s Climate Action Team as ARB works to implement AB 1493 and AB32. As part of the Climate Action Program at Caltrans (December 2006), Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks. However it is important to note that the control of the fuel economy standards is held by
the United States Environmental Protection Agency and ARB. Lastly, the use of alternative fuels is also being considered; Caltrans is participating in funding for alternative fuel research at the University of California Davis.
Chapter 3 – COMMENTS AND COORDINATION

Introduction
Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including: project development team meetings, interagency coordination meetings, a public hearing, letter mail outs, and newspaper postings. This chapter summarizes the results of Caltrans efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

Coordination with Agencies and Public Participation
During the initiation of studies period, Caltrans distributed letters to agencies, organizations, utility agencies, and interested persons between November 1, 2007 and November 14, 2007. The letter described the project purpose and need along with the anticipated environmental documentation. A period of 30 days (11/10/07-12/09/07) was given for submittal of any comments or suggestions. A specific consultation letter was distributed to cooperating and participating agencies, as part of SAFETEA-LU (Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users), Section 6002, inviting them to make comments or suggestions to the proposed project. Cooperating and participating agencies are agencies with an interest in the project. Non-governmental or private entities are not considered for this consultation.

Outreach to the general public was conducted by posting a scoping notice of the proposed project in regional newspapers. Scoping notices were posted in the following newspapers:
• San Gabriel Valley Tribune (12/04/07)
• Whittier Daily News (12/04/07),
• La Opinion (Spanish language) (12/05/07)
• Mundo L.A. (Spanish language) (12/06/07)
• L.A. Watts Times (12/06/07)

The notice invited public input on the proposed project during a period of 30 days.

A scoping summary report has been prepared from the comments received during the scoping period. Responses to the letters were received from three agencies. Issues raised in those letters are addressed in a scoping summary report. The report is available upon request by contacting Gary Iverson, Senior Environmental Planner at (213) 897-7665, or email: gary_Iverson@dot.ca.gov

During the project initiation phase several Project Development Team (PDT) meetings were held to update all the technical groups on project issues or design changes. Before the approval of the Project Study Report, local agencies were notified of the proposed project so they may provide
their input. Letters of support from Baldwin Park, West Covina, and Covina are provided (see Appendix F).

During the preparation of the detailed engineering studies and the IS/EA for the proposed project, Caltrans conducted coordination with affected local jurisdictions. Meetings were held with the Cities of Baldwin Park and the Los Angeles Department of Water and Power to discuss the proposed project’s alternatives and to evaluate the potential effects on the City’s frontage road, residences, parking facilities, other jurisdictional areas, and transmission lines. The meetings were used to incorporate design modifications and avoid or reduce impacts associated with the build alternatives and other issues of concern to these local jurisdictions. Table 23 lists the dates and local agency attendees at these meetings. Summaries of these meetings are on file with Caltrans.

### Table 23. Coordination Meetings

<table>
<thead>
<tr>
<th>Date</th>
<th>Purpose</th>
<th>Local Agency and Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 24, 2008</td>
<td>Value Analysis Results Meeting</td>
<td>Baldwin Park</td>
</tr>
<tr>
<td></td>
<td></td>
<td>David Lopez, Public Works Engineer</td>
</tr>
<tr>
<td>September 22, 2008</td>
<td>Transmission Lines Modification Coordination</td>
<td>Los Angeles Department of Water and Power</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Steven R. Boyle, James Gokey, Mary K. Dennis, Marc Garcia</td>
</tr>
</tbody>
</table>

**Notice of Completion and Notice of Availability**

After the Draft IS/EA was complete and the environmental document circulated to the affected agencies and public, whereby a public comment period commenced on November 04, 2008 and extended until December 24, 2008. An ad was published in the regional newspapers mentioned above informing the public of the project and comment period. A Notice of Completion was prepared and submitted to the California State Office of Planning and Research State Clearinghouse pursuant to CEQA on November 03, 2008.

**Public Hearing**

A public hearing was held on December 17, 2008, from 5:30pm 8:30pm at:

De Anza Elementary School  
12820 E. Bess Avenue  
Baldwin Park, CA 91706

Two notices informing the public interested in the project were published in regional newspapers. In addition, letters inviting agencies and the public to the public hearing were mailed out to local and regional institutions, government representatives, and members of the public affected by the completion of the project.

A total of 10 people participated in the public hearing and received the meeting handouts. Several display boards were setup depicting the alignment of the connector on an aerial photograph, a conceptual view of direct connector and soundwalls, and a chart interpreting noise levels. A formal presentation and questions and answers session was not held due to the small
number of attendants from the public. Instead, Caltrans technical staff addressed all of the questions and concerns on a one to one basis. A court reporter was present to document formal statements, and those statements are included in Table 24. A record of the public hearing, containing handouts and other documents utilized to obtain agency and the public’s participation are contained in Attachment I.

**Statements Filed for the Record during the Public Hearing**
The following statements were made by David Lopez, a staff engineer from the City of Baldwin Park.

**Table 24. Statements Filed During Public Hearing**

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>The city would like to have a construction agreement that would include compensation for extra police, traffic control, fire department paramedic services for expected additional traffic and possible collisions due to the impact of the project; to include in the agreement as well the city’s ability to hire an independent traffic engineer to verify the environmental documents traffic study and provide recommendations for mitigation that can then be implemented as part of the project during its construction</td>
<td>Careful traffic management will be used during the construction phase of the project to permit emergency service providers to deliver their respective services within acceptable response times. Accordingly, the project would not exacerbate a condition found to be less than desirable by the emergency service providers. Where needed, agreements between local agencies would be prepared, however, any agreements would be prepared during the following development phase. The Traffic Management Plan is explained in Section 2.1.4 of the IS/EA.</td>
</tr>
<tr>
<td>To include improvements for synchronization of traffic signals, striping or re-striping of street segments where additional traffic is to be expected, and allow for compensation for right-of-way acquisition at intersections that are heavily impacted to allow for safer traffic movement through that intersection;</td>
<td>See Response above.</td>
</tr>
<tr>
<td>To address peak hours of construction during p.m. and a.m. hours and allow for traffic plans for smooth traffic flow; to address how hot lanes will affect this project and address the need of right-of-way acquisition and how, through this project, they can be taken into account to minimize future impacts due to those hot lanes.</td>
<td>See response above. Section 2.5 of the updated IS/EA describes any cumulative effects from the I-10 “HOT Lane” project and the I-10/605 Connector project occurring concurrently. The project schedules are not anticipated to create conflict and in general Caltrans maintain capacity during peak flows.</td>
</tr>
</tbody>
</table>
The city would like parcels that full takes and/or partial takes – to give the city the first right of refusal for purchase and allow for proper development of those parcels as standard residential lots and/or commercial lots to be allowed as city standard residential lots and/or commercial standard lots.

According to the Right of Way Policy and Procedural Manual: Section 16.03.05.00. Before any excess real property, except surplus residential property as defined in government Code Section 54236 (See Section 16.10.00.00) is offered for sale to the public, it must be offered for sale or lease to local public agencies, housing authorities, or redevelopment agencies, within whose jurisdiction the property is located (See Streets &Highways Code Section 118 (a) (2).

Please note that properties declared as excess, must be cleared by various Caltrans internal Departments prior to sale.

Comments and Responses
The following pages contain comment letters received during the public circulation of the IS/EA and the corresponding responses to those comments.
MONTE 1
Section 2.5 has been updated to describe any cumulative effects from the I-10 “HOT Lane” project and the I-10/605 Direct Connector project.

MONTE 2
Section 2.1.5 has been updated to describe Caltrans efforts to maintain adequate traffic flow during peak hours. Generally, mainline lanes are kept open during peak hours to maintain capacity. Careful traffic management will be used during the construction phase of the project to minimize congestion and long travel times. Specific times and conditions for closures will be detailed in the Traffic Management Plan prepared in the next project phase.

MONTE 3
Caltrans will consult with affected local agencies throughout the project design and construction phases.
City staff were informed by Caltrans staff during the public workshop meeting on December 17, 2008, that the construction schedule for the proposed project may not in fact interfere with the scheduled December 31, 2010 deployment date for the HOT Lane program and two (2) year monitoring period of the operation of the HOT Lane on the I-10 (east and west bound at the I-10/I-605 interchanges) during the toll lane test period authorized under SB1422 Chapter 547, Statute of 2008 (Street and Highways Code Section 149.9). The City respectfully recommends that the IS/EA Document be appropriately edited to include an appropriate description of the HOT Lane demonstration program and the project construction schedule.

(iii) When construction begins on the Interstate Route 10/605 Direct Connector Project, it is the current understanding of City staff that all existing I-10 and I-605 freeway mainline travel lanes will remain open to traffic at peak travel time hours. Except for an emergency or other unused circumstances, no daytime or peak travel time lane closures are currently foreseen during the construction period for the project. The City respectfully requests that the IS/EA Document include appropriately detailed confirmation of this understanding on the part of the City.

(iv) The City staff understands that during the construction of the Interstate Route 10/605 Direct Connector Project, that any freeway mainline segment closures will be restricted to evening/night-time non-peak hours of short duration (for example, 10:00 p.m. to 5:00 a.m., on the following morning). The City notes that temporary freeway lane closures during construction of the project will likely produce a number of local street traffic affects as some freeway mainline traffic seeks alternate local street routes through the freeway interchange. The City respectfully requests that the IS/EA Document be appropriately edited to note that as the traffic plans for the construction of the project are developed by Caltrans, the cities of El Monte, Baldwin Park and South El Monte and the Los Angeles County Department of Public Works, will be consulted by Caltrans on an ongoing basis. Depending upon the specific details of the traffic plans for the management of construction related traffic for the project, the City of El Monte may request Caltrans to consider the implementation of specific construction/traffic related control and management measures for the project in the City of El Monte.

(iv) The City also respectfully requests that as the design plans for the deployment of the HOT Lanes on the I-10 Freeway are advanced, that Caltrans consider the potential interactions of HOT Lane activities, particularly for the outbound direction on the I-10 Freeway at PM peak hours during the course of construction of the project.
Mr. Gary Pearson  
Page 2  
Re: Interstate Route 10/605 Direct Connector Project

On behalf of the City Staff, please be assured that we look forward to working with Caltrans to accomplish the completion of this vitally important project at the earliest feasible time.

If you have any question regarding the comments of the City of El Monte, please do not hesitate to contact either Rene Bobadilla, City Superintendent of Public Works at (626) 580-2250 or me at (626) 580-2010.

Very Truly Yours,

David P. Gondek  
Senior Deputy City Attorney

cc: James Massenden, City Manager  
      Dante Hall, Assistant City Manager  
      Rene Bobadilla, Superintendent Public Works  
      Minh Thai, Planning Services Manager
Section 1.3 has been updated to include the project schedule. As proposed the project would begin construction in March 2012 and continue until January 2014.

RES 2
Sections 2.2.5 and 2.2.6 address the noise and health concerns. The inclusion of soundwalls would reduce the noise levels from the direct connector. Local air quality may be affected temporarily, but measures will be in place to reduce these impacts to local receptors. The project has complied with conformity requirements. A comprehensive analysis of project-level CO and PM (PM$_{2.5}$, PM$_{10}$) concluded that the proposed project is not likely to result in an adverse impact on the ambient air quality in the project vicinity. In addition, it is expected that there would be no appreciable difference in overall MSAT emissions among the alternatives. When compared to the no build alternative, the build alternatives are anticipated to result in reduced MSAT emissions in the immediate area of the project due to: reduction in congestion and improvement in the operations and the EPA’s and California’s control programs.

RES 3
A Notice of Availability (NOA) was mailed out to affected agencies and the public on 11/06/2008. Your address was included in the mailing list for the NOA. Three subsequent ads were published in regional newspapers informing the public of the NOA, comment period, and the public hearing held on 12/17/2008.
(RES 3 Continued)
The Caltrans right-of-way staff will make sure that you get your relocation benefits and you get relocated in a fair and equitable manner as shown in Appendix C.
CHAPTER 4 – CALIFORNIA ENVIRONMENTAL QUALITY ACT EVALUATION

4.1 DETERMINING SIGNIFICANCE UNDER CEQA

The proposed projects is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA’s responsibility for environmental review, consultation, and any other action required in accordance with NEPA and other applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327, (July 1, 2007). Caltrans is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. The NEPA determination of significance is based on context and intensity; CEQA is based on a similar concept—the environmental setting. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, the magnitude of the impact is evaluated and not the individual significance to the resource. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require Caltrans to identify each “significant effect on the environment” resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of mandatory findings or significance, which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

4.2 DISCUSSION OF CEQA CHECKLIST RESPONSES

A CEQA Checklist was prepared to evaluate for any significant effect on individual resources in compliance with CEQA’s Mandatory Findings of Significance. The Checklist is included as Appendix A. The following impacts are considered less than significant or less than significant with the implementation of proposed avoidance, minimization, and compensatory measures.

- Aesthetics- Please refer to the discussion in Section 2.1.6 of this document.
- Air Quality- Please refer to the discussion in Section 2.2.5 of this document.
- Cultural Resources- Please refer to the discussion in Section 2.1.7 of this document.
- Land Use and Planning- Please refer to the discussion in Section 2.1.1 of this document.
- Noise- Please refer to the discussion in Section 2.2.6 of this document.
- Population and Housing- Please refer to the discussion in Section 2.1.3 of this document.
- Mandatory Findings of Significance- Please refer to the discussion in Section 2.1.6
CHAPTER 5 - LIST OF PREPARERS & SUPPORTING TECHNICAL STUDIES

Caltrans Department of Transportation
District 7
Division of Environmental Planning
Ron Kosinski, Deputy District Director
Gary Iverson, Senior Environmental Planner
Agustin Barajas, Associate Environmental Planner
Noah Stewart, Associate Environmental Planner (Architectural History)
Michelle Goossens, Environmental Planner (Archeology)
Paul Caron, Senior Environmental Planner (District Biology)
Linna Wei, Environmental Planner (Biologist)
Elizabeth Suh, Associate Environmental Planner (Peer Reviewer)
Carlos Montez, Senior Environmental Planner (QA/QC Reviewer)
Quint Chemnitz, Environmental Planner

Office of Design
Refugio Dominguez, Senior Transportation Engineer
Amare Tsegie, Transportation Engineer
Aaron Foong, Transportation Engineer
Ivan-Chung Chu, Transportation Engineer

Office of Landscape Architecture
Jenifer Taira, Senior Landscape Architect
Catherine Zepeda, Landscape Architect

Office of Program/Project Management
Mehdi Salehink, Project Manager, District 7

Office of Environmental Engineering and Feasibility Studies
Andrew Yoon, Senior Transportation Engineer

Andy Woods, Transportation Engineer
Steve Chan, Senior Transportation Engineer
Jin Lee, Senior Transportation Engineer
Arnold Parmar, Transportation Engineer
Aye Htoon, Transportation Engineer

Office of Engineering Services
Shirley Pak, Senior Transportation Engineer
Loi Lamm, Transportation Engineer
Ralph Sasaki, Senior Transportation Engineer

Division of Materials and Foundations
Gustavo Ortega, Senior Engineering Geologist

Office of Freeway Operations
Dyari Ahmed, Transportation Engineer
Lily Kam, Senior Transportation Engineer

Office of Right of Way Acquisition and Relocation Assistance
Dan Dunn, Chief Right Of Way Relocation Assistance
Onyx Taylor, Right Of Way Agent

List of Supporting Technical Studies
Air Quality Report
Traffic Impact Analysis
Hydraulic Study
Visual Impact Assessment
Natural Environmental Study Report
Noise Study
Preliminary Hazardous Waste Assessment
Preliminary Geotechnical Evaluation
Storm Water Data Report
Historic Resources Evaluation Report
Archeological Survey Report
Relocation Impact Report
CHAPTER 6 - DISTRIBUTION LIST

Environmental Protection Agency
Office of Federal Activities (A104)
401 M Street SW
Washington, DC 20460

District Commander
U.S. Army Corps of Engineers,
Los Angeles District
Attn: Public Affairs office, Suite 1525
911 Wilshire Boulevard
Los Angeles, CA 90012

Director Office of Environmental Affairs
Department of Health and Human Services
200 Independence Avenue SW, Room 537F
Washington, DC 20201

Environmental Clearance Officer
U.S. Department of Housing & Urban Development
451 7th Street
S.W. Washington, D.C. 20410

Center for Disease Control
Center for Environmental Health & Injury Control Special Programs, Mail Stop F-29
1600 Clifton Road Atlanta, GA 30333

Director, Office of Environmental Compliance
U.S. Department of Energy
1000 Independence Avenue, SW, Room 4G-064
Washington, DC 20585

Office of Community and Planning Development
Department of Housing and Urban Development
611 West 6th Street, Suite 800
Los Angeles, CA 90017

Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

Director, Office of Environmental Affairs
U.S. Department of the Interior
Main Interior Building, MS 2340
1849 C Street, NW
Washington, DC 20240

Executive Officer
California Wildlife Conservation Board
1416 Ninth Street
Sacramento, CA 95814

Public Utilities Commission
320 West 4th Street, Suite 500
Los Angeles, CA 90013

California Highway Patrol, Southern Division
411 North Central Avenue, Suite 410
Glendale, CA 91203-2020

State Historic Preservation Officer
Office of Historic Preservation
Department of Parks and Recreation
P.O. Box 94296-0001
Sacramento, CA 94296-0001

Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-4
Los Angeles, CA 90012-2952

Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765
Mr. Mark A. Pisano, Executive Director
Southern California Association of Governments
818 West Seventh Street, 12th Floor
Los Angeles, CA 90017

Director, Department of Public Works
County of Los Angeles
125 South Baldwin Avenue
Arcadia, CA 91007

Vijay Singhal, Chief Executive Officer
City of Baldwin Park
14403 East Pacific Avenue
Baldwin Park, CA 91706

James W. Mussenden, City Manager
City of El Monte
11333 Valley Boulevard
El Monte, CA 91731-3293

Baldwin Park Unified School District
3699 North Holly Avenue
Baldwin Park, CA 91706

Foothill Transit District
100 North Barranca Avenue, Suite 100
West Covina, CA 91791

California Wildlife Federation
P.O. Box 1527
Sacramento, CA 95812

Sierra Club
Los Angeles Chapter
3435 Wilshire Boulevard, Suite 320
Los Angeles, CA 90010-1904

Automobile Club of Southern California
3333 Fairview Road
Costa Mesa, CA 92626

Director, Long Range Planning
University of California
300 Lakeside Drive 12th floor
Oakland, CA 94612

Los Angeles County Fire Department
1320 North Eastern Avenue
Los Angeles, CA 90063

Mayor Ernest Gutierrez
El Monte City Hall
11333 Valley Boulevard
El Monte, CA 91731

El Monte City Council
El Monte City Hall
11333 Valley Boulevard
El Monte, CA 91731

Mayor Manuel Lozano
Baldwin Park City Hall
14403 East Pacific Avenue
Baldwin Park, CA 91706

The Honorable Gloria Romero
California Senate District 24
149 S. Mednik Avenue, Suite 202
Los Angeles, CA 90022

The Honorable Ed Hernandez, O.D.
Assembly District 57
1520 W. Cameron Avenue, Suite 165
West Covina, CA 91790

The Honorable Hilda L. Solis
32nd Congressional District
4401 Santa Anita Avenue, Suite 211
El Monte, CA 91731

The Honorable Barbara Boxer
U.S. Senator, California
112 Hart Senate Office Building
Washington, D.C. 20510

The Honorable Dianne Feinstein
U.S. Senator, California
331 Hart Senate Office Building
Washington, D.C. 20510
L.A. County Supervisor Gloria Molina  
San Gabriel Valley Field Office  
3400 Aerojet Avenue, Suite 240  
El Monte, CA 91731  

Property Owner  
12758 Dalewood Street  
Baldwin Park, CA 91706

Property Owner  
12770 Dalewood Street  
Baldwin Park, CA 91706

Property Owner  
12800 Dalewood Street  
Baldwin Park, CA 91706

Property Owner  
12806 Dalewood Street  
Baldwin Park, CA 91706

Property Owner  
12812 Dalewood Street  
Baldwin Park, CA 91706

Property Owner  
12818 Dalewood Street  
Baldwin Park, CA 91706

Property Owner  
12839 Via Van Cleave  
Baldwin Park, CA 91706

Property Owner  
12846 Via Van Cleave  
Baldwin Park, CA 91706

Property Owner of APN #8564-003-020  
P.O. BOX 6085  
El Monte, CA. 91734-2085

Property Owner  
12836 Dalewood Street  
Baldwin Park, CA 91706

Property Owner  
13011 Judith Street  
Baldwin Park, CA 91706

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

Department of Transportation  
Division of Environmental Analysis  
Attn: Caltrans CTC Liaison  
1120 N Street, MS 27  
Sacramento, CA 95814

Group Pomona Properties LTD IV  
4900 Santa Anita Avenue 2C  
El Monte, CA 91731

Andrew Pastmant, City Manager  
City of West Covina  
125 E. College Street  
Covina, CA 91723

Roger Hernandez, Mayor  
City of West Covina  
125 E. College Street  
Covina, CA 91723

City Council  
City of West Covina  
125 E. College Street  
Covina, CA 91723

James Gokey  
Los Angeles Department of  
Water and Power  
111 N Hope St,  
Los Angeles, CA, 90012
CHAPTER-7 REFERENCES

- I-10/I-605 Partial Interchange Improvement Project Study Report, 2006
- I-10/I-605 Partial Interchange Improvement Draft Relocation Impact Report, April 2008
- I-10/I-605 Partial Interchange Improvement Traffic Impact Analysis, November 2005
- I-10/I-605 Partial Interchange Improvement Preliminary Hazardous Waste Assessment March 2008
- I-10/I-605 Partial Interchange Improvement Location Hydraulics Study, December 2007
- I-10/I-605 Partial Interchange Improvement Air Quality Report, May 2008
- I-10/I-605 Partial Interchange Improvement Natural Environmental Study Report, May 2007
- I-10/I-605 Partial Interchange Improvement Preliminary Geotechnical Investigation, January 2008
- I-10 San Bernardino Freeway HOV Project from I-10/I-605 to State Route 57/71 and Interstate I-210. Mitigated Negative Declaration/Finding of No Significant Impact
- City of El Monte web site: http://www.ci.elmonte.ca.us/citygov/planning/planningmain.html
- City of West Covina website, http://www.westcov.org/
- Southern California Association of Governments http://www.scag.ca.gov/
- California Air Resources Board, www.arb.ca.gov/desig/desig.htm
APPENDICES

Appendix A: CEQA Checklist
Appendix B: Title VI Policy Statement
Appendix C: Summary of Relocation Benefits
Appendix D: Project Plan Layout Sheets
Appendix E: Noise Level Measurements & Soundwall Locations
Appendix F: Letters of Support
Appendix G: Draft Environmental Commitments Record
Appendix H: Lease Agreement for Roadside Park
Appendix I: Public Hearing Record
Appendix J: FHWA Final Air Quality Conformity Determination
Appendix K: Discussion of Information that is Incomplete or Unavailable for MSAT impacts
Appendix A

CEQA Checklist
Supporting documentation of all CEQA checklist determinations is provided in Chapter 2 of this Environmental Impact Report/Environmental Assessment. Documentation of "No Impact" determinations is provided at the beginning of Chapter 2. Discussion of all impacts, avoidance, minimization, and/or mitigation measures is under the appropriate topic headings in Chapter 2.

**CEQA Environmental Significance Checklist**

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included in Section VI following the checklist. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts.

<table>
<thead>
<tr>
<th></th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Incorporation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**I. AESTHETICS -- Would the project:**

a) Have a substantial adverse effect on a scenic vista?  
   - [ ]  
   - [ ]  
   - [X]  
   - [ ]

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?  
   - [ ]  
   - [ ]  
   - [X]  
   - [ ]

c) Substantially degrade the existing visual character or quality of the site and its surroundings?  
   - [ ]  
   - [ ]  
   - [X]  
   - [ ]

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?  
   - [ ]  
   - [ ]  
   - [ ]  
   - [X]

**II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:**

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping  
   - [ ]  
   - [ ]  
   - [ ]  
   - [X]
and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>d) Expose sensitive receptors to substantial pollutant concentrations?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>e) Create objectionable odors affecting a substantial number of people?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

IV. BIOLOGICAL RESOURCES -- Would the project:

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?  

  [ ] Less Than Significant Impact  
  [ ] Potentially Significant Impact  
  [X] No Impact  
  [ ] Incorporation  
  [ ] Mitigation


d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?  

  [ ] Less Than Significant Impact  
  [ ] Potentially Significant Impact  
  [X] No Impact  
  [ ] Incorporation  
  [ ] Mitigation


e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?  

  [ ] Less Than Significant Impact  
  [ ] Potentially Significant Impact  
  [X] No Impact  
  [ ] Incorporation  
  [ ] Mitigation


f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?  

  [ ] Less Than Significant Impact  
  [ ] Potentially Significant Impact  
  [X] No Impact  
  [ ] Incorporation  
  [ ] Mitigation


V. CULTURAL RESOURCES -- Would the project:  

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?  

  [ ] Less Than Significant Impact  
  [ ] Potentially Significant Impact  
  [X] No Impact  
  [ ] Incorporation  
  [ ] Mitigation


b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?  

  [ ] Less Than Significant Impact  
  [ ] Potentially Significant Impact  
  [X] No Impact  
  [ ] Incorporation  
  [ ] Mitigation


c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?  

  [ ] Less Than Significant Impact  
  [ ] Potentially Significant Impact  
  [X] No Impact  
  [ ] Incorporation  
  [ ] Mitigation


d) Disturb any human remains, including those interred outside of formal cemeteries?  

  [ ] Less Than Significant Impact  
  [ ] Potentially Significant Impact  
  [X] No Impact  
  [ ] Incorporation  
  [ ] Mitigation


VI. GEOLOGY AND SOILS -- Would the project:  

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:  

  i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.  

  [ ] Less Than Significant Impact  
  [ ] Potentially Significant Impact  
  [X] No Impact  
  [ ] Incorporation  
  [ ] Mitigation
ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

b) Result in substantial soil erosion or the loss of topsoil?

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

VII. HAZARDS AND HAZARDOUS MATERIALS –

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two
miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

VIII. HYDROLOGY AND WATER QUALITY -- Would the project:

a) Violate any water quality standards or waste discharge requirements?

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

f) Otherwise substantially degrade water quality?
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

j) Inundation by seiche, tsunami, or mudflow?

IX. LAND USE AND PLANNING - Would the project:

a) Physically divide an established community?

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

X. MINERAL RESOURCES -- Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

XI. NOISE -

Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

XII. POPULATION AND HOUSING -- Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?
XIII. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Fire protection?  
  - No Impact
  - Significant Mitigation
  - Significant Impact
  - No Impact

- Police protection?  
  - No Impact
  - Significant Mitigation
  - Significant Impact
  - No Impact

- Schools?  
  - No Impact
  - Significant Mitigation
  - Significant Impact
  - No Impact

- Parks?  
  - No Impact
  - Significant Mitigation
  - Significant Impact
  - No Impact

- Other public facilities?  
  - No Impact
  - Significant Mitigation
  - Significant Impact
  - No Impact

XIV. RECREATION –

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

- No Impact
- Significant Mitigation
- Significant Impact
- No Impact

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

- No Impact
- Significant Mitigation
- Significant Impact
- No Impact

XV. TRANSPORTATION/TRAFFIC -- Would the project:

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

- No Impact
- Significant Mitigation
- Significant Impact
- No Impact

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

- No Impact
- Significant Mitigation
- Significant Impact
- No Impact

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

- No Impact
- Significant Mitigation
- Significant Impact
- No Impact

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

- No Impact
- Significant Mitigation
- Significant Impact
- No Impact

 significant mitigation
 significant impact
 no impact
e) Result in inadequate emergency access?

f) Result in inadequate parking capacity?

- [ ] Potentially Significant Impact
- [ ] Mitigation
- [ ] Less Than Significant Impact
- [x] No Impact

XVI. UTILITIES AND SERVICE SYSTEMS –

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

- [ ] Potentially Significant Impact
- [ ] Mitigation
- [ ] Less Than Significant Impact
- [x] No Impact

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

- [ ] Potentially Significant Impact
- [ ] Mitigation
- [ ] Less Than Significant Impact
- [x] No Impact

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

- [ ] Potentially Significant Impact
- [ ] Mitigation
- [ ] Less Than Significant Impact
- [x] No Impact

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

- [ ] Potentially Significant Impact
- [ ] Mitigation
- [ ] Less Than Significant Impact
- [x] No Impact

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

- [ ] Potentially Significant Impact
- [ ] Mitigation
- [ ] Less Than Significant Impact
- [x] No Impact

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

- [ ] Potentially Significant Impact
- [ ] Mitigation
- [ ] Less Than Significant Impact
- [x] No Impact

g) Comply with federal, state, and local statutes and regulations related to solid waste?

- [ ] Potentially Significant Impact
- [ ] Mitigation
- [ ] Less Than Significant Impact
- [x] No Impact

XVII. MANDATORY FINDINGS OF SIGNIFICANCE –

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant

- [ ] Potentially Significant Impact
- [ ] Mitigation
- [ ] Less Than Significant Impact
- [x] No Impact
or animal or eliminate important examples of the major periods of California history or prehistory?

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?
Appendix B

Title VI Policy Statement
January 14, 2005

TITLE VI
POLICY STATEMENT

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

WILL KEMPTON
Director

"Caltrans improves mobility across California"
Appendix C

Summary of Relocation Benefits
SUMMARY OF RELOCATION BENEFITS
AVAILABLE TO DISPLACED PARTIES

I  RELOCATION ASSISTANCE ADVISORY SERVICES

The California Department of Transportation will provide relocation advisory assistance to any person, business, farm or non-profit organization displaced as a result of the Department's acquisition of real property for public use. The Department will assist displacees in obtaining replacement housing by providing current and continuing information on the availability and prices of houses for sale and rental units that are comparable, "decent, safe and sanitary." Non-residential displacees will receive information on comparable properties for lease or purchase. For information on business, farm and non-profit organization relocation, refer to Section III, "Business and Farm Relocation Assistance Program."

Residential replacement dwellings will be in equal or better neighborhoods, at prices within the financial means of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are fair housing open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include supplying information concerning federal and state assisted housing programs and any other appropriate services being offered by public and private agencies in the area.

II  RESIDENTIAL RELOCATION PAYMENTS PROGRAM

The Relocation Payments Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for, or incidental to, purchasing or renting the replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacees' property. Any actual moving costs in excess of the 50-mile limit will be the responsibility of the displacees. The Residential Relocation Program is summarized below:

Moving Costs
Any displaced person, who was lawfully in occupancy of the acquired property regardless of the length of occupancy in the acquired property, will be eligible for reimbursement of the moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule which is determined by the number of furnished or unfurnished rooms in the displacement dwelling.
**Purchase Supplement**
In addition to moving and related expense payments, eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their properties for 180 days prior to the date of the first written offer to purchase the property, may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate. Also, the interest differential must be based upon the lower of either: 1) the loan on the displacement property, or 2) the loan on the replacement property. The maximum combination of these supplemental payments that the owner-occupants can receive is $22,500. If the total entitlement (without the moving payments) is in excess of $22,500, the Last Resort Housing Program will be applied. Refer to synopsis of Last Resort Housing below.

**Rental Supplement**
Tenants who have occupied the property to be acquired by Caltrans for 90 days or more and owner-occupants of 90 to 179 days prior to the date of the of the first written offer to purchase may qualify to receive a rental differential payment. This payment is made when the department determines that the cost to rent a comparable "decent, safe and sanitary" replacement dwelling would be more than the present rent of the acquired dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the "Down Payment" section below. The maximum payment to any tenant of 90 days or more and any owner-occupant of 90 to 179 days, in addition to moving expenses, will be $5,250. If the total entitlement for rental supplement exceeds $5,250, the Last Resort Housing Program will be used. Please refer to Last Resort Housing clarification below.

The displaced person must rent and occupy a "decent, safe and sanitary" replacement dwelling within one year from the date the department takes legal possession of the property, or from the date the displacee vacates the department-acquired property, whichever is later.

**Down Payment**
The down payment option has been designed to aid owner-occupants of 90 to 179 days and tenants with no less than 90 days of continuous occupancy prior to the Department's first written offer. The down payment and incidental expenses cannot exceed the maximum payment of $5,250. The one year eligibility period during which to purchase and occupy a "decent, safe and sanitary" replacement dwelling will apply.
Last Resort Housing

Federal regulations (49 CFR 25) contain the policy and procedure for implementing the Last Resort Housing Program on federal aid projects. Caltrans, in order to maintain uniformity in the program, has also adopted these federal guidelines on non-federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard relocation as explained above. Last Resort Housing has been designed primarily to cover situations where available comparable replacement housing, or when their anticipated replacement housing payments exceed the $5,250 and $22,500 limits of standard relocation procedures. In certain exceptional situations, last resort housing may also be used for tenants of less than 90 days.

After the first written offer to acquire the property has been made, the Department will, within a reasonable length of time, personally contact the displacees to gather important information relating to: preferences in areas of relocation; the number of people to be displaced and the distribution of adults and children (according to age and gender); location of schools and employment; special arrangements necessary to accommodate disabled family members; and the financial ability to relocate to a comparable replacement dwelling which will house all members of the family decently.

The above explanation is general in nature and is not intended to be a complete explanation of relocation regulations. Any questions concerning relocation should be addressed to Caltrans. Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displaced household in order to see that all payments and benefits are fully utilized, and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments.

III BUSINESS AND FARM RELOCATION ASSISTANCE PROGRAM

The Business and Farm Relocation Program provides for aid in locating suitable replacement property and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for specific relocation needs.

There are different types of payments available to businesses, farms and non-profit organizations. These include: moving expenses, which consist of actual reasonable costs (as listed) for:

- The relocation of inventory, machinery, office equipment, and similar business-related personal property; dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting personal property.
• Loss of tangible personal property provides payment to relocate for "actual direct" losses of personal property that the owner elects not to move.

• Expenses related to searching for a new business site can be reimbursed up to $1,000 for actual reasonable cost incurred.

• Reestablishment expenses relating to the new business operation.

Payment "in lieu" of moving expense is available to businesses which are expected to suffer a substantial loss of existing patronage as a result of the displacement, or if certain other requirements such as inability to find a suitable relocation site are met. This payment is an amount equal to the average annual net earnings for the last two taxable years prior to relocation. Such payment may not be less than $1,000 or no more than $20,000.

IV ADDITIONAL INFORMATION

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or sources for the purpose of determining the extent of eligibility of the displacees for assistance under the Social Security Act, local Section 8 housing programs, or other federal assistance programs.

Persons who are determined to be eligible for relocation payments, and are legally occupying the property required for the project will not be asked to move without being given at least 90 days advance notice, in writing. Occupants of any type of dwelling eligible for relocation payments will not be required to move unless at least one comparable "decent, safe and sanitary" replacement residence, open to all persons, regardless of race, color, religion, sex or national origin, is available or has been made available to them by the state.

Any person, business, farm or non-profit organization which has been refused a relocation payment by Caltrans, or believes that the payments made are inadequate, may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from Caltrans Relocation Advisors.

The information above is not intended to be a complete statement of all of the Department's laws and regulations. At the time of the first written offer to purchase, owner-occupants are given a more detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted immediately after the first written offer to purchase, and also given a more detailed explanation of the Department's relocation programs.
Appendix D

Project Plan Layout Sheets
GENERAL NOTES:
A) FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
   SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE
B) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
1-10/1-605 INTERCHANGE IMPROVEMENT
1-10 KP 50.2 (PM 31.2)
1-605 KP R 32.3 (PM R20.9)
07186-24640K

S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR

SEE SHEET L-2

ALTERNATIVE 2
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
ATTACHMENT C
LAYOUT
GENERAL NOTES:
A) FOR COMPLETE RIGHT OF WAY AND ACCURATE BOUND
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE
B) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

NOTES:
1. CONSTRUCT ELEVATED STRUCTURE
2. RESTRIPE HOV & MF LANES

PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE
I-10 KP 50.2 (PM 31.2)
I-605 KP R 32.3 (PM R 20.9)
07186-24540K

S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
(I-605 STA 332+40 - I-10 STA 514+00)
GENERAL NOTES:
1) FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
   SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE
2) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

NOTES:
1. CONSTRUCT ELEVATED STRUCTURE
2. RESTRIPE HOV AND MF LANE
3. REALIGN DALEWOOD ST

PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE
IMPROVEMENTS
I-10 KP 50.2 (PM 31.2)
I-605 KP R 32.3 (PM R20.9)
07186-24540K

S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
(I-605 STA 332+90 - I-10 STA 514+00)

ALTERNATIVE 2
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
ATTACHMENT C
LAYOUT
GENERAL NOTES:
A) FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
   SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE
B) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE IMPROVEMENT
I-10 KP 50.2 (PM 31.2)
I-605 KP R 32.3 (PM R20.9)
07186-24540K

ALTERNATIVE 3
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
ATTACHMENT C
LAYOUT

SEE SHEET L-5

S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
GENERAL NOTES:
A) FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE
B) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

NOTES:
1. CONSTRUCT ELEVATED STRUCTURE
2. RECONSTRUCT DALEWOOD ST

PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE

I-10 KP 50.2 (PM 31.2)
I-605 KP R 32.3 (PM R20.9)
07186-24540K

S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
(L 605 STA 323+00 - L 10 STA 544+00)

ALTERNATIVE 3
ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN
ATTACHMENT C LAYOUT
S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR

( I-605 STA 332+90 - I-10 STA 514+00)

ALTERNATIVE 3
ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN
ATTACHMENT C LAYOUT
GENERAL NOTES:
1) FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
   SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE
2) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

NOTE: 1) RECONSTRUCT DALEWOOD ST

S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
( I-605 STA 332+90 - I-10 STA 514+00)

PRELIMINARY PLAN
FOR PROJECT STUDY REPORT
I-10/I-605 INTERCHANGE
IMPROVEMENTS
I-10 KP 50.2 (PM 31.2)
I-605 KB R 32.3 (PM R20.9)
07186-24540K

ALTERNATIVE 3
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
ATTACHMENT C
LAYOUT
GENERAL NOTES:
FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE

CONSTRUCTION NOTES:
1. REALIGN S/B 605 TO W/B 10 & E/B 10 RAMP CONNECTOR

PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE IMPROVEMENT
I-10 KP 50.1/51.9 (PM 31.1/32.3)
I-605 KP R 32.5/33.1 (PM R20.2/20.6)
07186-24540K

ALTERNATIVE 4
ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN
ATTACHMENT C LAYOUT
GENERAL NOTES:
FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA,
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

CONSTRUCTION NOTES:
1. CONSTRUCT S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
2. REMOVE EXIST S/B 605 TO E/B 10 AT-GRADE RAMP CONNECTOR
3. REALIGN EXIST W/B 10 TO S/B 605 RAMP CONNECTOR

PRELIMINARY PLAN
FOR PROJECT STUDY REPORT:
I-10/I-605 INTERCHANGE IMPROVEMENTS
I-10 KP 50.1-51.9 (PM 31.1-32.3)
I-605 KP R 32.5-33.1 (PM R20.2-20.6)
07186-24640K

S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR

ALTERNATIVE 4
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
ATTACHMENT C LAYOUT
GENERAL NOTES:
FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

CONSTRUCTION NOTES:
1. CONSTRUCT SB 605 TO EB 10 ELEVATED DIRECTIONAL CONNECTOR
2. REALIGN DALEWOOD ST (STA 509+00 - 513+70)
3. PROTECT EXIST BESS AVE POC (PEDESTRIAN OVERCROSSING)
4. PROTECT EXIST BESS-FRAZIER ST O/C (OVERCROSSING)

PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE IMPROVEMENTS
I-10 KP 50.1/51.9 (PM 31.1/32.3)
I-605 KP R 32.5/33.1 (PM R20.2/20.6)
07186-24540K

S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
( I-605 STA 332+90 - I-10 STA 514+00)
PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE
IMPROVEMENTS
I-10 KP 50.1/51.9 (PM 31.1/32.3)
I-605 KP R 32.5/33.1 (PM R20.2/20.6)

S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
(I-605 STA 332+90 - I-10 STA 514+00)

GENERAL NOTES:
FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE

CONSTRUCTION NOTE:
3 REALIGN DALEWOOD ST (STA 509+00 - 513+70)

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ATTACHMENT C
LAYOUT
Appendix E

Noise Level Measurements and Soundwall Locations
Appendix F

Letters of Support from Local Agencies
Mr. Melvin Hodges  
Chief, Project Studies  
California Department of Transportation  
Division of Planning, Public Transportation and Local Assistance  
100 South Main Street  
Los Angeles, CA 90012

Dear Mr. Hodges:

The City of Baldwin Park Public Works Department is in full support of the Interstate 10 and 605 interchange improvement. We understand that this project would result in the construction of a new interchange connector for the southbound Interstate 605 by eliminating the conflict and weaving caused by the current situation. As you know, this improvement will greatly benefit the westbound Interstate 10 by eliminating this conflict. Currently, this interchange routinely causes westbound traffic to back up all the way to the Grand Avenue exit, often times during off-peak hours. This new connector will result in a tremendous improvement in traffic safety, eliminate congestion, reduce pollution and improve the quality of life and economy throughout the San Gabriel Valley. We are prepared to bring this issue before the City Council to request that they officially support this project and its eventual funding.

Please keep us informed on any status changes of this project and notify us if there is anything we can do to assist with this project. I can be contacted at (626) 813-5251.

Sincerely,

Shafique Naiyer  
Director of Public Works

SN:an

cc: Mehdi Salehinik, Caltrans Project Manager, Central Area
August 30, 2005

Mr. Melvin Hodges
Chief, Project Studies
California Department of Transportation
Division of Planning, Public Transportation and Local Assistance
100 South Main Street
Los Angeles, CA 90012

Dear Mr. Hodges:

The City of Covina is in full support of the Interstate 10 and 605 interchange improvement project. We understand that this project would result in the construction of a new interchange connector for the southbound Interstate 605 to the eastbound Interstate 10. This connector would relieve the interchange between the westbound Interstate 10 to the southbound Interstate 605 by eliminating the conflict and dangerous merging and lane changing caused by the current situation.

By eliminating this conflict, this improvement will greatly benefit the westbound Interstate 10. Currently, this interchange routinely causes westbound traffic to back up all the way to the Grand Avenue exit, often times during off-peak hours. This new connector will result in a tremendous improvement in traffic safety, eliminate congestion, reduce pollution and improve the quality of life and economy throughout the San Gabriel Valley. We are prepared to bring this issue before the City Council to request that they officially support this project and its eventual funding.

Please keep us informed on any status changes of this project and notify us if there is anything we can do to assist with this project. Our point of contact, Vince Mastrosimone, Director of Public Works, can be contacted at (626) 858-7248.

Sincerely,

Peggy Delach
Mayor

cc: Mehdi Salehinik, Caltrans Project Manager, Central Area File
August 29, 2005

Mr. Melvin Hodges
Chief, Project Studies
California Department of Transportation
Division of Planning, Public Transportation and Local Assistance
100 South Main Street
Los Angeles, CA 90012

Dear Mr. Hodges:

The City of West Covina Public Works Department is in full support of the Interstate 10 and 605 interchange improvement. We understand that this project would result in the construction of a new interchange connector for the southbound Interstate 605 to the eastbound Interstate 10. This connector would relieve the interchange between westbound Interstate 10 to the southbound Interstate 605 by eliminating the conflict and weaving caused by the current situation. As you know, this improvement will greatly benefit the westbound Interstate 10 by eliminating this conflict. Currently, this interchange routinely causes westbound traffic to back up all the way to the Grand Avenue exit, often times during off-peak hours. This new connector will result in a tremendous improvement in traffic safety, eliminate congestion, reduce pollution and improve the quality of life and economy throughout the San Gabriel Valley. We are prepared to bring this issue before the City Council to request that they officially support this project and its eventual funding.

Please keep us informed on any status changes of this project and notify us if there is anything we can do to assist with this project. I can be contacted at (626) 939-8416 or e-mail address at shannon.yauchzee@westcovina.org.

Sincerely,

Shannon A. Yauchzee
Public Works Director/City Engineer

cc: Mehdi Salehinik, Caltrans Project Manager, Central Area
Appendix G

Draft Environmental Commitments Record
<table>
<thead>
<tr>
<th>Log No.</th>
<th>Mitigation Type</th>
<th>Responsible Party</th>
<th>Monitoring Frequency</th>
<th>Implementation Phase</th>
<th>SEP/NSEP</th>
<th>Red List?</th>
<th>Mitigation Measure</th>
<th>Mitigation Monitoring Action Performed</th>
<th>Date Completed</th>
<th>Completed Signature Page</th>
<th>Mitigation Complete?</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>Pre-Construction Surveys</td>
<td>Environmental Division</td>
<td>Pre-Construction</td>
<td></td>
<td></td>
<td></td>
<td>Contact surveys at least three weeks before construction if clearing and grubbing will take place during the bird nesting season.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-7</td>
<td>Vegetation</td>
<td>Environmental Division</td>
<td>PS&amp;E and Construction</td>
<td></td>
<td></td>
<td></td>
<td>Revegetate disturbed or construction impact areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-1</td>
<td>Landscape and Plant Design</td>
<td>Landscape Architect</td>
<td>PS&amp;E</td>
<td></td>
<td></td>
<td></td>
<td>Views or other sound wave treatment shall be applied to soundwalls along Dalewood Street, towards the southeast of soundwall.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-4</td>
<td>Precision Cutting</td>
<td>Landscape Architect</td>
<td>PS&amp;E and Construction</td>
<td></td>
<td></td>
<td></td>
<td>Revegetate disturbed and construction impact areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-5</td>
<td>Special Architectural Treatments</td>
<td>Landscape Architect</td>
<td>PS&amp;E</td>
<td></td>
<td></td>
<td></td>
<td>Provide aesthetic treatments to bridge structure, such as concrete pattern designs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-7</td>
<td>Revegetation - Plan Establishment Types and Period</td>
<td>Landscape Architect</td>
<td>Construction and Post Construction</td>
<td></td>
<td></td>
<td></td>
<td>Landscaped areas within the project area, which are disturbed during construction would be reseeded as appropriate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-6</td>
<td>Historical Resources</td>
<td>Environmental Division</td>
<td>PS&amp;E and Construction</td>
<td></td>
<td></td>
<td></td>
<td>To minimize impacts, the new towers would resemble the existing eligible transmission lines in form and style, however the new towers would be approximately 40 feet higher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-5</td>
<td>Relocation Impacts</td>
<td>Right of Way</td>
<td>PS&amp;E</td>
<td></td>
<td></td>
<td></td>
<td>Relocation Assistance would be provided to displaced</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-1</td>
<td>Noise Unit</td>
<td>Resident Engineer</td>
<td>PS&amp;E and Construction</td>
<td>Permanent 10'-14' soundwalls to be constructed along Dalewood Street, between 3,000-4,000 feet length.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-3</td>
<td>Resident Engineer</td>
<td>Construction</td>
<td>Caltrans Sound Control Requirements shall be in place during construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-1</td>
<td>Resident Engineer</td>
<td>Construction</td>
<td>Implement Project Dust Control Measures provided in the Air Quality Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-1</td>
<td>Field Inspection</td>
<td>Hazardous Waste Unit</td>
<td>PS&amp;E and Construction</td>
<td>Lead-contaminated soils shall be handled per the DTSC release guidelines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-2</td>
<td>Appropriate Health and Safety Plan</td>
<td>Resident Engineer</td>
<td>PS&amp;E and Construction</td>
<td>TBD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-4</td>
<td>Appropriate Noise Control Plan</td>
<td>Resident Engineer</td>
<td>PS&amp;E and Construction</td>
<td>TBD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-6</td>
<td>Road Striping/Plant Lead Provisions</td>
<td>Resident Engineer</td>
<td>PS&amp;E and Construction</td>
<td>TBD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-8</td>
<td>Underground Trenches</td>
<td>Hazardous Waste Unit</td>
<td>PS&amp;E and Construction</td>
<td>TBD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-2</td>
<td>Asbestos and Caltrans DPP</td>
<td>Construction</td>
<td></td>
<td>Clearing and grubbing shall occur outside the two nesting season (March 1st thru September 1st). Unless necessary, trees are not cut out.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# District 7 DRAFT ENVIRONMENTAL COMMITMENTS RECORD

## I-10/I-605 Direct Bridge Connector Project

**LA-10/605-(31.1/32.3)(20.2/20.6)**

### WATER QUALITY REQUIREMENTS

<table>
<thead>
<tr>
<th>Log No.</th>
<th>Mitigation Type</th>
<th>Responsible Party</th>
<th>Monitoring Frequency</th>
<th>Implementation Monitoring Phase</th>
<th>Mitigation Measure</th>
<th>Mitigation Monitoring Action Performed</th>
<th>Date Completed</th>
<th>Completed Signature Page</th>
<th>Mitigation Complete?</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-3</td>
<td>Stormwater Pollution Prevention Plan (SWPPP)</td>
<td>Resident Engineer</td>
<td>Construction</td>
<td>Construction</td>
<td>Sound Corrals, Requirements, will be required as part of the project. The requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.</td>
<td>Crowd Control requirements, will be required as part of the project. The requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-7</td>
<td>Stormwater Pollution Prevention Plan (SWPPP)</td>
<td>Resident Engineer</td>
<td>Construction</td>
<td>Construction</td>
<td>Damns shall be coordinated with affected agencies and included in the project plans and Traffic Management Plan.</td>
<td>Crowd Control requirements, will be required as part of the project. The requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*SWPP shall be prepared by the contractor and approved by the State and USACE.

**Construction Site BMPs**

- **Construction Site BMPs**
  - Construction Storm Water Unit
  - Construction Structural Water Units
  - Construction Storm Water Unit
  - Construction Storm Water Unit

*All mitigation is complete input use number 1 in the corresponding row. TPQ TO be determined at the Design Phase*
Appendix H

Lease Agreement for Roadside Park
That the Lessor, for and in consideration of the covenants, conditions, agreements, and stipulations hereinafter to be performed by the Lessee does hereby lease unto the said City of Baldwin Park, said land or interests therein being shown on the map or plat attached hereto, marked "Exhibit A", and by this reference made a part hereof, and more particularly described in the attached Legal Description marked "Exhibit B".

TO HAVE AND TO HOLD said premises, hereinafter called "the leased premises", together with appurtenances and easements belonging thereto for the term and on the conditions hereinafter set forth.

THE PARTIES HERETO COVENANT AND AGREE AS FOLLOWS:

1. TERM:

The term of this lease shall be for a period of fifty (50) years beginning Oct. 1, 1974, and ending Oct. 1, 2024.

2. TERMINATION:

This lease shall terminate upon the occurrence of any of the following events:

(a) All or any portion of the leased premises is required for State highway or other public transportation purposes, PROVIDED HOWEVER, that when all or any portion of the leased property is required for highway purposes, the Lessor shall provide 180 days' notice of termination;

(b) All or any portion of the leased property ceases to be used for park purposes.

(c) In the opinion of the Director of Transportation, the property is not maintained in such a manner as to protect and
WHEREAS, the Legislature has enacted Section 104.15 of the Streets and Highways Code to authorize the Department to lease to local agencies for park purposes such portion of the remainder of property acquired pursuant to Section 104.15 not to exceed 200 feet from the closest boundary of the State highway or public work or improvement, when such use will protect such highway, public work or improvement and its environs, and will preserve its view, appearance, light and usefulness in accordance with conditions prescribed by the California Highway Commission; and

WHEREAS, the California Highway Commission has prescribed certain procedures, terms and conditions for the leasing of such property; and

WHEREAS, the City of Baldwin Park intends to develop a park upon said property;

IT IS THEREFORE AGREED that the State of California and the City of Baldwin Park hereby enter into a leasehold containing the following terms and conditions:

LEASE covering premises in the City of Baldwin Park County of Los Angeles

THIS INDENTURE OF LEASE, made and entered into and effective this 23rd day of Sept., 1977, by and between the STATE OF CALIFORNIA, acting by and through the Department of Transportation, hereinafter called the LESSOR, and the City of Baldwin Park, hereinafter called the LESSEE:
However, that the Lessor shall notify the Lessee that the Director has determined that the property is not so maintained, stating the reasons for such determination, and provided further, that Lessee shall have a reasonable time, not to exceed one hundred eighty (180) days, to remedy the conditions or defects which formed the basis for the Director's determination.

It is understood and agreed that upon termination of this lease for any reason, Lessor shall not be obligated to provide replacement lands or facilities or compensation in any manner for the part taken or the remainder of the leased premises. Provided however, that if Lessee has purchased adjoining property in conjunction with this Lessee, and if said adjoining parcel remains in the ownership of the Lessee and continues to be used in conjunction with the leased premises, and if this lease is terminated for the reasons stated in 2(a) above, Lessee shall be entitled to recover from the acquiring agency severance damages, if any, to the extent that said adjoining parcel is damaged.

3. RENTAL:

The Lessee agrees to pay Lessor as rent for the leased premises during the term the sum of One hundred ____________ Dollars ($100.00 ____________) payable annually in advance to the Lessor at the office of the State of California, Department of Transportation, at 120 South Spring Street, Los Angeles, California, commencing on the 1st day of Oct., 1974, and on the 1st day of Oct. of each year thereafter.
CITY OF BALDWIN PARK

TRACT NO. 13211
M.B. 270 - 14

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DISTRICT 07

PLAT ACCOMPANYING
Appendix I

Public Hearing Record
CALTRANS PUBLIC WORKSHOP/HEARING
INTERSTATE 10/INTERSTATE 605 DIRECT CONNECTOR AND INTERCHANGE IMPROVEMENT PROJECT

Wednesday, December 17th, 2008
De Anza Elementary School
5 p.m. – 8 p.m.

AGENDA

Formal statements may be made to a court reporter during this workshop/hearing. Formal statements will be entered into the project record and addressed in the final environmental document. If you wish to have your comment addressed during the presentation, please fill out a Comment Card.

Sign in; Display Viewing

Welcome/Meeting Overview
- Introduction of Project
- Project Description
- Schedule
- Funding

Ron Kosinski/ Mehdi Salehinik

Right of Way

Dan Dunn

Environmental Considerations

Ron Kosinski

Comments
(Please use cards to facilitate comments or questions)

Caltrans Specialists

What Happens From Here?

Ron Kosinski

Meeting Adjourns
- Continue Individual discussions with Caltrans specialist and view displays

For project information on-line go to http://dot.ca.gov/dist07/travel/projects/details.php?id=38

"Caltrans improves mobility across California"
PROJECT INFORMATION SHEET
Interstate 10/Interstate 605 Direct Connector and Interchange Improvement
Project in the City of Baldwin Park

Project Limits:
The Interstate 10/605 Interchange, from the beginning of southbound (S/B) I-605 to the eastbound (E/B) I-10 connector and extending 3,900 feet east of the interchange along the eastbound (E/B) I-10.

Benefits:
- Improve the safety and operation of the southbound (S/B) I-605 and northbound (N/B) I-605 to eastbound (E/B) I-10 and westbound (W/B) I-10 to S/B I-605 connectors. Currently, accident rates on the affected connectors exceed and even quadruple the state average.
- Eliminate merging conflicts at the joint segments of the affected connectors.
- Reduce queuing on the outside lanes of W/B I-10 and N/B I-605 mainlines just before entering the S/B I-605 and E/B I-10 connectors respectively. Due to merge conflicts and a high number of accidents, the outside lanes of the W/B I-10 and N/B I-605 experience long delays before entering their intended connector.

Project Alternatives:
Alternative 1: No Build
This will maintain the current configuration of the existing connectors.

Alternative 2: Construct a Direct Bridge Connector with standard width shoulders
Alternative 2 proposes to construct a single lane fly over bridge structure spanning the interchange. The bridge would provide a direct connector for traffic traveling from S/B I-605 to E/B I-10, and would convert the existing affected connectors into individual connectors. At the highest point the bridge
connector would stand approximately 90 feet over the interchange, and then gradually slope downward to the outside lane of E/B I-10. Retaining wall structures near the approach and departure of the bridge connector would be constructed to support the connector. Dalewood Street would need to be realigned throughout a length of 3,500 feet adjacent to the proposed connector. The realignment of Dalewood Street would require the acquisition of 13 full and partial property acquisitions. Soundwalls will be constructed in conjunction with this project and the Interstate 10 High Occupancy Vehicle project. The construction of soundwalls will take place just east of the I-10/605 interchange to west of Baldwin Park Boulevard.

The cost of Alternative 2 is estimated at $77.9 million.

**Alternative 3:** Construct a Direct Bridge Connector carrying two standard width lanes and shoulders

Alternative 3 is similar to Alternative 2 in regard to geometry and general alignment, except that the direct connector would involve a two-lane instead of a one-lane structure. Safety and operational improvements would be the same with added volume capacity on the bridge connector.

The construction of soundwalls would be similar to Alternative 2. Thirteen full and partial property acquisitions would be required as in Alternative 2 as well as additional air and subsurface easements for the two-lane structure.

The cost of Alternative 3 is estimated at $126.9 million.

**Alternative 4:** Construct a Direct Connector with standard width shoulders while also maintaining standard width outside shoulders on E/B I-10.

Alternative 4 incorporates the same design features as Alternative 2 with the exception of a further southward alignment on the south side of I-10. A southern alignment was incorporated into the alternative design in order to maintain standard width shoulders on the E/B I-10 mainline. Unlike Alternative 4, Alternatives 2 and 3 would create non-standard shoulder widths on the E/B I-10 mainline due to the placement of bridge columns and soundwalls. The alignment further south provides the space needed to maintain a standard width shoulder along the E/B I-10.

Alternative 4 would impact a similar land area to Alternative 2. The number of property acquisitions needed would remain the same as in Alternatives 2 and 3. The construction of soundwalls would be similar to Alternative 2, but would extend further east, following the bridge connector to where it meets the E/B I-10 mainline.

The cost of Alternative 4 is estimated at $74 million.

**Project Funding:**
The project is funded through the 2008 State Highway Operation and Protection Program (SHOPP). The project has a total amount of $70.5 million programmed for construction, right-of-way and support.

**Project Timeline:***

<table>
<thead>
<tr>
<th>Task</th>
<th>Tentative Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Approval</td>
<td>March 2009</td>
</tr>
<tr>
<td>Preliminary Design</td>
<td>April 2009</td>
</tr>
<tr>
<td>Begin Right-of-way</td>
<td>December 2009</td>
</tr>
<tr>
<td>Start construction</td>
<td>March 2012</td>
</tr>
<tr>
<td>End Construction</td>
<td>January 2014</td>
</tr>
</tbody>
</table>

FREQUENTLY ASKED QUESTIONS
Interstate 10/Interstate 605 Direct Connector and Interchange Improvement Project in the City of Baldwin Park

1. Will my home be purchased?
   Some private property will need to be acquired or purchased for this project. Before acquisition/purchase, a Right of Way agent will contact the homeowner about an appraisal. A full market value appraisal will be made of the subject property.

2. Will my property undergo a construction easement?
   Some construction easements will be required on some private property to construct the project. The owner(s) will be compensated for use of their property during construction. After construction the property will be returned to the owner. Before a construction easement is processed, a Right of Way agent will contact the homeowner about an appraisal of the property. This appraisal process is followed whether the property acquired is a partial acquisition or a full acquisition.

3. How long will this project take?
   Project as scheduled will include plans, specifications and estimates (PS&E) by April 2009 and will be ready to start construction in March 2012. The project will take about two years to build. The project completion date is scheduled for January 2014.

4. What are the alternatives?
   At this stage, there are three viable alternatives, Alternatives 2, 3 and 4. Please refer to the Project Information Sheet for additional information.

5. Which Alternative is preferred?
   One purpose of this meeting is to obtain public input regarding this project to assist in selecting the preferred alternative. The final decision will be determined at the Final Environmental Document stage (March 2009).

6. What data supports the decision for this project?
   Studies indicated that accidents occurred at a higher rate than the state average. At times accident rates exceeded the state average by four times. Studies also showed that travel speeds within the affected connectors would improve considerably with the implementation of the project.

7. How much will it cost?
   The project construction costs for the various build alternatives is estimated between $74 million and $126 million.

8. What if and when will my “off-or on-ramp lane” be closed?
   The temporary closure of any particular ramp has not been determined at this stage. This information will be available in the design stage, in April 2009. When a ramp is closed, traffic detours will be provided.
9. **How much delay will there be during construction?**
A Traffic Management Plan (TMP) will be developed to minimize delay and inconvenience to the public during the construction period. The TMP will include a public information program to inform the public of project progress and upcoming closures and detours.

10. **When will the construction be done, during the day, at night, or both?**
Construction will be done in the daytime.

11. **What about the noise levels – during the day, at night, or both?**
The project contractor will be required to comply with all local noise level rules, regulations and ordinances as well as the State’s Standard Specifications restricting noise levels.

12. **To whom do we voice our concerns during construction?**
A Caltrans Resident Engineer (RE) will be responsible for managing the construction phase. The RE will have a local telephone number with 24-hour voice mail to address concerns about the project. The name and phone number will be made available when the project is about to start.

13. **Are soundwalls proposed for this project?**
Soundwalls were recommended as part of all the build alternatives.

14. **What about graffiti removal? What/who will be responsible during and after construction?**
During the project construction period, the contractor is responsible for graffiti removal. After completion of the project, the local Caltrans Maintenance crew will be responsible.

15. **Can’t you do something else other than tear up everything?**
The No-Build Alternative can be chosen, however, this alternative will not solve the safety and connector operation problems.

16. **How do I know that my input will be considered?**
All input (comment cards, court reporter transcript, etc.) will be included in the final environmental document and will help Caltrans to make the final decision.
<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>John McCaffrey</td>
<td>3332 Barnes Ave BP</td>
<td></td>
<td></td>
<td>Assemblyman</td>
</tr>
<tr>
<td>Solo Charles</td>
<td>1520 W. Cameron St 105</td>
<td>West Covina</td>
<td>91790</td>
<td>El Hernandez</td>
</tr>
<tr>
<td>RONALD BURT</td>
<td>3752 Millbury</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RICHARD BURT</td>
<td>BALDWIN PARK 91706</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mike Miller</td>
<td>811 J. Sunset Ave</td>
<td></td>
<td></td>
<td>Leg Coalition of SCU</td>
</tr>
<tr>
<td></td>
<td>West Covina 91700</td>
<td></td>
<td></td>
<td>Chambers</td>
</tr>
<tr>
<td>Alessia C Garcia</td>
<td>10837 Via Van Cleave BP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Jeng</td>
<td>LACMTA</td>
<td>LA</td>
<td>90012</td>
<td></td>
</tr>
<tr>
<td>Gene Babudille</td>
<td>3527 Santa Anita</td>
<td></td>
<td></td>
<td>City of El Monte</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Gondolf</td>
<td>City of El Monte</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>David Lopez</td>
<td>14403 E. Pacific Ave Baldwin Park</td>
<td>91706</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Address</td>
<td>City</td>
<td>Zip</td>
<td>Organization (if any)</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
<td>------</td>
<td>-----</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Agustín Barajas</td>
<td></td>
<td></td>
<td></td>
<td>D30</td>
</tr>
<tr>
<td>Le Chen</td>
<td></td>
<td></td>
<td></td>
<td>D3P</td>
</tr>
<tr>
<td>Linna Wei</td>
<td></td>
<td></td>
<td></td>
<td>D3P</td>
</tr>
<tr>
<td>Daniel Tran</td>
<td></td>
<td></td>
<td></td>
<td>D3P</td>
</tr>
<tr>
<td>NOAH STEWART</td>
<td></td>
<td></td>
<td></td>
<td>D3R</td>
</tr>
<tr>
<td>RICH KESTER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTHONY BASUZIAN</td>
<td></td>
<td></td>
<td></td>
<td>D3P</td>
</tr>
<tr>
<td>MEHDI SALEHINIK</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joel Benilla</td>
<td></td>
<td></td>
<td></td>
<td>D3P</td>
</tr>
<tr>
<td>DARY AHMED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARNOLD J. Parmar</td>
<td></td>
<td></td>
<td></td>
<td>C3T</td>
</tr>
<tr>
<td>LEFLO (Jim)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PETER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>John</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Address</td>
<td>City</td>
<td>Zip</td>
<td>Organization (if any)</td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td>------</td>
<td>-----</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Dan Dunn</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(213) 837-4086</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L. J. Konning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(213) 837-0703</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix J

FHWA Final Air Quality Conformity Determination
Doug Failing, District Director  
California Department of Transportation  
District 7  
100 South Main Street, Suite 100  
Los Angeles, CA 90012-3606

Attention: Andrew Yoon, Senior Transportation Engineer

Dear Mr. Yoon:

SUBJECT: Project-Level Conformity Determination for the I-10/605 Direct Connector Project

On January 26, 2009, the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a request for the project-level conformity determination for the Interstates 10 and 605 Direct Connector Project pursuant to 23 U.S.C. 327(a)(2)(B)(ii)(1). The project is in an area that is designated nonattainment or maintenance for ozone, coarse particulate matter (PM10), fine particulate matter (PM2.5), carbon monoxide (CO), and nitrogen dioxide (NO2).

The project-level conformity analysis submitted by Caltrans indicates that the project-level transportation conformity requirements of 40 C.F.R. Part 93 have been met. The project is included in the Southern California Association of Government’s (SCAG) currently conforming 2008 Regional Transportation Plan (RTP), and the 2008 Regional Transportation Improvement Program (RTIP). The current conformity determinations for the RTP and RTIP were approved by FHWA and the Federal Transit Administration (FTA) on January 14, 2009. The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

Based on the information provided, FHWA finds that the Conformity Determination for the Interstates 10 and 605 Direct Connector Project conforms to the State Implementation Plan (SIP) in accordance with 40 C.F.R. Part 93.
If you have any questions pertaining to this conformity finding, please contact Aimee Kratovil, FHWA Air Quality Specialist, at (916) 498-5866.

Sincerely,

/s/ K. Sue Kiser

For
Walter C. Waidelich, Jr.
Division Administrator
cc: (email)
Gary Iverson, Caltrans
Mike Brady, Caltrans
Steve Luxenberg, FHWA

AKratovil

MOVING THE AMERICAN ECONOMY
Appendix K

Discussion of Information that is Incomplete or Unavailable for MSAT impacts
5.1.2 Unavailable Information for Project Specific MSAT Impact Analysis

This study includes a basic analysis of the likely MSAT emission impacts of this project per FHWA guidance. However, available technical tools do not enable us to predict the project-specific health impacts of the emission changes associated with the Alternatives in this study. Due to these limitations, the following discussion is included in accordance with CEQ regulations (40 CFR 1502.22(b)) regarding incomplete or unavailable information:

**Information that is Unavailable or Incomplete.** Evaluating the environmental and health impacts from MSATs on a proposed highway project would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling in order to estimate human exposure to the estimated concentrations, and then final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the MSAT health impacts of this project.

- **Emissions.** The EPA and California tools to estimate MSAT emissions from motor vehicles are not sensitive to key variables determining emissions of MSATs in the context of highway projects. While both MOBILE 6.2 and EMFAC2007 are used to predict emissions at a regional level, they have limitations when applied at the project level. Both are trip-based models – emission factors are projected based on a typical trip of around 7.5 miles, and on average speeds for this typical trip. This means that neither model has the ability to predict emission factors for a specific vehicle operating condition at a specific location at a specific time. Because of this limitation, both models can only approximate emissions from the operating speeds and levels of congestion likely to be present on the largest-scale projects, and cannot adequately capture emissions effects of smaller projects. For PM, the MOBIL E6.2 model
results are not sensitive to average trip speed; however, PM emissions from the EMFAC model are sensitive to trip speed, so for California conditions diesel PM emissions are treated the same as other emissions. Unlike MOBILE 6.2, the EMFAC model does not provide MSAT emission factors; off-model speciation of EMFAC's Total Organic Compound output must be used to generate MSAT emissions. The emissions rates used in both MOBILE 6.2 and EMFAC are based on a limited number of vehicle tests.

- These deficiencies compromise the capability of both MOBILE 6.2 and EMFAC2007 to estimate MSAT emissions to estimate MSAT emissions. Both are an adequate tool for projecting emissions trends, and performing relative analyses between alternatives for very large projects, but neither is sensitive enough to capture the effects of travel changes caused by smaller projects or to predict emissions near specific roadside locations.

- **Dispersion.** The tools to predict how MSATs disperse are also limited. The EPA’s current regulatory models, CALINE3 and CAL3QHC, were developed and validated more than a decade ago for the purpose of predicting episodic concentrations of CO to determine compliance with the NAAQS. The CALINE4 model used in California is an improvement on the CALINE3-based EPA models but like them, was built primarily for CO analysis, has not been specifically validated for use with other materials such as MSATs, and is difficult to use for averaging periods of more than 8 hours or so (health risk data for MSATs are typically based on 24-hr, annual, and long term (30-70 years) exposure). Dispersion models are appropriate for predicting maximum concentrations that can occur at some time at some location within a geographic area, but cannot accurately predict exposure patterns at specific times at specific locations across an urban area to assess potential health risk. The NCHRP is conducting research on best practices in applying models and other technical methods in the analysis of MSATs. This work also will focus on identifying appropriate methods of documenting and communicating MSAT impacts in the NEPA process and to the general public. Along with these general limitations of dispersion models,
FHWA is also faced with a lack of adequate monitoring data in most areas for use in establishing project-specific MSAT background concentrations.

- **Exposure Levels and Health Effects.** Finally, even if emission levels and concentrations of MSATs could be accurately predicted, shortcomings in current techniques for exposure assessment and risk analysis preclude us from reaching meaningful conclusions about project-specific health impacts. Exposure assessments are difficult because it is difficult to accurately calculate annual concentrations of MSATs near roadways, and to determine the portion of a year that people are actually exposed to those concentrations at a specific location. These difficulties are magnified for 70-year cancer assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over a 70-year period. There are also considerable uncertainties associated with the existing estimates of toxicity of the various MSATs, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population. Because of these shortcomings, any calculated difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with calculating the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against other project impacts that are better suited for quantitative analysis.

**Summary of Existing Credible Scientific Evidence Relevant to Evaluating the Impacts of MSATs.**

Research into the health impacts of MSATs is ongoing. For different emission types, there are a variety of studies that show that some either are statistically associated with adverse health outcomes through epidemiological studies (frequently based on emissions levels found in occupational settings) or that animals demonstrate adverse health outcomes when exposed to large doses.

Exposure to toxics has been a focus of a number of EPA efforts. Most notably, the agency conducted the National Air Toxics Assessment (NATA) in 1996 to evaluate
modeled estimates of human exposure applicable to the county level. While not intended for use as a measure of or benchmark for local exposure, the modeled estimates in the NATA database best illustrate the levels of various toxics when aggregated to a national or State level.

The EPA is in the process of assessing the risks of various kinds of exposures to these pollutants. The EPA Integrated Risk Information System (IRIS) is a database of human health effects that may result from exposure to various substances found in the environment. The IRIS database is located at [http://www.epa.gov/iris](http://www.epa.gov/iris). The following toxicity information for the six prioritized MSATs was taken from the IRIS database *Weight of Evidence Characterization* summaries. This information is taken verbatim from EPA's IRIS database and represents the Agency's most current evaluations of the potential hazards and toxicology of these chemicals or mixtures. The five organic-based MSATs listed below are also listed as toxic air contaminants by the ARB.

- **Benzene** is characterized as a known human carcinogen.

- The potential carcinogenicity of **acrolein** cannot be determined because the existing data are inadequate for an assessment of human carcinogenic potential for either the oral or inhalation route of exposure.

- **Formaldehyde** is a probable human carcinogen, based on limited evidence in humans, and sufficient evidence in animals.

- **1,3-butadiene** is characterized as carcinogenic to humans by inhalation.

- **Acetaldehyde** is a probable human carcinogen based on increased incidence of nasal tumors in male and female rats and laryngeal tumors in male and female hamsters after inhalation exposure.

- **Diesel exhaust (DE)** is likely to be carcinogenic to humans by inhalation from environmental exposures. Diesel exhaust as reviewed in this document is the combination of diesel particulate matter and diesel exhaust organic gases. The
PM fraction of diesel exhaust (Diesel PM) has been identified by the ARB as a toxic air contaminant due to long-term cancer risk.

- **Diesel exhaust** also is connected with chronic respiratory effects, possibly the primary non-cancer hazard from MSATs. Prolonged exposures may impair pulmonary function and could produce symptoms, such as cough, phlegm, and chronic bronchitis. Exposure relationships have not been developed from these studies.

There have been other studies that address MSAT health impacts in proximity to roadways. The Health Effects Institute, a non-profit organization funded by EPA, FHWA, and industry, has undertaken a major series of studies to research near-roadway MSAT hot-spots, the health implications of the entire mix of mobile source pollutants, and other topics. The final summary of the series is not expected for several years.

Some recent studies have reported that proximity to roadways is related to adverse health outcomes – particularly respiratory problems. Much of this research is not specific to MSATs, instead surveying the full spectrum of both criteria and other pollutants. The FHWA cannot evaluate the validity of these studies, but more importantly, they do not provide information that would be useful to alleviate the uncertainties listed above and enable us to perform a more comprehensive evaluation of the health impacts specific to this project.

*Relevance of Unavailable or Incomplete Information to Evaluating Reasonably Foreseeable Significant Adverse Impacts on the Environment, and Evaluation of impacts based upon theoretical approaches or research methods generally accepted in the scientific community*

Because of the uncertainties outlined above, a reliable quantitative assessment of the effects of air toxic emissions impacts on human health cannot be made at the project level. While available tools do allow us to reasonably predict relative emissions changes between alternatives for larger projects, the amount of MSAT emissions from each of the project alternatives and MSAT concentrations or exposures created by each of the project
alternatives cannot be predicted with enough accuracy to be useful in estimating health impacts. (As noted above, the current emissions model is not capable of serving as a meaningful emissions analysis tool for smaller projects.) Therefore, the relevance of the unavailable or incomplete information is that it is not possible to make a determination of whether any of the alternatives would have “significant adverse impacts on the human environment.”

Below, a Quantitative analysis of MSAT emissions in the project area is provided. This analysis acknowledges that the project may result in slightly increased exposure to MSAT emissions in certain locations compared to no project conditions. However, the analysis shows that exposure to MSAT emissions in the future will be less than current conditions. The concentrations and duration of exposures are uncertain, and because of this uncertainty, the health effects from these emissions cannot be estimated.