

# I-80 Eastbound Cordelia Truck Scales Relocation Project



## Draft Environmental Impact Report/ Environmental Assessment

State Clearinghouse #2008052067

Solano County, California  
Interstate 80, from approximately 0.2 mile east of Suisun Creek  
to Chadbourne Road on State Route 12  
04-SOL-80-13.8/15.7; 04-SOL-SR 12-L1.8/L2.0  
EA 0A5350

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 are being, or have been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.



January 2009



## General Information about This Document

### What's in this document:

The California Department of Transportation (the Department), as assigned by the Federal Highway Administration (FHWA), has prepared this draft environmental impact report/environmental assessment (EIR/EA), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Solano County, California. The document describes why the project is being proposed; alternatives for the project; the existing environment that could be affected by the project; the potential impacts from each of the alternatives; and any proposed avoidance, minimization, and compensation measures.

### What you should do:

- Please read this EIR/EA. Additional copies of this document as well as the technical studies are available for review at the following locations:
  - Caltrans District 04, 111 Grand Avenue, Oakland, CA;
  - Solano County Library;
  - Solano Transportation Authority;
  - City of Fairfield;
  - Solano County Public Works Department; and
  - On-line at [www.sta.dst.ca.us](http://www.sta.dst.ca.us).
- Attend a public hearing.
- We welcome your comments. If you have any comments regarding the proposed project, please attend the public hearing or send your written comments to Caltrans by the deadline, or both. Submit comments via U.S. mail to Caltrans at the following address:  
Melanie Brent, Environmental Analysis Office Chief  
California Department of Transportation, District 04,  
P.O. Box 23660, MS-8B  
Oakland, CA 94623-0660
- Submit comments via email to: [melanie\\_brent@dot.ca.gov](mailto:melanie_brent@dot.ca.gov).
- Submit comments by the deadline: March 18, 2009.

### What happens next:

After comments are received from the public and reviewing agencies, the Department, as assigned by the FHWA, may: (1) give environmental approval to the proposed project, (2) undertake additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, the Department could design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disc. To obtain a copy in one of these alternate formats, please write to California Department of Transportation, Attn: Melanie Brent, Environmental Analysis Office Chief, California Department of Transportation, District 04, 111 Grand Avenue, P. O. Box 23660, Oakland, CA 94623-0660; call (510) 286-5231 (voice); or use the California Relay Service at (800) 735-2929 (TTY), (800) 735-2929 (voice), or 711.



## I-80 Eastbound Cordelia Truck Scales Relocation Project

### Draft Environmental Impact Report/ Environmental Assessment

Solano County, California  
Interstate 80, from approximately 0.2 mile east of Suisun Creek to Chadbourne Road on  
State Route 12  
04-SOL-80-13.8/15.7; 04-SOL-12-L1.8/L2.0  
EA 0A5350

**January 2009**

Submitted Pursuant to: (State) Division 13, California Public Resources Code  
(Federal) 42 USC 4332(2) C

State of California  
Department of Transportation

1-29-09  
Date of Approval

  
Bijan Sartipi  
District Director  
California Department of Transportation, District 4



# Summary

## **Overview of Project Area**

The Cordelia Truck Scales facility is located within the Interstate 80 (I-80)/Interstate 680 (I-680)/State Route 12 (SR 12) interchange in Solano County, in the vicinity of Fairfield and Suisun City. The project area encompasses the existing facility, the site of the new facility, and all associated on- and off-ramps and utility relocations. The project area extends along I-80 from the Scandia Family Center (at post mile 13.8) east to the SR 12 East (SR 12E) interchange with I-80 and continues east along SR 12E to Chadbourne Road, a distance of 2.1 miles (see Figure 1-1) in Chapter 1.

The land surrounding the project area is relatively flat (the average elevation is approximately 10 feet) and includes two waterways (Suisun and Dan Wilson Creeks). The land uses in the area consist primarily of agricultural and commercial uses.

## Related Projects

Several related transportation projects are being planned or recently were completed in the general project area. These projects (and their Caltrans EA project numbers where appropriate) are listed below in the order of anticipated completion.

- **Interstate 80 High-Occupancy Vehicle Lane Project:** Eastbound and westbound high-occupancy vehicle (HOV) lanes will be constructed along an approximately 8.5-mile-long segment of I-80 from the Red Top Road interchange in Solano County to 0.5 mile east of the Air Base Parkway interchange in Fairfield. The project (EA-04-0A5304) will increase the overall carrying capacity of I-80 in the project area and will facilitate the already high demand for ridesharing on I-80. Construction of this project began in June 2008, and completion is anticipated in late 2009.
- **North Connector Project:** The North Connector Project would construct a parallel route to the north of I-80 between Abernathy Road at I-80 on the east to SR 12 at Red Top Road on the west. This project would provide increased east/west capacity and provide an alternative to I-80 for local traffic. Construction of the first phase of the North Connector Project is expected to begin in summer 2009, with completion anticipated in December 2010.
- **Transit Improvements:** To support increased transit ridership and expanded bus routes in the county, the *I-80/I-680/I-780 Transit Corridor Study* identifies numerous potential locations for park-and-ride lots in these major corridors, three of which could be located in the project area: Red Top Road at I-80, a surface lot at Abernathy Road between I-80 and SR 12 or an expanded parking structure at the Fairfield Multimodal Transportation Center, and Gold Hill Road at I-680. These potential lots are expected to be constructed between 2010 and 2015.
- **I-80/I-680/SR 12 Interchange Project:** The I-80/I-680/SR 12 Interchange Project (EA-04-0A5300) would include numerous improvements to the I-80/I-680/SR 12 interchange to address existing and future traffic operations and congestion, including the relocation of the westbound Cordelia Truck Scales. The improvements are intended to add freeway capacity, reduce cut-through traffic on local roads, improve local access to and from the freeway,

accommodate current and future truck volumes, improve safety, and increase the use of HOV lanes and ridesharing. The environmental document for the project is currently underway and is expected to be completed in early 2010.

- **Jameson Canyon (SR 12) Widening from I-80 to SR 29:** This project would provide a continuous 4 lane expressway between I-80 and SR 29. The project currently in the final design phase and construction is planned to begin in 2011, with completion in 2013.
- **I-80 Improvements through Fairfield:** Several projects are programmed between SR 12 East and Air Base Parkway. They include construction of an eastbound auxiliary lane between Abernathy Road and Auto Mall Parkway, removal of existing hook ramps at Auto Mall Parkway, construction of an eastbound auxiliary lane between Beck Avenue and Travis Boulevard, construction of an eastbound auxiliary lane from Travis Boulevard to Air Base Parkway, construction of a westbound auxiliary lane from Waterman Boulevard/Air Base Parkway to Travis Boulevard, and construction of a westbound auxiliary lane from West Texas Street to Abernathy Road. These improvements are in the early planning phases. No construction date has been determined.

## ***Purpose and Need***

### *Purpose*

The purpose of the project is to:

- Accommodate anticipated growth in truck traffic in the corridor by 2040.
- Improve the reliability of the truck weight and safety inspection.
- Improve mainline safety by reducing truck/auto weaving and queuing.
- Provide traffic congestion relief along this segment of I-80.

### *Need*

The existing Cordelia Truck Scales are located within the I-80/I-680/SR12 interchange, a point at which two major interstate freeways and one state highway converge. Since the facility was constructed in 1958, the San Francisco Bay Area (Bay Area) and Northern California region have experienced rapid population growth, resulting in substantial increases in truck and regional traffic passing through the interchange area, as well as substantial changes in the land uses immediately surrounding the interchange.

The truck scales substantially contribute to the congestion and safety concerns on I-80 because of the large number of trucks exiting and entering I-80 and the close proximity of the scales to both the Suisun Valley Road and I-680 and SR 12E interchanges. Congestion leads to closure of the truck scales when queuing trucks begin to back up onto the mainline freeway. The project will address these related deficiencies.

- **Inadequate Enforcement:** Currently closures to the truck scales occur approximately 15 times a week, when the queue gets too long and extends into traffic, creating a safety hazard and compromising enforcement of weight and safety requirements.

- **Truck-Related Congestion:** Trucks slowing to enter and accelerating to exit the facilities, as well as those queuing to enter, exacerbate the congestion problem, particularly during peak commute hours.
- **Unreliable Freight Transport:** Travel times for truck trips are unpredictable due to queues and congestion. This unpredictability is further increased by the likelihood of breakdowns resulting from uninspected trucks which have bypassed the scales during periodic closures.
- **Traffic Safety:** High vehicle and truck volumes, short merge and diverge maneuvers, short distances between interchanges, and trucks queuing on the entrance ramp all contribute to safety concerns in the area.

### ***Proposed Project***

The proposed Project is to construct a larger, more efficient truck scale facility on eastbound I-80 approximately 2,500 feet to the east of the current facility in a large oval configuration. Associated on- and off-ramps would be constructed, and, upon completion of the project, the existing facility would be demolished.

The new facility would be a Class B Commercial Vehicle Enforcement Facility (CVEF) (with Class B being defined as an independent command facility of the CHP located along a major highway route), which would have the capacity to inspect all eastbound I-80 trucks passing the facility 24 hours per day, seven days a week. The facility would contain up to four sets of scales to accommodate two lines of empty and loaded trucks. The new facility would contain seven inspection bays, parking for semi-truck trailer combinations and automobiles, and a roadway along the outer edge of the oval to allow weighed trucks to be driven around into the inspection bay or to be reweighed. An operations building would be constructed to facilitate the vehicle inspection and weighing process. Utilities would be provided from the west.

The off-ramp to the new truck scale facility would use the existing off-ramp location and geometry, which consists of a single lane exit. The new off-ramp would widen to a two-lane facility through the existing truck scale site and would widen to four lanes immediately west of Suisun Creek. The new off-ramp would cross over Suisun Creek on a new bridge before entering the new truck scale facility. Truck traffic would be sorted along the approach roadway into the appropriate lane by means of weigh-in-motion scales and signal bridges.

Trucks leaving the facility would use a new two-lane eastbound roadway that splits approximately 1,300 feet east of the facility, with one lane merging onto eastbound I-80 and the other lane connecting to the eastbound I-80-to-eastbound SR 12E connector.

The eastbound I-80 connector to eastbound SR 12E would be reconstructed as a two-lane ramp crossing over (braided with) the truck scale on-ramp to eastbound I-80. The connector overpass and associated retaining wall would be constructed to an ultimate three-lane width although the exit from I-80 proposed with this project would consist of a two-lane connection (one dedicated SR 12E lane and a shared through-exit lane). The new dedicated lane on I-80 would begin approximately 2,500 feet west of the exit point to the connector. The two-lane connector would continue east, becoming SR 12E, with the truck scale on-ramp joining as an auxiliary lane that would end at the SR 12E/Chadbourne Road interchange off-ramp.

Once construction of the new truck scales had been completed, and the new facility was operational, the existing facility would be removed.

As part of the proposed project, several utilities would need to be relocated. Relocating the utilities would occur during the construction phase of the proposed project. Impacts associated with high-voltage power line relocations are addressed in this EIR/EA pursuant to California Public Utilities Commission General Order (GO) 131 D filing requirements. The precise field location of high-risk utilities would be identified during final design in accordance with Caltrans procedures.

### ***Other Alternatives Considered***

Other alternatives were eliminated as part of the 2005 *Cordelia Truck Scales Relocation Study: Summary Report and Recommendations* (Solano Transportation Authority 2005a). This study determined that the Cordelia location was the preferred location based on enforcement and financial feasibility standards. This document considers only the proposed project and the no-project alternative.

### ***No Project Alternative***

Under the no-project alternative, operations of the existing truck scales would continue, and no improvements or expansions of truck scale facilities would be constructed. Congestion would worsen over time as truck and auto traffic increases.

### ***Joint California Environmental Quality Act/National Environmental Policy Act Documentation***

The proposed project is a joint project by the California Department of Transportation (the Department) and the Federal Highway Administration (FHWA) and 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). Caltrans is the lead agency under CEQA. In addition, the FHWA's responsibility for 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. Code (USC) 327.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, it is quite often the case that a "lower level" document is prepared for NEPA. One of the most commonly seen joint document types is an environmental impact report/environmental assessment (EIR/EA).

Following the receipt of public comments on the draft EIR/EA and the circulation of the final EIR/EA, Caltrans will be required to take actions regarding the environmental document. Caltrans will determine whether to certify the EIR/EA and issue findings and a statement of overriding considerations under CEQA and to issue a finding of no significant impact (FONSI) or require an environmental impact statement (EIS) under NEPA.

## ***Project Impacts***

Project impacts would occur in the following resource areas: Land Use, Farmlands, Utilities, Traffic and Transportation, Visual Resources, Cultural Resources, Hydrology, Water Quality, Paleontology, Hazardous Waste, Air Quality, Noise, Energy, and Biology. Implementation of environmental commitments and mitigation measures would ensure that all these project effects are not adverse (under NEPA) or less than significant (under CEQA). Project effects under NEPA are discussed fully in Chapter 2. Chapter 3 addresses impacts under CEQA.

## ***Coordination with Public and Other Agencies***

### **Notice of Preparation and Scoping**

A notice of preparation of (NOP) for the proposed project was published on May 16, 2008. It was filed with the State Clearinghouse and sent to the appropriate elected officials, agencies, and interested parties.

A scoping meeting was held on June 5, 2008, from 6:30 to 8:30 p.m. at the Solano County Administration Building, at 675 Texas Street in Fairfield.

A number of means were utilized to inform the public of the scoping process and the public open house scoping meeting. A public notice was distributed to the project mailing list, which included property owners, elected officials, city staff, special interest organizations, and neighborhood groups. The Department mailed a letter to agency representatives and elected officials. Samples of these notification materials are included in Appendix G of this report.

Information pertaining to the scoping process and the public open house scoping meeting also appeared on the Solano Transportation Authority website at <http://www.solanolinks.com>.

### **Necessary Permits and Approvals**

Table S-1 shows the permits and approvals that would be required.

**Table S-1. Permits and Approvals**

<b>Agency</b>	<b>Permit, Approval, or Consultation</b>
U.S. Fish and Wildlife Service (USFWS)	Consultation under Section 7 of the federal Endangered Species Act
National Marine Fisheries Service (NMFS)	Consultation under Section 7 of the federal Endangered Species Act
U.S. Army Corps of Engineers	Section 404 nationwide permit for placement of fill
California Department of Fish and Game (DFG)	Section 1602 streambed alteration agreement for waters of the state; potential consultation under Section 2081 of the California Endangered Species Act (CESA); CEQA trustee agency
San Francisco Bay Regional Water Quality Control Board	Nonpoint Section 402, National Pollutant Discharge Elimination System permit (General Construction Permit), 401 Water Quality Certification
Bay Area Air Quality Management District (BAAQMD)	Permit for air emission generating equipment
California Public Utilities Commission	GO-131 D filing requirements for high-voltage electrical lines

*Unresolved Issues*

Section 15123(b) of the State CEQA Guidelines requires an EIR to identify areas of controversy known to the lead agency, including issues raised by agencies and the public. During preparation of the environmental document, no known issues of controversy were raised, and no issues remain unresolved.

# Table of Contents

	<b>Page</b>
Summary .....	i
Table of Contents .....	vii
List of Tables .....	xi
List of Figures .....	xiii
List of Acronyms .....	xv
 Chapter 1 Proposed Project .....	 1-1
1.1 Introduction .....	1-1
1.2 Purpose and Need .....	1-1
1.2.1 Purpose of the Project .....	1-2
1.2.2 Need for the Project .....	1-2
1.3 Project Description .....	1-5
1.4 Alternatives .....	1-6
1.4.1 Project Alternatives .....	1-6
1.4.2 Build Alternative .....	1-7
1.4.3 No-Build (No Action) Alternative .....	1-9
1.4.4 Alternatives Considered but Eliminated from Further Discussion .....	1-9
1.5 Funding and Programming .....	1-11
1.6 Permits and Approvals Needed .....	1-11
 Chapter 2 Affected Environment; Environmental Consequences; and Avoidance, Minimization, and/or Mitigation Measures .....	 2-1
2.1 Human Environment .....	2-1-1
2.1.1 Land Use .....	2-1-1
2.1.2 Growth .....	2-1-4
2.1.3 Farmlands .....	2-1-5
2.1.4 Community Impacts .....	2-1-8
Community Character and Cohesion .....	2-1-8
Relocations .....	2-1-9
Environmental Justice .....	2-1-10
2.1.5 Utilities/Emergency Services .....	2-1-11
2.1.6 Traffic and Transportation .....	2-1-13
2.1.7 Visual/Aesthetics .....	2-1-29
2.1.8 Cultural Resources .....	2-1-35
2.2 Physical Environment .....	2-2-1
2.2.1 Hydrology and Floodplain .....	2-2-1
2.2.2 Water Quality and Stormwater Runoff .....	2-2-4
2.2.3 Geology/Soils/Seismic/Topography .....	2-2-11
2.2.4 Paleontology .....	2-2-15
2.2.5 Hazardous Waste/Materials .....	2-2-18
2.2.6 Air Quality .....	2-2-26
2.2.7 Noise .....	2-2-51
2.2.8 Energy .....	2-2-59
2.3 Biological Environment .....	2-3-1
2.3.1 Natural Communities .....	2-3-1
Riparian Woodland .....	2-3-1
Valley Oak Woodland .....	2-3-5

2.3.2	Wetlands and Other Waters.....	2.3-6
	Seasonal Wetland .....	2.3-7
	Perennial Wetland Drainage.....	2.3-8
	Perennial and Seasonal Drainages.....	2.3-9
2.3.3	Plant Species .....	2.3-11
2.3.4	Native Trees .....	2.3-12
2.3.5	Animal Species.....	2.3-13
	Western Pond Turtle.....	2.3-13
	White-Tailed Kite.....	2.3-14
	Western Burrowing Owl .....	2.3-15
	Loggerhead Shrike .....	2.3-17
	Migratory Birds and Raptors .....	2.3-18
	Swallows .....	2.3-18
	Roosting Bats .....	2.3-20
	Central Valley Fall/Late Fall-Run Chinook Salmon .....	2.3-21
	River Lamprey.....	2.3-23
2.3.6	Threatened and Endangered Species .....	2.3-23
	Swainson’s Hawk.....	2.3-24
	Valley Elderberry Longhorn Beetle .....	2.3-25
	California Red-Legged Frog .....	2.3-27
	Central California Coast Steelhead .....	2.3-31
2.3.7	Invasive Plant Species.....	2.3-37
2.3.8	No Project Alternative.....	2.3-39
2.4	Cumulative Impacts .....	2.4-1
	2.4.1 Regulatory Setting.....	2.4-1
	2.4.2 Approach to Cumulative Impact Analysis .....	2.4-1
	2.4.3 Assessment of Cumulative Impacts.....	2.4-2
	Human Environment .....	2.4-2
	Physical Environment.....	2.4-4
	Biological Environment .....	2.4-8
Chapter 3	California Environmental Quality Act (CEQA) Evaluation.....	3-1
	3.1 Determining Significance under CEQA .....	3-1
	3.1.1 Thresholds of Significance.....	3-1
	3.2 Discussion of Significance of Impacts.....	3-2
	3.2.1 Less-than-Significant Impacts of the Proposed Project.....	3-2
	3.2.2 Significant Environmental Effects of the Proposed Project .....	3-9
	3.2.3 Unavoidable Significant Environmental Effects .....	3-9
	3.2.4 Growth Inducing Impacts.....	3-9
	3.2.5 Climate Change .....	3-9
	3.3 Mitigation Measures for Significant Impacts under CEQA.....	3-12
	3.4 Environmental Commitments .....	3-13
Chapter 4	Comments and Coordination.....	4-1
	4.1 Scoping Process .....	4-1
	4.1.1 Notice of Preparation.....	4-1
	4.1.2 Scoping Meeting.....	4-1
	4.1.3 Summary of Concerns .....	4-2

Chapter 5	List of Preparers.....	5-1
5.1	Solano Transportation Authority .....	5-1
5.2	Design .....	5-1
5.3	Environmental Document .....	5-1
Chapter 6	Distribution List.....	6-1
Chapter 7	References Cited.....	7-1
7.1	Printed References .....	7-1
7.2	Personal Communications .....	7-11
Appendix A	Farmland Consultation	
Appendix B	Relocation Assistance Program Information	
Appendix C	Title VI Policy Statement	
Appendix D	List of Technical Studies	
Appendix E	Compliance with 40 CFR 1502.22 and System-Wide Emissions Spreadsheet	
Appendix F	CALINE Model	
Appendix G	CEQA Checklist	



## List of Tables

		<b>Page</b>
Table S-1	Permits and Approvals.....	v
Table 1-1	Existing and Forecast Peak Hour Truck Volumes .....	1-3
Table 1-2	Eastbound P.M. Weave Volumes, 2035 .....	1-4
Table 1-3	Accident History, January 1, 2004, to December 31, 2006 .....	1-6
Table 1-4	Required Permits and Approvals .....	1-11
Table 2.1-1	Property Acquisition and Displacement for the Project.....	2.1-3
Table 2.1-2	Growth-Inducement Checklist .....	2.1-5
Table 2.1-3	Freeway Mainline, Weaving, and Ramp Junction Level of Service Criteria.....	2.1-14
Table 2.1-4	Intersection Level of Service Definitions for Highway Capacity Manual Methodology .....	2.1-15
Table 2.1-5	Existing (Fall 2004) Measures of Effectiveness .....	2.1-16
Table 2.1-6	Existing (Fall 2004) Mainline and Ramps Analysis .....	2.1-17
Table 2.1-7	Existing (Fall 2004) Intersection Analysis .....	2.1-18
Table 2.1-8	Year 2015 with Project—Eastbound Measures of Effectivenessa.....	2.1-20
Table 2.1-9	Year 2015 with Project—Mainline and Ramps Analysis .....	2.1-21
Table 2.1-10	Year 2015 with Project—Intersection Analysis.....	2.1-23
Table 2.1-11	Year 2035 with Project—Eastbound Measures of Effectiveness .....	2.1-25
Table 2.1-12	Year 2035 with Project—Mainline and Ramps Analysis .....	2.1-26
Table 2.1-13	Year 2035 with Project: Intersections Analysis.....	2.1-28
Table 2.1-14	Visual Quality Change in the Selected Viewpoint.....	2.1-32
Table 2.2-1	Proposed Pollution Prevention BMPs by Reach.....	2.2-9
Table 2.2-2	Subsurface Soil and Groundwater Conditions .....	2.2-12
Table 2.2-3	Faults That Have the Potential to Cause Ground Shaking in the Project Area.....	2.2-13
Table 2.2-4	LUST Properties .....	2.2-21
Table 2.2-5	Summary of Identified Potential Hazardous Waste Facilities and Recommendations.....	follows 2.2-24
Table 2.2-6	Ambient Air Quality Standards Applicable in California and the Attainment Status of Solano County.....	follows 2.2-26
Table 2.2-7	BAAQMD Feasible Control Measures for Construction Emissions of PM10.....	2.2-33
Table 2.2-8	Ambient Air Quality Standards .....	2.2-36
Table 2.2-9	Attainment Status for the BAAQMD .....	2.2-37
Table 2.2-10	Ambient Air Quality Monitoring Data Measured at the Fairfield Chadbourne Road and Vallejo Tuolumne Street Monitoring Stations .....	2.2-41
Table 2.2-11	CO Modeling Concentrations (ppm) .....	2.2-45
Table 2.2-12	Summary of Project-Level MSAT Emissions at Truck Scales.....	2.2-47
Table 2.2-13	System-Wide Project-Related Motor Vehicle Emissions .....	2.2-50
Table 2.2-14	Typical A-Weighted Noise Levels.....	2.2-52
Table 2.2-15	Activity Categories and Noise Abatement Criteria.....	2.2-53
Table 2.2-16	Summary of Short-Term Noise Monitoring.....	2.2-54
Table 2.2-17	I-80 Truck Scales Traffic Noise Impact Evaluation Activity Category B Land Uses .....	2.2-55
Table 2.2-18	Summary of Reasonableness Determination Data—Noise Barriers SB4A and SB4B .....	2.2-57

Table 2.2-19	Summary of Reasonableness Allowances and Cost Estimates for the Evaluated Noise Barrier Design SB4.....	2.2-57
Table 2.2-20	Construction Equipment Noise .....	2.2-58
Table 2.2-21	Direct Electricity Consumptions.....	2.2-65
Table 2.2-22	Estimated Carbon Dioxide Emissions during Operations in 2015 .....	2.2-67
Table 2.2-23	Estimated Carbon Dioxide Emissions during Operations in 2035 .....	2.2-68
Table 2.3-1	Effects on Waters of the State and Waters of the United States .....	2.3-6
Table 2.3-2	Special-Status Plant Species with the Potential to Occur in the Project Region.....	follows 2.3-12
Table 2.3-3	Sensitive Wildlife and Fish Species with the Potential to Occur in the Project Region.....	follows 2.3-14
Table 2.3-4	Summary of Stem Counts for Elderberry Shrubs Adjacent to the Study Area.....	2.3-26
Table 2.3-5	Invasive Plant Species Located in the Study Area and Vicinity .....	2.3-38

## List of Figures

		<b>Follows Page</b>
Figure 1-1	Project Location .....	1-6
Figure 1-2	Eastbound Cordelia Truck Scales Relocation Project Features .....	1-8
Figure 2.1-1	Property to be Acquired for the Project .....	2.1-4
Figure 2.1-2	Agricultural Land within the Project Area.....	2.1-6
Figure 2.1-3	Displaced Residences .....	2.1-10
Figure 2.1-4	Landscape Unit .....	2.1-30
Figure 2.1-5	Project Viewshed .....	2.1-30
Figure 2.1-6	Viewpoint Location .....	2.1-32
Figure 2.1-7	Visual Simulation .....	2.1-32
Figure 2.2-1	Fault Map.....	2.2-14
Figure 2.2-2	Geologic Map of the Project Vicinity .....	2.2-16
Figure 2.2-3	Paleontological Sensitivity Map of the Project Area.....	2.2-18
Figure 2.2-4a	Site Plan .....	2.2-24
Figure 2.2-4b	Site Plan .....	2.2-24
Figure 2.2-5	Locations of Sensitive Receptors.....	2.2-44
Figure 2.2-6	Sensitive Receptors and Potential Noise Barriers.....	2.2-54
Figure 2.3-1	Biological Resources I-80 Eastbound Cordelia Truck Scales Relocation Project, Solano County, California .....	2.3-2
Figure 2.3-2	Essential Fish Habitat in the Project Vicinity .....	2.3-22
Figure 2.3-3	California Red-legged Frog CNDDB Occurrences within a 5-Mile Radius of the Project Area .....	2.3-28
Figure 2.3-4	California Red-legged Frog Critical Habitat.....	2.3-28
Figure 2.3-5	Special-Status Salmonid Habitat in the Project Area.....	2.3-34
Figure 3-1	Changes in CO <sub>2</sub> Emissions and Vehicle Speeds .....	on 3-11



## List of Acronyms

$\mu/m^3$	micrograms per cubic meter
AADT	annual average daily traffic
AB	Assembly Bill
ABAG	Association of Bay Area Government
AC	asphalt concrete
ACCM	asbestos-containing construction material
ACHP	Advisory Council on Historic Preservation
ADL	aerially deposited lead
AIRS	Aerometric Information Retrieval System
APE	area of potential effect
APN	Assessor's Parcel Number
ARB	California Air Resources Board
ASTs	aboveground storage tanks
BAAQMD	Bay Area Air Quality Management District
basin plan	Water Quality Control Plan for the San Francisco Bay Basin
Bay Area	San Francisco Bay Area
BG	block group
BMPs	best management practices
BO	biological opinion
BOD	biochemical oxygen demand
BTUs	British thermal units
CAAQS	California's ambient air quality standards
CAFE	Corporate Average Fuel Economy
Cal/OSHA	California Division of Occupational Safety and Health
Cal-IPC	California Invasive Plants Council
CAT	Climate Action Team
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFA	California Department of Food and Agriculture
CDFPP	California Department of Forestry and Fire Protection
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CERFA	Community Environmental Response Facilitation Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CIA	community impact assessment
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide

CRHR	California Register of Historical Resources
CRLF	California red-legged frog
CSA	Critical Source Area
CT	census tract
CVEF	Commercial Vehicle Enforcement Facility
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
Department, the	California Department of Transportation
DFG	California Department of Fish and Game
DOC	California Department of Conservation
DPM	diesel particulate matter
Draft Traffic Operations Report	Draft Traffic Operations Report, Interstate 80 Eastbound Cordelia Truck Scales Relocation Project
DTSC	California Department of Toxic Substances Control
DWR	Department of Water Resources
E85	ethanol
EDR	Environmental Data Resource
EFH	Essential Fish Habitat
EIR/EA	environmental impact report/environmental assessment
EIS	environmental impact study
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EPCA	Energy Policy and Conservation Act
ERNS	Emergency Response Notification System
ESA	Endangered Species Act
ESA fencing	Environmentally Sensitive Area fencing
ESAs	environmentally sensitive areas
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FINDS	Facility Index System
FIRM	Flood Insurance Rate Maps
FMMP	Farmland Mapping and Monitoring Program
FONSI	Finding of no significant impact
FPPA	Farmland Protection Policy Act
FR	Federal Register
GHG	greenhouse gas
GO	General Order
gpm	gallons per minute
GSRD	gross solids removal device
HAPs	hazardous air pollutants
HCP	habitat conservation plan
HOV	High-occupancy vehicle
I-680	Interstate 680

I-80	Interstate 80
IPCC	Intergovernmental Panel on Climate Change
ISA	initial site assessment
ITS	Intelligent Transportation Systems
kg	kilograms
kV	kilovolt
LCP	lead-containing paint
L <sub>eq</sub>	equivalent sound level
LOS	level of service
LOTBs	Log of Test Borings
LPG	liquefied petroleum gas
LQG	large quantity generator
LUST	leaking underground storage tank
M85	methanol
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
map ID Nos.	map identification numbers
MBTA	Migratory Bird Treaty Act
MCE	Maximum Credible Earthquake
MEI	maximally exposed individual
MEP	maximum extent practicable
MLD	most likely descendent
MOE	measures of effectiveness
mpg	miles per gallon
mph	miles per hour
MPO	metropolitan planning organization
MSATs	mobile source air toxics
MTBE	methyl tertiary butyl ether
MTC	Metropolitan Transportation Commission
NAAQS	national ambient air quality standards
NAC	noise abatement criteria
NAHC	Native American Heritage Commission
NBA	North Bay Aqueduct
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act of 1966, as amended
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO <sub>2</sub>	nitrogen dioxide
NOA	naturally occurring asbestos
NOP	notice of preparation
NO <sub>x</sub>	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
O <sub>3</sub>	ozone
OHWM	ordinary high water mark
OSHA	Occupational Safety and Health Act

PG&E	Pacific Gas and Electric Co.
PM	post mile
PM10	particulate matter 10 microns or less in diameter
PM2.5	particulate matter 2.5 microns or less in diameter
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 2002
ppd	pounds per day
ppm	parts per million
PRC	Public Resources Code
Programmatic Agreement	Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act as It Pertains to the Administration of the Federal-Aid Highway Program in California
project	I-80 Eastbound Cordelia Truck Scales Relocation Project
PS&E	plans, specifications, and estimates
psi	pounds per square inch
PUC	California Public Utilities Commission
RAP	Relocation Assistance Program
RCP	reinforced concrete pipe
RCRA	Resource Conservation and Recovery Act of 1976
ROG	reactive organic gases
RSP	rock slope protection
RTIP	regional transportation improvement program
RTP	regional transportation plan
SAA	streambed alteration agreement
San Francisco Bay RWQCB	San Francisco Bay Regional Water Quality Control Board
SCWA	Solano County Water Agency
SFBAAB	San Francisco Bay Area Air Basin
SFPD	Suisun Fire Protection District
SGP	Strategic Growth Plan
SID	Solano Irrigation District
SIP	state implementation plan
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxides
SQG	Small Quantity Generator
SR	State Route
SR 12	State Route 12
SR 12E	State Route 12 East
SRA	shaded riverine aquatic
STA	Solano Transportation Authority
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TASAS	Traffic Accident Surveillance and Analysis System
TCM	traffic control measures
TDS	total dissolved solids
the County	Solano County

TIP	transportation improvement program
TMDLs	total maximum daily loads
TMP	transportation management plan
tpy	tons per year
Traffic Noise Analysis Protocol	Traffic Noise Analysis Protocol for New Highway Construction, Reconstruction, and Retrofit Barrier Projects
Transportation 2030 Plan	Transportation 2030 Plan for the San Francisco Bay Area
TRIS	Toxics Release Inventory System
TSCA	Toxic Substances Control Act
TSS	total suspended solids
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
USTs	underground storage tanks
VELB	valley elderberry longhorn beetle
VHD	vehicle hours of delay
VHT	vehicle hours of travel
VIA	visual impact assessment
VMT	vehicle miles traveled
WDRs	waste discharge requirements
western pond turtle	northwestern pond turtle
Williamson Act	California Land Conservation Act of 1965
WQF	water quality flow
XPI	Extended Phase I report

