California Department of Transportation

United States Department of Transportation Federal Highway Administration

Record of Decision

Interstate 10 Corridor Project

SAN BERNARDINO AND LOS ANGELES COUNTIES, CALIFORNIA
DISTRICT 7 – LA – 10 (PM 44.9/48.3)
DISTRICT 8 – SBD – 10 (PM 0.0/R37.0)
EA 0C2500 / PN 0800000040
SCH# 2012101082

This Record of Decision (ROD) was developed pursuant to 40 Code of Federal Regulations 1505.2 and 23 Code of Federal Regulations 771.127. The California Department of Transportation (Caltrans), in cooperation with the San Bernardino County Transportation Authority (SBCTA), proposes to improve a 33-mile-long stretch of Interstate 10 (I-10) from the Los Angeles/San Bernardino (LA/SB) county line (Post Miles 44.9/48.3) to Ford Street in San Bernardino County (Post Miles 0.0/R37.0). The project limits, including transition areas, extend from approximately 0.4 mile west of White Avenue in the city of Pomona to Live Oak Canyon Road in the city of Yucaipa. This project would reduce congestion, increase throughput, enhance trip reliability, and accommodate long-term congestion management of the corridor for the planning design year of 2045 and is expected to be open to traffic by year 2025.

The project's purpose and need are described in detail in Chapter 1 of the I-10 Corridor Project's Final Environmental Impact Statement (Final EIS) approved on May 15, 2017, and are discussed below. The Notice of Availability for the Final EIS was published in the *Federal Register* on May 26, 2017 and the 30-day review period closed on June 26, 2017.

The environmental review, consultation, and any other action required by applicable Federal laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S.C. 327 and the executed Memorandum of Understanding, dated December 23, 2016, by the Federal Highway Administration (FHWA) and Caltrans.

A. Decision

This ROD approves the Preferred Alternative identified in the Final EIS (Alternative 3, Express Lanes). After public review of the Draft Environmental Impact Report/ Environmental Impact Statement (DEIR/EIS) and full consideration of the technical studies prepared, public comments and agency input and after comments on the Final EIS were considered, Caltrans, as NEPA lead agency, has selected Alternative 3 for the widening and improvement of the I-10 corridor. This was based on the ability of this alternative to meet the project purpose and need; reduce congestion; increase throughput; enhance trip reliability; long-term congestion management of the corridor; environmental impacts; funding availability; community input; and coordination with regulatory agencies and local stakeholders, including San Bernardino County

and Los Angeles County, and the cities of Pomona, Claremont, Montclair, Upland, Ontario, Rancho Cucamonga, Fontana, Bloomington, Rialto, Colton, San Bernardino, Loma Linda, and Redlands. The identification of Alternative 3 as the Preferred Alternative in Section 2.2.4.1 of the Final EIS.

B. Purpose and Need

The project purpose is a set of objectives the project is intended to meet. The project need is the range of transportation deficiencies that the project was initiated to address.

Purpose

The purpose of the I-10 Corridor Project is to improve traffic operation on Interstate 10 in San Bernardino County to reduce congestion, increase throughput, enhance trip reliability, and accommodate long-term congestion management of the corridor for the planning design year of 2045.

In furtherance of the project's purpose, the objectives of the project are to:

- Reduce volume-to-capacity (v/c) ratios along the corridor;
- Improve travel times within the corridor;
- Relieve congestion and improve traffic flow on the regional transportation system;
- Address increased travel associated with existing and planned development;
- Provide a facility that is compatible with transit and other modal options;
- Provide consistency with the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP), where feasible and in compliance with federal and State regulations;
- Provide a cost-effective project solution;
- Minimize environmental impacts and right-of-way (ROW) acquisition; and
- Promote sustainable travel and livability for the corridor.

Need

I-10 is a critical link in the State transportation network and is used by interstate travelers, local commuters, and regional and inter-regional trucks. The efficient movement of people through San Bernardino County is limited by the existing capacity of the transportation networks.

Existing deficiencies of I-10 include:

- General purpose lanes peak-period traffic demand currently exceeds capacity; and
- I-10 high-occupancy vehicle (HOV) lanes operation is degraded during peak periods.

Forecasted deficiencies of I-10 include:

- Local and regional traffic demand is expected to increase due to population growth;
- Increase in delays;
- Increase in accidents;
- Regional/local circulation will worsen as additional traffic avoids congestion on the facility;
- Interchange/junction traffic service will worsen as additional traffic attempts to enter and exit the facility;
- Bus/multimodal travel time will increase due to congestion and become unreliable; and
- I-10 HOV will continue to degrade as speed decreases on the facility due to the increase in traffic volumes.

C. Alternatives Considered

A full range of alternatives was considered in the course of identifying the Selected Alternative. A total of eight alternatives were reviewed as part of the initial screening process, but five alternatives were eliminated from further analysis (see Section 2.2.5, Alternatives Considered but Eliminated from Further Discussion Prior to Draft EIR/EIS, in the final environmental document for an explanation of the screening process and alternatives eliminated from further analysis). The Final EIS considered potential construction and operational impacts to the natural and human environment that would result from a No Build Alternative and two build alternatives (Alternatives 2 and 3). A brief description of the project alternatives given full consideration in the Final EIS is presented below.

Alternative 1 (No Build)

The No Build Alternative would not provide any improvements to the I-10 corridor within the project limits. No additional lanes or interchange improvements would be provided, except by other projects implemented that are unrelated to the I-10 Corridor Project.

Alternative 2 – One High-Occupancy Vehicle Lane in Each Direction

Alternative 2 would extend the existing HOV lane in each direction of I-10 from the current HOV terminus near Haven Avenue in Ontario to Ford Street in Redlands, a distance of approximately 25 miles from SBd PM4.7 to SBd PM 37.0. Alternative 2 would add one HOV lane in each direction from Haven Avenue to Ford Street and construct a new westbound auxiliary lane between Rancho Avenue and La Cadena Drive. In addition to the mainline widening, the project includes reconstruction and/or modification of interchange ramps, local arterials, and structures that are necessary to accommodate the proposed freeway widening, including new or reconstruction of retaining walls and soundwalls where appropriate. Preliminary cost estimates for this alternative are \$567 million (approximately \$659 million in future dollars), including \$446 million in construction, \$14 million in ROW and utility relocation, and \$100 million in support costs. A full description of Alternative 2 is provided in Section 2.2.1 of the Final EIS.

Alternative 3 (Selected Alternative) – Two Express Lanes in Each Direction

Alternative 3 would provide two Express Lanes in each direction of I-10 from the LA/SB county line to California Street in Redlands for a total of 33 miles. West of Haven Avenue, a single new lane would be constructed and combined with the existing HOV lane to provide two Express Lanes in each direction; between Haven Avenue and California street, two new Express Lanes would be constructed in each direction by the project, and between California Street and Ford Street, one new Express Lane would be constructed in each direction. The Express lanes would be price-managed lanes, otherwise known as high-occupancy Express Lanes, in which vehicles not meeting the minimum occupancy requirement would need to pay a toll. To accommodate two Express Lanes, the project requires reconstruction and/or modification of existing interchange ramps, local arterials, and structures, including new or reconstruction of retaining walls and soundwalls. Existing auxiliary lanes would be re-established in kind and additional ones added where warranted.

Alternative 3 proposes the following mainline improvements:

- Add one Express Lane in each direction from the LA/SB county line to Haven Avenue to operate jointly with existing HOV lanes as two Express Lanes in each direction
- Add two Express Lanes in each direction from Haven Avenue to California Street
- Add one Express Lane in each direction from California Street to Ford Street

- Provide 10 at-grade access points, with an additional weave lane and 1 as a weave zone
- Provide California Highway Patrol (CHP) enforcement/observation areas in the median at selected locations along the corridor
- Re-establish existing auxiliary lanes along the corridor
- Construct new EB auxiliary lane between Mountain Avenue and Euclid Avenue
- Construct new WB auxiliary lane for 1,300 feet preceding Mountain Avenue WB off-ramp
- Modify existing WB auxiliary lane at Haven Avenue WB on-ramp to begin at Haven Avenue WB loop on-ramp
- Modify existing EB auxiliary lane at Haven Avenue EB on-ramp to begin at Haven Avenue EB loop on-ramp
- Construct new WB auxiliary lane at Cedar Avenue westbound on-ramp
- Extend WB auxiliary lane preceding the Riverside Avenue off-ramp to Pepper Avenue
- Construct new WB auxiliary lane between Rancho Avenue and La Cadena Drive

Ten at-grade ingress/egress (I/E access points are proposed in each direction along the project corridor, typically spaced at 3- to 4-mile intervals, to provide access to and from the Express Lanes for all freeway-to-freeway and local street interchanges along the corridor. Median lighting is proposed at I/E access points to and from the Express Lanes and is anticipated to be on 35-foot-tall poles. Nine access points would be provided with an additional weave lane and one as a weave zone. The following locations of these access points were selected to serve heavy traffic interchanges along the corridor and major destinations such as the LA/Ontario International Airport, while meeting the requirements for geometric, safety, and operational constraints:

- Mountain Avenue, Upland
- 6th Street, Ontario
- Haven Avenue, Ontario
- Etiwanda Avenue, Fontana
- Citrus Avenue, Fontana
- Cedar Avenue, Bloomington
- Pepper Avenue, Colton
- Tippecanoe Avenue, San Bernardino
- California Street (transition from 2 to 1 Express Lane), San Bernardino
- Orange Street (weave zone), Redlands

Except for the California Street I/E and Orange Street I/E, all other access points are proposed with an additional weave or speed change lane provided between the No. 1 general purpose lane and the No. 2 Express Lane.

At the California Street I/E, a separate I/E access configuration is provided in the EB direction. At the egress location, the No. 1 EB Express Lane continues while the No. 2 Express Lane becomes a general purpose lane. A separate ingress opening is provided downstream. In the WB direction, the No. 2 Express Lane is opened up just upstream of the California Street I/E and is anticipated to operate as a weave lane.

The Orange Street I/E is proposed as a weave zone in both directions without a weave lane between the No. 1 general purpose lane and the No. 2 Express Lane. It will operate similarly to existing HOV lane I/E

locations. A weave zone is a portion of the freeway where a single lane is used by vehicles slowing down to exit while other vehicles are using the same lane to increase speed while entering the highway.

Alternative 3 project limits pass through three system interchanges (I-10/I-15 interchange, I-10/I-215 interchange, and I-10/SR-210 interchange and 29 local street interchanges, including one interchange (Indian Hill Boulevard) in Los Angeles County.

Ten arterial streets crossing under or over I-10 would be reconstructed by widening and lengthening to accommodate the I-10 improvements, as listed below. Eight of these are overcrossing structures, which would need to be replaced with a longer-span structure to accommodate the widened freeway. The Monte Vista Avenue and 4th street undercrossing structures would also need to be replaced to accommodate the proposed widening of the local streets. To address comments from the City of Ontario on the Draft EIR/EIS, the 4th Street bridge would be replaced to accommodate the future I-10/Grove Avenue Interchange Project and avoid unnecessary throwaway cost when the City project is constructed after completion of the I-10 CP. The 4th Street bridge replacement has been included in the list below.

- 1. Monte Vista Avenue (Montclair)
- 2. San Antonio Avenue (Upland)
- 3. Euclid Avenue (Ontario)
- 4. Sultana Avenue (Ontario)
- 5. Campus Avenue (Ontario)
- 6. 6th Street (Ontario)
- 7. 4th Street (Ontario)
- 8. Vineyard Avenue (Ontario)
- 9. Richardson Street (Loma Linda)
- 10. Tennessee Street (Redlands)

Several arterials that parallel I-10 would be modified as part of the proposed project improvements:

- Palo Verde Street between Mills Avenue and Monte Vista Avenue (reduced landscaped parkway along north side)
- Azure Court near San Antonio Avenue (minor intersection modification)
- Alvarado Street at Sultana Avenue (minor roadway reconstruction to tie in to the higher profile of Sultana Avenue).
- Richland Street at Sultana Avenue (minor roadway reconstruction to tie in to the higher profile of Sultana Avenue)
- 7th Street between Euclid Avenue and the Euclid Avenue WB hook off-ramp (minor roadway modification)
- Richland Street at Campus Avenue (minor intersection improvements)
- Hope Avenue at 6th Street (minor roadway reconstruction to tie in to the higher profile of 6th Street)
- El Dorado Avenue at 4th Street (minor intersection reconstruction)
- J Street between 3rd Street and Pennsylvania Avenue near Rancho and Colton OH (widening on the north side with new curb, gutter, sidewalk, curb ramps, driveway approaches, and on-street parking; and rehabilitation of existing pavement)

Five railroad crossings over or under I-10 would be impacted and require bridgework. In addition, Alternative 3 would necessitate construction replacement of 13 structures, and modification of 61

structures. There are 19 known major drainage structures that either cross or run parallel to the project corridor that would be modified as part of Alternative 3.

Existing sidewalks within the project limits would be maintained. Under Alternative 3, sidewalks would be provided on both sides of proposed arterial improvement locations, including Monte Vista Avenue, San Antonio Avenue, Euclid Avenue, Sultana Avenue, Campus Avenue, and 6th Street. Reconstruction of Vineyard Avenue, Richardson Street, and Tennessee Street in Alternative 3 would provide one continuous sidewalk on these streets, similar to the current condition. Pedestrian facilities on arterials being improved would meet current ADA standards. In addition, there is a project currently in planning to retrofit existing curb ramps on various cross streets along the I-10 corridor (EA 1C490).

Existing bike lanes and trails within the project limits would be maintained. Under Alternative 3, new bike lanes (Class II or III) would be incorporated in the design of the proposed arterial improvements at Monte Vista Avenue, Euclid Avenue, Vineyard Avenue, and Tennessee Street. These streets have been identified in their respective local circulation plans as having a bicycle facility.

Additional Alternative 3 project improvements are as follows (also common to Alternative 2):

- Provide/maintain pedestrian facilities on overcrossings and along arterials within interchanges.
- Existing sidewalks within the project limits will be maintained or replaced in-kind.
- Existing bike lanes and trails within the project limits will be maintained.
- Pedestrian facilities on arterials being improved would meet current Americans with Disabilities Act (ADA) standards.
- To the extent feasible, existing concrete barriers, temporary railings, metal beam guardrails, and metal
 thrie-beam barriers in the median of I-10 will be replaced with 56-inch-high concrete barrier to reduce
 glare.
- In both build alternatives, new chain link fence will be installed along the existing or proposed right-of-way (ROW) where needed.
- Maintenance vehicle pullouts (MVP) would be included in various locations under each build alternative. These locations will be determined during the design-build phase.
- Relocation of existing utilities, which includes electric, gas, telephone, cable, water, sewer, oil, gas, and waste water.
- Modification of existing stormwater drainage channels and construction of new drainage and/or retention facilities, and water quality Best Management Practices (BMPs).
- New or reconstructed soundwalls and retaining walls.
- Median lighting is proposed at selected locations along the corridor. Lighting is anticipated to improve headlight sight distance in sag vertical curves (i.e., vertical curves with descending slopes forming a bowl or a valley bottom). Median lighting is anticipated to be on 35-foot-tall poles.
- Replacement and/or new shielded light fixtures.
- Landscaping and hardscaping elements.
- Safety lighting improvements between the 4th Street undercrossing and I-10/I-15 freeway interchange. Install double-luminaire mast arm lighting in the existing concrete median barrier at approximately 200-foot intervals from PM 5.00 to PM 6.35 and PM 7.03 to PM 10.00. Install high mast lighting in the dirt median at seven locations at approximately 450-foot intervals from PM 6.45 to PM 6.95 and at four locations in the dirt area at PM 10.0 (one in each quadrant of I-10/I-15 interchange).
- Replacement of approximately 28 overhead signs on EB and WB I-10 between PM 5.00 and PM 10.75.

- Due to ROW constraints and existing nonstandard features, design exceptions are being requested as part of the proposed project. Examples of such design exceptions include:
 - Horizontal stopping sight distance; vertical stopping sight distance; super-elevation rate; traveled way width; shoulder width and minimum horizontal clearance; median width; vertical clearance; corner sight distance; interchange spacing; partial interchange and isolated off-ramp; ramp lane width; weaving length; access control; access rights opposite ramp terminal; curb ramps; decision sight distance; super-elevation transition; super-elevation of compound curves; compound curves; tangent length between reversing curves; minimum grade; vertical curve length; bridge median; minimum outer separation width; design of freeway entrances and exits; vertical curve beyond exit nose SSD; crossroad grade at ramp terminal; single-lane ramps; successive on-ramps; freeway connector design speed; single-lane connections; branch connections number of lanes; branch connections merge/diverge; and access control.
- Omnitrans express routes would be able to use the HOV or Express Lanes on I-10.
- Although TSM and TDM measures alone do not satisfy the purpose and need of the project, TSM and TDM measures will be incorporated into each of the build alternatives for the proposed project. Every effort will be made to incorporate the following TSM and TDM elements:
 - Improved ramp metering hardware and software and closed-circuit television (CCTV) systems for viewing ramps and nearby arterials
 - At locations of interchange improvements, upgraded traffic signals interconnected and coordinated with adjacent signals and ramp meters
 - Additional way-finding signs on freeways and arterials
 - Design of on- and off-ramps to limit impacts to pedestrian and nonmotorized travel and preserve access to bike lanes and trails
 - Intelligent Transportation System (ITS) elements, including fiber-optic and other communication systems for improved connectivity and remote management; changeable message signs (CMS);
 CCTV coverage of the entire freeway mainline, ramps, and adjacent arterials; video detection systems; and vehicle detection system (VDS) for volume, speed, and vehicle classification
 - Traveler Information Management System improvements to enhance dissemination of real-time information on roadway conditions
 - Vanpool initiatives
 - Carpooling programs
 - Promote and integrate public transit design features
 - CCTV with Pan-Tilt-Zoom (PTZ) capability
 - Ramp Metering System (RMS)
 - VDS

Tolling/Express Lanes Operations

CHP enforcement areas would be provided on I-10 at selected locations, including on-ramps and medians. Median lighting is proposed at CHP enforcement/observation areas and is anticipated to be on 35-foot-tall poles, as previously noted. Nine CHP observation/enforcement areas are proposed in the WB direction and eight in the EB direction to provide enforcement for the Express Lanes.

The tolling and signage infrastructure needed to operate the Express Lanes would include:

- Toll gantries (toll reader) with transponder readers and high-speed digital cameras located at the I-10 I/E access points in each direction of I-10
- Signage approaching Express Lane entry and exit points, including variable message signs before entry
 points indicating the toll amount
- Complete CCTV coverage of the entire Express Facility to provide security for tolling equipment and to enable quick response to breakdowns and other incidents in the Express Lanes
- Fiber optics linking the electronic infrastructure to a centralized toll operations office

The policies under which the Express Lanes in Alternative 3 would be operated have not been finalized, but the preliminary policies are presented here to provide the current plans anticipated to operate the Express Lanes. Final decisions on operating policies would be made during the design-build phase and prior to opening of the project. Operating policies would be needed for:

- Type of tolling (i.e., static, variable, or dynamic);
- Toll policies for HOVs and others;
- Maximum target volume in the Express Lanes to maintain speed and minimize congestion;
- Method of determining toll amounts;
- Methods of toll collection, including requirements for use of transponders;
- Methods of toll enforcement; and
- Provision of an Express Lane service patrol.

The current plan for each of these topics is discussed below. As stated previously stated, final decisions on operating policies would be made during the design-build phase and prior to opening of the project; therefore, plans for each of the following topics are subject to change as the project further develops.

Type of Tolling. The type of tolling to be used in the Express Lanes is anticipated to be dynamic. Dynamic tolling varies toll amounts minute to minute in response to the real-time volume of traffic in the Express Lanes. Toll amounts are adjusted to manage the volume of traffic in the Express Lanes and avoid congestion. As a result of reduced congestion, there would be more throughput per Express Lane than per general purpose lane during periods of congestion in the general purpose lanes. With the additional throughput in the Express Lanes, there is a related reduction in general purpose lane traffic, thereby reducing congestion in the general purpose lanes. Under either variable or dynamic tolling, both the Express Lanes and general purpose lanes would benefit. Dynamic pricing would increase or lower the toll amount based on demand, while variable tolling would increase or reduce the toll price based on time of day or week. These tolling strategies encourage drivers to use the lanes when the general purpose lanes are congested or to utilize the general purpose lanes when the tolling lanes are congested.

Toll Discounts. The current toll policy is to allow HOV with three or more occupants to use the Express Lanes for free in the segment west of Haven Avenue and either toll-free or at discounted rates east of Haven Avenue. The Express Lanes would also be free to buses, vanpools, motorcycles, transit vehicles, CHP vehicles, California Department of Transportation (Caltrans) vehicles, and emergency vehicles (i.e., police, fire, ambulance). While Clean Air Vehicles that meet specified emission standards of the California Air Resources Board (ARB) and identified through decals issued by the Department of Motor Vehicles (DMV) are currently allowed to use the HOV lanes in California, this legislation will expire before the opening of

the Express Lanes. With the implementation of the Express Lanes, the San Bernardino County Transportation Authority (SBCTA) intends to provide a discount to Clean Air Vehicles for Express Lane access if state law is extended.

Maximum Target Volume in the Express Lanes. During peak periods of traffic congestion, the volume of traffic using the Express Lanes would be managed to maintain optimal speeds and minimize congestion in the Express Lanes. This would be accomplished by managing the volume of traffic in the Express Lanes. Toll amounts would be increased when a certain vehicle threshold is met to manage the demand and to keep traffic moving; toll amounts would be adjusted down when volumes fall below the threshold to attract more traffic into the Express Lanes.

Toll Amounts. Toll amounts would be set at the time the Express Lanes are open to traffic. It is anticipated that toll rates to use the entire 33 miles of the proposed I-10 Express Lanes from the LA/SB county line to Ford Street in Redlands would range from \$2.00 to \$7.15 (approximately \$0.06 to \$0.22 per mile).

Methods of Toll Collection. The tolling operation is proposed to be fully electronic, with no tollbooths to make cash payments or for controlling access for a trip. Based on current technology, vehicles would be identified through either an electronic transponder or through video-imaging/license plate recognition. To qualify for free or discounted travel, such as an HOV 3+, a vehicle must use a transponder. A FasTrakTM transponder uses radio frequency to transmit user information to an overhead reader. Each transponder transmits a unique signal that identifies the transponder unit/user. There would be no traditional toll booths where motorists stop and pay cash. Drivers with a registered transponder would be charged to their account immediately following their use of the Express Lanes. Rental cars would likely be given a stated grace period to pay their one-time toll either online or over the phone. Transponders may be equipped with a switch that motorists would utilize to declare their vehicle occupancy. The position of the switch would be used to assess the correct toll amount based on HOV/occupancy status.

Transponders would be read and tolls charged at toll gantries. A toll gantry is the overhead structure on which transponder readers would be mounted. The 33-mile-long I-10 Express Lanes corridor is divided into four segments: County Line to I-15, I-15 to I-215, I-215 to SR-210, and SR-210 to Ford Street. To discourage short trips in the Express Lanes, which cause additional weaving and congestion, a toll would be collected for use of each toll segment of the Express Lanes, regardless of the distance traveled within that segment. A toll gantry would be located along each separately tolled segment of the Express Lanes where transponders would be read to charge the toll. All toll equipment would be able to operate and share information to State and federal requirements and standards.

Methods of Toll Enforcement. Ensuring that each motorist pays the correct toll and minimizing toll evasion enforcement would be an essential component of the operation of the Express Lanes. Examples of toll violations that may be monitored and how surveillance may be conducted are as follows. Using a transponder set to an occupancy that results in a discounted toll charge to which the motorist is not entitled would be a toll violation. These violations would be enforced by CHP officers in the field. Enforcement of the HOV occupancy requirement would be accomplished in a manner similar to that used to enforce the HOV occupancy requirement; officers would use visual checks to determine if occupancy requirements are met. Each enforcement area would be equipped with a toll gantry and a transponder reader. Enforcement areas would be lighted to assist officers in the area with visual inspection of the number of occupants in a vehicle. Enforcement areas would also be equipped with a set of lighted indicators that would be illuminated to show an enforcement officer stationed at the enforcement area whether the vehicle has a transponder and

what vehicle occupancy the transponder declares. The lighted indicators would be positioned to allow an officer to view both the lighted indicators and traffic at the same time.

Other electronic methods of enforcement would also be used, including digital imagery of vehicles passing a toll gantry without a transponder. The digital images would be used to determine the license plate number of the vehicle without a transponder, and toll violation notices would be mailed to vehicle owners to collect both the unpaid toll and a toll violation penalty.

Express Lane Service Patrol. A service patrol similar to the existing Freeway Service Patrol would be provided during the heavy traffic periods. The service patrol would be available to assist motorists with a disabled vehicle, move disabled vehicles out of Express Lanes onto the shoulder, and assist CHP in removing vehicles from the Express Lanes following a collision.

Toll Operations Office. A Toll Operations Office would be needed to administer the tolling operation. No building would be built; it is assumed office space would be leased for administrative tasks near the corridor. The office location has not yet been identified. The Toll Operations Office would determine the range of toll amounts, given time of day or week and demand, and display them on variable message signs near the ingress points to the Express Lanes. Among the Toll Operations Office principal duties would be distribution of transponders to motorists, establishing and maintaining toll accounts for Express Lane users receiving transponders, charging toll accounts based on transponder readings along the Express Lanes, and providing periodic account statements to account holders.

Construction of the Selected Alternative

Due to the scale of the Selected Alternative and the need to minimize impacts and maintain traffic during construction, the proposed improvements are envisioned to be constructed in two construction stages from west to east with some overlap. Although there is overlap in the construction of the two contracts, the overall construction period within this overlap area will be less than 12 months. The Selected Alternative is anticipated to utilize a design-build delivery process. Construction of the two project contracts are anticipated to occur over a period of 60 months (5 years). Contract 1 covers the proposed improvements from the LA/SB county line to I-15 and is anticipated to be constructed within 36 months (3 years) between 2019 and 2022. Contract 2 covers the improvements from I-15 to Ford Street and is anticipated to be constructed within 36 months (3 years) between 2021 and 2024.

Preliminary Cost Estimate

Preliminary cost estimates for the Selected Alternative are \$1.7 billion (approximately \$1.9 billion in future dollars), including \$1.3 billion in construction, \$83 million in ROW and utility relocation, and \$332 million in support costs.

Rationale for Identification of the Selected Alternative

This section identifies the Selected Alternative, as well as the rationale and process in its identification. Prior to circulation of the Draft EIR/EIS, Caltrans and SBCTA determined that Alternative 3 (Express Lanes) was the Locally Preferred Alternative (LPA) on July 2, 2014. This decision was reached after it was determined that traditional methods of improving freeways would not accommodate the projected population growth of this region and associated increase in traffic. Caltrans and SBCTA concluded that Alternative 3 is viable from an engineering and financial standpoint, and it provides a transportation improvement that is sustainable over time. By designating Alternative 3 as the LPA prior to circulation of

the Draft EIR/EIS for public review, both transportation agencies provided disclosure of its preference among the alternatives to the public, as well as to other agencies that may have an interest in the project.

Several factors were considered in determining the basis for the selection of the Selected Alternative, including consideration of all information in the Draft Environmental Impact Statement (DEIS) and technical studies, as well as the Final EIS. It was also based on discussion and extensive input from the internal project development team (PDT) members, public, stakeholders, interested citizens, participating agencies, cooperating agencies, federal, state, and local agencies during the public involvement process. Extensive public outreach/coordination resulted in comments from the public and agencies; all comments were considered to identify the Selected Alternative, which include: funding, public concerns, and consideration of other project alternatives. In addition, a comparative evaluation of the alternatives was made using, among other considerations, criteria reflecting the project purpose and need; environmental, economic, and social impacts; and evaluation of the following criteria:

- Traffic Management
- Improve Traffic Flow
- Vehicle Hours of Delay (VHD)
- VMT
- Trip Reliability
- Benefit to General Purpose Lanes
- Compatibility with Transit and Other Modal Options
- Consistency
- HOV Federal Operating Standards
- Comprehensive HOV System

After analyzing each alternative with respect to the aforementioned criteria, it was determined that Alternative 1 (No Build Alternative) would not meet the project purpose and need. Although Alternative 2 partially met the project's purpose and need, Caltrans determined that the existing HOV lane west of Haven Avenue is degraded, and thus fails to meet federal HOV lane operating criteria. A degraded HOV facility is one that does not provide a speed of 45 miles per hour (mph) 90 percent of the time during peak hours. Alternative 2 adds a single HOV lane in each direction from Haven Avenue to Ford Street. Because the existing HOV lane west of Haven Avenue does not meet federal HOV lane operating criteria and the proposed HOV lane is anticipated to operate over capacity in some locations as soon as it is opened, operation forecasts under Alternative 2 are not anticipated to result in better performance compared to Alternative 3.

Alternative 3 meets the project purpose and need better than Alternative 2 because it provides: greater congestion reduction, greater throughput capacity, better trip reliability for single-occupant and HOV users, greater transit opportunities, and long-term congestion management. As summarized in Table 1, each alternative is compared to the project purpose and objectives.

Table 1. Comparison of Alternatives with the Project Purpose and Objectives

	Alternative 1 (No Build)	Alternative 2 (One HOV Lane in Each Direction)	Selected Alternative 3 (Two Express Lanes in Each Direction)
Project Purpose			
Reduce Congestion	No	Yes	Yes
Increase throughput	No	Yes	Yes
Enhance trip reliability	No	No	Yes
Accommodate long-term congestion management of the corridor	No	No	Yes
Project Objectives			
Reduce volume-to-capacity (v/c) ratios along the corridor	No	Yes	Yes
Improve travel times within the corridor	No	Yes	Yes
Relieve congestion and improve traffic flow on the regional transportation system	No	Yes	Yes
Address increased travel associated with existing and planned development	No	Yes	Yes
Provide a facility that is compatible with transit and other modal options	No	Yes	Yes
Provide consistency with the SCAG RTP, where feasible and in compliance with Federal and State regulations	No	Yes	Yes
Provide a cost-effective project solution	No	No	Yes
Minimize environmental impacts and right- of-way (ROW) acquisition	Yes	Yes	Yes
Promote sustainable travel and livability for the corridor	No	No	Yes

As illustrated in Table S-1 of the Final EIS, the comparison of environmental impacts for both build alternatives indicate that Alternative 3 would result in greater environmental impacts compared to Alternative 2; however, environmental studies conducted for both build alternatives (Alternative 2 and Alternative 3) indicate that environmental effects would not result in environmental impacts that would be considered adverse. Comprehensive measures would be included with implementation of both build alternatives to ensure that environmental impacts are not substantial.

Construction cost would be greater for Alternative 3 (\$1.7 billion) compared to Alternative 1 (No Build) and Alternative 2 (\$567 million). Although construction costs for Alternative 3 would be higher, the revenue generation from toll collection (per the Toll and Revenue conducted by SBCTA), long-term operational benefits, transit enhancement/compatibility, carpool encouragement and enhanced trip reliability would outweigh increased construction costs of Alternative 3. All of the alternatives considered were evaluated on a set of criteria that would achieve the objectives of the project to reduce congestion, increase throughput, enhance trip reliability, and accommodate long-term congestion

management of the corridor. Some of these criteria include the ability to relieve traffic congestion for the long term, project cost, environmental impacts, and to achieve acceptable LOS along the I-10 corridor. If an alternative did not achieve the intended purpose established for the project, it was eliminated from further consideration.

Based on the reasons mentioned, the PDT identified Alternative 3 as the Selected Alternative to move forward for design and construction. For a more complete discussion of the factors considered and reasons in choosing the Selected Alternative, please refer Section 2.2.4.1 in Chapter 2 of the Final EIS.

D. Section 4(f)

The analysis of alternatives considered the project's possible potential direct and indirect use of Section 4(f) resources. Section 4(f) properties resulting from the implementation of the Selected Alternative (Alternative 3) would generally avoid the removal, impairment, or access to park lands used as active recreational facilities and would not adversely affect recreational uses throughout the project corridor. Avoidance alternatives for the described Section 4(f) uses would include the No Build Alternative; however, this alternative would not satisfy the project's stated purpose and need. Alternative 3 would result in the temporary occupancy of properties subject to Section 4(f) protection, but uses would be limited during the construction period of the project, and all Section 4(f) properties would be restored to pre-project conditions. No constructive uses were found to affect any of the Section 4(f) properties. In addition to common measures to minimize harm, uses of Section 4(f) properties would be reduced to de minimis levels through implementation of specific measures for each Section 4(f) resource during project construction. As discussed in the Final EIS in Appendix B, Resources Evaluated Relative to the Requirements of Section 4(f), Alternative 3 would affect the following Section 4(f) properties:

MacArthur Park

Direct Use

The Selected Alternative (Alternative 3) would require acquisition of 0.14 acre of MacArthur Park, which represents 5.3 percent of the park's pre-project acreage. This acquisition would be necessary to widen I-10, accommodate on-ramp realignment at the I-10/Central Avenue interchange, and replace a soundwall on top of the retaining wall. The 0.14-acre direct use area would be acquired for project right-of-way (ROW) and would be converted to transportation uses; however, the 0.14-acre area contains only landscaping, with no recreational facilities or playing fields in this section of the park.

The direct use area would not impact any of the current recreational activities, features, or attributes within the park because none are located in the direct use area. Although the acquisition area would minimally reduce the overall size of the park from 2.64 acres to 2.50 acres, it would not inhibit existing recreational activities within the park.

In addition, a 0.04-acre permanent footing easement would be required within this property, which is necessary to provide structural support for the new soundwall on top of the retaining wall to be constructed adjacent to MacArthur Park. The footing easement would be underground and would not permanently affect recreational activities, features, or attributes within the park. The surface above the footing easement area would be returned to pre-project conditions after temporary occupancy of the area during construction is complete.

Temporary Use

The Selected Alternative (Alternative 3), would require a 0.16-acre TCE at MacArthur Park for approximately 9 months to allow for mainline roadway widening along I-10 and construction of a new soundwall adjacent to the park. Although this TCE would temporarily reduce the overall park area during construction, it would not impact existing recreational activities, features, or attributes in the park because the area is not used for recreational purposes. Construction of the proposed project would result in a temporary occupancy of the park, although recreational activities at the park can continue throughout project construction.

The area that would be impacted in the park is landscaped with turf grass and scattered tree cover with no recreational facilities or playing fields. Landscaping, screening, revegetation, and restoration of this area will be conducted in consultation with the property owner (City of Montclair) to ensure the property is returned to its original condition, or better, at the completion of construction. After implementation of this measure, the land designated as a TCE would have similar function and value prior to project construction.

Caltrans has determined that a *de minimis* finding applies because the acquisition area would affect existing landscaping and tree cover and would not affect any of the recreational activities, features, or attributes within the park. Construction of the proposed project (Alternative 3) would not adversely affect the park because recreational activities can continue during construction of the proposed project.

The City of Montclair concurred with the De Minimis Determination on November 28, 2016.

Santa Ana River Trail

Direct Use

The Selected Alternative (Alternative 3) would not require any acquisition or permanent easement of the Santa Ana River Trail (SART). Land from this resource would not be permanently incorporated into the project either through partial or full acquisition. Furthermore, no permanent project features would be constructed that would modify or otherwise permanently alter the SART. Any trail closures would occur at night after sunset to avoid all impacts to users of the SART. Given that the SART is only open from sunrise to sunset, work outside of these hours would not require closure or detour of the trail. Therefore, the proposed project would not result in Section 4(f) direct use of SART.

Temporary Use

The Selected Alternative (Alternative 3) would require temporary overnight closures of the SART to widen three I-10 mainline bridges that crosses over the SART. During construction, an 8-foot-tall falsework clearance would be maintained to provide accessibility to the SART facility.

The bridge widenings above the SART would not interfere with the activities or purposes of the SART. Closures would only occur at night while the trail is closed to public access to avoid any inconvenience to SART users. Approval for work on the trail that may conflict with usage of bicyclist or pedestrian usage will be obtained in writing by San Bernardino County Regional Parks Department 30 days prior to construction. Informational signage, illuminated with temporary lighting, will be posted on both sides of the SART underpass.

Caltrans has determined that a *de minimis* finding applies because the construction of the proposed project (Alternative 3) would not result in adverse effects to SART since recreational activities can continue during construction of the proposed project. The proposed project would not result in a Section 4(f) direct use and constructive use of the trail.

The County of San Bernardino Regional Parks Department concurred with the De Minimis Determination on November 1, 2016.

Orange Blossom Trail

Direct Use

The Selected Alternative (Alternative 3) would not require any acquisition or permanent easement at any proposed segments of Orange Blossom Trail (OBT) and the Zanja Trail. Land from these resources would not be permanently incorporated into the project, either through partial or full acquisition. Furthermore, no permanent project features would be constructed that would modify or otherwise permanently impact the OBT or Zanja Trail; therefore, there would be no direct use of these resources.

Temporary Use

The Selected Alternative (Alternative 3) would require a 1.2-mile temporary closure and detour of the OBT to widen I-10 bridges over the trail. If the OBT is constructed prior to the proposed project, trail traffic would be detoured along local streets (Lugonia Avenue and California Street) for approximately 18 months while the I-10 bridge widening is constructed over the OBT alignment. To maintain the recreational value of the OBT, trail users would be detoured during project construction at this location. To further minimize any inconvenience caused by the temporary closure and detour, informational and detour signage will be posted in advance to inform users of temporary closures and detour routes. Trail closure and detour information will also be posted to the City of Redlands Web site, Facebook page, and Twitter page.

There would be no interference with the activities or purposes of the future OBT due to construction of the I-10 Corridor Project. The duration of occupancy would be temporary, no changes would occur to the trail, and land would be fully restored to pre-project or better condition after construction. Given that a suitable detour route would be provided to maintain non-motorized connectivity throughout the OBT, it's recreational value would not be reduced by the temporary occupancy. No temporary occupancy, including closures or detours would be required at the Zanja Trail.

Caltrans has determined that a *de minimis* finding applies because the construction of the proposed project (Alternative 3) would not result in adverse effects to the OBT since recreational activities can continue during construction of the proposed project. The proposed project would not result in a Section 4(f) direct use and constructive use of the trail.

The City of Redlands concurred with the De Minimis Determination on November 7, 2016.

Euclid Avenue/SR-83

Direct Use

The Selected Alternative (Alternative 3) will result in 0.48 acre of permanent impact to medians, 470 linear feet of historic cobblestone curb impacts, and removal of 9 character defining trees at a small segment of the historic Euclid Avenue/SR-83 in the cities of Ontario and Upland. Adverse impacts would be avoided by replacing character-defining features (i.e., stone curbs and trees) in-kind and ensuring that overall continuity of the Euclid Avenue corridor would be maintained. Construction of project would result in the removal of 26 trees, 9 of which are character-defining features of the historic properties. Compared to the totality of the extant of this character defining feature, removal of such a small number of trees should not be considered as rising to the level of being considered adverse. All trees to be removed from the Euclid Avenue parkway and median would be replaced within the parkway or median.

Temporary Use

The Selected Alternative (Alternative 3), would not require temporary construction easements along Euclid Avenue. Euclid Avenue/SR-83 would remain open to vehicular traffic during construction of Alternative 3; however, to allow the flow of vehicular traffic, construction staging would occur in three phases. A Draft

Traffic Management Plan (TMP) for the project has been prepared and was designed to minimize traffic delays that may result from lane restrictions or closures during construction operations. Therefore, temporary construction associated with the proposed project improvements would not adversely affect the historic property.

Caltrans has determined that a *de minimis* finding applies because the direct use area would not adversely affect any of the recreational activities, features, or attributes within the historic district since character-defining features of Euclid Avenue/SR-83 features would be replaced in-kind after the construction of the project. Construction of the proposed project (Alternative 3) would not result in adverse effects because the historic district would remain open during construction.

The City of Ontario concurred with the De Minimis Determination on March 31, 2017 and the City of Upland concurred with the De Minimis Determination on April 3, 2017.

E. Summary of Beneficial Environmental Impacts

The Selected Alternative (Alternative 3) will reduce congestion, increase throughput, enhance trip reliability, and accommodate long-term congestion management of the I-10 corridor.

The Selected Alternative (Alternative 3) will improve projected future traffic operations. In 2045, for an entire corridor trip between the LA/SB county line and Ford Street, speeds are anticipated to be 4 to 13 mph faster under the Selected Alternative than under no build conditions. Speeds on the Express Lanes for an entire corridor trip are expected to be 26 to 39 mph faster under the Selected Alternative than under no build conditions in the HOV lane. Travel times are anticipated to be 10 to 28 minutes less under the Selected Alternative than no build conditions. On the Express Lanes, travel times for an entire corridor trip are expected to be 20 to 50 minutes less than no build conditions. Daily and annual vehicle hours of delay are anticipated to be approximately 485,000 and 1.9 million less, respectively, than under no build conditions. In addition, with implementation of the Selected Alternative, four fewer intersections are anticipated to operate at LOS F and four less will have v/c ratios greater than 1.00 during peak hours compared to no build conditions. The percentage of off-ramps with adequate storage at their arterial terminal is anticipated to be 35 percent greater. The percentage of arterials with adequate storage at their intersections with freeway ramps is anticipated to be 24 percent greater.

The project would improve several interchanges along I-10, including 3 system interchanges (I-10/I-15 interchange, I-10/I-215 interchange, and I-10/SR-210 interchange) and 30 local street interchanges, including 1 interchange (Indian Hill Boulevard) in Los Angeles County.

The project would maintain existing bikeways in the corridor and construct additional bikeways and pedestrian facilities along arterials within the project limits. Bike lanes (Class I or Class II), which have been identified in the local circulation plans, will be incorporated into the design of the proposed arterial improvements along Euclid Avenue, Vineyard Avenue, and Tennessee Street. Sidewalks will be provided on both sides of local arterials in which improvements are proposed, including Monte Vista Avenue, Sultana Avenue, Campus Avenue, Euclid Avenue, Vineyard Avenue, Richardson Avenue, and Tennessee Street. Pedestrian facilities on arterials being improved will meet current Americans with Disabilities Act (ADA) standards.

The Selected Alternative is anticipated to result in a beneficial impact to neighborhoods and community cohesion by reducing cut-through traffic within the adjacent neighborhoods. Community members living

within the vicinity of the I-10 corridor and people commuting between Los Angeles County and San Bernardino County would benefit from the reduced congestion and the improved freeway operations.

The improvement of the I-10 corridor is recognized in local planning documents and is mainly limited to the available right of way to the maximum extent possible along the corridor within the project limits. The project is mainly consistent with the goals and policies in the land use, mobility, and conversation and open space elements of the corridor cities' General Plans. The project is also consistent with the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and the 2017 FTIP.

F. Summary of Adverse Impacts and Measures to Minimize Harm

The Selected Alternative (Alternative 3) incorporates all practicable measures to minimize environmental harm, which are described in the Final EIS and summarized in the Environmental Commitment Records (ECR) in Appendix E of the Final EIS. Potential adverse impacts and measures are summarized below.

Land Use and Planning

Potential Impacts

The adoption of the Selected Alternative may require the affected counties and cities to amend their General Plan Land Use and Circulation Elements to reflect the final I-10 Corridor Project alignment, particularly at interchange locations that may need to be acquired for the project. The Selected Alternative is anticipated to require permanent conversion, through partial and full acquisition, of approximately 19.05 acres of land designated as other land uses to transportation.

The Selected Alternative will require permanent acquisition of 0.14 acre and a TCE of 0.16 acre at MacArthur Park in the City of Montclair. In addition, temporary overnight closures of the Santa Ana River trail and temporary closures and detours at the Orange Blossom Trail and Zanja Trail are anticipated to widen the I-10 mainline. Finally, the project will result in 0.48 acre of permanent impact to medians, 470 linear feet of historic cobblestone curb impacts, and removal of 9 character defining trees at Euclid Avenue/SR-83.

Measures to Minimize Harm

The Selected Alternative has been designed to minimize ROW impacts. The project is generally consistent with current and future planned local land uses as identified through the local government planning process. The project has been designed to avoid existing built land uses to the extent practicable while adhering to design and operational criteria to maintain a safe roadway. During the design-build phase, efforts will be undertaken to further minimize construction and operation impacts to existing and planned land uses.

- SBCTA will work with affected jurisdictions to amend General Plans to reflect the Selected Alternative
 and modify land use designations for properties that would be acquired for the project that are not
 currently designated for transportation uses.
- Any landscaping temporarily disturbed or removed during construction will be returned to pre-project or better conditions.
- Access and circulation for recreational users will be maintained at impacted locations identified.
 Detours for any temporary closures of the recreational facilities identified will be implemented.
 Informational and detour signage will be posted in advance to inform users of any temporary closures and detour routes.

- Final design shall not reduce grade separation over the SART. The trail closures will occur at night after sunset to avoid all impacts to users of the SART.
- Coordination with the City of Montclair will be maintained to provide compensation required under the Park Preservation Act.

Community: Character and Cohesion

Potential Impacts

The Selected Alternative (Alternative 3) does not conflict with applicable land use plans, policies, or regulations, and project effects would not result in adverse effects. I-10 is an existing highway facility, thus widening of the lanes would not divide an existing community or create a barrier between communities. Overall, the general visual character of I-10 and surrounding environment would not be greatly altered by addition of one or two lanes because the project is located within an urbanized area that is primarily built out; therefore, no significant permanent impacts to community character or cohesion would occur.

There would be no substantial barriers to access affecting the neighborhood or community cohesion within the project area during the construction period, although construction of the proposed project would create typical construction-related temporary and intermittent inconvenience for local and regional users and adjacent residents and business owners within and adjacent to the project corridor, including mainline lane closures and ramp connector closures. Several on- and off-ramps would require closure during construction of between 10 to 30 days, with other ramp closures less than 10 days. The Monte Vista Avenue eastbound (EB) on-ramp is anticipated to require long-term closure of approximately 16 to 24 months during replacement of the Monte Vista Avenue undercrossing structure. The freeway and street closures could temporarily delay goods shipment, affect business parking, and impede business access.

Subsequent to construction, the proposed project is anticipated to result in a beneficial impact to neighborhoods and community cohesion by reducing cut-through traffic within the adjacent neighborhoods. Community members living within the vicinity of the I-10 corridor and people commuting between Los Angeles County and San Bernardino County would benefit from the reduced congestion and improved freeway operation. The Selected Alternative improvements would not physically divide an established community and would not result in adverse effects.

Environmental Justice

The Selected Alternative (Alternative 3) would not cause disproportionately high and adverse effects on any minority or low-income populations per Executive Order 12898. The proposed project would result in residential acquisitions in Fontana, and although there are a higher percentage of minority non-white residents in the city, none of the acquisition areas have meaningfully greater minority non-white populations than the rest of the city and would not result in disproportionately effects. No minority or low-income populations would be significantly affected by the Selected Alternative; therefore, this project is not subject to the provisions of EO 12898.

Measures to Minimize Harm

Community disruption during project construction as a result of construction activities would be temporary and mitigated by implementing a traffic staging plan and a TMP as well as temporary visual impact measures, noise impact measures, and air quality impact measures. SBCTA and Caltrans will prepare a TMP to minimize direct and cumulative impacts on the community. Upon completion, the final TMP will

be available to the public and can be obtained by request from SBCTA and/or the project website. The TMP will also be submitted with the construction plan to the police and fire departments of affected cities prior to commencement of construction activities.

To the extent practical, the following measures will be implemented to minimize construction-related effects related to the affected communities:

- No two consecutive/adjacent off-ramps or two consecutive/adjacent on-ramps in the same direction will be closed concurrently.
- Business access will be maintained at all times during construction.
- To keep residents, businesses, community services, and service providers within the affected area informed about the proposed project construction schedule and traffic-impacted areas, provide motorist information (i.e., existing CMSs, portable CMSs, stationary ground-mounted signs, traffic radio announcements, and the Caltrans Highway Information Network [CHIN]).
- Traffic circulation construction strategies, as informed by the TMP, will be incorporated into project
 design in consultation with Caltrans, SBCTA, and affected cities to keep residents, businesses,
 community services, and service providers within the affected area informed about the proposed project
 construction schedule and traffic-impacted areas.
- Coordination with the relevant park and recreation departments of affected parks shall occur during construction to ensure the access and safety of users in the parks and trails adjacent to the proposed project.
- Close coordination with utility service providers and the implementation of a public outreach program
 will be conducted to minimize impacts to surrounding communities. A public outreach plan for
 relocation of utilities will be developed.
- Close coordination with railroad owners and operators will be conducted during the design-build phase to minimize impacts to railroad operations.
- Close coordination with affected property owners will be conducted to identify means to avoid and
 minimize parking impacts, including space management such as restriping of parking areas and
 identifying parking replacement options.
- A robust public outreach program will be maintained to minimize objections to the unavoidable construction impacts.
- At identified locations, all pedestrian facilities will be designed to meet or exceed requirements of the Americans with Disabilities Act (ADA) and current safety standards. Access to the pedestrian and bicycle facilities shall be maintained to the extent practicable during the construction period.
- Coordination with Metrolink, Foothill Transit, Omnitrans, and other affected transit providers will be conducted to request and comply with applicable procedures for any required temporary bus stop relocations or other disruptions to transit service during construction.
- SBCTA will promote the use of public transit, ride sharing, and variable work hours to reduce the
 amount of traffic using the freeway and roadways in and around the construction zone.

The following measures will be implemented by the project to make Alternative 3 more equitable:

A Low-Income Equity Program will be created, which will include policies to enable low-income
households to utilize the proposed project improvements, such as waiving account maintenance fees or

allowing the use of cash to open and replenish toll accounts and/or implementing video license plate recognition as an alternative to toll-collection technology.

Account maintenance fees often apply to toll road or Express Lane transponders that do not incur a minimum amount in tolls in a stated period of time. Waiving these fees would allow low-income and minority communities to utilize the Express Lanes without being required to spend a minimum amount per month. This, in addition to allowing the use of cash to open and replenish toll accounts and/or implementing video license plate recognition, would make the Express Lanes more accessible for these communities.

• To minimize impacts to surrounding low-income or minority communities, outreach activities targeted to low-income residents will continue to be conducted during the design-build process. Community outreach will include providing timely information about anticipated construction activities to affected citizens and adjacent property owners. Notification methods could include, but are not limited to, website, fliers, mailers, e-mail notifications, and electronic messaging on the freeway.

Community: Relocation and Property Acquisition

Potential Impacts

The Selected Alternative (Alternative 3) will result in the displacement of 12 businesses and 40 residential units. In addition, the Selected Alternative will require partial acquisitions of 151 parcels, permanent underground footing easements at 128 parcels, and temporary construction easements at 426 parcels.

Measures to Minimize Harm

Caltrans, in coordination with SBCTA, has prepared a relocation analysis as part of the Final Relocation Impact Report (July 2016), and the results have been incorporated into the final environmental document. The Final Relocation Impact Report identified adequate resources within the city or area vicinity to relocate residents or businesses (i.e., a sufficient number of comparable replacement locations meeting the decent, safe, and sanitary standards that exist within the study area or in neighboring communities. It is anticipated that finding replacement housing for owner- or tenant-occupied residences would not present any unusual problems for the project.

Where acquisition and relocation are unavoidable, the Caltrans relocation team will fully comply with the provisions of the Uniform Act and the 1987 Amendments, as implemented by the Uniform Relocation Assistance and Real Property Acquisition Regulations for Federal and Federally Assisted Programs adopted by the United States of Transportation (March 2, 1989), including providing relocation assistance payments and counseling to persons and businesses affected by displacement resulting from the proposed project.

Utilities/Emergency Services

Potential Impacts

Approximately 281 utilities have the potential to be affected by the proposed improvements. The Selected Alternative (Alternative 3) may temporarily impact response times from service providers due to the proposed construction, road closures, and lane closures. During construction, the ability of emergency services providers to meet response times could be impaired because of temporary traffic delays; road, lane, and/or ramp closures; or detours.

Measures to Minimize Harm

The following measures were identified for impacts to emergency services and utilities during construction of the proposed project. Additional avoidance, minimization, and/or mitigation measures for impacts to utilities and emergency services will be considered upon completion of coordination with utility companies and emergency service providers during design-build.

- Utility relocation plans will be prepared in consultation with the affected utility providers/owners for those utility facilities that will need to be relocated, removed, or protected in-place.
- To protect the integrity of the Metropolitan Water District of Southern California's pipeline, geotechnical exploration and analysis will be coordinated with Caltrans and SBCTA before the start of construction.
- Caltrans and SBCTA will implement measures to minimize risk of fire prior to and during any construction activities.
- To keep residents, businesses, community services, and service providers within the affected area informed about the proposed project construction schedule and traffic-impacted areas, provide motorist information (i.e., existing CMSs, portable CMSs, stationary ground-mounted signs, traffic radio announcements, and the Caltrans Highway Information Network [CHIN]).
- Traffic circulation construction strategies (i.e., lane closure restrictions during holidays and special local events, closure of secondary streets during construction to allow quick construction and reopening, lane modifications to maintain the number of lanes needed, allowing night work and extended weekend work, maintaining business access, and maintaining pedestrian and bicycle access) will be incorporated into project design in consultation with Caltrans, SBCTA, and affected cities to keep residents, businesses, community services, and service providers within the affected area informed about the proposed project construction schedule and traffic-impacted areas.

Traffic and Transportation/Pedestrian and Bicycle Facilities

Potential Impacts

The project is a transportation project within an urbanized transportation corridor designed to enhance public safety and relieve congestion. No permanent adverse effects to traffic and circulation are anticipated due to the project. Temporary adverse effects due to construction related activities are anticipated.

Measures to Minimize Harm

In addition to the measures listed below, additional measures listed under the Community Character and Cohesion section will also help to minimize temporary impacts to traffic during project construction.

- A Final TMP will be prepared prior to project construction that identifies methods to avoid and
 minimize construction-related traffic and circulation effects and minimize impacts to pedestrian and
 bicycle access, including ADA-compliant features, as a result of the proposed project. During
 construction, the contractor shall implement the methods identified in the Final TMP.
- Every effort will be made to incorporate Transportation System Management (TSM) and Transportation Demand Management (TDM) elements.

Visual/Aesthetics

Potential Impacts

The addition of express lanes on either side of the I-10 corridor is expected to have long-term visual impacts on key viewpoints ranging from moderately low to moderately high after project implementation. Construction of the Selected Alternative (Alternative 3) would require 13 structure replacements, 61 structure widening or modifications. Removal of 1,148 eucalyptus trees and other vegetation within the interchange areas may have an adverse effect on visual quality for local residents and motorists. In addition, the addition of lanes, and construction of structures such as 26 new sound walls, and 180,000 linear feet of retaining walls have the potential to alter the existing visual quality of the corridor.

Measures to Minimize Harm

Caltrans will preserve as many mature trees as practical, and the landscape plan will incorporate a tree replacement ratio of 2:1, so the effects of vegetation removal would be temporary in duration as the replacement vegetation grows and matures.

With implementation of the following measures, the visual impacts of this project would be reduced and would not result in a substantial change in overall visual quality for the area.

- For the corridor aesthetics and landscaping, the Caltrans I-10 Corridor Master Plan (dated November 2011) will be used as the basis for the designs. During the design review and approval process, coordination will continue to occur with all corridor stakeholders for decisions on specific design elements.
- Beginning with preliminary design and continuing through the design-build phase, as much existing vegetation in the corridor as feasible will be saved and protected, especially eucalyptus and other skyline trees. It is anticipated that approximately 295 eucalyptus trees will be protected-in-place during construction. Trees to be protected-in-place will be identified in project design plans. A Tree Removal and Replacement Plan will be prepared prior to clearing and grubbing. Skyline trees will be included in the planting palette, where feasible and acceptable to local agencies, to soften the new freeway elements and recreate a sense of the existing tree colonnades.
- As determined by SBCTA and Caltrans, large infield areas of existing plantings to be preserved through the construction period with temporary fencing will be identified.
- Construction plans will be developed that apply aesthetic treatments, including color, textures, and
 patterns, to the soundwalls, retaining walls, and proposed bridges that follow the guidelines in the I-10
 Corridor Master Plan. Vine plantings on one or both faces of soundwalls will be included wherever
 feasible (given Caltrans setback and maintenance requirements).
- The Euclid Avenue Bridge over I-10 will be designed to be consistent with the requirements of the local communities, including plantings on the bridge, decorative fencing, and replacement/reconstruction of existing historically contributing elements.
- Plans will be developed and implemented to landscape and revegetate disturbed areas to the greatest
 extent feasible, as directed Caltrans. Replanting the corridor will commence prior to the end of each
 construction period. Plant material will be comprised of drought-tolerant and native species of trees
 and shrubs to the extent feasible. A 3-year plant and irrigation establishment period or equivalent 1year plant establishment plus 2-year Establish Existing Planting (EEP) period will be included as part
 of the construction period to provide a single source of maintenance through the establishment period.

- Trees will be planted to the maximum extent feasible, given space constraints, to provide screening of
 the facility and structures. All visible concrete structures and surfaces will be designed to visually
 blend with the adjacent landscaping and natural plantings.
- To deter graffiti, textures will be included on walls and surfaces and/or anti-graffiti coatings on all
 walls, barriers, and bridges. Where feasible, vine plantings will be included on walls to also deter
 graffiti.
- For all new or relocated light fixtures and other sources of glare, shielded fixtures will be provided that prevent light trespass onto adjacent properties.

Cultural Resources

Potential Impacts

The project only has the potential to contribute to a permanent effect on Euclid Avenue/SR-83, because it is the only historic property being directly affected by the Selected Alternative (Alternative 3). The proposed project would require modification of the medians, curbs, and/or mature vegetation that are character-defining features of Euclid Avenue/SR-83. In addition, the Euclid Avenue/I-10 Overcrossing (Bridge No. 54 0445) would be replaced. While this bridge is not a character-defining feature of Euclid Avenue/SR-83, care must be given to the design and aesthetics of the replacement structure to ensure that the new structure does not impact the setting of the corridor. The Selected Alternative would have No Adverse Effect with Non-Standard Conditions at Euclid Avenue/SR-83.

Measures to Minimize Harm

- If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.
- If human remains are discovered, further disturbances and activities shall stop in any area or nearby area suspected to overlie remains.
- Design plans will be prepared and implemented for structure, tree, stone curbs, streetlights, and sign replacement of the Euclid Avenue/I-10 structure, tree replacement at Euclid Avenue to maintain physical features within the area that contribute to its historic significance.
- Construction plans and activities in the vicinity of the remaining historic properties in the area of potential effects (Euclid Avenue/SR-83, the Mill Creek *Zanja*, 1055 E. Highland Avenue, and the Peppers/El Carmelo) will be spot monitored by the Caltrans Professional Qualified Staff.
- Plans that designate and establish an environmentally sensitive area (ESA) at Curtis Homestead in accordance with the ESA Action Plan will be developed and implemented.

Hydrology, Water Quality, and Storm Water Runoff

Potential Impacts

The project is anticipated to result in 13 transverse and 5 longitudinal floodplain encroachments. In addition, several channels and drains and their floodplain would be impacted to various degrees; however, the proposed project would have a very small impact on: life and property; interruption or termination of a transportation facility; or natural and beneficial floodplain values.

The project would increase impervious surface area by 140 acres and potentially increase stormwater runoff from construction, including a total disturbed soil area of approximately 661 acres during construction.

With the implementation of Treatment BMPs, Design Pollution Prevention BMPs, and Maintenance BMPs, the effects to water quality associated with operation of the proposed project would be minimized to the maximum extent practicable.

Measures to Minimize Harm

- Standard measures will be used, including compliance with provisions of the Caltrans Statewide (NPDES) Storm Water Permit, the General NPDES Permit for Construction Activities and the General Waste Discharge Requirements Permit, that include preparing and implementing a Stormwater Pollution Prevention Plan (SWPPP) addressing all State and federal water control requirements and regulations relating to construction, equipment, and materials; and provide Maintenance, Design Pollution Prevention, and Treatment BMPs to meet Maximum Extent Practicable (MEP) requirements.
- Positive drainage will be provided during construction, and the project will refrain from filling designated floodplains.
- Erosion control and water quality protection will be implemented during in-river construction and post-construction. Construction activities will be limited between October and May to those actions that can adequately withstand high flows and entrainment of construction materials. Adequate conveyance capacity at bridge crossings will be provided to ensure no net increase in velocity.

Geology

Potential Impacts

The project has the potential to permanently result in or be affected by ground motion, liquefaction, fault rupture, and other effects related to seismic activity; retaining walls for slope stability; and erosion of slopes and other unpaved areas. There may also be increased potential for soil erosion in areas of disturbed soil; ground motion, liquefaction, fault rupture, and other effects related to seismic activity; retaining walls for slope stability; and erosion of slopes and other unpaved areas.

Measures to Minimize Harm

Standard measures will be used, including preparation of detailed geotechnical studies during the designbuild phase. To reduce potential for seismic slope instability or lateral spreading, additional measures will be incorporated for new structures.

Paleontology

Potential Impacts

The project has the potential to impact paleontological resources during construction; however, because fossils are located subsurface, there is no way to know the full extent of the effect of the project on fossil resources until excavation is underway. Existing fossil localities nearby in the same rock units present within the project study area have produced significant vertebrate paleontological resources. On this basis, the San Timoteo Formation has high sensitivity or potential to produce significant fossils with increasing depth below the ground surface.

Measures to Minimize Harm

A Paleontological Mitigation Plan (PMP) will be prepared by a qualified paleontologist, prior to construction of this project. The PMP will detail the paleontological monitoring to be implemented during construction.

Hazardous Waste/Materials

Potential Impacts

Forty-four (44) structures to be demolished were sampled for asbestos-containing materials (ACM) and lead-based paint (LBP). Since some bridges contain ACM and LBP, handling of these materials will be addressed during the design-build phase by preparation of an appropriate Special Provision. Two parcels contain at least one aboveground storage tank (AST), but only one may be located within the portion identified for acquisition. Ten identified parcels contain at least one underground storage tank (UST) on the property. After further investigation, only one property reported a leaking UST.

Measures to Minimize Harm

- If additional properties and/or structures are identified to be removed and/or altered beyond those identified in this Final EIS, surveys for hazardous building materials, including ACM, LBP, and polychlorinated biphenyls (PCBs) will be conducted for the residential and commercial structures and bridge structures that will be removed as part of the proposed project.
- Parcels beyond those analyzed in this Final EIS that are required for partial or full acquisition will be surveyed to determine whether any USTs, ASTs, or arsenic-contaminated soils are located within an area identified for acquisition. If design plans change and require any of the USTs and ASTs to be removed, additional site investigation(s) will be necessary. Removal of USTs and ASTs will be conducted in accordance with applicable regulations.
- Prior to construction, Caltrans will require utility owners to inspect for potential PCBs in utility pole-mounted transformers that will be relocated or removed as part of the project and handled accordingly.
- Prior to construction, testing of yellow traffic stripes and pavement marking material will be performed.
- If additional disturbance within unpaved areas are required beyond those identified in the Final EIS, sampling for ADL shall be conducted.
- If additional soil disturbance is required within historic and current agricultural uses beyond those identified in the Final EIS, soil samples will be collected and analyzed for herbicides and pesticides.
- If additional site investigations are necessary and hazardous waste/ materials are found, coordination
 with all appropriate regulatory agencies will be required for the removal, disposal, and/or handling of
 potentially hazardous materials.
- If signs of potential impacts (e.g., odors, discolored soil) are observed during construction activity, construction shall cease and Caltrans' Unknown Hazards Procedures for construction shall be followed. If groundwater is encountered during construction activities, or if construction dewatering is necessary, then sampling and analysis of groundwater shall be conducted to identify the appropriate management and disposal of the groundwater.
- A Health and Safety Plan that meets all applicable federal, State, and local regulations and requirements
 will be developed to guide all construction activities. It will prescribe safe work practices, contaminant
 monitoring, personal protective equipment, emergency response procedures, and safety training
 requirements to protect construction workers and third parties.

Air Quality

Potential Impacts

Construction of the Selected Alternative (Alternative 3) has the potential to temporarily increase air emissions in the project area during construction.

Measures to Minimize Harm

Standard measures will be used, including those specified in the Caltrans Standard Specifications Section 14, compliance with all applicable laws and regulations related to air quality, fugitive dust emissions control, construction site soil binder on unpaved roads, proper construction equipment emission requirements, construction site dust control, storage and location of construction material discharge, and covered transported material.

Best Available Control Technology (BACT) will be implemented during construction where feasible, including: soliciting bids that include use of energy and fuel-efficient fleets; soliciting preference for construction bids that use BACT, particularly those seeking to deploy zero- and/or near zero emission technologies; employing use of alternative fuel vehicles; using lighting systems that are energy efficient, such as limited wavelength amber light-emitting diode (LED) technology; using an adopted emissions calculator to estimate construction-related emissions; using the minimum feasible amount of GHG-emitting construction materials feasible; using cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production; using lighter-colored pavement where feasible; recycling construction debris to maximum extent feasible; and planting shade trees in or near construction projects where feasible.

Noise

Potential Impacts

The traffic noise analysis for the project area indicates that residential areas and park and recreation facilities, as well as school and motels, would be impacted by the Selected Alternative (Alternative 3) (i.e., the noise level would approach or exceed the Noise Abatement Criteria specified in 23 CFR 772). Without any additional barrier protection, noise analysis results indicate that the proposed project would raise noise levels in some areas from 1 to 5 dB compared to the Design Year (2045) No Build Alternative. The proposed project would not cause a substantial noise increase (i.e., 12 dB).

Temporary construction noise impacts are anticipated at areas located immediately adjacent to the proposed project alignment. In addition, it is possible that certain construction activities would cause intermittent localized concern from vibration in the project area. During certain construction phases, processes such as earth moving with bulldozers, the use of vibratory compactions rollers, impact pile driving, demolitions, or pavement braking may cause construction-related vibration impacts such as human annoyance or, in some cases, building damages.

Measures to Minimize Harm

With consideration of the abatement measures required, predicted noise impacts range from a 4-dB increase to a 10-dB decrease from existing conditions compared to the Selected Alternative with abatement. Predicted increases in noise from existing conditions compared to the future build alternative with abatement would not be perceptible and are considered significant. Future conditions under the Selected Alternative with abatement would result in beneficial noise reductions compared to the future no build noise impacts for 252 receptors. After conducting soundwall surveys, it was determined that 26 soundwalls would be constructed as part of the project as noise abatement features.

The following measures will be implemented to minimize construction-related effects related to the affected communities:

- Noise barriers presented in the Final EIS will be included in the design-build plans and constructed for noise abatement.
- The construction contractor will comply with the Caltrans Standard Specifications Section 14, as it relates to noise and vibration.
- Various control measures will be implemented to minimize noise and vibration disturbances at sensitive areas during construction.

Natural Communities

Potential Impacts

The Selected Alternative (Alternative 3) is anticipated to permanently impact 0.25 acres of Riversidean sage scrub (RSS) habitat. In total, 150 acres of vegetation communities would be permanently affected by the project. There would be temporary impacts to riparian plant communities, including southern willow scrub and mule fat scrub. In addition, 2.85 acres of RSS habitat would be temporarily impacted by the Selected Alternative.

Measures to Minimize Harm

- SBCTA's Design Engineer will coordinate with the qualified biologist to delineate all ESAs within the
 project footprint and immediately surrounding areas in the project specifications. ESAs include riparian
 vegetation communities and Riversidean sage scrub vegetation within the Santa Ana River and Warm
 Creek Channel that are not identified as temporarily or permanently impacted in the environmental
 document.
- Prior to the completion of construction, hydroseed and/or plant container plants will be used to restore
 temporarily impacted vegetation communities with appropriate native plant species that are approved
 by Caltrans. Plant species used in the seeding or plantings should be similar to what was present in each
 area prior to the impact unless prohibited by visual impact measures.

Wetlands and Other Waters

Potential Impacts

Based on preliminary engineering, the Selected Alternative (Alternative 3) would result in 0.09 acre of permanent impacts to waters pursuant to United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB) jurisdiction. The project would also result in 12.42 acres of temporary impacts to USACE jurisdictional areas and 16.81 acres of impacts to waters pursuant to CDFW and RWQCB jurisdiction.

Measures to Minimize Harm

Impacts to Waters of the U.S and Waters of the State have been avoided to the greatest extent practicable during project design. The following measures are being proposed to reduce and minimize impacts:

 SBCTA's Design Engineer will coordinate with the qualified biologist to delineate all environmentally sensitive areas (ESAs) within the project footprint and immediately surrounding areas in the project specifications. ESAs will include the Santa Ana River, Warm Creek Channel, and other Waters of the

- U.S. and Waters of the State that are not identified as temporarily or permanently impacted in the environmental document.
- When dewatering is necessary, the water must be pumped or channeled through a sediment settling or
 filtration device prior to return discharge to the water body. Construction plans and specifications for
 dewatering and nonstormwater construction BMPs for clearwater diversion and dewatering operations
 will be implemented.
- Prior to the completion of construction, temporarily impacted, earthen-bottom Waters of the U.S.,
 Waters of the State, and other drainages will be hydroseeded or revegetated with container plants. Plant
 species used in the seeding or plantings should be similar to what was present in each area prior to the
 impact.
- To offset impacts to jurisdictional resources and riparian vegetation communities, compensation for impacts will be made by purchasing mitigation credits from a mitigation bank or in-lieu fee program at a minimum 1:1 impact to mitigation ratio, or as otherwise indicated in the project's 401, 404, and/or 1602 permits. SBCTA will be responsible for purchasing these credits.

Animal Species

Potential Impacts

The project will result in indirect impacts to burrowing owl (BUOW) due to loss of 39.43 acres of potential habitat. Raptors and migratory birds potentially using shrubs within the biological study area could be affected by their removal and/or proximity to construction activities. The proposed project would require removal of 1,148 eucalyptus trees adjacent to I-10, which harbor a higher potential to support nesting bird species due to their age and size. Permanent indirect impacts to other special-status species as a result of habitat loss and fragmentation. Temporary effects related to BUOW, nesting birds, and other special-interest animal species could result from unavailability of potential habitat, noise, vibration, lighting, and other effects during construction.

Measures to Minimize Harm

- To avoid effects to nesting birds, SBCTA will require the Contractor to conduct any native or exotic vegetation removal or tree-trimming activities outside of the nesting bird season (i.e., February 15 through August 31). If vegetation clearing or the start of construction in a previously undisturbed area is necessary during the nesting season, SBCTA will require the Contractor to have a qualified biologist conduct a preconstruction survey within 300 feet of construction areas no more than three days prior to construction at the location to identify the locations of nests, if any. If an occupied nest is discovered, the biologist will monitor the nests on a weekly basis when new equipment is utilized or when night work is performed to ensure lighting is shielded and directed away from the nest. Should nesting birds be found, an exclusionary buffer of 300 feet will be established by the qualified biologist around each nest site. The buffer will be clearly marked and construction or clearing will not be conducted within this zone until the qualified biologist determines that the young have fledged or the nest is no longer active. The qualified biologist will monitor the nests on a weekly basis to ensure that construction activities do not disturb or disrupt nesting activities. If more than three days lapse between the preconstruction survey and construction start date at that location, the survey will be reconducted.
- Because work may occur during the swallow/swift nesting season (March 1 through August 31), swallows will be excluded from structures, if necessary, by a qualified biologist during the nonbreeding season no earlier than 5 days prior to the start of construction. Exclusion structures (e.g., netting and

- weep hole plugs) will be left in place and maintained through August 31 of each breeding season or until the work is complete.
- To ensure that any BUOW that may occupy the site in the future are not affected by construction activities, preconstruction BUOW surveys will be conducted within 30 days prior to any phase of construction in the areas identified as potential BUOW habitat in the project specifications. If any of the preconstruction surveys determine that BUOW are present, appropriate avoidance and minimization measures will be implemented, such as establishing an avoidance buffer and/or work in the vicinity with a biological monitor on hand.
- * SBCTA will coordinate with the designated qualified biologist to identify all areas of potential bat habitat within and immediately adjacent to the project footprint and will designate those areas on the project specifications, including, but not limited to, the following assessment features: bridge type, geographic region, and potential deterrents. Prior to construction at structures with potential bat habitat as identified in the project specifications, a qualified bat biologist conduct a series of surveys of all potential bat habitat areas. Surveys will occur during the bat breeding season (preferably May or June) immediately preceding the start of construction, to assess the potential for the presence of roosts. The qualified bat biologist will also perform preconstruction surveys at structures and ornamental trees potentially containing bats because bat roosts can change seasonally. If bat roosts are found, a qualified bat biologist will be onsite for the duration of construction activities that may impact bats. If it is determined that the roosts are present and, based on consultation with CDFW, exclusion is warranted, bats will be excluded from the bridge using CDFW-approved exclusionary devices to the extent necessary to prevent mortality to the colony.

Threatened and Endangered Species

Potential Impacts

The Selected Alternative (Alternative 3) will result in 0.59 acre of temporary impacts and less than 0.01 acre of permanent effects to mapped Santa Ana Sucker critical habitat. The project would result in 0.77 acre of permanent impacts and 1.63 acre of temporary impacts to suitable, occupied Delhi Sands Flower-Loving Fly (DSF) habitat. Finally, the project will result in 0.59 acre of temporary effects to mapped Southwestern Willow Flycatcher critical habitat.

Measures to Minimize Harm

- All environmentally sensitive areas (ESAs) within the project footprint and immediately surrounding
 areas will be delineated in the project specifications. ESAs will include the Santa Ana River and Warm
 Creek Channel, as well as Delhi soils (potential DSF habitat) that are not identified as temporarily or
 permanently impacted in the environmental document.
 - Prior to clearing vegetation or construction within or adjacent to ESAs, the Contractor will install highly visible barriers (e.g., orange construction fencing) under the direction of the qualified biologist, adjacent to the project footprint to designate ESAs to be preserved in place. No grading or fill activity of any type will be permitted within these ESAs. In addition, no construction activities, materials, or equipment will be allowed within the ESAs. All construction equipment will be operated in a manner to prevent accidental damage to nearby ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within the ESAs. Silt fence barriers will be installed at the ESA boundaries to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned grading activities. The ESA fencing will conform to the provision of Section 14-1.03 "Type

- ESA Temporary Fence" of the California Department of Transportation's 2010 Standard Specifications and Special Provisions. A qualified biologist will supervise the placement of ESA fencing.
- A preconstruction survey will be conducted by a qualified biologist for the Santa Ana River woolly-star within the BSA in the vicinity of Warm Creek Channel and the Santa Ana River. The preconstruction survey will be conducted during the blooming season (i.e., May to September) prior to initiation of construction activities within the area of Warm Creek Channel and the Santa Ana River. If the species is found within the construction footprint during the preconstruction surveys, then Caltrans will reinitiate consultation with USFWS and CDFW in accordance with FESA and CESA. If present, one or more of the following mitigation strategies will be required: purchase of credits from a mitigation bank; onsite conservation of existing Santa Ana River woolly-star through avoidance and designation of ESAs; and/or translocation of Santa Ana River woolly-star outside of the project ROW to areas of suitable habitat, as identified by a Contractor-supplied plant biologist with knowledge of and experience with translocation of local flora species of the region.
- Permanent impacts to occupied suitable DSF habitat will be mitigated through the purchase of mitigation credits at a 3:1 ratio. For temporary impacts to occupied suitable DSF habitat, mitigation credits will be purchased at a 1:1 ratio. Potential regional DSF conservation programs that may be used for compensatory mitigation include the Reichel HCP, the Angelus Block Property, the Owl Company Property, the Laing Homes (King is Coming) Site, the Hospital Site, the Colton Substation Site, the Vulcan Materials DSF Mitigation Bank or other appropriate mitigation area as approved by USFWS. Prior to the onset of ground disturbance, Caltrans will submit a record of credits purchased to USFWS for review and approval.
- To avoid potential downstream impacts to SAS and its habitat, silt fencing will be installed at construction areas adjacent to the river, and the requirements of measure WET-2 will be implemented prior to construction within the Santa Ana River and Warm Creek Channel.
- Prior to initiation of ground-disturbing activities, construction personnel will receive training regarding
 potential impacts to DSF and restricted areas. In addition, a qualified biologist will periodically monitor
 and report on compliance with the established construction limits. If there are unanticipated impacts to
 DSF occupied, suitable habitat, construction in that area will be halted and USFWS will be contacted
 immediately. Caltrans will submit a report following completion of the project to USFWS, identifying
 total DSF habitat impacted.
- For night lighting during construction, wildlife-friendly limited wavelength amber light-emitting diode (LED) roadway lighting fixtures will be used. Night lighting during construction will be directed away from SBKR CH within the Santa Ana River. A qualified biological monitor will be present to inspect onsite lighting prior to initiating nighttime construction activities.
- For DSF Occupied, Suitable Habitat Prior to initiation of ground-disturbing activities, construction personnel will receive training regarding potential impacts to DSF and restricted areas in accordance with USFWS BO Amendment (FWS-SB-08B0369-17F0669). In addition, a qualified biologist will periodically monitor and report on compliance with the established construction limits. If there are unanticipated impacts to DSF occupied, suitable habitat, construction in that area will be halted and USFWS will be contacted immediately. Caltrans will submit a report following completion of the project to USFWS, identifying total DSF habitat impacted.

G. Mitigation Monitoring or Enforcement Program

An Environmental Commitments Record (ECR) has been prepared for the Selected Alternative (Alternative 3) and is provided in Appendix E of the Final EIS. The ECR provides the language of each measure, the party/parties responsible for implementing the measure, and the timing of the implementation of each measure. The ECR serves as a living record of the commitments, and is used as a tool to ensure that the measures are completed over time through various phases of the project.

Caltrans, as the Lead Agency under NEPA for the project, has made these commitments with SBCTA's full agreement. SBCTA, as the agency sponsoring the project, will administer the design, right-of-way acquisition, and construction of the project. SBCTA will hire and manage contractors to design, build, and implement/fund all measures during the design-build phase. As a result, SBCTA is required to ensure compliance with each of the adopted avoidance, minimization, and mitigation measures listed in the ECR. Nearly all of the measures listed in the ECR will be the responsibility of SBCTA to implement, monitor, and document. There are a few measures Caltrans will be responsible for implementing. Caltrans will assist, monitor and approve each measure, in partnership with SBCTA, and will ensure that the ECR is updated, and completed, in cooperation with SBCTA.

H. Responses to Comments on the Final Environmental Impact Statement

The following letters and emails with comments were received when the Final EIS was made available during the 30-day availability period (May 26, 2017 through June 26, 2017). A total of 39 comments were received, one from federal agencies, and 38 from local entities. Letters, emails, phone comments with substantive NEPA-related environmental comments have been summarized and responses provided below. New substantive comments are addressed for NEPA; it is not necessary to address previous comments that have already been adequately responded to in the Final EIS. Comments were received from the following agencies and interested parties:

Federal Agencies

United States Environmental Protection Agency, Region 9: The United States Environmental Protection Agency (EPA) acknowledged that additional information regarding truck traffic diversion from I-10 to SR-60 and other corridors, potential air quality impacts and Environmental Justice have been included in the Final EIS to address previously submitted comments in the Draft EIR/EIS. EPA has a few remaining concerns regarding analysis of human health risks associated with mobile source air toxics (MSAT) emissions and the potential for near-roadway health impacts on children. EPA provided recommendations for additional discussion of these issues in this ROD. EPA continues to disagree with the characterization of uncertainty regarding MSAT and health impacts described in the Final EIS (Section 3.2.5, pages 48-50 and Appendix O, page O-37) and recommends quantification of health risk. EPA requests further coordination between EPA and Caltrans/FHWA to discuss existing and emerging MSAT research, techniques to support analysis of impacts and mitigation. In addition to health risks associated with MSAT, EPA recommended an updated discussion of children's health and correct misstatement in the Final EIS in this ROD.

<u>Response:</u> MSAT and Heath-Risks – Based on the results of the MSAT analysis conducted, existing (2012) baseline emissions would generally decrease over time (by 2045). However, the emissions for the Selected Alternative (Alternative 3) compared to the No Build emissions is projected to result in an increase in MSAT emissions ranging from 8 to 17 percent in 2045.

Caltrans and FHWA agrees that future coordination and discussion continue to develop a reliable technical analysis methodology and quantification of MSAT and its potential risk to human health. Until such an accurate methodology is developed between EPA, Caltrans and EPA, Caltrans will abstain from including a project-specific health risk determination resulting from MSAT. A general discussion on MSAT and health-related effects are provided in Section 3.2.6-48 to Section 3.2.6-55 of the Final EIS. Based on the results of the MSAT analysis conducted, existing (2012) emissions would generally decrease over time (by 2045). However, the emissions for the Selected Alternative (Alternative 3) compared to the No Build emissions is projected to result in an increase in MSAT emissions ranging from 8 to 17 percent in 2045.

Children's Health and Safety – This ROD corrects the statement in the Final EIS, pages O-38 and O-39 of the Response to Comments that Executive Order 13045 on Children's Health and Safety is only applicable to federal actions that are regulatory in nature. This ROD revises the aforementioned statement to: Executive Order 13045 directs each federal agency to ensure that its policies, programs, activities and standards address disproportionate risks to children that result from environmental health risks or safety risks. A discussion of each criteria pollutant and its effects on children's health is provided in Section 3.2.6-13 to 3.2.6-23 to 3.2.6-27 in the Final EIS. As mentioned previously, due to the absence of reliable technical analysis methodology, a project-specific assessment on children's health has not been included in the Final EIS; hence, an "effect" determination on children's health is not provided. Without a conclusive determination whether the project would result in impacts to children's health, no mitigation is proposed.

General Public

Caltrans and SBCTA received written comments, emails and verbal comments by phone from members of the general public. Most of the public comments and concerns are similar in nature to those received during the public review of the Draft EIS. Those comments did not raise specific substantive environmental issues or ask specific questions regarding the analyses and conclusion in the Final EIS. The comments raised generally relate to the following topics: potential project effects on individual properties (full or partial acquisition, permanent easements, temporary construction easements during construction and access during construction); property acquisitions process and schedule; displacement resulting from relocations; impacts to low-income population; construction-related impacts to residences and businesses; soundwalls; existing noise levels; threatened and endangered species; other project alternatives; interchange improvements; inadequacy of Final EIS 30-day review period; project schedule; and opposition to tolling and Express Lanes. Caltrans and SBCTA have responded to these comments either by email or via phone call.

<u>Response to 30-Day Review of the Final EIS</u>: A comment was received by the public regarding the inadequacy of the 30-day review of the Final EIS. Per 40 CFR 1506.10(b)(2), the lead agency may approve the project thirty days after the publication of the Notice of Availability of the Final EIS in the *Federal Register*. Caltrans is following federal guidelines for the Final EIS NEPA review.

During the public review of the Final EIS, Ms. Tressy Capps brought to the attention of Caltrans and SBCTA that an attachment to her email comment submitted during the public review of the Draft EIR/EIS was not published or responded in the Final EIR/EIS. The missing attachment consist of comments about improving the SR-210 freeway instead of the I-10 freeway, cost of the project compared to widening of the SR-210 freeway, and the Selected Alternative's (Alternative 3) effectiveness to relieve congestion. These comments are similar to those that were raised in the Draft EIR/EIS and addressed in the Final EIS.

I. Record of Decision Approval

Following robust and thorough analysis of the Interstate 10 Corridor Project, Alternative 3 was identified as the Selected Alternative. This identification is based on the ability of this alternative to meet the project purpose and need. Caltrans based its decision on the Final EIS and supporting studies, as well as comments received from the public and agencies on the Draft and Final EIS. All practical measures to avoid, minimize, and mitigate environmental harm have been adopted and are incorporated into this decision. It is the decision of Caltrans to approve Alternative 3 as the Selected Alternative for the Interstate 10 Corridor Project.

The ROD for the Interstate 10 Corridor Project is hereby approved.

John Bulinski,

District Director

District 8 - San Bernardino

California Department of Transportation

National Environmental Policy Act Lead Agency

California Environmental Quality Act Lead Agency

Record of Decision

- 33 -