California Department of Transportation

United States Department of Transportation
Federal Highway Administration

Record of Decision

FOR THE STATE ROUTE 710 NORTH PROJECT IMPROVEMENTS ON THE STATE ROUTE 710 AND/OR SURROUNDING AREA FROM NORTH TO INTERSTATE 210, SOUTH TO INTERSTATE 10, EAST TO INTERSTATE 605 AND WEST TO INTERSTATE 5 AND STATE ROUTE 2

LOS ANGELES COUNTY, CALIFORNIA
DISTRICT 7-LA-710 (SR 710)
E.A. 187900/EFIS 070000091

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

This Record of Decision (ROD) was developed pursuant to 40 Code of Federal Regulations (CFR) 1505.2 and 23 CFR 771.127. This Record of Decision (ROD) will explain the reasons for the project decision, summarize avoidance measures, minimization measures, mitigation measures, and document Section 4(f) approval based on information contained in the EIS (40 CFR 1502.2). The California Department of Transportation (Caltrans), in cooperation with the Los Angeles County Metropolitan Transportation Authority (Metro), identified the need to improve mobility and relieve congestion in the area between State Route 2 (SR 2), and Interstates 5, 10, 210 and 605 (I-5, I-10, I-210, and I-605, respectively) in east/northeast Los Angeles and the western San Gabriel Valley.

The project's purpose and need are described in detail in Chapter 1 of the *SR 710 North Project Final Environmental Impact Statement* (Final EIS), which was approved on November 26, 2018. The Notice of Availability for the Final EIS was published in the *Federal Register* on December 7, 2018, and the 30-day review period closed on January 7, 2019.

A. Decision

This Record of Decision (ROD) approves the Selected Alternative, which is the Transportation System Management/Transportation Demand Management (TSM/TDM) Alternative identified in the *SR 710 North Project Final Environmental Impact Statement* (Final EIS). The Selected Alternative was approved after the following had occurred:

- Public review of the Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) and Focused Recirculated Draft EIR/Supplemental Draft EIS (Focused RDEIR/SDEIS).
- Full consideration of the technical studies and performance evaluations prepared, public comments, and agency input.
- Consideration of the comments on the Final EIS.

Caltrans has selected the TSM/TDM Alternative to meet the project purpose and need to improve efficiency of the existing regional freeway and transit networks and reduce congestion on local arterials adversely affected due to accommodating regional traffic volumes, while minimizing environmental impacts. This decision was also based upon the potential impacts identified in the Final EIS, avoidance, minimization, mitigation measures, funding availability, community input, and coordination with regulatory agencies and local stakeholders.

B. Alternatives Considered

A brief description of the project alternatives given full consideration in the Final EIS are provided below:

Selected Alternative (TSM/TDM Alternative)

The TSM/TDM Alternative consists of strategies and improvements to increase efficiency and capacity for all modes in the transportation system. It is designed to maximize the efficiency of the existing transportation system by improving capacity and reducing the effects of bottlenecks and chokepoints. The construction of the TSM/TDM Alternative is estimated to cost $105 million (in 2014 dollars) and $126 million (in 2020 dollars), which includes structures, utilities, and right-of-way (ROW) costs. Construction of the improvements in the TSM/TDM Alternative would be expected to take approximately 2 years. The proposed improvements are described below:

TSM Strategies

TSM strategies increase the efficiency of existing facilities by identifying actions that increase the number of vehicle trips a facility can carry without increasing the number of through lanes. The TSM strategies are:

- **Intelligent Transportation System (ITS) Improvements:** Improvements include traffic signal upgrades, synchronization and transit prioritization, arterial changeable message signs (CMSs), and arterial video and speed data collection systems. The improvements include signal optimization on corridors with signal coordination hardware already installed as part of Metro's Traffic Signal Synchronization Program (TSSP), including Del Mar Avenue, Rosemead Boulevard, Temple City Boulevard, Santa Anita Avenue, Fair Oaks Avenue, Fremont Avenue, and Peck Road. TSSP will also be included on Garfield Avenue, which is the only remaining major north-south corridor in the San Gabriel Valley in which TSSP has not been implemented.
- **Local Street and Intersection Improvements:** Local street and intersection improvements are proposed in the cities of Los Angeles, Pasadena, South Pasadena, Alhambra, San Gabriel, Rosemead, and San Marino.
- **Active Traffic Management:** The major elements of active traffic management (ATM) are arterial speed data collection and CMSs. Data on arterial speeds would be collected and distributed through Los Angeles County's Information Exchange Network. Travel time data collected through this effort could be provided to navigation system providers for distribution to the traveling public. Arterial CMSs or "trailblazer" message signs would be installed at key locations to make travel time and other traffic data available to the public.

TDM Strategies

TDM strategies focus on regional means of reducing the number of vehicle trips and vehicle miles traveled as well as increasing vehicle occupancy. The TDM strategies are:

- Expanded Bus Service and Bus Service Improvements
- Active Transportation Improvements

Rationale for Identification of the Selected Alternative

Environmentally Preferred Alternative

Caltrans, as lead agency under the National Environmental Policy Act (NEPA), as assigned by the Federal Highway Administration (FHWA), and in cooperation with Metro, has selected the TSM/TDM Alternative. The TSM/TDM Alternative was selected based on the engineering and environmental

technical analysis, the project's impact on the environment, and the comments and concerns expressed during the public review period.

After comparing and weighing the benefits and impacts of the study alternatives summarized in Table ES-1 of the Executive Summary of the Final EIR/EIS; reviewing the comments received during the public circulation of the Draft EIR/EIS and Focused RDEIR/SDEIS; and completing technical studies and performance evaluations for each of the alternatives.

The TSM/TDM Alternative would attain the purpose and need of the project, as discussed in Section 2.4 of the Final EIS and would improve local traffic operations, mobility and accessibility and enhance modal choice while accommodating planned growth within the study area and minimizing environmental impacts. The TSM/TDM Alternative would provide direct benefits for traffic circulation on local arterials and some benefit to the regional freeway and transit networks resulting from the following improvements:

- Signal optimization
- Local street and intersection improvements
- Transit service improvements
- Bus service enhancements
- Bicycle facility improvements

The Selected Alternative consists of relatively small capital cost investments with low impacts. The Selected Alternative would attain the purpose and need of the project, as discussed in Section 2.4 of the Final EIS, and would improve local traffic operations, mobility, and accessibility, and enhance modal choice while accommodating planned growth within the study area and minimizing environmental impacts. The Selected Alternative would provide direct benefits for traffic circulation on local arterials and some benefit to the regional freeway and transit networks. As described above, the TSM component of this alternative includes ITS, signal optimization, local street and intersection improvements, and active traffic management throughout the study area. The TDM component of the alternative includes expanded bus service, bus service improvements, and bicycle facility improvements throughout the study area. The Selected Alternative also encourages automobile, public, and private transit; ridesharing programs; and bicycle and pedestrian improvements as elements of a unified urban transportation system.

The Selected Alternative[1] has the fewest number of freeway segments that would be adversely affected and is tied with the Bus Rapid Transit (BRT) Alternative for the lowest number of total intersections and freeway segments adversely affected.

The following additional factors support the selection of the Selected Alternative (not listed in order of importance and not representative of all the benefits or impacts associated with the Selected Alternative).

Community Impact Factors

- The Selected Alternative is generally consistent with the Pasadena, Rosemead, San Gabriel, San Marino, and South Pasadena General Plans and most of the local jurisdictions' Specific Plans, as discussed in Section 3.1.2 of the Final EIS.

[1] Depending on the design and operational variation, the Tunnel Alternative could have 2 fewer total intersections and freeway segments adversely impacted or could have up to 16 more total intersections and freeway segments adversely impacted.

- The Selected Alternative would have the lowest overall adverse effects related to property acquisitions, and it would not displace any residents or residential land uses.
- The Selected Alternative would have the least number of historic resource impacts when compared to all the other Build Alternatives.

Local Traffic Circulation Factors

- The Selected Alternative includes signal optimization on corridors with signal coordination hardware already installed as a part of Los Angeles County's TSSP. The ITS improvements (traffic signal upgrades and synchronization, transit signal prioritization, CMSs, and detection systems) provide incremental benefits that are independent of any capital transportation improvements.
- The Selected Alternative includes local street and intersection improvements within the cities of Los Angeles, Pasadena, South Pasadena, Alhambra, San Gabriel, Rosemead, and San Marino. Intersection improvements will reduce delay at individual intersections regardless of other local or regional transportation projects.
- The Selected Alternative includes transit service improvements by enhanced bus headways between 10 and 30 minutes during the peak hour, and between 15 and 60 minutes during the off-peak periods. Some of the bus service enhancements almost double existing bus service. The expanded bus service can be implemented incrementally to provide increased transit service for existing and future users.
- The Selected Alternative includes bicycle facility improvements that consist of on-street bicycle facilities that support access to transit facilities throughout the study area, in addition to expanded bicycle parking facilities at existing Metro Gold Line stations. The expanded bicycle network will enhance access to both local destinations and the regional transit system.

Natural Resource Factors

- The Selected Alternative does not result in impacts to any State jurisdictional wetlands or any federal or regional jurisdictional drainages.

Economic and Fiscal Factors

- The construction cost estimate for the Selected Alternative is approximately $105 million (in 2014 dollars) and $126 million (in 2020 dollars) and can be funded using existing resources.

For the reasons listed above, the Selected Alternative has also been identified as the Environmentally Preferred Alternative (pursuant to NEPA). The other alternatives that were considered are described below.

Bus Rapid Transit Alternative

The BRT Alternative would provide high-speed, high-frequency bus service through a combination of new, dedicated, and existing bus lanes, and via mixed-flow traffic lanes to key destinations between East Los Angeles and Pasadena. The proposed route length is approximately 12 miles.

The BRT Alternative includes the BRT arterial street and station improvements, frequent bus service, new bus feeder services, and enhanced connecting bus services. Buses would operate every 10 minutes during peak hours and every 20 minutes during off-peak hours. The BRT service would generally replace the existing Metro Route 762 service in the study area. The approximately 12-mile-long BRT route would begin at Atlantic Boulevard and Whittier Boulevard to the south; extend along Atlantic Boulevard, Huntington Drive, Fair Oaks Avenue, and Del Mar Boulevard; and end with a terminal loop in Pasadena

to the north. Buses operating in the corridor would be given transit signal priority from a baseline transit signal priority project that will be implemented separately by Metro.

Buses would operate in dedicated bus lanes adjacent to the curb, either in one direction or both directions, during peak periods. The new dedicated bus lanes would generally be created within the existing street ROWs through a variety of methods that include restriping the roadway, restricting on-street parking during peak periods, and narrowing medians, planted parkways, or sidewalks. Buses would share existing lanes with bicyclists and vehicles in cases where there is not enough ROW. The dedicated bus lanes would be limited to buses and right-turning traffic during a.m. and p.m. peak hours only. At other times of day, the dedicated bus lanes would be available for on-street parking use.

The BRT service would be operated using 60-foot-long articulated buses with three doors and would have the latest fare collection technology, such as on-board smart card (transit access pass card) readers to reduce dwell times at stations. Additionally, the BRT Alternative would include bus feeder routes that would connect additional destinations with the BRT Alternative alignment. The frequency and/or span of service for other existing bus services in the study area, such as the El Sol shuttle routes that serve East Los Angeles, would be increased.

The total estimated cost of the BRT Alternative is $241 million (in 2014 dollars) and $288 million (in 2020 dollars), which includes the vehicles, stations, roadway improvements, structures, and ROW costs for the BRT Alternative and the TSM/TDM Alternative improvements included in the BRT Alternative. Construction of the BRT Alternative would be expected to take approximately 2 years.

Light Rail Transit Alternative

The Light Rail Transit (LRT) Alternative would include a passenger rail line that is operated along a dedicated guideway like other Metro light rail lines. The LRT alignment is approximately 7.5 miles long, with approximately 3 miles of aerial segments and approximately 4.5 miles of bored tunnel segments, and 7 stations.

The LRT Alternative would begin at an aerial station on Mednik Avenue adjacent to the existing East Los Angeles Civic Center Station on the Metro Gold Line (Eastside Extension). The alignment would remain elevated as it travels north on Mednik Avenue, west on Floral Drive, north across Corporate Center Drive, and then along the west side of Interstate (I-) 710, primarily in State ROW, to a station adjacent to California State University, Los Angeles. The alignment would descend into a tunnel south of Valley Boulevard and travel northeast to Fremont Avenue, north under Fremont Avenue, and east to Fair Oaks Avenue. The alignment would then cross under State Route (SR) 110 and end at an underground station beneath Raymond Avenue, adjacent to the existing Fillmore Station on the Metro Gold Line in Pasadena. The LRT service would be operated using light rail trains similar to the trains on the existing Metro light rail lines. Two approximately 20-foot-diameter tunnels (one in each direction) are proposed with cross passages connecting the tunnels to allow for emergency access.

Two bus feeder services would also be provided as part of the LRT Alternative. In addition, the frequency and/or span of service of other existing bus services in the study area, such as the El Sol shuttle, would be increased. The LRT Alternative would also include four park-and-ride facilities located adjacent to the Floral, Alhambra, Huntington, and South Pasadena stations.

The total estimated cost of the LRT Alternative structures and ROW is $2,420 million (in 2014 dollars) and $3,066 million (in 2022 dollars). The total cost includes $52 million (in 2014 dollars) and $66 million (in 2022 dollars) for TSM/TDM improvements. Construction of the improvements in the LRT Alternative would be expected to take approximately 6 years.

Freeway Tunnel Alternative

The alignment for the Freeway Tunnel Alternative would start at the existing southern stub of SR 710 in Alhambra, north of I-10, and connect to the existing northern stub of SR 710, south of the I-210/SR 134 interchange in Pasadena. Short segments of cut-and-cover tunnels would be located at the south and north termini to provide access via portals to the bored tunnels. The portal at the southern terminus would be located south of Valley Boulevard. The portal at the northern terminus would be located north of Del Mar Boulevard.

The Freeway Tunnel Alternative includes two design variations related to the number of tunnels (i.e., dual- and single-bore). The dual-bore design variation includes two tunnels that independently convey northbound and southbound vehicles. The single-bore design variation includes one tunnel that carries both northbound and southbound vehicles. Operational variations have been identified for the Freeway Tunnel Alternative dual-bore and single-bore design variations, as described below:

- **Dual-Bore Operational Variation**
  - **No Tolls**: The facility would operate as a freeway with all travel lanes open to all vehicles.
  - **No Tolls and No Trucks**: The facility would operate as a freeway, but trucks would be excluded from using the tunnel. Signs would be provided along I-210, SR 134, I-710, and I-10 to provide advanced notice of the truck restriction.
  - **With Tolls**: All vehicles, including trucks, using the tunnels would be tolled.
- **Single-Bore Operational Variation**
  - **With Tolls:** All vehicles, including trucks, using the tunnel would be tolled.
  - **With Tolls and No Trucks:** The facility would operate as a tolled freeway, but trucks would be excluded from using the tunnel. All automobiles would be tolled. Signs would be provided along I-210, SR 134, I-710, and I-10 to provide advanced notice of the truck restriction.
  - **With Tolls and Express Bus:** The single-bore tunnel would operate as a tolled facility and would include an Express Bus component.

Express buses would be allowed in any of the travel lanes in the tunnel. The tunnel would not include any bus-only or restricted lanes. The Express Bus route would start at the Commerce Station on the Orange County Metrolink line, and then serve the Montebello Station on the Riverside Metrolink line and East Los Angeles College before entering I-710 at Floral Drive. The bus would travel north to Pasadena via the freeway tunnel, making a loop serving Pasadena City College, the California Institute of Technology, and downtown Pasadena before re-entering the freeway and making the reverse trip.

The total estimated cost of the Freeway Tunnel Alternative roadway, structures, and ROW is $5,650 million (in 2014 dollars) and $7,158 million (in 2022 dollars) for the dual-bore design variation and $3,150 million (in 2014 dollars) and $3,991 million (in 2022 dollars) for the single-bore design variation. Construction of the Freeway Tunnel Alternative would take approximately 4 to 5 years for the single-bore design variation and approximately 5 years for the dual-bore design variation.

No Build Alternative

The No Build Alternative represents the option of no action. Under the No Build Alternative, there would be no improvements to the SR 710 North Project area, other than those projects already planned in the Federal Transportation Improvement Program, as listed in the Southern California Association of Governments 2012 Regional Transportation Plan/Sustainable Communities Strategy, Measure R, and the funded part of Metro's 2009 Long Range Transportation Plan.

C. Section 4(f)

The SR 710 North Study Draft EIS (2015) included a Draft Section 4(f) Analysis, which analyzed all Section 4(f) resources within a 0.5-mile radius in the study area, Section 4(f[DHM1]) resources included parks, recreational areas, wildlife, and waterfowl refuges within the Area of Potential Effects established under Section 106 for Historic Properties.

After circulation of the Draft EIS, the Finding of No Adverse Effect under Section 106 for the Arroyo Seco Parkway Historic District changed to a Finding of Adverse Effect (FOAE) under Section 106. Because the Arroyo Seco Parkway Finding of Effect changed to an adverse effect and there would be actual use under Section 4(f), an Individual Section 4(f) Evaluation (Appendix B.1 in the Final EIS) was prepared to address the change in use.

Section 4(f) Use

The off-ramp at Fair Oaks Avenue is a character-defining feature of the Arroyo Seco Parkway.

- The proposed widening would remove portions of the ramp itself, including character-defining curbs, and the character-defining vegetated embankment and cause an adverse direct effect on the Arroyo Seco Parkway and an actual use (permanent incorporation) under Section 4(f).
- Installation of the retaining wall and concrete barrier would remove portions of the ramp and its character-defining features and cause an adverse direct effect and an actual use (permanent incorporation) under Section 4(f).

The dual-tone paved surface (design, not materials) is a character-defining features of the Arroyo Seco Parkway.

- Restriping in those areas has the potential to cause an adverse direct effect and an actual use (permanent incorporation) under Section 4(f).

Section 4(f) Consultation and Coordination

On April 22, 2016, Caltrans and Metro held a meeting with the California State Historic Preservation Office (SHPO) and Office of Historic Preservation (OHP) staff, the Federal Preservation Officer from the Advisory Council on Historic Preservation (ACHP), and the consulting parties to provide more detailed information about the tunneling process and the type of construction associated with each Build Alternative. The meeting was held in response to the consulting parties' opposition to the Preliminary Draft Finding of No Adverse Effect and concerns regarding the effects to historic properties from tunneling vibration and ground settlement. Following the meeting, Caltrans staff took the interested parties on a driving tour of portions of the project APE. In October 2016, an email update on the progress of the revised FOAE was sent to the consulting parties. In March 2017, Caltrans cultural resources staff met with several of the consulting parties at the office of Pasadena Heritage. Groups and agency staff who attended the meeting were:

- Advisory Council on Historic Preservation
- SHPO
- Office of Historic Preservation staff
- City of South Pasadena

- National Trust for Historic Preservation
- Los Angeles Conservancy
- Pasadena Heritage
- No on 710 Action Committee
- Sequoyah School

In October 2016, an email update on the progress of the revised FOAE was sent to the consulting parties. In March 2017, Caltrans cultural resources staff met with several of the consulting parties at the office of Pasadena Heritage. The primary goal of the meeting was to discuss the property sales in the SR-710 Corridor, but the SR-710 North Study was discussed as well. Following the meeting, an email update was sent to the consulting parties that were not in attendance. Based on extensive consultation between Caltrans and the State Historic Preservation Officer (SHPO), as well as valuable input from consulting parties through the Section 106 process, the effect finding for the proposed Project was changed to reflect an adverse effect. As a result, Caltrans documented the supplemental evaluations in a Supplemental HPSR and submitted the findings to the SHPO in October 2017. In October 2017, the Supplemental HPSR and an update on the preparation of the FOAE was sent to consulting parties. SHPO concurred with the determinations on November 9, 2017. In December 2017, Caltrans prepared an updated FOAE for the proposed Project consistent with the requirements of Section 106. On December 22, 2017, the FOAE was sent to the Consulting Parties for review and on January 3, 2018, the FOAE was sent to the SHPO for review.

On February 14, 2018, Caltrans held a meeting with the SHPO, ACHP, and Consulting Parties. The purpose of the meeting was to provide a project update and answer questions related to new significant effects identified subsequent to the circulation of the Draft EIR/EIS in the FOAE and how they would be addressed in the Focused RDEIR/SDEIS, Draft Individual Section 4(f) Evaluation, and the Final EIR/EIS. The Consulting Parties requested to review the Draft Individual Section 4(f) Evaluation.

Under 23 CFR 774.5, prior to making Section 4(f) approvals under 23 CFR 774.3(a), the Section 4(f) Evaluation must be provided to the SHPO, the official with jurisdiction over the Section 4(f) resource, and to the U.S. Department of the Interior (DOI). On February 23, 2018, the Draft Individual Section 4(f) Evaluation was circulated to the SHPO, DOI, and Consulting Parties. A minimum of 45 days was provided for receipt of comments by April 9, 2018. SHPO and DOI did not provide comments by the deadline; therefore, a lack of objection was presumed.

Section 4(f) Avoidance Alternatives

After evaluation of all potential Avoidance Alternatives, the No Build Alternative was the only alternative that would avoid the use of all Section 4(f) properties. Although the No Build Alternative was identified as the Avoidance Alternative, it would not be a feasible or prudent Avoidance Alternative because it does not meet the Purpose and Need of the project. The Section 4(f) Evaluation concluded that the TSM/TDM Alternative includes all possible planning to minimize harm to the Arroyo Seco Parkway Historic District resulting from such use.

The TSM/TDM Alternative causes the least overall harm in light of the statute's preservation purpose and employs all practicable measures to minimize environmental harm which are included in the Memorandum of Agreement (MOA), in accordance with the Section 106 Programmatic Agreement (PA) executed by Caltrans and the State Historic Preservation Officer (SHPO) on October 18, 2018 and the Final EIS.

Section 4(f) All Possible Planning to Minimize Harm

The following minimize measures are contained in the Memorandum of Agreement (MOA) and the SR 710 North Environmental Commitment Record.

- The Arroyo Seco Parkway Historic District's Secretary of the Interior's Standards for the Treatment of Historic Properties (SOIS) Plan will be prepared. The plan will conform with the SOIS and will be prepared in consultation with the Caltrans Cultural Studies Office (CSO) and the SHPO, as required. The TSM/TDM Alternative would destroy landscaped buffers, install new retaining walls within the boundaries of this historic district, move an existing off-ramp at State Street, add a new on-ramp, and widen another off-ramp. These adverse effects of the TSM/TDM Alternative improvements in the historic district cannot be avoided.

  To minimize the effects on the character-defining features of the Arroyo Seco Parkway Historic District, the new construction for the TSM/TDM Alternative improvements shall be designed in a manner that is consistent with the SOIS. The project architectural historian shall review the final design plans, review mockups as needed, and conduct a field visit to ensure that the following work is performed in accordance with the SOIS. At a minimum, the SOIS plan will ensure:

  - New elements, such as retaining walls, off-ramps, on-ramps, lighting, and curbing, will be designed to be compatible with the historic district in terms of color, materials, profiles, dimensions, and so forth.
  - Any work taking place on character-defining features will minimize potential damage to the historic district.
  - All revegetation of buffers and planting strips will be designed to be compatible with the historic district.

  The requirements for preparation of an SOIS plan are for the TSM/TDM Alternative improvements in the Arroyo Seco Parkway Historic District:

  - Caltrans will install a highway sign near the northern entrance to the Parkway at Glenarm Street that welcomes drivers to the Arroyo Seco Parkway Historic District. The sign will be compatible with similar signage found at the southern entrance to the Parkway.
  - Electronic content for a smart phone traveler application (Clio or equal) will be created that describes and interprets the Historic District. The content will include historical narrative information, as well as historical photographs, and other documentation. This application will be available free to the public through smartphone application stores prior to the termination of this agreement. The availability of the application will be advertised on or in Metro facilities, such as bus benches, local bus lines, Gold Line Stations, and rail cars within the project area.
  - Caltrans shall submit design development plans for the Fair Oaks and State Street interchanges for review and comment at 60% and 90% completion. All parties to the MOA will be invited to review the design development plans to determine whether the plans conform to concepts described in the SOIS Plan. All parties to the MOA will provide comments on the submittals to Caltrans within 30 calendar days of receipt. If MOA parties do not comment within the time

provided, Caltrans may assume that the MOA parties concur, and the package meets the cited objectives.

Caltrans will incorporate MOA parties' comments into the project plans to the fullest extent. If Caltrans revises project plans in response to MOA parties' comments, then no further review is required for that consultation package. Should Caltrans object to incorporation of MOA parties' comments into consultation packages at any stage of the project, Caltrans will provide the MOA parties with written explanation of that objection. Objection to the plans shall be resolved in accordance with Stipulation IV.B of the MOA.

Section 4(f) Conclusion

The TSM/TDM Alternative (Preferred Alternative) would attain the purpose and need of the project and would improve local traffic operations, mobility, and accessibility; enhance modal choice; and accommodate planned growth within the study area while minimizing environmental impacts. The TSM/TDM Alternative would provide direct benefits for traffic circulation on local arterials and some benefit to the regional freeway and transit networks resulting from the following improvements:

- Signal optimization
- Local street and intersection improvements
- Transit service improvements
- Bus service enhancements
- Bicycle facility improvements

The TSM/TDM Alternative consists of relatively small capital cost investments with low impacts that include operational improvements and strategies that increase the efficiency and capacity of the existing transportation system, while reducing the effects of localized bottlenecks and chokepoints. The TSM component of this alternative includes ITS, local street and intersection improvements, and ATM throughout the study area. The TDM component of the alternative includes expanded bus service, bus service improvements and bicycle facility improvements throughout the study area. The TSM/TDM Alternative also encourages automobile, public and private transit, ridesharing programs, and bicycle and pedestrian improvements as elements of a unified urban transportation system. For more detailed information, please see Section 2.4 Identification of a Preferred Alternative, of the Final EIR/EIS.

Based on the above considerations, there is no feasible and prudent alternative to the use of land from the Arroyo Seco Parkway Historic District. The proposed action includes all possible planning to minimize harm to the Arroyo Seco Parkway Historic District resulting from such use and causes the least overall harm in light of the statute's preservation purpose.

D. Measures to Minimize Harm

All practicable measures to minimize harm have been incorporated in the selection and approval decision. Below are all the measures identified in the Final EIS to minimize harm.

Measures to Minimize Harm Related to Land Use

- The TSM/TDM Alternative would result in inconsistencies with local jurisdictions' General Plans and/or other local land use plans. Metro will request the applicable local jurisdictions to amend their General Plans and/or other local land use plans after the acquisition of land to reflect the improvements in the TSM/TDM Alternative.
- Metro will coordinate with the Southern California Association of Governments on needed amendments to the next cycle of the Regional Transportation Plan/Sustainable Communities Strategy and Federal Transportation Improvement Program to reflect the selected project.

Measures to Minimize Harm to Community Impacts

- All acquisition of property for improvements for the TSM/TDM Selected Alternative will be conducted in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) of 1970 as amended.
- A Transportation Management Plan (TMP) will be developed to:
  - Maintain traffic safety during construction.
  - Effectively maintain an acceptable level of traffic flow throughout the transportation system during construction.
  - Minimize traffic delays and facilitate reduction of duration of construction activities.
  - Minimize detours and impacts to pedestrians and bicyclists.
  - Foster public awareness of the project and related impacts.
  - Achieve public acceptance of construction of the project and the Final TMP measures.

  The TMP will address all aspects of transportation effects of all construction activities on vehicular, pedestrian, and bicycle access and mobility, including temporary lane, sidewalk, and ramp closures; detours; increases in traffic volumes (including regular traffic and construction traffic, construction equipment, materials delivery vehicles, waste/haul vehicles, and employee commutes); and potential effects on emergency services (e.g., fire, police, ambulances), transit services, bicyclists, and pedestrians. The development of the TMP will be closely coordinated with Caltrans, Metro, local jurisdictions (cities and the county), and other potentially affected parties (such as, but not limited to, school bus and transit operators; police, fire, and emergency services providers; and community organizations). The TMP will identify specific TMP strategies, the party/parties responsible for implementing those strategies, the agencies and parties the TMP strategies will be coordinated with, and the timing of the implementation of those strategies.

  The TMP will include specific strategies to address short-term, project-related construction effects on traffic, bicyclists, pedestrians, and area residents and businesses.

  The Resident Engineer will require the Construction Contractor to implement the strategies in the TMP prior to, during, and after construction activities, as required in the TMP.

- When sidewalks, crosswalks, and/or bicycle facilities are temporarily closed during construction, pedestrian and bicycle detours will be developed and clearly signed prior to closing the locations.
- During clearing, grading, earthmoving, or excavation operations, the Resident Engineer will require the construction contractor to control excessive fugitive dust emissions by regular watering or other dust preventive measures using the following procedures, as specified in the South Coast Air Quality Management District (SCAQMD) Rule 403 Fugitive Dust. The Construction Contractor will be required to:
    - Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites during workdays, weekends, holidays, and windy conditions.
    - Install wind fencing and phase-grading operations where appropriate and operate water trucks for stabilization of surfaces under windy conditions.
    - When hauling material and operating non-earthmoving equipment, prevent spillage and limit off-road speeds to 15 miles per hour (mph). Limit speed of off-road earthmoving equipment to 10 mph.
- During all site preparation, grading, excavation, and construction, the Resident Engineer will require the Construction Contractor to:
    - Reduce use, trips, and unnecessary idling from heavy equipment.
    - Use solar-powered rather than diesel-powered CMSs.
    - Obtain electricity from power poles rather than from generators where feasible.
    - Maintain and tune engines per manufacturer's specifications to perform at United States Environmental Protection Agency (EPA) certification levels and at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
    - Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
    - Use new, clean (diesel or retrofitted diesel) equipment meeting the most stringent applicable federal or State standards and commit to the best available emissions control technology. Use Tier 3, or higher, engines for construction equipment with a rated horsepower exceeding 75. Use Tier 2, or higher, engines for construction equipment with a rated horsepower of less than 75. If non-road construction equipment that meets or exceeds Tier 2 or 3 engine standards is not available, the Construction Contractor will be required to use the best available emissions control technologies on all equipment.
    - Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.
- Prior to any site disturbance, the Resident Engineer will require the Construction Contractor to meet EPA diesel fuel requirements off-road and on-highway and, where appropriate, use alternative fuels, such as natural gas and electricity.
- Identify sensitive receptors in the project area (e.g., residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes) and specify how impacts to these populations will be minimized.

For example, locate construction equipment and staging zones away from sensitive receptors and away from fresh air intakes to buildings and air conditioners.

- During construction outside State-owned ROW, Metro will require the Construction Contractors to comply with the hours of operation, the allowable noise levels at specified distances from construction activities, and other noise reduction/avoidance requirements in the applicable jurisdiction's Municipal Code and/or Noise Ordinance.
- The final designs of sound walls and retaining walls adjacent to identified viewer groups or within sensitive Key Views within State-owned ROW will be based on Caltrans Highway Design Manual standards and consideration of community input. Metro design standards will be used for the TSM/TDM Alternative outside of the State-owned ROW. The wall designs will include enhancements, such as, but not limited to, graphic patterns and colors based on input gathered from the local community, stakeholders, and Caltrans. The detailed and specific measures provided in Measure V-4 will be incorporated in the Corridor-Wide Aesthetics Master Plan.
- During final design, Metro will identify land uses adjacent to construction areas that may be sensitive to views of construction, staging, and materials storage areas. These will be identified on the construction staging plans. The final design will include features to minimize views of those areas, including, but not limited to, temporary screening, installation of temporary and/or permanent landscaping (particularly trees and shrubs) as early in the construction process as feasible, and/or installation of temporary and/or permanent berms. Metro will require the Construction Contractor to implement and maintain these features throughout the construction period.

Measures to Minimize Harm to Relocations and Real Property Acquisitions

- All acquisition of property for improvements for the TSM/TDM Selected Alternative will be conducted in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) of 1970 as amended.

Measures to Minimize Harm to Environmental Justice

Please see measures to minimize harm under Community Impacts.

Measures to Minimize Harm Related to Utilities and Emergency Services

- The TMP (described below) will address short-term transportation impacts during construction, including potential delays to emergency responders. A TMP will be developed to:
  - Maintain traffic safety during construction.
  - Effectively maintain an acceptable level of traffic flow throughout the transportation system during construction.
  - Minimize traffic delays and facilitate reduction of duration of construction activities.
  - Minimize detours and impacts to pedestrians and bicyclists.
  - Foster public awareness of the project and related impacts.
  - Achieve public acceptance of construction of the project and the Final TMP measures.

  The TMP will address all aspects of transportation effects of all construction activities on vehicular, pedestrian, and bicycle access and mobility, including temporary lane, sidewalk, and ramp closures; detours; increases in traffic volumes (including regular traffic and construction traffic, construction equipment, materials delivery vehicles, waste/haul vehicles, and employee commutes); and

potential effects on emergency services (e.g., fire, police, ambulances), transit services, bicyclists, and pedestrians. The development of the TMP will be closely coordinated with Caltrans, Metro, local jurisdictions (cities and the county), and other potentially affected parties (such as, but not limited to, school bus and transit operators; police, fire, and emergency services providers; and community organizations). The TMP will identify specific TMP strategies, the party/parties responsible for implementing those strategies, the agencies and parties the TMP strategies will be coordinated with, and the timing of the implementation of those strategies.

The TMP will include specific strategies to address short-term, project-related construction effects on traffic, bicyclists, pedestrians, and area residents and businesses.

The Resident Engineer will require the Construction Contractor to implement the strategies in the TMP prior to, during, and after construction activities, as required in the TMP.

- Coordination with utility providers will be conducted to minimize the risk of disruption of services and damage to facilities, to ensure advance notification of any temporary service disruptions to the public and protect the safety of construction workers and the public.

Measures to Minimize Harm Related to Traffic and Transportation/Pedestrian and Bicycle Facilities

- A TMP will be developed to:
  - Maintain traffic safety during construction.
  - Effectively maintain an acceptable level of traffic flow throughout the transportation system during construction.
  - Minimize traffic delays and facilitate reduction of duration of construction activities.
  - Minimize detours and impacts to pedestrians and bicyclists.
  - Foster public awareness of the project and related impacts.
  - Achieve public acceptance of construction of the project and the Final TMP measures.

  The TMP will address all aspects of transportation effects of all construction activities on vehicular, pedestrian, and bicycle access and mobility, including temporary lane, sidewalk, and ramp closures; detours; increases in traffic volumes (including regular traffic and construction traffic, construction equipment, materials delivery vehicles, waste/haul vehicles, and employee commutes); and potential effects on emergency services (e.g., fire, police, ambulances), transit services, bicyclists, and pedestrians. The development of the TMP will be closely coordinated with Caltrans, Metro, local jurisdictions (cities and the county), and other potentially affected parties (such as, but not limited to, school bus and transit operators; police, fire, and emergency services providers; and community organizations). The TMP will identify specific TMP strategies, the party/parties responsible for implementing those strategies, the agencies and parties the TMP strategies will be coordinated with, and the timing of the implementation of those strategies.

  The TMP will include specific strategies to address short-term, project-related construction effects on traffic, bicyclists, pedestrians, and area residents and businesses.

  The Resident Engineer will require the Construction Contractor to implement the strategies in the TMP prior to, during, and after construction activities, as required in the TMP.

- When sidewalks, crosswalks, and/or bicycle facilities are temporarily closed during construction, pedestrian and bicycle detours will be developed and clearly signed prior to closing the locations.

Measures to Minimize Harm Related to Visual and Aesthetics

- During final design, land uses adjacent to construction areas that may be sensitive to views of construction, staging, and materials storage areas will be identified on the construction staging plans. The final design will include features to minimize views of those areas, including, but not limited to, temporary screening, installation of temporary and/or permanent landscaping (particularly trees and shrubs) as early in the construction process as feasible, and/or installation of temporary and/or permanent berms. The Construction Contractor will implement and maintain these features throughout the construction period.
- A Corridor-Wide Aesthetics Master Plan will be prepared during final design and include the following treatment and consultation requirements:
    - Identification of specific aesthetic treatments and the locations for those treatments in the Selected Alternative. Those treatments will be based on the specific design concepts related to walls, structures, and landscaping. Specific design treatments, such as lighting style, colors, graphics, and decorative railing, will be developed during the final design phase of the project.
    - Plan development in consultation and partnership with the cities/communities where the project features are located, other interested parties/stakeholders, Caltrans, and Metro.
    - Input will be solicited from the cities with jurisdiction, communities, interested parties, and stakeholders specifically related to the desired visual character of the project improvements, the spirit and community culture of each area, and historic values of the communities.
    - Implementation as appropriate during the design and construction of the project improvements.
- The final designs of sound walls and retaining walls adjacent to identified viewer groups or within sensitive Key Views within State-owned ROW will be based on Caltrans Highway Design Manual standards and consideration of community input.
- Metro design standards will be used for sound walls or retaining walls outside of the State-owned ROW. The wall designs will include enhancements, such as, but not limited to, graphic patterns and colors based on input gathered from the local community, stakeholders, and Caltrans.

Measures to Minimize Harm Related to Cultural Resources

- Pre-construction surveys are required and shall be conducted on all historic properties with an FOAE before any construction activities commence. The pre-construction survey will be performed by a licensed structural engineer in collaboration with a qualified architectural historian and/or historic architect. The qualifications for the structural engineer, architectural historian, and/or historic architect shall be approved by a Caltrans Professionally Qualified Staff (PQS) in collaboration with Metro.

  The pre-construction condition assessment shall be carried out during final project design phase when more data on site-specific geotechnical conditions are available. The surveys shall document the baseline physical conditions of each historic property (with a FOAE). Additional localized geotechnical studies shall be performed near each historic property to identify additional strategies and control measures to better protect each historic property during construction. The condition assessment reports shall document all aspects of known structural conditions through observations and measurements, plans, photographs, and any other data the qualified preparer may deem appropriate.

Photographs and plans may also be used to indicate existing damage on the historic property. The information developed in the pre-construction surveys shall be integrated into the Property-Specific Protection Plans described in Section 3.7.4.8 of the Final EIS. The pre-construction condition assessment reports shall be prepared according to an agreed-upon template and shall provide baseline information on the historic properties in sufficient detail to assess their existing structural condition and determine the safe threshold of the historic property compared to the proposed activity at that location. The pre-construction condition assessment reports shall be completed at least two months prior to construction in the vicinity of the property.

Immediately prior to the initiation of construction, the property where preconstruction surveys were completed as part of the studies for the Selected Alternative in the Final EIS will be revisited to confirm the information in the surveys remains valid. The preconstruction surveys will be used as the baseline in the post-construction surveys (discussed in Section 3.7.4.9 of the Final EIS), which will document any evidence of a change in the physical condition of historic properties following completion of construction.

A copy of the pre-construction survey will be made available to the property owner(s). A copy of each survey will also be kept on file with the appropriate municipal department as well as at Caltrans and/or Metro for the duration of the project. If requested by the SHPO, its office may also receive copies of the preconstruction surveys.

- The Arroyo Seco Parkway Historic District's Secretary of the Interior's Standards for the Treatment of Historic Properties (SOIS) Plan will be prepared. The plan will conform with the SOIS and will be prepared in consultation with the Caltrans Cultural Studies Office (CSO) and the SHPO, as required. The TSM/TDM Alternative would destroy landscaped buffers, install new retaining walls within the boundaries of this historic district, move an existing off-ramp at State Street, add a new on-ramp, and widen another off-ramp. These adverse effects of the TSM/TDM Alternative improvements in the historic district cannot be avoided.

  To minimize the effects on the character-defining features of the Arroyo Seco Parkway Historic District, the new construction for the TSM/TDM Alternative improvements shall be designed in a manner that is consistent with the SOIS. The project architectural historian shall review the final design plans, review mockups as needed, and conduct a field visit to ensure that the following work is performed in accordance with the SOIS. At a minimum, the SOIS plan will ensure:

  - New elements, such as retaining walls, off-ramps, on-ramps, lighting, and curbing, will be designed to be compatible with the historic district in terms of color, materials, profiles, dimensions, and so forth.
  - Any work taking place on character-defining features will minimize potential damage to the historic district.
  - All revegetation of buffers and planting strips will be designed to be compatible with the historic district.

  The requirements for preparation of an SOIS plan are for the TSM/TDM Alternative improvements in the Arroyo Seco Parkway Historic District:

  - Caltrans will install a highway sign near the northern entrance to the Parkway at Glenarm Street that welcomes drivers to the Arroyo Seco Parkway Historic District. The sign will be compatible with similar signage found at the southern entrance to the Parkway.
  - Electronic content for a smart phone traveler application (Clio or equal) will be created that describes and interprets the Historic District. The content will include historical narrative

information, as well as historical photographs, and other documentation. This application will be available free to the public through smartphone application stores prior to the termination of this agreement. The availability of the application will be advertised on or in Metro facilities, such as bus benches, local bus lines, Gold Line Stations, and rail cars within the project area.

- Caltrans shall submit design development plans for the Fair Oaks and State Street interchanges for review and comment at 60% and 90% completion. All parties to the MOA will be invited to review the design development plans to determine whether the plans conform to concepts described in the SOIS Plan. All parties to the MOA will provide comments on the submittals to Caltrans within 30 calendar days of receipt. If MOA parties do not comment within the time provided, Caltrans may assume that the MOA parties concur, and the package meets the cited objectives.

  Caltrans will incorporate MOA parties' comments into the project plans to the fullest extent. If Caltrans revises project plans in response to MOA parties' comments, then no further review is required for that consultation package. Should Caltrans object to incorporation of MOA parties' comments into consultation packages at any stage of the project, Caltrans will provide the MOA parties with written explanation of that objection. Objection to the plans shall be resolved in accordance with Stipulation IV.B of the MOA.

- A property-specific protection plan will be prepared to ensure that the potential effects of the Selected Alternative on each adversely affected property are addressed by specific measures implemented as part of the project pre-construction, construction, and post-construction phases.

  At a minimum, the property-specific protection plan for the properties adversely affected by the selected alterative will include the following for each affected property:

  - Name, address, boundary, and description of the historic property.
  - List of potential adverse effects of the Selected Alternative on each historic property and the measures included in that alternative to address those effects.
  - Key actions required in each measure.
  - Party/parties responsible for implementing each key action in each measure.
  - Other party/parties involved in implementing, overseeing, and/or documenting the implementation of the key actions in each measure.
  - Timing of the implementation of the key actions in each measure (final design/pre-construction, construction, and/or post-construction).
  - Requirements for documenting compliance with the requirements of each measure.
  - Other relevant technical and supporting information.

- During final design, the project engineer, in consultation with the historic architect, the architectural historian, the structural engineer, the acoustical engineer, and the geotechnical engineer, will prepare a property-specific protection plan for all properties adversely affected by the project. Properties subject to this measure are the historic properties that would be adversely affected by the Selected Alternative. The property-specific protection plans shall be prepared in consultation with the Caltrans CSO and the SHPO, as required. The project engineer, resident engineer, and the construction contractor will be required to implement the property-specific protection plans for each property during the appropriate project phases (pre-construction, construction, and/or post-construction).

- Post-construction surveys will be conducted. The post-construction surveys would be completed within two months or 60 days following completion of the work in a specific area. The construction contractor and the resident engineer will notify the structural engineer and architectural historian when construction in the vicinity of a specified historic property or properties is completed. At that time, the structural engineer, the historic architect, the architectural historian, the geotechnical engineer, and other appropriate qualified specialists will conduct the post-construction surveys. The results of the survey will be documented in a written report, illustrated with photographs and drawings, as appropriate.

  If the post-construction survey identifies damage to a historic property as a result of project-related activities, the structural engineer and Caltrans and/or Metro will consult with the historic architect to collaborate on a plan to repair the damage per the SOIS.

- The Post-review Discovery and Monitoring Plan (PRDMP) for the proposed project is included in Confidential Volume III of the FOAE for the SR 710 North Project (Caltrans 2017). The PRDMP specifies procedures to be followed prior to and during construction activities to ensure compliance with Caltrans Section 106 PA. The policies and procedures in the PRDMP apply during ground-disturbing activities in areas deemed sensitive for subsurface archaeological deposits, particularly in the vicinity of the Horatio Rust Site and Otsungna Village Site. Archaeological monitoring areas are further specified in the PRDMP. The Resident Engineer will require the construction contractor to implement the policies and procedures of the PRDMP detailed in Appendix I. The implementation of those requirements will be overseen by a qualified archaeological monitor or a consultant who meets the professionally qualified staff requirements for a qualified archaeological monitor.

- Community outreach will be conducted by Caltrans and/or Metro or their designated representative to educate the public about the project and its expected effects. Community outreach methods will consist of certified correspondence, public meetings, or in-person meetings. As part of this outreach, Caltrans and/or Metro or their designated representative will provide a procedure for obtaining feedback and maintaining a registry for ensuring that public comments are addressed. The registry will be updated routinely and will contain the responses provided by appropriate staff based on the nature of the inquires, questions, and requests in a deliberate, timely fashion.

- Following the notice to proceed but before work begins, the resident engineer and the construction contractor will provide cultural resources training to key personnel and supervisors. The training will be prepared and conducted by an archaeologist, architectural historian, and historic architect. The training, which may be conducted in person or through video, will describe the applicable measures for treatment and protection of historic properties in compliance with the SOIS. The training will present and discuss applicable laws, their penalties, and examples of artifacts that may be encountered and potential conditions where historic resources can be damaged during construction. The training will also outline the steps, in accordance with the PRDMP, that must be taken should work crews encounter cultural resources during project-related activities, including the authority of archaeological monitors in conjunction with the resident engineer to halt work in the area of a discovery to ensure the resource is protected against further effects.

Measures to Minimize Harm Related to Water Quality and Stormwater Runoff

- Metro will require the Construction Contractor to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2009-0009-DWQ, as amended by 2010-2014-DWQ and 2012-0006-DWQ, NPDES No. CAS000002, or any subsequent permit. The project will comply with the Construction General Permit by preparing and implementing a stormwater pollution prevention plan to address

all construction-related activities, equipment, and materials that have the potential to impact water quality for the appropriate Risk Level. The stormwater pollution prevention plan will identify the sources of pollutants that may affect the quality of stormwater and include Best Management Practices (BMPs) (e.g., Erosion Control, Sediment Control, and Good Housekeeping BMPs) to control the pollutants, such as sediment control, catch basin inlet protection, temporary soil stabilization, construction materials management, and non-stormwater BMPs.

- If dewatering is required, Metro will require the Construction Contractor to comply with the requirements of Order No. R4-2013-0095 (NPDES No. CAG994004) for construction site dewatering. Order No. R4-2013-0095 covers general waste discharge permits for discharges to surface waters from activities involving groundwater extraction. It covers treated or untreated groundwater generated from permanent or temporary dewatering operations or other appropriate wastewater discharge not specifically covered in other general NPDES permits in the Los Angeles region. Under this order, permittees are required to monitor their discharges from groundwater extraction waste from construction to ensure that effluent limitations for constituents are not exceeded.
- During construction of the improvements outside State-owned ROW, in compliance with the Standard Urban Stormwater Mitigation Plan (SUSMP) prepared for the Los Angeles Regional Water Quality Control Board Water Discharge Requirements for Municipal Separate Storm Sewer System Order No. R4-2012-0175, NPDES Permit No. CAS004001, as amended, the Resident Engineer will require the Construction Contractor to prepare and implement a final project-specific SUSMP. The final project-specific SUSMP will include implementation of Site Design, Source Control, and Treatment Control BMPs to the maximum extent practicable. Examples of Site Design, Source Control, and Treatment Control BMPs include tree box filters, catch basins, curb inlet filters, media filters, and bioretention facilities.

Measures to Minimize Harm Related to Geology

- During preliminary and final design, a comprehensive geologic and geotechnical investigation will be conducted, and design-level geotechnical/baseline reports will be prepared. This report will document and provide design recommendations for seismic hazards, such as fault-induced ground rupture, ground shaking, co-seismic deformation, slope instability, seismic settlement, and liquefaction, or related secondary seismic impacts that may be present along the alignment of the TSM/TDM Alternative project. The report will also provide design recommendations for geology-related constraints, such as settlement, collapse potential, expansion, landslides, erosion, and naturally occurring gas. The performance standard for this report will be the geotechnical design standards of the State of California and Caltrans, FHWA, Metro, and/or the local jurisdiction, as applicable.

  The Project Engineer will incorporate the measures recommended in the design-level geotechnical report in the final design and project specifications.

  The Construction Contractor, Design/Build Contractor, or the Private Public Partnership developer, as applicable, will implement the measures recommended in the design-level geotechnical reports as included in the project design and specifications.

Measures to Minimize Harm Related to Paleontology

- During the final design phase of the project, a Paleontological Resources Impact Mitigation Program (PRIMP) that follows the guidelines of the Society of Vertebrate Paleontology (2010) will be prepared. Preparation of a Paleontological Mitigation Plan (PMP) or PRIMP, as appropriate, during final design will follow the guidelines provided in the Caltrans Standard Environmental Reference Environmental Handbook, Volume 1, Chapter 8, and includes the measures listed below:

- A qualified paleontologist or representative will attend the preconstruction meeting. At this meeting, the paleontologist will conduct paleontological resources awareness training, including describing the likelihood of encountering paleontological resources during grading and excavation, what types of resources might be discovered, the roles and authorities of the paleontological resources monitors, the methods used to assess and recover discovered resources, and other information relevant to paleontological resources and the monitoring that will be conducted during project construction.
- A preconstruction field survey will be conducted in areas with deposits of high paleontological sensitivity after vegetation and paving have been removed, and any observed surface paleontological resources salvaged prior to the beginning of additional grading.
- In general, a qualified paleontological monitor will initially be present on a full-time basis whenever excavation would occur within the sediments that have a high paleontological sensitivity rating, and on a spot-check basis when excavating in sediments that have a low sensitivity rating. No monitoring is generally necessary in deposits with no paleontological sensitivity, such as Artificial Fill and Holocene Alluvial Fan Deposits. However, the specific monitoring levels and locations will be developed according to the final design plans and take into account the excavation methods and depths, the thickness of any Artificial Fill and/or Holocene Alluvial Fan Deposits present in the project area, and the sensitivity of the deposits underlying those two geologic units.
- Full-time monitoring may be reduced to a part-time or spot-check basis if no resources are being discovered in sediments with a high sensitivity rating (monitoring reductions, when they occur, will be determined by a qualified Principal Paleontologist in consultation with the Resident Engineer).

Measures to Minimize Harm Related to Hazardous Waste and Materials

- During final design, the Project Engineer will ensure that specifications related to the sampling, handling, and treatment of pavement markings are included and implemented during construction. A qualified contractor will sample and test the striping paint along roads to be disturbed as part of the project for lead chromate. Sampling will be performed on the residue after waste is generated to characterize the waste so that it can be disposed at an appropriate landfill. The field and analytical data obtained during this study will be used to provide a review of the sampling locations and descriptions, a summary of the analytical results, and recommendations for striping paint removal, containment, and offsite transportation and disposal, as appropriate. The sampling, handling, treatment, and disposal of hazardous waste will be conducted in accordance with applicable local, State, and federal regulations and requirements, prior to and during construction of the project.
- During final design, the Project Engineer will ensure the specifications related to the handling and treatment of transformers are included and implemented if transformer removal is required. The Construction Contractor will contact Southern California Edison prior to handling or removal of electric transformers. Should wood utility poles require removal, the Resident Engineer will require the Construction Contractor to manage (handle, store, transport, and dispose) wood poles as treated wood waste, a non-Resource Conservation and Recovery Act (California) hazardous waste. Treated wood waste is treated with chemical preservatives, such as arsenic, chromium, copper, and pentachlorophenol (often associated with the preservation of wooden electric poles) and requires appropriate disposal methods. Any hazardous transformers or poles that are disturbed/removed will

be disposed of in accordance with the California Health and Safety Code and Title 22 California Code of Regulations.

- Prior to construction, the Project Engineer will ensure that the specifications related to the testing and handling of soils with aerially deposited lead (ADL) are included during final design and implemented during construction. The Construction Contractors responsible for excavating, transporting, or stockpiling soil will prepare a Lead Compliance Plan in accordance with the California Code of Regulations and California Occupational Safety and Health Administration standards. The Lead Compliance Plan will address the presence of ADL in the soils within the project area and the health and safety of construction workers.
- During final design, the Project Engineer will ensure the specifications related to soil sampling and handling of soils with ADL are included and implemented prior to any site preparation, disturbance, grading, and construction. The qualified contractor will conduct soil sampling for ADL in unpaved locations adjacent to existing roadways within the project alignment. The analytical results of the soil sampling will determine the appropriate handling of the soil in those areas and the disposal of surplus materials. The sampling, handling, treatment, and disposal of hazardous waste will be conducted in accordance with applicable local, State, and federal regulations and requirements, prior to and during construction of the project.
- The Project Engineer will ensure the specifications related to the sampling, handling, treatment and disposal of asbestos-containing material (ACM), lead-based paint (LBP), and equipment containing chlorofluorocarbons, polychlorinated biphenyls (PCBs) (fluorescent lights, PCB ballasts), mercury switches, timers, sensors, thermostats, and mercury vapor lamps for structures planned for demolition are included during final design and implemented after property acquisition and prior to demolition. The qualified contractor will assess structures planned for demolition within the project area for the possible presence of ACM, LBP, and equipment containing chlorofluorocarbons, PCBs (fluorescent lights, PCB ballasts), mercury switches, timers, sensors, thermostats, and mercury vapor lamps. These studies will be conducted by trained and/or licensed professionals and will comply with the EPA National Emission Standards for Hazardous Air Pollutants 40 Code of Federal Regulations (CFR), SCAQMD Rule 1403, Housing and Urban Development, and California Department of Public Health guidelines.
- The qualified contractor will assess bridges planned for demolition within the project area for the possible presence of ACM and LBP. These studies will be conducted by trained and/or licensed professionals and will comply with the EPA National Emission Standards for Hazardous Air Pollutants 40 CFR, SCAQMD Rule 1403, Housing and Urban Development, and California Department of Public Health guidelines. The results of these studies will provide a description of the ACM and LBP locations, estimated quantity, and recommendations for removal, containment, and offsite transportation and disposal. The sampling, handling, treatment, and disposal of hazardous waste will be conducted in accordance with applicable local, State, and federal regulations and requirements, prior to and during construction of the project.
- The qualified contractor will assess planned upgrades to traffic signals for the possible presence of mercury-containing equipment, mercury lamps, cathode ray tubes, etc. These studies will be conducted by trained and/or licensed professionals. The results of these studies will provide a description of the mercury-containing equipment locations, estimated quantity, and recommendations for removal, containment, and offsite transportation and disposal. The sampling, handling, treatment, and disposal of hazardous waste will be conducted in accordance with applicable local, State, and federal regulations and requirements, prior to and during construction of the project.

- The Project Engineer will ensure the specifications related to air pollution control during demolition or renovation of a structure or bridge are included during final design and implemented prior to demolition or renovation of a structure or bridge. The Construction Contractor will notify the SCAQMD and submit the required fees at least 10 days prior to proceeding with the demolition work (refer to SCAQMD Rule 1403). Failure to do so may result in Metro or Caltrans being cited for regulatory noncompliance. Notification would fall under Section 7-1.01F, Air Pollution Control, and Section 7-1.04, Permits and Licenses of the Standard Specifications. The Construction Contractors will be required to adhere to the requirements of SCAQMD Rule 1403 during renovation/demolition activities. The sampling, handling, treatment, and disposal of hazardous waste will be conducted in accordance with applicable local, State, and federal regulations and requirements, prior to and during construction of the project.
- The Project Engineer will ensure the specifications related to the handling, treatment, and disposal of hazardous wastes are included when plans, specifications, and estimates are prepared and implemented prior to Phase II Site Investigations to determine if special handling, treatment, or disposal provisions associated with hazardous wastes will be required for the project and if remediation of a property prior to or after construction and protection of health and safety of workers are required. A qualified contractor will conduct Phase II Site Investigations at all parcels proposed for acquisition or easement and other properties identified in the Initial Site Assessment at the following locations:

  1. Former Circle K Stores (Subject Property 1), 1000 West Valley Boulevard, Alhambra
  2. Fashion Master Cleaners (Subject Property 2), 1433 Huntington Drive, South Pasadena
  3. Railroad ROW (Subject Property 3) north of Valley Boulevard and SR 710 and immediately south of Alhambra Avenue/Mission Road
  4. Elite Cleaners (Subject Property 4), 1310 Fair Oaks Avenue, South Pasadena
  5. Blanchard Landfill (Subject Property 5), between Blanchard Avenue and McBride Avenue at 4531 East Blanchard Street, Monterey Park
  6. Mercury Die/Mission Corrugated (Subject Property 6), 3201 West Mission Road, Alhambra
  7. Arco Station (Subject Property 7), 3201 Valley Boulevard, Alhambra
  8. Former Tosco/Unocal Station (Subject Property 8), 2140 Huntington Drive, South Pasadena

  The Initial Site Assessment was performed to identify impacts to the project from hazardous waste and petroleum product. These impacts will be investigated through a Phase II Site Investigation. The Phase II Site Investigations will be performed prior to completion of final design for properties that may be potentially impacted by the selected Build Alternative. Based on the results of the Phase II Site Investigations, additional soil and/or groundwater sampling as well as removal and/or treatment of soil and/or groundwater prior to construction may be necessary. The sampling, handling, treatment, and disposal of hazardous waste will be conducted in accordance with applicable local, State, and federal regulations and requirements, prior to and during construction of the project.
- The Project Engineer will ensure the specifications related to the sampling and handling of soils adjacent to the railroad ROW are included during final design and implemented prior to disturbance of soils adjacent to the railroad ROW in the Build Alternative ROW. A qualified contractor will sample those soils to determine whether they require special handling and disposal.

- The Project Engineer will ensure the specifications related to the monitoring of soil excavations for visible soil staining, odor, and the possible presence of unknown hazardous material sources and pre- and post-construction remediation are included during final design and implemented during construction. The Construction Contractor will monitor soil excavations for visible soil staining, odor, and the possible presence of unknown hazardous material sources. The Construction Contractor will have field monitoring equipment (e.g., photoionization detector) onsite to facilitate the timely detection of potentially hazardous conditions in the field and protection of workers. If signs of potential impact (odors, discolored soil, etc.) are noted or observed during construction activity, sampling and analysis should be conducted.
- Soil samples should be analyzed for total petroleum hydrocarbons with carbon chain analysis using EPA Method 8015B and volatile organic compounds (VOCs) by EPA Method 8260B, heavy metals by EPA Method 6010/7000 series, semi-volatile organic compounds by EPA Method 8270, polycyclic aromatic hydrocarbons by EPA Method 8310, and other analytical methods depending on the suspected contaminant where runoff may have collected. If other hazardous materials contamination or sources are suspected or identified during project construction activities, an environmental professional will evaluate the course of action required. This course of action will follow the Unknown Hazards Procedures described in Chapter 7 of the Caltrans Construction Manual (August 2006) for areas within State-owned ROW. For improvements outside the State-owned ROW, applicable State and federal regulations will be followed during construction activities and if any impacts are identified. The sampling, handling, treatment, and disposal of hazardous waste will be conducted in accordance with applicable local, State, and federal regulations and requirements, prior to and during construction of the project.
- Special construction methods are to be used during construction of Bridge Retaining Walls, Noise Barriers, and Pile installation where there is contaminated soil and perched groundwater to prevent cross-contamination and creating a conduit for migration of contamination.
- For construction activities related to dewatering, the Construction Contractor will comply with the requirements of Order No. R4-2013-0095 (NPDES No. CAG994004) for construction site dewatering. Order No. R4-2013-0095 covers general waste discharge permits for discharges to surface waters from activities involving groundwater extraction. It covers treated or untreated groundwater generated from permanent or temporary dewatering operations or other appropriate wastewater discharge not specifically covered in other general NPDES permits in the Los Angeles region. Under this order, permittees are required to monitor their discharges from groundwater extraction waste from construction to ensure that effluent limitations for constituents are not exceeded.
- Prior to construction activities in areas potentially contaminated with hazardous materials or wastes, a comprehensive geologic and geotechnical investigation will be conducted, and design-level geotechnical/baseline reports will be prepared during preliminary and final design. This report will document and provide design recommendations for seismic hazards, such as fault-induced ground rupture, ground shaking, co-seismic deformation, slope instability, seismic settlement, and liquefaction, or related secondary seismic impacts that may be present along the alignment. The report will also provide design recommendations for geology-related constraints, such as settlement, collapse potential, expansion, landslides, erosion, and naturally occurring gas. The performance standard for this report will be the geotechnical design standards of the State of California and Caltrans, FHWA, Metro, and/or the local jurisdiction, as applicable.
- The Project Engineer will incorporate the measures recommended in the design-level geotechnical report in the final design and project specifications.

- The Construction Contractor, Design/Build Contractor, or the Private Public Partnership developer, as applicable, will implement the measures recommended in the design-level geotechnical reports as included in the project design and specifications.

Measures to Minimize Harm Related to Air Quality and Climate Change

- During clearing, grading, earthmoving, or excavation operations, the Resident Engineer will require the construction contractor to control excessive fugitive dust emissions by regular watering or other dust preventive measures using the following procedures, as specified in the SCAQMD Rule 403 Fugitive Dust. The Construction Contractor will be required to:
    - Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites during workdays, weekends, holidays, and windy conditions.
    - Install wind fencing and phase-grading operations where appropriate and operate water trucks for stabilization of surfaces under windy conditions.
    - When hauling material and operating non-earthmoving equipment, prevent spillage and limit off-road speeds to 15 mph. Limit speed of off-road earthmoving equipment to 10 mph.
- During all site preparation, grading, excavation, and construction, the Resident Engineer will require the Construction Contractor to:
    - Reduce use, trips, and unnecessary idling from heavy equipment.
    - Use solar-powered rather than diesel-powered CMSs.
    - Obtain electricity from power poles rather than from generators where feasible.
    - Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels and at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
    - Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
    - Use new, clean (diesel or retrofitted diesel) equipment meeting the most stringent applicable federal or State standards and commit to the best available emissions control technology. Use Tier 3, or higher, engines for construction equipment with a rated horsepower exceeding 75. Use Tier 2, or higher, engines for construction equipment with a rated horsepower of less than 75. If non-road construction equipment that meets or exceeds Tier 2 or 3 engine standards is not available, the Construction Contractor will be required to use the best available emissions control technologies on all equipment.
    - Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.
- Prior to any site disturbance, the Resident Engineer will require the Construction Contractor to:
    - Meet EPA diesel fuel requirements off-road and on-highway and, where appropriate, use alternative fuels, such as natural gas and electric.
    - Identify sensitive receptors in the project area (e.g., residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent

centers, and retirement homes) and specify the means by which impacts to these populations will be minimized. For example, locate construction equipment and staging zones away from sensitive receptors and away from fresh air intakes to buildings and air conditioners.

- Metro will require the Construction Contractors to comply with its "Green Construction Policy" (adopted 2011, or more current) related to the use of greener, less polluting construction equipment and vehicles, and the implementation of best practices to meet or exceed air quality emission standards.

Measures to Minimize Harm Related to Noise and Vibration

- During construction outside State-owned ROW, Metro will require the Construction Contractor to comply with the hours of operation, the allowable noise levels at specified distances from construction activities, and other noise reduction/avoidance requirements in the applicable jurisdiction's Municipal Code and/or Noise Ordinance.
- The Construction Contractor will not use pile driving or other activities that generate high levels of vibration during construction.
- In addition to these measures, geology-related measures would be required for construction activities related to the evaluation of potential excavation in high strength bedrock for ground-borne noise and vibration effects.
- Based on the studies completed to date, Metro/Caltrans intends to incorporate noise abatement in the form of sound walls listed as reasonable in Final EIS Table 3.14.34 (refer to Appendix N). During final design, Metro/Caltrans will make the final decision on noise abatement to be included in the selected Build Alternative, based on the final design of the proposed project and the public involvement process. If conditions have substantially changed during final design, noise abatement at some of the locations noted above may not be reasonable/feasible. Metro/Caltrans will incorporate the final noise abatement in the final project design and specifications.

  The following noise barriers were determined not to be feasible and/or reasonable for the TSM/TDM Alternative, for more detailed information, please see Section 3.14.4.3 of the Final EIS. The specific heights of the walls determined not to be feasible and/or reasonable are also provided below:

  - TSM/TDM Alternative T-1, Alternative Noise Barrier (TNB) No. 3, all heights
  - TSM/TDM Alternative T-1, TNB No. 4, all heights

- Based on the studies completed to date and input from the public, Caltrans or Metro (as appropriate) intends to incorporate noise abatement in the form of barriers at the following locations for the TSM/TDM Alternative (Selected Alternative):

  - For the TSM/TDM Alternative L-3, calculations based on preliminary design data show that TNB No. 1 will reduce noise levels by 7 decibels (dBA) to meet the design goal for one residence at a cost ranging from $27,120 to $33,600 with ROW donated and from $33,720 to $40,200 with ROW costs included. TNB No. 2 will reduce noise levels by 7 dBA (minimum design goal) to 18 dBA for one residence at a cost ranging from $10,178 to $31,913 with ROW donated and $49,053 to $52,158 with ROW costs included.
  - For TSM/TDM Alternative L-5, calculations based on preliminary design data show that TNB No. 1 will reduce noise levels by 7 dBA (minimum design goal) to 10 dBA for two residences at a cost ranging from $52,811 to $107,351 with ROW donated.

- For TSM/TDM Alternative T-1, calculations based on preliminary design data show that TNB No. 1 will reduce noise levels by 7 dBA (minimum design goal) to 10 dBA for 18 residences at a cost of $921,009 with ROW donated and $981,972 with ROW costs included. TNB No. 2 will reduce noise levels by 5 dBA to 8 dBA (exceeding the minimum design goal of 7 dBA) for 15 to 16 residences at a cost ranging from $541,387 to $665,373.
- If conditions have substantially changed during final design, noise abatement may not be necessary.
- The final decision on noise abatement will be made upon completion of the project design.

- The analyzed noise barriers for the TSM/TDM Alternative are shown on Figure 3.14-3 in Appendix N of the Final EIS. Preliminary abatement measures proposed for the TSM/TDM Alternative includes five noise barriers, as follows:
  - Local Street Improvement L-3 (Atlantic Boulevard from Glendon Way to I-10): L-3/TNB No. 1 would be an approximately 48-foot-long barrier along the perimeter of the private swimming pool area at the Atlantic Riviera Apartments located at 1417 South Atlantic Boulevard and would range in height from 16 to 20 feet (refer to Sheet 2 of Figure 3.14-3 in Appendix N for this TSM/TDM Alternative noise barrier).
  - L-3/TNB No. 2 would be an approximately 46-foot-long barrier along the private property line of 1721 South Atlantic Boulevard and would range in height from 6 to 20 feet (refer to Sheet 2 of Figure 3.14-3 in Appendix N for this TSM/TDM Alternative noise barrier).
  - Local Street Improvement L-5 (Rosemead Boulevard from Lower Azusa Road to Marshall Street): L-5/TNB No. 1 would be an approximately 202-foot-long barrier along the private property line of 3955 Rosemead Boulevard and would range in height from 6 to 14 feet (refer to Sheet 4 of Figure 3.14-3 in Appendix N for this TSM/TDM Alternative noise barrier).
  - Other Road Improvement T-1 (Valley Boulevard to Mission Road Connector Road): T-1/TNB No. 1 would be an approximately 1,247-foot-long barrier along the Caltrans ROW/private property line along the northbound side of SR 710 south of Valley Boulevard and would be 8 feet in height (refer to Sheet 7 of Figure 3.14-3 in Appendix N for this TSM/TDM Alternative noise barrier).
  - T-1/TNB No. 2 would be an approximately 963-foot-long barrier along the edge of shoulder on the southbound side of SR 710, south of Valley Boulevard, and would range in height from 16 to 20 feet (refer to Sheet 7 of Figure 3.14-3 in Appendix N for this TSM/TDM Alternative noise barrier).
  - Subsequent to the circulation of the Draft EIR/EIS, and in an effort to minimize adverse visual effects to historic resources, the following noise barriers are no longer proposed:
    - Other Road Improvement T-2 (SR 110/Fair Oaks Avenue Hook Ramps). T-2/TNB No. 1 would be an approximately 743-foot-long barrier along the Caltrans ROW/private property line along the northbound side of SR 110 and would range in height from 6 to 16 feet (refer to Sheet 8 of Figure 3.14-3 in Appendix N for this TSM/TDM Alternative noise barrier).
    - T-2/TNB No. 2 would be an approximately 963-foot-long barrier along the edge of the shoulder on the southbound side of SR 110 and would range in height from 12 to 20 feet (refer to Sheet 8 of Figure 3.14-3 in Appendix N for this TSM/TDM Alternative noise barrier).

Measures to Minimize Harm Related to Energy

- As part of the final design, the Project Engineer will prepare a construction efficiency plan, which may include the following:
  - Reusing existing rail, steel, and lumber wherever possible, such as for falsework, shoring, and other applications during the construction process
  - Recycling of asphalt taken up from roadways, if practicable and cost effective
  - Using newer, more energy-efficient equipment where feasible and maintenance of older construction equipment to keep it in good working order
  - Promoting scheduling of construction operations to efficiently use construction equipment (e.g., only haul waste when haul trucks are full and combine smaller dozer operations into a single comprehensive operation where possible)
  - Promoting construction employee carpooling

Measures to Minimize Harm Related to Animal Species

- Due to the presence of marginally suitable bridge roosting habitat within the TSM/TDM Alternative (Selected Alternative), the following avoidance and minimization efforts will be implemented:
  - Metro or Caltrans will have preconstruction bat surveys conducted by a qualified bat biologist prior to ground-disturbing and/or bridge construction activities. The surveys will be conducted at least 30 days prior to the start of project construction activities, regardless of the time of year. The most effective dates to determine the presence of day or maternity roosts is during the breeding season (March to September). If it is determined during the preconstruction bridge surveys that a structure is being used as a bat roost site (day or night roost), work will be avoided within 100 feet of the roost site. If any active night roosts are present onsite, no work will take place between 10:00 p.m. and sunrise, and air space access to the bridge will be restricted. Lights will not be used under the structure, foot traffic and equipment use will not be allowed under the structure, and combustion equipment will not be parked or operated under the structure. If a structure is determined to be used by roosting bats, a qualified bat biologist will be onsite for the duration of construction activities that may impact bats. If it is determined that the above activities cannot be avoided, bats will be excluded from the bridge using California Department of Fish and Wildlife (CDFW)-approved exclusionary devices to the extent necessary to prevent mortality to the colony. Exclusion will take place prior to April 15. If a structure is determined to be in use by roosting bats, CDFW will be contacted to determine additional, appropriate avoidance and minimization measures, including exclusionary measures.
  - Metro or Caltrans will require the Construction Contractor to implement the following avoidance and minimization measures in areas of potentially suitable habitat for winter roosting aggregations of monarch butterfly and the species' egg, caterpillar, and pupal stages:
    - If eucalyptus trees are to be removed or trimmed between October and March, preconstruction surveys for winter roosting aggregations of monarchs will be conducted by a qualified biologist.
    - If a winter roosting aggregation is discovered, the area will be flagged and posted with Environmentally Sensitive Area (ESA) signs. If practicable, activities within this area will be avoided until the aggregation disperses in spring.

- If any mature trees are to be removed or trimmed between September and October, preconstruction surveys for overnight fall roosts of monarchs will be conducted by a qualified biologist.
- If an overnight fall roost is discovered, the area will be flagged and posted with ESA signs by a qualified biologist. If practicable, activities within this area will be avoided until the fall roosting group disperses (during the day).
- Preconstruction surveys for milkweed plants that may support monarch eggs, caterpillars, or pupae will be conducted within grassland and riparian areas by a qualified biologist.
- Any milkweed plants found that may support monarch eggs, caterpillars, or pupae will be flagged and ESA signs posted by a qualified biologist. Construction in the area will be avoided and minimized.

- Metro or Caltrans will require the Construction Contractor to implement the following avoidance and minimization measures in areas of potentially suitable non-native grassland and disturbed/ developed habitat for western spadefoot and San Bernardino ring-necked snake:
  - Potentially suitable habitat for these species will be avoided to the greatest extent possible during construction and design.
  - Staging areas will be confined to existing disturbed areas to the greatest extent possible.
  - Preconstruction surveys will be conducted in areas of potentially suitable habitat by a qualified biologist.
  - If any individuals of these species are determined to be present during the preconstruction surveys, CDFW will be notified and translocation will be conducted by a qualified biologist.
  - The translocation process will be conducted in accordance with the guidelines outlined by CDFW.
- The Construction Contractor will implement the following avoidance and minimization efforts for Cooper's hawk, Allen's hummingbird, Costa's hummingbird, Lawrence's goldfinch, merlin, Nuttall's woodpecker, oak titmouse, and any nesting or breeding birds of prey protected under California Fish and Game Code Sections 3503 and 3503.5, and any other nesting or breeding birds protected under the Migratory Bird Treaty Act (MBTA):
  - The removal and/or disturbance of trees or suitable roosting shrubbery will be minimized to the greatest extent possible.
  - Any activities in which tree or native vegetation trimming/removal or construction on bridges may occur will take place outside of the nesting bird season (February 1 to August 31) where feasible.
  - Should bridge construction be required during the nesting season, a qualified biologist will be required to inspect the construction site prior to February 1 and be present during bird nest removal. The presence of a qualified biologist is required to inspect the construction site and confirm that any nests potentially occurring are unoccupied or inactive prior to nest removal, because removing active nests violates State and federal law.
  - If avoidance of these activities during this period is not possible, preconstruction surveys by a qualified biologist will be conducted to identify any existing nests or breeding birds within 200 feet of (and including) the area scheduled for construction. The survey will be completed no more than 48 hours prior to the start of project activities. Additional surveys will be

conducted if more than 3 days pass between preconstruction nesting bird surveys and the start of construction.

- If breeding/nesting birds are located within 300 feet of the limits of disturbance, a buffer will be flagged around the nest by a qualified biologist and ESA signs posted. Any work within 300 feet of the flagged area will require a qualified biologist to monitor the birds and ensure that the construction activities do not negatively impact the birds.
- If the biologist identifies signs of stress to any bird species, the biologist will halt activities in the immediate area until the birds resume their normal behavior or until the nest has been determined to be no longer active. This intervention will provide adequate protection to native nesting bird species under the MBTA and the California Fish and Game Code.
- Should breeding/nesting birds of prey be located within the area scheduled for construction, the buffer will be extended to 500 feet as birds of prey are typically more sensitive to disturbance.
- Unoccupied nests will be removed from bridges prior to the colony returning to the nesting site to begin nesting (February 1 to August 31). During the period between the removal of unoccupied nests and the start of bridge construction, bridges will be checked often and unoccupied nests that are under construction will be removed. The removal of unoccupied nests will be monitored by a qualified biologist through the duration of construction. These efforts will continue until September or until the completion of construction to keep the structures free of nesting birds. Nest removal will not take place for nests found in trees or other vegetation.
- The construction buffer limits may be modified at the discretion of a qualified biologist familiar with the specific circumstances of the situation. Coordination with CDFW will be conducted to confirm appropriate buffers and determine when it is safe to remove the buffers. If there are no breeding/nesting birds, no further action is necessary.

Measures to Minimize Harm to Invasive Species

- The Metro or Caltrans Project Engineer will develop a weed abatement program and will include it in the Plans, Specifications, and Estimates package. The intent of this program is to minimize the introduction and spread of non-native plant material during construction of the selected Build Alternative. This program will include, but not be limited to, the following monitoring and eradication measures during and after construction:
  - Preconstruction surveys will be conducted to identify populations of invasive species within the project disturbance limits with the potential to be encouraged by construction activities, such as exposure or tilling of bare ground, disturbance of adjacent habitats that are not highly invaded, and/or enhanced distribution of pollen or seeds. Such populations will be controlled by mechanical or chemical means prior to construction.
  - Revegetation of soils will occur as soon as practical after completion of construction activities in those areas. To prevent the spread of invasive species on the project site, invasive species-free products will be exclusively used for all activities, including, but not limited to, landscaping materials and soil erosion materials (i.e., mulch, soil mats, straw fencing, or wattles).
  - Any disturbance in any construction area not containing existing infestations of exotic plants will be monitored for one-year post-construction to ensure that establishment of invasive plant species in the area has not occurred. If evidence of invasive plant species establishment is found, invasive species control measures will be implemented immediately.

Measures to Minimize Harm Related to Cumulative Impacts

- See construction-related measures for Community Impacts, Traffic, Air Quality, Noise, Energy and Vibration, and Visual/Aesthetics.
- See measures under Cultural Resources.
- TMPs will be coordinated if more than one project is being constructed in the same general area to ensure adequate circulation in the area.

E. Monitoring or Enforcement Program

The Environmental Commitment Record (ECR) for the SR 710 Project has been prepared and is provided in Appendix E of the Final EIS. The ECR provides the language of each measure, identifies responsible parties for implementing the measure, and indicates the timing of the implementation of each measure. The ECR provides a process for tracking and documenting the implementation of the project avoidance, minimization, and mitigation measures during the design, construction, and operation of the TSM/TDM Alternative.

The identified responsible party in the ECR will be implementing and reporting the status of the measures to the Caltrans Stewardship Unit. Monitoring forms are required and will be completed by those party/parties responsible for implementing each measure in the ECR. Completed monitoring forms will be retained by Caltrans. Caltrans Stewardship Unit will be assuring that avoidance, minimization, and mitigation measures in the ECR are fully implemented by designated qualified personnel.

F. Response to Comments on the Final EIS

The following letters and emails with comments were received when the Final EIS was made available for a 30-day waiting period (December 7, 2018 to January 7, 2019) from the following agencies and parties:

- **Federal Agencies**
  - United States Environmental Protection Agency (EPA), Region 9
- **Public Agencies**
  - County of Los Angeles Fire Department
- **Organizations**
  - National Trust of Historic Preservation
  - West Pasadena Residents Association
  - South Pasadena Preservation Foundation
- **General Public**
  - Tom Salvio
  - Dr. Edward Franks
  - John Bednarski

Comments received, as well as Caltrans' responses to the comments, are provided in Attachment 1.

G. Record of Decision Approval

The TSM/TDM Alternative would meet the project purpose and need. The identification of the TSM/TDM Alternative as the Selected Alternative was based on evaluation of substantive comments received from the public and agencies on the Draft/Final EIS, Supplemental Draft/Final EIS, and all the supporting technical studies prepared for the project. All practicable measures to minimize harm have been adopted and will be incorporated into this decision. It is the decision of Caltrans, as the federal lead agency for this undertaking, to select the TSM/TDM Alternative as described in the Final EIS approved on November 26, 2018.

Record of Decision for the SR 710 North Project is hereby approved.

John Bulinski
District Director
California Department of Transportation, District 7

8/6/19
Date

Attachment 1
Comments Received on the SR 710 North Project Final EIS and Responses

Comment from: United States Environmental Protection Agency, Region 9

FA3-1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

February 1, 2019

Ron Kosinski, Deputy District Director
Division of Environmental Planning
Caltrans, District 7
100 South Main Street
Los Angeles, California 90012

Subject: EPA Comments on the Final Environmental Impact Statement (FEIS) for the State Route 710 North Study, Los Angeles County, California (EIS #20180306)

Dear Mr. Kosinski:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. EPA thanks the California Department of Transportation (Caltrans) for granting an extension to allow EPA to submit comments on this document due to our inability to meet the deadline as a result of the federal government furlough. FA3-1-1

EPA submitted comments on the Draft EIS for this project on August 27, 2015. The primary concerns raised in our Draft EIS comment letter were due to the lack of information on the Freeway Tunnel Alternative's potential to cause or contribute to localized National Ambient Air Quality Standards (NAAQS) exceedances in the project area. We requested that Caltrans: determine whether the project would contribute to a NAAQS exceedance, demonstrate how the tunnel design and emissions controls would reduce and capture emissions to the highest extent feasible, and commit to mitigating residual air quality impacts. FA3-1-2

EPA understands that Caltrans has identified the Transportation System Management/Transportation Demand Management (TSM/TDM) Alternative as the Preferred Alternative for this project. We appreciate Caltrans' coordination with our agency to examine alternatives that address local and regional transportation needs while minimizing impacts to air quality in an area that faces some of the worst ambient air pollution in the country. FA3-1-3

Thank you for additional information in response to some of our comments regarding the Freeway Tunnel Alternative, such as disclosure of the anticipated effectiveness of the particulate matter filtration system that would have been incorporated in that alternative, a more detailed modeling methodology description, and additional details about the fugitive dust controls that would have be implemented during construction. Please note, however, that while the Southern California Association of Governments (SCAG) Transportation Conformity Working Group (TCWG) approved the particulate matter hot-spot modeling *protocol* for the Freeway Tunnel Alternative, EPA did not review the hot-spot *analysis* for this alternative that was included in the Final EIS. Should Caltrans choose to pursue the Freeway Tunnel Alternative in the future, EPA would need to review the analysis, and project-level conformity discussions would need to be resumed through the TCWG in order to determine whether this FA3-1-4 FA3-1-5

alternative would result in any NAAQS exceedances. We recommend that the Record of Decision (ROD) acknowledge that conclusions provided in the Final EIS have not been shared with the TCWG for feedback, and that additional consultation through the TCWG would be necessary prior to making a conformity determination for this alternative. We also request the opportunity to resume discussions regarding other air quality impacts in the event that the Freeway Tunnel Alternative is revisited in the future. FA3-1-6 FA3-1-7

EPA provided comments on the Supplemental Draft EIS on July 2, 2018. In our comment letter, we requested an updated noise impact analysis based on the removal of certain soundwalls that would have adversely impacted cultural resources in the project area, as well as clarification as to whether other potential noise mitigation measures were considered. In response to our comments, Caltrans notes that removing soundwalls T-2/TNB No. 1 and T-2/TNB No. 2 from the TSM/TDM Alternative would not result in any adverse noise impacts. Given that sensitive receptors reside within the areas that would no longer receive these noise abatement measures, we recommend that Caltrans explore alternative means to reduce noise impacts while avoiding visual impacts to cultural resources. FA3-1-8

We appreciate the opportunity to provide feedback on the Final EIS. Please send a copy of the ROD when it becomes available to this office at the address above (mail code ENF-4-2). If you have any questions, please contact Morgan Capilla, the lead reviewer for this project, at 415-972-3504 or capilla.morgan@epa.gov. FA3-1-9

Sincerely,

Connell Dunning

Connell Dunning, Transportation Team Supervisor
Environmental Review Section

Electronic copy:

Brenda Powell-Jones, Caltrans
Jason Roach, Caltrans
Vince Mammano, FHWA
Joseph Vaughn, FHWA
Bryan Pennington, Metro
Susan Nakamura, South Coast Air Quality Management District
Rongsheng Luo, Southern California Association of Governments

Response to: United States Environmental Protection Agency, Region 9

FA3-1-1

As noted in the comment, Caltrans provided additional time for comments to EPA due to the federal government furlough.

FA3-1-2

EPA's comment letter dated August 27, 2015 on the Draft EIR/EIS was received and responses were provided in the Final EIS. Responses to comments can be found in Volume IIIA in the Final EIR/EIS under Federal Agency, comment letter FA-2 and responses FA2-1 to FA2-101.

FA3-1-3

EPA's understanding that the TSM/TDM Alternative was identified as the Preferred Alternative in the Final EIR/EIS and appreciation of Caltrans efforts to coordinate with EPA are acknowledged.

FA3-1-4

EPA's appreciation of the additional information provided in response EPA's comments made on the Freeway Tunnel Alternative is acknowledged.

FA3-1-5

EPA's position regarding the Freeway Tunnel Alternative and the particulate matter (PM) hot-spot analysis in the Final EIR/EIS is acknowledged; however, Caltrans has selected the TSM/TDM Alternative as the preferred alternative in the Final EIR/EIS. Therefore, EPA's review of the Freeway Tunnel PM Hot-Spot Analysis and conformity discussions with the TCWG to determine if the Freeway Tunnel Alternative would result in any NAAQS exceedances is not be required.

FA3-1-6

EPA's position regarding the Freeway Tunnel Alternative PM Hot Spot Analysis and future feedback from the TCWG is acknowledged. However, Caltrans has selected the TSM/TDM Alternative as the preferred alternative in the Final EIR/EIS. Therefore, further consultation with the TCWG regarding the Freeway Tunnel Alternative PM Hot-spot analysis is not required.

FA3-1-7

EPA's position regarding discussions about the Freeway Tunnel Alternative is acknowledged.

FA3-1-8

The Final EIR/EIS Volume IIIB Response to Comment FA2-2-2 addresses EPA's comments regarding removal of soundwalls to reduce adverse effects to cultural resources and consideration of alternative noise abatement measures in locations where the soundwalls were

removed. Caltrans determined the soundwalls were not feasible and reasonable, by balancing the benefits of highway traffic noise abatement against the overall adverse environmental effects and overall public good, keeping in mind all the elements of the highway program (need, funding, environmental impacts, public involvement, etc.), for more detailed information, please see Section 3.14.4.3 of the Final EIS. As noted by the commenter, the Response to Comment FA2-2-2 concluded that "it was determined the increase in noise at these locations would not result in an adverse effect even with the removal of the soundwalls." The locations analyzed were soundwalls T-2/TNB No. 1 (for Receptors T2/TR-1 and T2/TR-2) and T2/TNB No. 2 (for Receptors T2/TR-8 through T2/TR-14).

Since there are no adverse noise impacts from removal of the soundwalls, alternative measures are not needed (or required).

FA3-1-9

EPA's request for a copy of the ROD will be accommodated.

Comment from: County of Los Angeles Fire Department

LA3-1

COUNTY OF LOS ANGELES
FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 881-2401
www.fire.lacounty.gov

"Proud Protectors of Life, Property, and the Environment"

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

December 19, 2018

(421)

Garrett Damrath, Chief Environmental Planner
Department of Transportation
District 7
100 South Main Street
Los Angeles, CA 90012

Dear Mr. Damrath:

NOTICE OF AVAILABILITY OF FINAL ENVIRONMENTAL IMPACT REPORT, "SR 710 NORTH PROJECT," WOULD IMPROVE MOBILITY AND RELIEVE CONGESTION ON STATE ROUTE 710 AND SURROUNDING AREAS, LOS ANGELES COUNTY, FFER 201800137

The Notice of Availability of Final Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department.

The following are their comments:

PLANNING DIVISION:

We have no further comments.

LAND DEVELOPMENT UNIT:

1. This project does not propose construction of structures or any other improvements at this time. Therefore, until actual construction is proposed the project will not have a significant impact to the Fire Department's Land Development Unit. LA3-1-1

2. Provide three sets of alternate route (detour) plans with a tentative schedule of planned closures prior to the beginning of construction. Complete architectural/ structural plans are not necessary. LA3-1-2

3. Disruptions to water service shall be coordinated with the County of Los Angeles Fire Department and alternate water sources shall be provided for fire protection during such disruptions. LA3-1-3

The County of Los Angeles Fire Department's Land Development Unit appreciates the opportunity to comment on this project.

For any questions regarding the report, please contact Inspector Joseph Youman at (323) 890-4125 or Joseph.Youman@fire.lacounty.gov.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance.

The areas germane to the statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division have been addressed.

Under the Los Angeles County Oak tree Ordinance, a permit is required to cut, destroy, remove, relocate, inflict damage or encroach into the protected zone of any tree of the Oak genus which is 25 inches or more in circumference (eight inches in diameter), as measured 4 1/2 feet above mean natural grade. LA3-1-4

If Oak trees are known to exist in the proposed project area further field studies should be conducted to determine the presence of this species on the project site.

The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project.

HEALTH HAZARDOUS MATERIALS DIVISION:

The Health Hazardous Materials Division of the Los Angeles County Fire Department has no comments or requirements for the project at this time.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

Michael Y. Takeshita

MICHAEL Y. TAKESHITA, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

MYT:ac

Response to: County of Los Angeles Fire Department

LA3-1-1

The commenter correctly notes that no buildings (structures) are proposed. There are only transportation-related structures (e.g., a bridge is an element of improvement T-1) as part of the Selected Alternative.

LA3-1-2

Detour plans for closures would be developed during final design. The detour plans will be described and analyzed in a Transportation Management Plan (TMP) which will also be developed in coordination with affected agencies and first responders during final design and will be provided to affected agencies and first responders prior to construction.

LA3-1-3

Section 3.24.4 of the Final EIS identifies that "construction activities under the Build Alternatives would affect various underground and overhead utilities through removal or relocation, which may result in temporary service disruptions to some utility users in the vicinity of those removals/relocations." The only water services issue, as identified in Table 3.4.6, is in the City of Alhambra and those services will be protected in place, so no disruption in service is anticipated."

LA3-1-4

The commenter's statutory responsibilities under the County of Los Angeles Fire Department Forestry Division: are acknowledged, as well as the confirmation that these areas have been addressed in the Final EIS.

The commenter's explanation of the Los Angeles County Tree Ordinance is acknowledged; however, the Final EIS Table 3.18.2 identifies that the TSM/TDM Alternative would not result in temporary or permanent impacts to any special-status plant species or trees potentially subject to local tree ordinances. In addition, the operation activities associated with the TSM/TDM Alternative would not result in indirect permanent impacts to any special-status plant species or trees potentially subject to local tree ordinances." Therefore, no further field studies will be needed.

Comment from: West Pasadena Residents Association

O3-1

Date: December 20, 2018

To: Via Email and Letter
Garrett Damrath, Chief Environmental Planner
Division of Environmental Planning
Department of Transportation, District 7
100 S. Main St, MS-16A
Los Angeles, CA 90012

Reference 1 SR-710 Project Final Environmental Impact Report / Environmental Impact Statement and Individual Section 4(f) Evaluation, State Clearinghouse Number: (SCH#) 1982092310, File number: 07-LA-710 (SR 710), Caltrans Project No.: EFIS 0700000191 (EA: 187900), Title: State Route 710 North Study.

References 2:

a) 'West Pasadena Residents' Association (WPRA) Response to the SR-710 Draft Environmental Impact Report (DEIR) / Draft Environmental Impact Statement (DEIS), August 4, 2015.
b) 'WPRA Comments to the SR-710 North Study Findings of Adverse Effects (FOAE),' March 1, 2018.
c) 'WPRA Comments to the SR-710 North Study Focused Re-circulated Draft Environmental Impact Report (FRDEIR)/ Supplemental Draft Environmental Impact Statement (SDEIS)', July 2, 2018.
d) 'WPRA Comments to the SR-710 North Study Draft Memorandum of Agreement dated June 28, 2018', July 15, 2018.
e) 'State Route 710 North Study Environmental Impact Report/Environmental Impact Statement', August 22, 2018. From the Los Angeles Conservancy, South Pasadena Preservation Foundation, Natural Resources Defense Council, West Pasadena Residents' Association, No 710 Action Committee, Westridge School.

Subject: WPRA Response to the SR-710 Final Environmental Impact Report (EIR) / Final Environmental Impact Statement (EIS)

Dear Mr. Damrath,

The West Pasadena Residents' Association (WPRA) appreciates the opportunity to review and comment on the State Route 710 (SR-710) North Study Final EIR/EIS. WPRA is an all-volunteer organization dedicated to maintaining and enhancing the character of west Pasadena and the quality of life throughout Pasadena. We represent 7,000 households and have nearly 1,000 dues-paying members. Because the SR-710 Study Project will have a very large and permanent impact on our community, our organization has reviewed the SR-710 Final EIR/EIS released in November, 2018. O3-1-1

We were very pleased to find that the report selected the Transportation System Management (TSM) / Transportation Demand Management (TDM) Alternative for implementation. We

believe that this alternative is highly preferable, providing the required transportation performance with minimal negative environmental impacts. For this reason, this alternative is broadly accepted by all cities along the SR-710 corridor and by other key stakeholder organizations. We look forward to working with you to both successfully implement this alternative and other supplemental projects that will augment transportation improvements along the SR-710 Study route. O3-1-1 Cont.

While we support the TSM/TDM Alternative, we are quite alarmed by language in the Final EIR/EIS Executive Summary, pg. ES-1. Specifically,

> *"After comparing and weighing the benefits and impacts of the study alternatives summarized in Table ES-1 of the Executive Summary of the Final EIR/EIS; reviewing the comments received during the public circulation of the Draft EIR/EIS and Focused RDEIR/SDEIS; and completing technical studies and performance evaluations for each of the alternatives, the Freeway Tunnel Alternative with Single Bore Tunnel design variation was determined to provide operational benefits. However, with the lack of funding and the lack of community consensus, the Single Bore Tunnel Alternative, estimated at $3.15 billion, cannot be accomplished successfully within a reasonable period of time."*

These words appear to be carefully chosen to applaud the purported merits of the Tunnel Alternative. They further suggest that if funds were to become available in the future and the project could be accomplished within a "reasonable period of time," the tunnel alternative could still be selected in the future. Our legal counsel has informed us that if the tunnel analyses are certified as part of the Final EIR/EIS, they might still be relevant and viable for five years or more. O3-1-2

We find the continued threat of a tunnel(s) to the communities along the SR-710 corridor to be unacceptable; our communities have suffered from this threat for more than 60 years. Moreover, we are concerned that a possible resurrection of the Tunnel Alternative is based on deeply flawed tunnel environmental analyses. The WPRA thoroughly documented our original Findings of Inadequacy to the Draft EIR/EIS in Reference 2a above, and in follow-on letters provided in References 2b through 2e. Unfortunately, most of our concerns regarding the tunnel analyses have been arbitrarily dismissed, or not addressed in a meaningful way.

From its inception, the SR-710 Study environmental process has been improperly executed to favor the Tunnel Alternative. Problems include an unstable and distorted project definition and need statement, improper SR-710 and I-710 project segmentation, inappropriate Study Area boundaries, and biased bundling of options. Several of the tunnel alternative options are also not credible. This includes the 'no truck' option, which is not enforceable either in the near term or future, and the single-bore tunnel option, which is not reasonable because it exceeds reasonable margins of safety and passes unacceptable fire and accident risks onto tunnel users. O3-1-3 O3-1-4 O3-1-5 O3-1-6

The tunnel environmental impact assessments are also grossly flawed. Many assessments lack definition, are incomplete, or deferred. We continue to find significant deficiencies in the following areas: Land Use, Growth, Community Impacts, Utilities / Emergency Services, Traffic and Transportation / Pedestrian and Bicycle Facilities, Visual / Aesthetics, Cultural Resources, Hydrology and Floodplain, Water Quality and Storm Water Runoff, O3-1-7

Geology/Soils/Seismic/Topography, Air Quality, Noise and Vibration, Energy, Natural Communities, Wetlands and Other Waters, Plan Species, Animal Species, Threatened and Endangered Species, Invasive Species, Construction Impacts, and Cumulative Impacts. O3-1-7 Cont.

To avoid possible litigation we recommend that Caltrans insert language in the final environmental process closeout documents - the Statement of Findings and Overriding Considerations and the Notice of Determination - to unequivocally state the following:

- The Tunnel Alternative analyses are not certified.
- If Caltrans were to consider implementation of a tunnel at a later time, a new environmental analysis would have to be performed (e.g. a Supplemental EIR is insufficient).
- Caltrans will remove the SR-710 segment from the 210 to the 10 freeways from the California Streets and Highways Code. O3-1-8
- Caltrans will return the freeway 'stubs' in Alhambra/Los Angeles and Pasadena to the local communities, and
- Caltrans will declare as surplus all properties in their possession that were seized for the purpose of implementing a SR-710 surface and/or tunnel freeway. Caltrans will also relinquish subsurface rights for these properties.

We remain optimistic that the SR-710 Project can be concluded without litigation if the concluding SR-710 environmental documentation language reflects Caltrans' stated intentions to move forward in solving the SR-710 route transportation needs in collaboration with the local communities.

We ask that this letter be put into the administrative record. Thank you for your consideration. O3-1-9

Dan Beal
WPRA President

Sarah Gavit
WPRA SR-710 Lead

Distribution:

California State Transportation Authority
Garrett Damrath
Laurie Berman, Director
John Bulinski, District 7 Director

Los Angeles Metropolitan Transportation Authority
CEO, Phillip Washington
Board of Directors

Governor, State of California
Gavin Newsom

U.S. Representative, District 28
Adam Schiff

California Senator, District 25
Anthony Portantino

California Assemblymember, District 41
Chris Holden

LA County Supervisor
Kathryn Barger

Pasadena Mayor and City Council
Terry Tornek
Tyron Hampton
Margaret McAustin
John Kennedy
Gene Matsuda
Victor Gordo
Steve Madison

Pasadena City Manager & Staff:
Steve Mermell
Fred Dock
Julie Gutierrez
David Reyes
Pasadena Planning Commission
Pasadena Transportation Commission
Pasadena Design Review commission

Other
- National Trust for Historic Preservation
  - Betsy Merritt
  - Chris Morris
  - Jesse Lattig
- Pasadena Heritage
  - Sue Mossman
  - Adam Rajper
- South Pasadena Preservation Foundation
  - Mark Gallatin
- Los Angeles Conservancy
  - Adrian Fine
- No 710 Action Committee
  - Joanne Nuckels
  - Claire Bogaard
  - Bill Sherman
  - Jan SooHoo
- Beyond the 710 Coalition
  - The Honorable Ara Najarian
  - Marina Khubesrian
- Day 1
  - Wes Reutimann

WPRA
- WPRA Board Members
- Doug Carstens

Response to: West Pasadena Residents Association

O3-1-1

This commenter's support for the selection of the TSM/TDM Alternative is acknowledged.

O3-1-2

The commenter's position regarding the language used in the Final EIR/EIS to describe the Tunnel Alternative, response to concerns, and opposition of the Freeway Tunnel Alternative are acknowledged. As discussed in Section 2.4 of the Final EIS, the TSM/TDM Alternative has been identified as the Preferred Alternative following a comprehensive environmental review and consideration of public input. As shown in the Final EIR/EIS, the lead agency has properly analyzed the alternatives, reviewed and considered all public comments, and informed the public and the decision-maker of the results.[DHM2]

Consistent with the requirements of NEPA, responses to all comments received on the Draft EIS and the Focused Supplemental Draft EIS were addressed in the Final EIS and were made available to the public and decision-makers prior to any action on the proposed project.

O3-1-3

In the Final EIS Volume III A Master Response 1.2.9.1, the following comment response was provided:

The development of the Purpose and Need of the project was initiated during the scoping meetings in the first steps of the environmental process. Caltrans and Metro presented the participants with the basic project purpose, providing a set of objectives that the project was intended to meet, and the need of the transportation deficiency that the project was initiated to resolve. [DKC3]The Purpose and Need statement allowed Caltrans and Metro to consider more than one solution, the consequences of the No Build Alternative, and alternate alignments, design variations, and other modes of travel.

O3-1-4

The study area for the SR 710 North Project is approximately 100 square miles and generally bounded by I-210 on the north, I-605 on the east, I-10 on the south, and I-5 and SR 2 on the west. The study area also includes portions of East Los Angeles and Monterey Park south of I-10.

The Final EIS Volume III A Response to comment O-15-162 addresses the commenter's concern regarding an inappropriate study area boundary:

The Final EIR/EIS is for a transportation project, and it focuses on the major facilities in the transportation network. The boundaries of the network are defined for convenience of the reader, and not to predetermine a result. The freeways are labeled because they are the best-known elements of the transportation system, and they are the best way to orient the reader to the maps (e.g., Figure 1-1 of the Final EIR/EIS). Note also that the transportation

analysis used a larger study area. Section 2.6 of the TTR describes the process for identifying the freeway study area: "The freeway study area was determined by including freeways inside the EIR/EIS study area and by comparing traffic volume changes between the 2035 No Build Alternative and the 2035 dual-bore variation of the Freeway Tunnel Alternative model runs for freeways outside the study area. The dual-bore tunnel alternative was selected as the basis for comparison since it is expected to result in the most positive and negative changes in traffic volumes on the freeways in the region. The trigger for including a freeway was the percent change (greater than +/- 5 percent) in average daily traffic (ADT), AM peak period, and PM peak period volumes." The criterion was determined in consultation with technical staff from Metro and Caltrans. Over 600 freeway segments were studied. In other words, the study area determination was based on analytical means. Finally, note that the transportation analysis study area map (Figure 2-1 in the TTR) does not use freeways as the boundaries.

Furthermore, in Volume III A of the Final EIS Response to Comment 1.2.9.2 addresses the study area as follows:

"Another important element of the Purpose and Need was the determination of the affected area. While most of greater Los Angeles has transportation deficiencies across multiple modes, some focus was needed to be able to develop workable solutions that addressed well-defined needs. While the scale of the SR 710 North Project study is relatively large, it was necessary to bound the problem to allow for that focus. Major freeways are a logical breakpoint, so the study area was limited to the area roughly bounded by the I-210, I-605, I-10, I-5, and SR 2 freeways. Using a larger area would take the study into the realm of a regional analysis, which would require examining multiple major freeway corridors and regional transit system connectivity."

O3-1-5

The process used to evaluate the alternatives and identify the preferred alternative for the project is described in detail in Section 2.4, Identification of the Preferred Alternative, in the Final EIR/EIS.

In the Final EIS Volume III A, Response to Comments Section 1.2.9.1, the following comment response is provided:

"As part of the AA, an unscreened set of alternatives was identified through a process that included a review of prior studies and public input received during the scoping process. The Purpose and Need statement allowed Caltrans and Metro to consider more than one solution, the consequences of the No Build Alternative, and alternate alignments, design variations, and other modes of travel.

As the project's Purpose and Need was refined, some of the alternatives were screened out, including possible hybrid or combination alternatives, thereby permitting a more focused analysis of those alternatives which truly address the problem defined by the Purpose and Need. Alternatives were dropped from consideration with the concurrence of those cooperating agencies with legal jurisdiction."

O3-1-6

There are existing vehicle restrictions in place across California including freeway segments where trucks are prohibited. For example, commercial vehicles with 3 or more axles or a gross vehicle weight of 9,000 or more pounds are prohibited on SR 2 between I-210 and County Route N4 (California Department of Transportation Special Route Restrictions, http://www.dot.ca.gov/hq/trafficops/trucks/routes/restrictlist.htm, accessed March 2, 2016.). This comment also states that the single bore tunnel alternatives are not reasonable because it exceeds the margins of safety and passes unacceptable fire and accidents risks onto tunnel users. However, this comment does not provide information supporting these assertions and, therefore, it is not possible to address these concerns. The Selected Alternative TSM/TDM Alternative does not propose tunnels.

O3-1-7

The Selected Alternative TSM/TDM Alternative does not propose tunnels. With respect to the tunnel environmental analyses, the commenter does not provide specific information to support the statement that there are significant deficiencies in the study areas listed by the commenter. Because this comment does not provide information supporting these assertions, therefore, it is not possible to address these concerns.

O3-1-8

The commenter's concern regarding certification of the Freeway Tunnel Alternative analyses are acknowledged. Only the TSM/TDM Alternative has been certified as the Preferred Alternative and Environmentally Superior Alternative under CEQA. In the event that Caltrans, as the Lead Agency under NEPA, proposes to pursue an alternative other than the Selected Alternative (TSM/TDM Alternative) described in this ROD, Caltrans acknowledges that additional environmental review will be necessary pursuant to NEPA.

O3-1-9

This letter and the responses here are contained in the Record of Decision (ROD) for the SR-710 North Project Responses to Comments (RTC). The RTC is part of the ROD, therefore, the ROD including the comment letter and the RTC, are included in the administrative record for the project.

Comment from: National Trust for Historic Preservation

O3-2

National Trust *for* Historic Preservation
Save the past. Enrich the future.

January 7, 2019

John C. Bulinski, District Director
Garrett Damrath, Chief Environmental Planner
California Department of Transportation, District 7
100 S. Main Street, MS-16A
Los Angeles, CA 90012

Re: Comments on SR-710 North Project
Final Environmental Impact Report (EIR) / Environmental Impact Statement (EIS)

Dear Mr. Damrath and Mr. Bulinski,

On behalf of the National Trust for Historic Preservation,[1] we submit the following comments on the Final Environmental Impact Report (EIR) / Environmental Impact Statement (EIS) for the SR-710 North Project.

We reiterate our support for the decision by the California Department of Transportation (Caltrans) to select the TSM/TDM (Transportation System Management/Transportation Demand Management) Alternative for implementation. We strongly endorse this decision, not only because the TSM/TDM Alternative would be the least harmful to historic and cultural

O3-2-1

[1] The National Trust for Historic Preservation is a private nonprofit organization chartered by Congress in 1949 to facilitate public participation in the preservation of our nation's heritage, and to further the historic preservation policy of the United States. 54 U.S.C. §§ 320101, 312102. With more than one million members and supporters across the nation, the National Trust works to protect significant historic sites and to advocate historic preservation as a fundamental value in programs and policies at all levels of government. In addition, the National Trust has been designated by Congress as a member of the Advisory Council on Historic Preservation, which is responsible for working with federal agencies to implement compliance with Section 106 of the National Historic Preservation Act. *Id.* §§ 304101(8), 304108(a). The National Trust has actively engaged for decades in efforts to find meaningful transportation solutions for the 710 corridor, while protecting historic properties. Beginning in 1989, the Trust named South Pasadena, Pasadena, and El Sereno to its annual list of *America's 11 Most Endangered Historic Places*, for five consecutive years, shining a national spotlight on the devastating threat to historic communities within the corridor from the proposed 710 freeway extension. In 1999, the National Trust was a co-plaintiff in the litigation that resulted in an injunction against the surface freeway proposed at the time, which would have demolished hundreds of historic homes and cultural sites. *City of South Pasadena, et al. v. Slater,* 56 F. Supp. 2d 1106 (C.D. Cal. 1999). More recently, in 2015, the National Trust named the "Historic Communities of the 710" as a National Treasure, in light of the renewed threats to historic resources, neighborhoods, and communities from the Tunnel Alternative. And we have been actively engaged from the outset in the consultation and review process for this project under federal and state law, through our Los Angeles field office.

The Watergate Office Building 2600 Virginia Avenue NW Suite 1100 Washington, DC 20037
E law@savingplaces.org P 202.588.6035 F 202.588.6272 www.savingplaces.org

resources, but also because it would be the most feasible, efficient, and cost-effective alternative, in addition to being the locally preferred and environmentally superior alternative. It is also the only alternative with a dedicated source of funding for implementation (i.e., Metro's reallocation of all remaining Measure R funds to TSM/TDM).

The fact that the Cities of Alhambra, Pasadena, and South Pasadena have issued a joint letter (dated January 2, 2019), stating their "united support" for this decision by Caltrans, is an extraordinary testament confirming the corridor-wide benefits of the TSM/TDM Alternative as a win-win solution to the transportation needs throughout the corridor, and "the start of a new era for mobility in the region."

O3-2-1 Cont.

While we support (and celebrate!) this outcome, we do share the concerns that have been articulated by a number of the other commenting parties that Caltrans needs to take a few additional steps in order to ensure that the Tunnel Alternative would not be brought back to life at some future date, based on this Final EIR/EIS document.

In contrast to federal law, which requires a presumptive Reevaluation after three years (*see* 23 C.F.R. § 771.129), a Final EIR document under California law could serve as the basis for Caltrans to come back many years in the future and to adopt and construct an alternative that was previously evaluated but not selected. (*See Mani Bros. Real Estate Group v. City of Los Angeles* (2007) 153 Cal. App. 4th 1385, 64 Cal. Rptr. 3d 79.) The unusual longevity of these documents under California law is combined with an extraordinarily *short* statute of limitations for any legal challenge to a final document under the California Environmental Quality Act (CEQA); the window of time for raising *any* challenge to a Final EIR is limited to 30 days from the Notice of Determination (NOD). (Cal. Pub. Res. Code § 21167(b)-(c).)

O3-2-2

Accordingly, we are concerned that, if Caltrans were to certify any sections of the Final EIR related to the Tunnel Alternative, there could be future attempts to rely on the FEIR to approve the Tunnel Alternative (or some modified configuration of it) under California law. Unless the future selection of the Tunnel Alternative is permanently precluded, or the ability to bring a future legal challenge to the Tunnel Alternative is preserved under California law, Caltrans would be creating the risk of litigation challenging the EIR before the 30-day statute of limitations expires. Obviously, that scenario would be contrary to the interests of all parties, because it could lead to invalidation of the EIR, and a stay halting implementation of *any* alternative, including the adopted TSM/TDM Alternative. And both sides would be burdened with the financial and other costs of the litigation.

In order to prevent this wasteful scenario, we urge Caltrans to include language in the final environmental decision documents -- the Statement of Findings and Overriding Considerations, the Notice of Determination, and the Record of Decision -- to confirm unequivocally the follow commitments and conclusions:

O3-2-3

- The Tunnel Alternative analysis will not be "certified," for purposes of California Law, and the current Final EIR cannot be used in the future to approve a Tunnel Alternative;
- If Caltrans were to consider construction of a tunnel at a later date, a full new EIR/EIS would have to be prepared, with maximum public participation, review and comment

opportunities (for example, a Supplemental EIR/EIS would *not* be sufficient); O3-2-3 Cont.

- Caltrans will support legislation to delete the SR-710 North segment from the 210 Freeway and the 10 Freeway in the California Streets and Highways Code; O3-2-4
- Caltrans will return the "stub" at the northern end of the former freeway corridor to the City of Pasadena, and the "stub" at the southern end south of Valley Blvd. to the City of Alhambra, and the vacant land north of Valley Blvd. to the City of Los Angeles, respectively; and O3-2-5
- Caltrans will declare as "surplus" all properties in its possession that were acquired for the purpose of constructing or implementing a surface freeway and/or tunnel within the SR-710 North corridor. Caltrans will also relinquish subsurface rights for these properties. O3-2-6

We support the comments from other parties looking to Caltrans for leadership in finally removing the threat of a freeway tunnel from the communities in the SR-710 North Project area once and for all. O3-2-7

Thank you for considering the comments of the National Trust for Historic Preservation.

Sincerely,

Elizabeth Merritt

Elizabeth S. Merritt
Deputy General Counsel

cc:
Julianne Polanco, California State Historic Preservation Officer
Natalie Lindquist, California Office of Historic Preservation
Beyond the 710 Coalition
(Glendale Mayor Ara Najarian, South Pasadena Mayor Marina Khubesrian)
City of South Pasadena (Margaret Lin)
Natural Resources Defense Council (Damon Nagami)
Pasadena Heritage (Sue Mossman, Adam Rajper)
Los Angeles Conservancy (Adrian Fine and Linda Dishman)
No 710 Action Committee (Claire Bogaard, Bill Sherman, Jan SooHoo)
West Pasadena Residents Association (Sarah Gavit)
South Pasadena Preservation Foundation (Steven Lawrence, Mark Gallatin, Joanne Nuckols)
Westridge School (Kendis Heffley)
Douglas P. Carstens, Esq.

Response to: National Trust for Historic Preservation

O3-2-1

This commenter's endorsement of the selected TSM/TDM Alternative is acknowledged.

O3-2-2

The commenter's concerns about the Freeway Tunnel Alternative are acknowledged. All of the alternatives are viable and have been evaluated equally throughout the environmental process. As discussed in Section 2.4 of the Final EIR/EIS, the TSM/TDM Alternative has been identified as the Preferred Alternative following a comprehensive environmental review and consideration of public input.

The commenter's concern regarding certification of the Freeway Tunnel Alternative analyses are acknowledged. Only the TSM/TDM Alternative has been certified as the Preferred Alternative and Environmentally Superior Alternative under CEQA. In the event that Caltrans, as the Lead Agency under NEPA, proposes to pursue an alternative other than the Selected Alternative (TSM/TDM Alternative) described in this ROD, Caltrans acknowledges that additional environmental review will be necessary pursuant to NEPA.

O3-2-3

The commenter's concern regarding certification of the Freeway Tunnel Alternative analyses are acknowledged. Only the TSM/TDM Alternative has been certified as the Preferred Alternative and Environmentally Superior Alternative under CEQA. In the event that Caltrans, as the Lead Agency under NEPA, proposes to pursue an alternative other than the Selected Alternative (TSM/TDM Alternative) described in this ROD, Caltrans acknowledges that additional environmental review will be necessary pursuant to NEPA.

O3-2-4

The commenter's request for further legislation is acknowledged and included in the project's administrative record.

O3-2-5

The commenter's position regarding returning the stubs at the northern and southern ends of the former freeway is acknowledged; however, relinquishing the stubs is beyond the project purpose and need, scope of work or proposed alternatives for the SR 710 North Project.

O3-2-6

Caltrans has conducted a separate environmental review to evaluate the potential environmental impacts associated with the sale of the 460 Caltrans-owned properties in the cities of Pasadena and South Pasadena, and in the El Sereno neighborhood in the City of Los Angeles. Caltrans originally acquired those properties as potential right-of-way for the proposed surface route for SR 710 between Valley Boulevard in El Sereno and Del Mar Boulevard in Pasadena.

The SR 710 Surplus Property Sales Final EIR was approved on July 28, 2016 and is available at: http://www.dot.ca.gov/d7/env-docs/docs/SR-710-Surplus-Property-Sale-FEIR-2016.pdf and the NOD was filed on October 24, 2016. The sale of properties was planned in three phases. SR 710 Surplus Property sale updates can be found at http://www.dot.ca.gov/d7/business/710sales/

O3-2-7

The commenter's position is acknowledged. Comments from other parties are addressed separately.

Comment from: South Pasadena Preservation Foundation

O3-3

913 Meridian Avenue South Pasadena, CA 91030

Date: January 7, 2019

To:
Via Email and Letter
Garrett Damrath, Chief Environmental Planner
Division of Environmental Planning
Department of Transportation, District 7
100 S. Main St, MS-16A
Los Angeles, CA 90012

Reference 1: SR-710 Project Final Environmental Impact Report / Environmental Impact Statement and Individual Section 4(f) Evaluation, State Clearinghouse Number: (SCH#) 1982092310, File number: 07-LA-710 (SR 710), Caltrans Project No.: EFIS 0700000191 (EA: 187900), Title: State Route 710 North Study.

References 2:
a) 'SPPF Comments to the SR-710 North Study Focused Re-circulated Draft Environmental Impact Report (FRDEIR)/ Supplemental Draft Environmental Impact Statement (SDEIS)', Response to Comments from Public Hearing #1, June 13, 2018.
b) 'State Route 710 North Study Environmental Impact Report/Environmental Impact Statement', August 22, 2018. From the Los Angeles Conservancy, South Pasadena Preservation Foundation, Natural Resources Defense Council, West Pasadena Residents' Association, No 710 Action Committee, and Westridge School.

Subject: SPPF Response to the SR-710 Final Environmental Impact Report (EIR)/Final Environmental Impact Statement (EIS)

Dear Mr. Damrath,

The South Pasadena Preservation Foundation (SPPF) wishes to thank you for the opportunity to review and comment on the State Route 710 (SR-710) North Study Final EIR/EIS. SPPF began as the Cultural Heritage Committee of the community improvement organization South Pasadena Beautiful in 1970. In 1972, it became the Jean Driskell Cultural Heritage Foundation to raise funds for the preservation and restoration of South Pasadena landmarks. It was renamed the South Pasadena Preservation Foundation in 1984. In the years since then, few cities in the nation are better recognized for the determination to preserve their neighborhoods and small-town atmosphere than South Pasadena and SPPF has played a significant role in that effort. Today we count over 200 friends of historic preservation as our members and are governed by an all-volunteer 15-member Board of Directors drawn from the community. SPPF is a 501(c)(3) non-profit organization. The mission of the South Pasadena Preservation Foundation is to foster awareness and appreciation of

O3-3-1

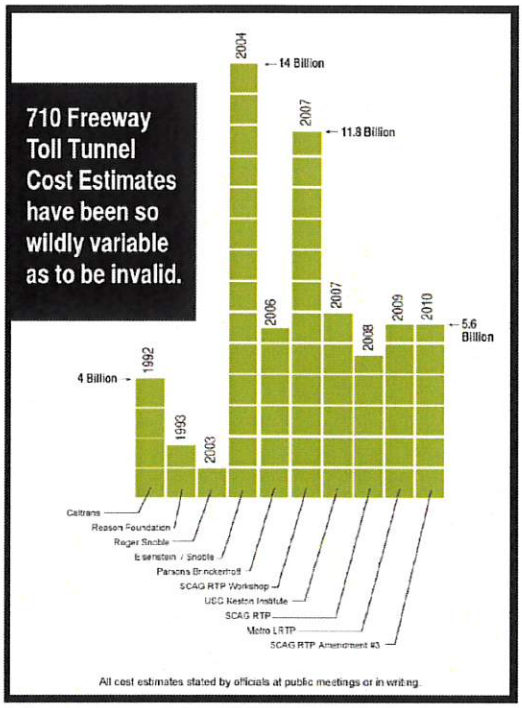
the historic heritage of South Pasadena and to advocate and facilitate preservation of significant examples of that heritage. Because the SR-710 Study Project will have a very large and permanent impact on our community, our organization has reviewed the SR-710 Final EIR/EIS released in November, 2018.

We wholeheartedly endorse the selection of the Transportation System Management (TSM)/Transportation Demand Management (TDM) Alternative for implementation. This comprehensive, holistic and low-impact approach improves the efficiency of the transportation network throughout the SR-710 North Study Area, is cost-effective, and meets project needs and objectives, while respecting and preserving community character. Indeed, page ES-2 of the FEIR/EIS recognizes that this alternative will provide "direct benefits for traffic circulation" and includes "operational improvements and strategies that increase the efficiency and capacity of the existing transportation system". The benefits of the TSM/TDM Alternative are broadly distributed among all communities in the Study Area. Is it any wonder then that this alternative is welcomed by all cities along the SR-710 North corridor, as well as by local environmental, preservation and neighborhood organizations? The next few years will be filled with anticipation, action and tangible improvements as we come together to successfully implement the many individual transportation improvement projects which collectively comprise the TSM/TDM Alternative. O3-3-1 Cont.

Nevertheless, there remains a serious concern that the implementation of the TSM/TDM Alternative would not preclude the pursuit of other, ill-advised and disruptive alternatives, such as the Freeway Tunnel. The Final EIR/EIS states on pages I-63 and I-64 that "The improvements in the TSM/TDM Alternative would not restrict consideration of other reasonably foreseeable transportation improvements in the study area" and that construction of the Freeway Tunnel Alternative would be compatible with other transportation improvements in the study area. This, in spite of the fact that the Final EIR/EIS at page 3.1-14 states "The Freeway Tunnel Alternative is not consistent with the scope of the design concept for the project in the 2016 RTP/SCS and 2017 FTIP". While we support the TSM/TDM Alternative, we believe the Final EIR/EIS does not state clearly, definitively and unequivocally that the Freeway Tunnel Alternative is not feasible, both as that term is defined in state and in federal law. O3-3-2

Section 21061.1 of the State of California Public Resources Code defines "Feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." Furthermore, the *State CEQA Guidelines* (Section 15126.6(f)(1) of the California Code of Regulations) clarifies what constitutes factors that shape feasible alternatives: "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional access to the alternative site (or the site is already owned by the proponent)." The definition of feasible as noted in the *State CEQA Guidelines* (Section 15364 of the CCR) also considers legal factors: "Feasible means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."[1] O3-3-3

[1] We note that the definition of "feasible" under federal law is much broader; an alternative is only "infeasible" "if it cannot be built as a matter of sound engineering judgment." 23 C.F.R. § 774.17.



As we will demonstrate in the following paragraphs, the Freeway Tunnel Alternative is economically, environmentally, socially, and technologically infeasible. We note here the wildly varying cost estimates for the Freeway Tunnel Alternative (see graph at left), the state law that requires Caltrans to obtain permission from cities on the SR-710 North corridor before moving forward with a tunnel, the local resolutions adopted by corridor cities stating their unwillingness to grant such permission, and the insufficient analysis of land use planning/community character and environmental justice impacts on disadvantaged communities and communities of color along the proposed Freeway Tunnel alignment. We find particularly problematic language in the Final EIR/EIS Executive Summary, page ES-1. Specifically, O3-3-4 O3-3-5 O3-3-6

"After comparing and weighing the benefits and impacts of the study alternatives summarized in Table ES-1 of the Executive Summary of the Final EIR/EIS; reviewing the comments received during the public circulation of the Draft EIR/EIS and Focused RDEIR/RSEIS; and completing technical studies and performance evaluations for each of the alternatives, the Freeway Tunnel Alternative with Single Bore Tunnel design variation was determined to provide operational benefits. However, with the lack of funding and the lack of community consensus, the Single Bore Tunnel Alternative, estimated at $3.15 billion, cannot be accomplished successfully within a reasonable period of time. " O3-3-7

While this paragraph clearly states that the Tunnel Alternative cannot be accomplished successfully within a reasonable period of time, as per the State's definition of a feasible project, it nevertheless touts this alternative (single bore variation) for its "operational benefits". The phrasing of this paragraph implies that, after taking into account economic, environmental, social, and technological factors, this alternative could potentially become "feasible" in the future, and could be built within a "reasonable period of time," in the event that sufficient funding materialize and Caltrans' perception of community consensus changed to one of support for the Freeway Tunnel Alternative. As there is no statute of limitations or "shelf life" for an EIR under California law, if the tunnel analyses are certified as part of the Final EIR/EIS, the possibility exists that they could be found still valid and therefore used to support a decision to implement the Tunnel Alternative years or even decades into the future.

Furthermore, Section 4(f) of the Department of Transportation Act of 1966 requires that before approving a project that uses Section 4(f) property, the Federal Highway Administration (FHWA) must determine that there is no feasible and prudent alternative that avoids the Section 4(f) properties and that the project includes all possible planning to minimize harm to the Section 4(f) properties. When selecting an alternative the most important point to remember is if an avoidance alternative is determined to be feasible and prudent, Section 4(f) mandates that it must be selected. If one assumes sufficient funding and time to build the Freeway Tunnel Alternative, it becomes difficult to argue that this alternative is not feasible because it cannot be built as a matter of sound engineering judgment. In this case, however, an avoidance alternative that is both feasible and prudent is available, namely the TSM/TDM Alternative. O3-3-8

As other interested parties have noted, the SR-710 Study environmental process has been improperly executed to favor the Tunnel Alternative, as evidenced by an unstable and distorted project definition and need statement, improper SR-710 and I-710 project segmentation, inappropriate Study Area boundaries, and biased bundling of options. Several of the tunnel alternative options are also not credible. This includes the 'no truck' option, which is not enforceable either in the near term or future, and the single-bore tunnel option, which is not reasonable because it exceeds reasonable margins of safety and passes unacceptable fire and accident risks onto tunnel users. O3-3-9 O3-3-10 O3-3-11 O3-3-12

We are also concerned that the environmental analyses of the Tunnel Alternative are deeply flawed. Specifically, the following assessments are deficient in that they lack definition or are ill-defined, are incomplete, or are simply deferred: Land Use, Growth, Community Impacts, Utilities/Emergency Services, Traffic and Transportation/Pedestrian and Bicycle Facilities, Visual/Aesthetics, Cultural Resources, Hydrology and Floodplain, Water Quality and Storm Water Runoff, Geology/Soils/Seismic/Topography, Air Quality, Noise and Vibration, Energy, Natural Communities, Wetlands and Other Waters, Plan Species, Animal Species, Threatened and Endangered Species, Invasive Species, Construction Impacts, and Cumulative Impacts. O3-3-13

In addition to the aforementioned deficiencies in the environmental review process and technical analyses of the Freeway Tunnel Alternative, the Final EIR/EIS fails to adequately respond to comments entered into the administrative record by SPPF (and other interested parties) at a public hearing held in Pasadena on June 13, 2018 and in a letter dated August 22, 2018. The responses to these concerns can be characterized as insufficient at best and dismissive at worst. Specifically, our representatives pointed out that the Freeway Tunnel Alternative was shown to have adverse effects which cannot be mitigated on four historic properties in the Study Area (see Finding of Adverse Effect for the State Route 710 North Project Volume 1, December 2017, p. 5.6-121) and that CEQA prohibits the approval of a project with adverse effects where a less-damaging alternative is available. Caltrans' response (PT2-3-1 on page 20-27 of the Final EIR/EIS) acknowledges the potential for adverse effects to historic properties under the Freeway Tunnel Alternative, but the implication is that this should not be cause for concern because the TSM/TDM Alternative has been identified as the Preferred Alternative. Such a response is wholly inadequate as long as the continued threat of a tunnel alternative in any form being resurrected at a later date continues to loom over the communities affected by the SR-710 North corridor. O3-3-14

Concerns raised by SPPF regarding impacts to historic resources related to vibration, ground-borne noise, tunnel fires, fault crossings, blasting methods, soil conditions, sinkholes and settlement effects of the Freeway Tunnel Alternative and to lack of funding for this alternative, are similarly acknowledged but dismissed (see PT2-5-2 on page 20-34 and PR2-11-1, PT2-11-2 and PT2-11-3 on page 20-55 of the Final EIR/EIS). Our comments related to reservation of subsurface rights for tunneling below properties and to curvatures in the Freeway Tunnel alignment, which would increase costs, present placement problems, increase the potential for ground failures and result in more transferred traffic vibrations if the ground is firm, are ignored altogether (see page 20-32 of the Final EIR/EIS). O3-3-15

To prevent the possibility of future litigation, we strongly urge that Caltrans include language in the final environmental process documents to be filed upon certification and approval of the FEIR/EIS - the Statement of Findings and Overriding Considerations, the Notice of Determination, and the Record of Decision - to state unequivocally that:

- The Tunnel Alternative analyses are not certified and the current FEIR/EIS will not be used to approve a Tunnel Alternative in the future;
- If Caltrans did consider implementation of a tunnel at a later date, a new environmental analysis would have to be performed with full public participation, review and comment (e.g. a Supplemental EIR is insufficient);
- Caltrans will delete the SR-710 segment from the 210 to the 10 freeways from the California Streets and Highways Code;
- Caltrans will return the northern and southern freeway 'stubs' to the cities of Pasadena and Alhambra/Los Angeles respectively; and
- Caltrans will declare as surplus all properties in their possession that were acquired for the purpose of implementing a SR-710 surface and/or tunnel freeway. Caltrans will also relinquish subsurface rights for said properties.

O3-3-16

We look to Caltrans for leadership in finally removing the threat of a freeway tunnel from the communities in the SR-710 North Project area once and for all. We believe this can be accomplished without the need for costly and time-consuming litigation by inclusion of the five points listed above in the concluding environmental documents for the project. Once again, we applaud your choice of the TSM/TDM Alternative as the Preferred Alternative. Until such time, however, as the Freeway Tunnel Alternative in all its variations is technically, environmentally, politically, economically and legally dead and buried, we cannot rest assured nor shall we. O3-3-17

Thank you for your consideration. We respectfully request that this letter be included in the administrative record of this project. O3-3-18

Steven Lawrence by mail

Steven Lawrence
SPPF President

Distribution:

California State Transportation Authority
- Garrett Damrath
- Laurie Berman, Director
- John Bulinski, District 7 Director

Los Angeles Metropolitan Transportation Authority
- Phillip Washington, CEO
- Board of Directors

Governor, State of California
- Gavin Newsom

U.S. Representative, District 27
- Judy Chu

California Senator, District 25
- Anthony Portantino

California Assemblymember, District 41
- Chris Holden

LA County Supervisor
- Kathryn Barger

Other

National Trust for Historic Preservation
- Betsy Merritt
- Chris Morris
- Jesse Lattig

Pasadena Heritage
- Sue Mossman
- Adam Rajper

Los Angeles Conservancy
- Adrian Fine

No 710 Action Committee
- Claire Bogaard
- Bill Sherman
- Jan SooHoo

Beyond the 710 Coalition

The Honorable Ara Najarian
Mayor Marina Khubesrian

Day One
Wes Reutimann

WPRA
Sarah Gavit

Doug Carstens

Response to: South Pasadena Preservation Foundation

O3-3-1

This commenter's support and endorsement of the selected TSM/TDM Alternative is acknowledged.

O3-3-2

The commenter's position regarding the Freeway Tunnel Alternative and Final EIR/EIS is acknowledged. As discussed in Section 2.4 of the Final EIS, the TSM/TDM Alternative has been identified as the Preferred Alternative following a comprehensive environmental review and consideration of public input.

O3-3-3

The commenter's explanation of Section 21061.1 of the State of California Public Resources Code, State CEQA Guidelines (Section 15126.6(f)(1) of the California Code of Regulations (CCR), and the State CEQA Guidelines (Section 15364) of the CCR are noted and have been applied in the Final EIR/EIS.

O3-3-4

The cost estimates prepared for the Freeway Tunnel Alternative was estimated using unit quantities and schedule-based assessments. Quantities were calculated from the Freeway Tunnel plans included in the Draft Project Report (March 2015) that was posted on the Caltrans website, current unit prices were researched and used, and cost data from similar tunneling jobs was referenced. This is consistent with current cost estimating practice. The prior studies and planning documents cited in the graph used broader means to approximate costs and were not based on engineering plans.

O3-3-5

Tunnel construction would require local permits, and for Caltrans to comply with any state or local requirements to obtain necessary permits prior to construction. Table ES-2 in the Final EIS (Permits, Reviews, and Approvals Required for Project Construction) is a comprehensive listing of those requirements.

O3-3-6

The commenter does not provide any specific comments on the adequacy of the technical information or environmental analyses in the Final EIR/EIS. The analysis contained in the Final EIR/EIS was prepared to comply with CEQA/NEPA and FHWA environmental regulations.

O3-3-7

The commenter's position regarding the Freeway Tunnel Alternative and Final EIR/EIS is acknowledged. As discussed in Section 2.4 of the Final EIS, the TSM/TDM Alternative has been

identified as the Preferred Alternative following a comprehensive environmental review and consideration of public input. The commenter does not raise an environmental issue within the context of CEQA and/or NEPA, or comment on the adequacy of the technical information or environmental analyses in the Final EIS; therefore, no additional response is necessary.

As the CEQA lead agency and NEPA lead agency under FHWA assignment, Caltrans must follow the CEQA/NEPA regulations and guidance in the Caltrans Standard Environmental Reference (SER) and Code of Federal Regulations (CFR) when assessing subsequent changes to the Final EIR/EIS. According to the Caltrans SER, subsequent changes to a Final EIR/EIS or Record of Decision would trigger consultation under 23 CFR 771.129, a NEPA/CEQA revalidation, environmental review and appropriate environmental documentation.

O3-3-8

A Section 4(f) Individual Evaluation (Appendix B1 of the Final EIR/EIS) was prepared to evaluate the TSM/TDM Alternative (T-2 Other Road Improvements) use of and impacts to the Arroyo Seco Parkway Historic District under Section 4(f). Feasible and Prudent Avoidance Alternatives were considered. After evaluation of all potential avoidance alternatives, the No Build Alternative was the only alternative that would avoid the use of all Section 4(f) properties. The No Build Alternative would not be a feasible or prudent avoidance alternative because it does not meet the purpose and need of the project and it was not selected.

If there is no prudent and feasible avoidance alternative, an evaluation must be completed to determine which among the remaining Build Alternatives would cause the least overall environmental harm. A Least Overall Harm Analysis was completed and after balancing the seven factors in 23 CFR 774.3 (c)(1) concerning all the Build Alternatives under consideration and the TSM/TDM Alternative (Preferred Alternative) was identified as the Least Overall Harm Alternative. The Section 4(f) Evaluation concluded there was no feasible and prudent alternative to the use of land from the Arroyo Seco Parkway Historic District and the TSM/TDM Alternative included all possible planning to minimize harm to the Arroyo Seco Parkway Historic District resulting from such use and would cause the least overall harm in light of the statute's preservation purpose and all practicable measures to minimize environmental harm have been incorporated into the decision to select the TSM/TDM Alternative as the Preferred Alternative per 40 CFR 1505.2 (c).

O3-3-9

In the Final EIS Volume III A Master Response 1.2.9.1, the following comment response was provided:

"The development of the Purpose and Need of the project was initiated during the scoping meetings in the first steps of the environmental process. Caltrans and Metro presented the participants with the basic project purpose, providing a set of objectives that the project was intended to meet, and the need of the transportation deficiency that the project was initiated to address... The Purpose and Need statement allowed Caltrans and Metro to consider more than one solution, the consequences of the No Build Alternative, and alternate alignments, design variations, and other modes of travel."

O3-3-10

The study area for the SR 710 North Project is approximately 100 square miles and generally bounded by I-210 on the north, I-605 on the east, I-10 on the south, and I-5 and SR 2 on the west. The study area also includes portions of East Los Angeles and Monterey Park south of I-10.

The Final EIS Volume III A Response to Comment O-15-162 addresses the commenter's concern regarding an inappropriate study area boundary:

The Final EIR/EIS is for a transportation project, and it focuses on the major facilities in the transportation network. The boundaries of the network are defined for convenience of the reader, and not to predetermine a result. The freeways are labeled because they are the best-known elements of the transportation system, and they are the best way to orient the reader to the maps (e.g., Figure 1-1 of the Final EIR/EIS). Note also that the transportation analysis used a larger study area. Section 2.6 of the TTR describes the process for identifying the freeway study area: "The freeway study area was determined by including freeways inside the EIR/EIS study area and by comparing traffic volume changes between the 2035 No Build Alternative and the 2035 dual-bore variation of the Freeway Tunnel Alternative model runs for freeways outside the study area. The dual-bore tunnel alternative was selected as the basis for comparison since it is expected to result in the most positive and negative changes in traffic volumes on the freeways in the region. The trigger for including a freeway was the percent change (greater than +/- 5 percent) in average daily traffic (ADT), AM peak period, and PM peak period volumes." The criterion was determined in consultation with technical staff from Metro and Caltrans. Over 600 freeway segments were studied. In other words, the study area determination was based on analytical means. Finally, note that the transportation analysis study area map (Figure 2-1 in the TTR) does not use freeways as the boundaries.

Furthermore, in Volume III A of the Final EIS Response to Comment 1.2.9.2 addresses the study area as follows:

"Another important element of the Purpose and Need was the determination of the affected area. While most of greater Los Angeles has transportation deficiencies across multiple modes, some focus was needed to be able to develop workable solutions that addressed well-defined needs. While the scale of the SR 710 North Project study is relatively large, it was necessary to bound the problem to allow for that focus. Major freeways are a logical breakpoint, so the study area was limited to the area roughly bounded by the I-210, I-605, I-10, I-5, and SR 2 freeways. Using a larger area would take the study into the realm of a regional analysis, which would require examining multiple major freeway corridors and regional transit system connectivity".

O3-3-11

The process used to evaluate the alternatives and identify the preferred alternative for the project is described in detail in Section 2.4, Identification of the Preferred Alternative, in the Final EIR/EIS.

In the Final EIS Volume III A, Response to Comments Section 1.2.9.1, the following comment response is provided:

"As part of the AA, an unscreened set of alternatives was identified through a process that included a review of prior studies and public input received during the scoping process. The Purpose and Need statement allowed Caltrans and Metro to consider more than one solution, the consequences of the No Build Alternative, and alternate alignments, design variations, and other modes of travel.

As the project's Purpose and Need was refined, some of the alternatives were screened out, including possible hybrid or combination alternatives, thereby permitting a more focused analysis of those alternatives which truly address the problem defined by the Purpose and Need. Alternatives were dropped from consideration with the concurrence of those cooperating agencies with legal jurisdiction."

O3-3-12

There are existing vehicle restrictions in place across California including freeway segments where trucks are prohibited. For example, commercial vehicles with three or more axles or a gross vehicle weight of 9,000 or more pounds are prohibited on SR 2 between I-210 and County Route N4 (California Department of Transportation Special Route Restrictions, http://www.dot.ca.gov/hq/trafficops/trucks/routes/restrictlist.htm, accessed March 2, 2016.).

This comment also states that the single bore tunnel alternatives are not reasonable because it exceeds the margins of safety and passes unacceptable fire and accidents risks onto tunnel users. However, this comment does not provide information supporting these assertions and, therefore, it is not possible to address these concerns. The Selected Alternative TSM/TDM Alternative does not propose tunnels.

O3-3-13

The commenter's position regarding the environmental analyses of the Freeway Tunnel Alternative is acknowledged and has been included in the project's administrative record.

O3-3-14

Consistent with the requirements of CEQA and NEPA, all comments received on the Draft EIR/EIS and the Focused RDEIR/SDEIS were addressed in the Final EIR/EIS and were made available to the public and decision-makers prior to any action on the proposed project.

O3-3-15

The commenter's concerns regarding historic resources related to vibration, ground-borne noise, tunnel fires, fault crossings, blasting methods, soil conditions, sinkholes and settlement under the Freeway Tunnel Alternative and lack of funding are acknowledged. However, since the TSM/TDM Alternative has been identified and selected as the Preferred Alternative and since the TSM/TDM Alternative does not propose tunnels, the concerns raised related to the

potential effects of implementation of the Freeway Tunnel Alternative would no longer be pertinent.

The Final EIR/EIS does address the stated concerns about the Freeway Tunnel Alternative. In Volume III A and B, Response to Comments on the Draft EIR/EIS and Focused Draft EIR/Supplemental Draft EIS, the following comment responses are provided:

Vibration and ground-borne noise (Final EIR/EIS Volume III B Response to comment PT2-3-2):

The Finding of Adverse Effect (2017) determined that there was a finding of no effect to historic properties within the APE from direct or indirect ground borne vibration due to the operation of Freeway Tunnel under the Freeway Tunnel Alternative.

Fires and Faults (Final EIR/EIS Volume III A Response to comment O-2B-27):

The tunnel fire, life, safety system is designed to control potential damage due to fires and other anticipated incidents. Also, design elements to address earthquakes and fault crossing are incorporated in design. The costs associated with these elements are included in the overall cost of the tunnel and considered in the CBA.

Blasting (Final EIR/EIS Volume III A Response to comment LA-1-243):

Although blasting is not anticipated for the project, if blasting is required it will be performed under controlled conditions to minimize vibration and settlement impacts at the surface. Refer to response to comment SE-2-23.

Settlement (Final EIR/EIS Volume III A Master Response 1.2.1.4):

As discussed in Chapters 2.2.3.3 (LRT Alternative) 2.2.3.4 (Freeway Tunnel Alternative) of the Final EIR/EIS, the bored tunnels will be excavated with pressurized-face TBMs, which are routinely used to successfully control ground losses during tunnel excavation. These TBMs are able to control ground losses and for some projects have resulted in ground surface effects that are below the levels that could cause adverse effects to structures, and this has been proven on many tunnel projects worldwide with varying tunnel diameters, including many Los Angeles County Metropolitan Transportation Authority (Metro) projects. The settlement due to tunnel construction of the SR 99 tunnel was measured to be low and had no effect on properties at the surface. With respect to other excavations such as portals, underground stations, and cross passages, the contractor will be required to use a sufficiently stiff support system to control ground movements to acceptable levels.

The methods will be used to meet specific ground loss and settlement guidelines developed in the detailed design phase to control surface ground settlement. These standard methods are listed as measures in Chapter 3.10 of the EIR/EIS. With respect to the work performed to estimate excavation-induced ground movements, the Tunnel Evaluation Report (2014) includes a preliminary screening for potential settlement effects to help identify the zones of potential influence in support of the Draft EIR/EIS. This preliminary screening does not include a structure-specific analysis, but rather provides a zone of potential excavation

Funding (Final EIR/EIS Volume III B PW2-1-1):

The commenter's concern regarding construction funding is acknowledged; The commenter does not raise an environmental issue within the context of CEQA and/or NEPA, or comment on the adequacy of the technical information or environmental analyses in the Final EIR/EIS; therefore, no additional response is necessary.

Lastly, the TSM/TDM Alternative has been identified and selected as the Preferred Alternative. Since the TSM/TDM Alternative does not propose tunnels, the commenter's concerns regarding reservation of subsurface rights and curvatures for construction of tunnels will not require a response.

O3-3-16

The commenter's concern regarding certification of the Freeway Tunnel Alternative analyses are acknowledged. Only the TSM/TDM Alternative has been certified as the Preferred Alternative and Environmentally Superior Alternative under CEQA. In the event that Caltrans, as the Lead Agency under NEPA, proposes to pursue an alternative other than the Selected Alternative (TSM/TDM Alternative) described in this ROD, Caltrans acknowledges that additional environmental review will be necessary pursuant to NEPA. O3-3-18

This letter and the responses here are contained in the Record of Decision (ROD) for the SR-710 North Project Responses to Comments (RTC). The RTC is part of the ROD, therefore, the ROD including the comment letter and the RTC, are included in the administrative record for the project.

Comment from: Tom Savio

P3-1

---------- Original Message ----------
From: Tom Savio [railwaybaron@earthlink.net]
Sent: 11/29/2018 9:42 AM
To: sr710study@metro.net
Subject: Re: Final Environmental Impact Report/Environmental Impact Statement

$45,000,000, the price of a new elementary school, for nothing! Shame on CalTrans! Tom

P3-1-1

-----Original Message-----
From: Metro SR-710 North Project
Sent: Nov 28, 2018 4:28 PM
To: railwaybaron@earthlink.net
Subject: Final Environmental Impact Report/Environmental Impact Statement

Having trouble viewing this email? Click here

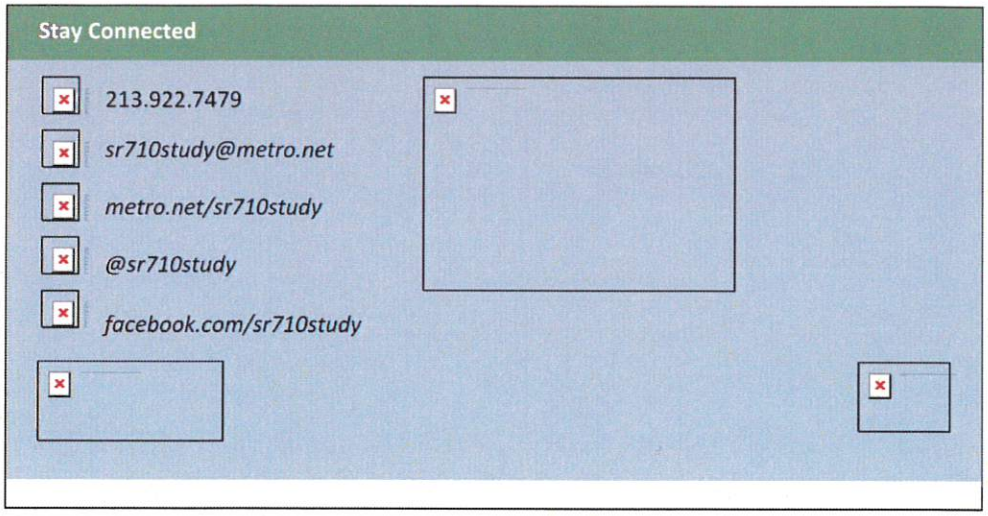
State Route 710 (SR-710) North Project Final Environmental Impact Report/ Environmental Impact Statement

En Español

The Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) for the State Route 710 (SR-710) North Project is now available.

Caltrans has selected the Transportation System Management/Transportation Demand Management (TSM/TDM) Alternative as the Preferred Alternative for the SR-710 North Project. The SR-710 North Final EIR/EIS may be accessed at http://www.dot.ca.gov/d7/env-docs/docs/SR710NorthProject/.

metro.net/sr710study



Metro, One Gateway Plaza, Los Angeles, CA 90012

SafeUnsubscribe™ railwaybaron@earthlink.net
Forward this email | Update Profile | About our service provider
Sent by sr710study@metro.net

ref:_00Df42UDS._500f4BZzS5:ref

Response to: Tom Savio

P3-1-1

This commenter's opinion regarding costs have been acknowledged and included in the project's administrative record.

Comment from: Dr. Edward Franks

P3-2

---------- Original Message ----------
From: Ed Franks [edfranks@fuller.edu]
Sent: 11/29/2018 11:55 AM
To: sr710study@metro.net
Subject: TSM/TDM Alternative

To Whom It May Concern:

Why should I be surprised that after all these years Caltrans would end up caving to a handful of cities to promote the TSM/TDM Alternative (a/k/a the non-alternative) as the preferred solution to the 710-Gap fiasco. This alternative will solve nothing, except that it will allow a handful of cities to prevent the rest of the Los Angeles area from realizing their preferred alternative. Many people seem to have undergone some rather remarkable changes of heart in recent months. Shame on Caltrans, Metro and the local activists who've misrepresented everything about the tunnel project in a desperate effort to prevail at any cost, no matter how unethical the means. This is a tragedy for the west San Gabriel Valley, and the overall viability of the LA freeway system. Pasadena & S Pas will now remain split in East & West halves indefinitely, ironically, even though the 710 opponents think they've won. Sadly, I fear the old adage applies to them, "Be Careful What You Wish For...You Just Might Get It!" P3-2-1

Regards,

Dr Edward Franks

Edward Carr Franks, PhD
Economist (Rtd), Pasadena, CA
edfranks@fuller.edu 626-799-6786

ref:_00Df42UDS._500f4Ba0M8:ref

Response to: Dr. Edward Franks

P3-2-1

The commenter's position regarding the Preferred Alternative and process is acknowledged and has been included in the project's administrative record.

Comment from: John Bednarski

P3-4

---------- Original Message ----------
From: John Bednarski [bednarskiboys@sbcglobal.net]
Sent: 12/1/2018 8:59 AM
To: sr710study@metro.net
Subject: Re: Final Environmental Impact Report/Environmental Impact Statement

Congratulations on a massive failure, and waste of everyone's time and energy. More bike lanes? P3-4-1

John,

Sent from my iPhone

On Nov 28, 2018, at 4:28 PM, Metro SR-710 North Project <sr710study@metro.net> wrote:

Having trouble viewing this email? Click here

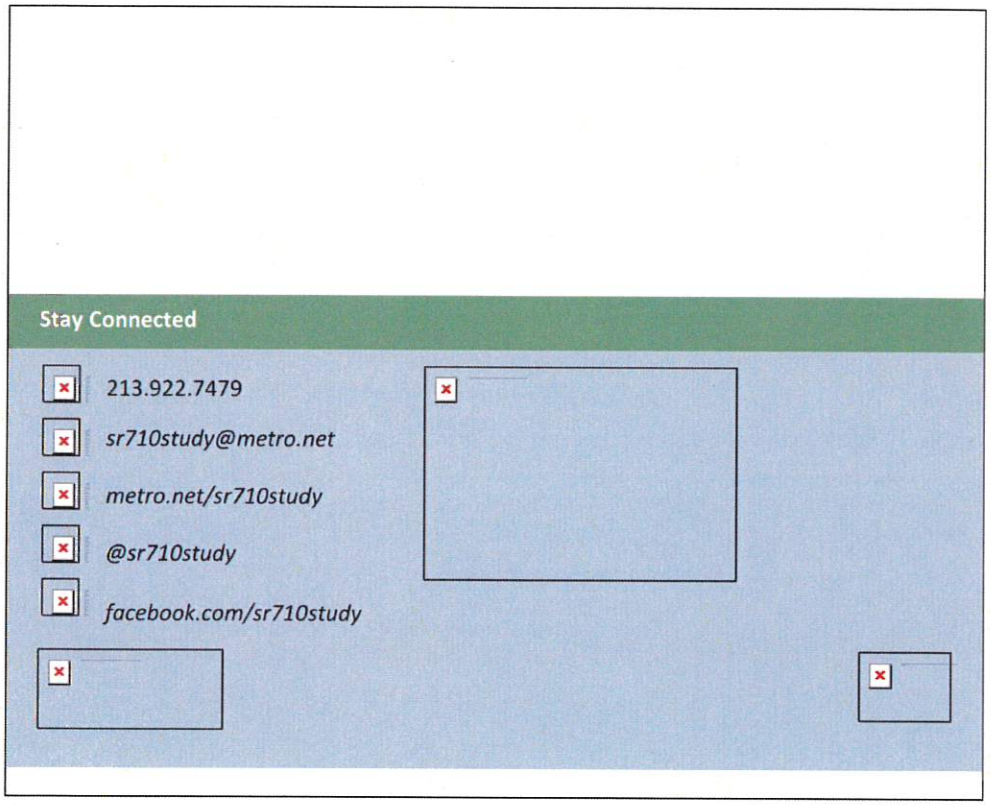
State Route 710 (SR-710) North Project Final Environmental Impact Report/ Environmental Impact Statement

En Español

The Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) for the State Route 710 (SR-710) North Project is now available.

Caltrans has selected the Transportation System Management/Transportation Demand Management (TSM/TDM) Alternative as the Preferred Alternative for the SR-710 North Project. The SR-710 North Final EIR/EIS may be accessed at http://www.dot.ca.gov/d7/env-docs/docs/SR710NorthProject/.

metro.net/sr710study



Metro, One Gateway Plaza, Los Angeles, CA 90012

SafeUnsubscribe™ bednarskiboys@sbcglobal.net
Forward this email | Update Profile | About our service provider
Sent by sr710study@metro.net

ref:_00Df42UDS._500f4Ba6tS:ref

Response to: John Bednarski

P3-3-1

The commenter's position regarding the Preferred Alternative and process is acknowledged and has been included in the project's administrative record.