



Supplemental Project Information

This document is intended to provide additional information to the formal Notice of Preparation (NOP) of an Environmental Impact Report being initiated by the California Department of Transportation (Caltrans) in accordance with the California Environmental Quality Act (CEQA). Caltrans is the lead agency under CEQA and is preparing an EIR in accordance with CEQA and an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) for the Proposed Project. The environmental document will be prepared as a joint document pursuant to CEQA and NEPA. Caltrans is proposing a project to improve the Interstate (I) 5 Freeway.

What Is the Project?

The Project proposes improvements and modifications to the existing High Occupancy Vehicle (HOV) lanes along the section of I-5 between Red Hill Avenue in Orange County to 0.5 mile north of the Orange/Los Angeles (OC/LA) County line. Within the project limits, the I-5 currently has at least one HOV lane, a type of managed lanes, in each direction.

Why Do We Need It?

The project intends to address certain operational and capacity issues for the HOV lanes within this section of the I-5 corridor. The existing HOV lanes experience degradation during peak periods because the demand exceeds existing capacity. These issues are described in more detail below:

HOV Degradation

According to the Federal Highway Administration (FHWA), an HOV lane is considered degraded when the average traffic speed during the morning or evening weekday peak commute hour is less than 45 miles per hour for more than 10 percent of the time over a consecutive 180-day period. The 2017 California HOV Lane Degradation Determination Report was developed to report the performance of the HOV lane network and listed this section of HOV facility as degraded with portions of the project listed as extremely degraded. Average speeds on the northbound HOV lanes during the p.m. peak hours is 27 miles per

hour. On the southbound HOV lane, average speeds are 30 miles per hour in the a.m. peak hour and 41 miles per hour in the p.m. peak hour. In 2021 a second HOV lane was opened in each direction between State Route (SR) 55 and SR 57. This section of the freeway will be included in the evaluation.

Demand Exceeds Capacity

The northbound and southbound HOV lanes experience queuing during peak hours. A vehicle is considered queued when it approaches a stopped vehicle and is itself about to stop. Queuing is the result of any obstruction of traffic flow and is an indication of where demand exceeds existing capacity.

Within the project limits, the average daily traffic for the northbound HOV lanes ranges from 12,700 to 19,300 and 7,500 to 21,300 on the southbound HOV lanes. Average daily traffic along this corridor is expected to increase. By 2035, the HOV lane peak hour volumes are projected to reach as high as 1,960-2,350. Increased traffic volumes would exacerbate the lack of capacity to meet demand along the corridor.

Operational Deficiencies

Level of service (LOS) is a measure of traffic operational performance used to describe user experience in terms of speed, freedom to maneuver, traffic interruption, and comfort. Letter grades "A" through "F" are assigned to different traffic conditions with "A" representing free-flow traffic and "F" representing stop-and-go waves of forced flow traffic. Currently, 37 percent of the northbound HOV lanes within the corridor operate at LOS E or F during the p.m. peak period. On the southbound HOV lanes, 29 percent of the corridor operates at LOS E or F during the a.m. peak period, and 16 percent operates at LOS E or F during the p.m. peak period.

What Are Managed Lanes?

The FHWA defines managed lanes as highway facilities or a set of lanes in which operational strategies are implemented and managed (in real time) in response to changing conditions. Managed lanes are distinguished from other traditional forms of lane management strategies in that they are proactively implemented, managed, and may involve using more than one operational strategy.

The term "managed lanes" refers to a variety of special-use highway lanes including:

- High occupancy vehicle lanes: lanes restricted to vehicles with a driver and one or more passengers to encourage ridesharing.
- High occupancy toll (HOT) lanes: lanes with price, occupancy and access restrictions
- Express lanes (ELs): dedicated managed lanes within highway rights-of-way that motorists may use by paying a variably priced toll
- Truck-only toll (TOT) lanes: tolled highway lanes available only to trucks

At its broadest definition, managed lanes could refer to any dedicated and restricted lane that is not a general-purpose lane.

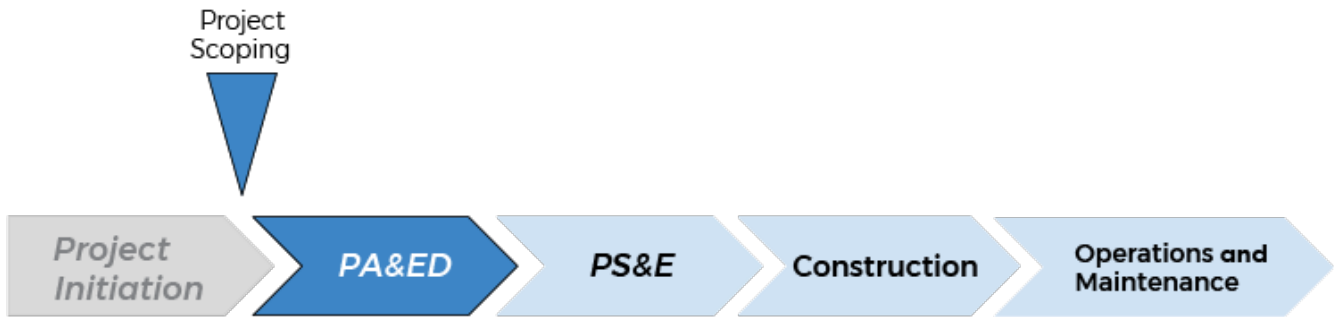
Priced Managed Lanes (PMLs) are a type of managed lanes that allow vehicles not meeting the minimum occupancy requirements to gain access if they choose to pay the applicable toll. PMLs combine two of the most effective highway management tools:

- **Congestion Pricing:** the use of pricing to moderate demand during peak periods
- **Lane Management:** restricting access to designated highway lanes based on occupancy or vehicle type

PMLs may include HOT lanes, ELs, TOT lanes, as well as Bus Toll Lanes (BTL). BTLs represent the pricing of a managed lane or lanes with up to 10 percent of the capacity dedicated to bus transit. BTL is not a HOT lane and only transit buses would be allowed to use the lane(s) without paying a toll.

Where Are We Today?

As part of the formal environmental scoping process, Caltrans is issuing a Notice of Preparation (NOP) for a project-level Environmental Impact Report (EIR) for the I-5 Managed Lanes Project. The purpose of the NOP is to notify the responsible agencies, trustee agencies, the Office of Planning and Research, County clerk and involved federal agencies that an EIR is being prepared and to solicit guidance from those agencies on the scope and content regarding potential significant environmental issues, reasonable alternatives, and reasonable mitigation measures that should be discussed in the EIR. Issuing the NOP is part of Caltrans' Formal Environmental Scoping Stage and will precede preparation of the Draft EIR. The following Figure outlines the Caltrans project development process.



Project Initiation Phase (completed)

Identification of Project Cost, Scope and Schedule. Includes preparation of a Project Study Report (PSR) (A kind of Project Initiation Document), which entails preliminary engineering efforts, an alternatives analysis, cost estimates for environmental mitigation, preliminary schedule, and environmental scope. The PSR also includes a summary of known environmental resources, identification of potential environmental issues and constraints, and the type of environmental document anticipated for NEPA and/or CEQA compliance. The Preliminary Environmental Analysis Report (PEAR) provides input to the PID. It provides the initial environmental evaluation of a project and all feasible alternatives before the project is programmed. No environmental studies have been completed, only preliminary scoping of environmental impacts have been undertaken

Project Scoping (here now)

The scoping phase is an important step in initiating the Project Approval and Environmental Document (PA&ED) phase of the project and is the process by which the public, resource agencies and stakeholders can formally provide their input on the depth and breadth of issues that should be addressed in the EIR/EA. Project scoping includes public noticing to inform the general public that a study is going to take place and that there is an opportunity to comment on the scope of the project and the alternatives being considered. It also includes early consultation with resource agencies, state and local agencies, tribal governments, and other federal agencies whose coordination, approval, or funding is required for completion of the project.

What Have We Learned So Far?

Based on information developed during the PID phase, several resource areas could potentially be affected by the Proposed Project. The following table provides a summary of potential physical impacts that may occur because of construction activities and/or operations. The identified effects are preliminary and only include those effects that have been identified at this stage.

Alternatives Impact Comparison Summary Table

| | Alternative 1 (No-Build) | Alternative 2 | Alternative 3 | Alternative 4 | |
|-------------------------------------|-----------------------------|---------------------------|---------------------------|---------------------------|----------------------------|
| | | | | Alternative 4A | Alternative 4B |
| Estimated Right-of-Way Costs | \$0 | \$0 | \$8,700,000 | \$8,700,000 | \$215,000,000 |
| Right-of-Way Impacts | 0 Parcels 0 Structures | 0 Parcels 0 Structures | 3 Parcels 3 Structures | 3 Parcels 3 Structures | 47 Parcels 7 Structures |
| Railroad Involvement | No | No | No | No | Yes |
| Utility Impacts | 0 | 0 | 1 | 2 | 11 |

The PID phase also identified known environmental resources, potential environmental issues and constraints, and potential construction or operations effects of the Build Alternatives. In some cases, the No Build Alternative or 'do nothing' option would also result in an adverse effect. A description of potential project effects are provided below and will be assessed further in the EIR after completion of the scoping phase.

Air Quality

During construction fugitive dust and exhaust emissions from diesel and gasoline-fueled construction equipment and on-road vehicles would have short-term effects on air quality at various locations along the project corridor. Long-term operational impacts may be beneficial under alternatives that improve mobility of the HOV lanes, such as Alternatives 3, 4A, and 4B. The No Build Alternative, and potentially Alternative 2, may not provide the same benefits as the other three alternatives and therefore, may not result in beneficial impacts.

Under the National Ambient Air Quality Standards (NAAQS), the project is located in an area that is designated nonattainment for the ozone (O₃) and particulate matter with diameter equal to or smaller than 2.5 micrometers (PM_{2.5}), and is in

maintenance for particulate matter with diameters less than or equal to 10 micrometers (PM₁₀), nitrogen dioxide (NO₂), and carbon monoxide (CO). Under the California Ambient Air Quality Standards (CAAQS), the area is designated as nonattainment for O₃, PM₁₀ and PM_{2.5}. The project is included in the conforming Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP), and a CO and PM₁₀/PM_{2.5} hot spot analyses will be performed to demonstrate federal transportation conformity.

Biological Resources

Work conducted around or within waterways or requiring vegetation clearing, may result in potential impacts to biological resources. As such, biological surveys and the possible need for permits could be expected. Jurisdictional Waters of the United States and/or Waters of the State have been known to occur within the project limits. A jurisdictional delineation would be required for any work within or near potentially impacted jurisdictional waters. If impacts were to occur within jurisdictional waters, consultation with the Army Corps of Engineers (ACOE) and the Santa Ana Regional Water Quality Control Board (SARWQCB) under the Clean Water Act, may be required. The proposed project may include activities conducted within multiple drainage facilities; therefore, it may also require consultation with, and permits from, the California Department of Fish and Wildlife (CDFW). Permits may include a Streambed Alteration Agreement or Incidental Take Permit under Fish and Game Code sections 1600 and 2081, respectively. A Natural Environmental Study will be prepared to assess potential impacts to biological resources.

Cultural Resources

No cultural resources were identified that are currently listed or eligible for listing on the National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), California Points of Historic Interest, California Historic or local significant historical resource listings within or immediately adjacent to the project boundaries. The Union Pacific Railroad right-of-way within the project boundaries is not currently listed in a federal, state, or local registry of significant resources; however, the facility has followed the same alignment for over 100 years. A review of local register listings and related information was conducted within a buffer of approximately 500 feet from the project boundary to identify resources that are further out and not within or adjacent to the Proposed Project. Based on the preliminary archival search and project mapping, there is a low-to-moderate

potential for the Proposed Project to encounter previously unidentified cultural resources during construction. As a result, the following cultural resources technical studies will be required; Historic Property Survey Report, Archaeological Survey Report, and Historical Resources Evaluation Report. In addition, as required by Assembly Bill (AB) 52 and Section 106, consultation with the Native American Heritage Commission (NAHC) and Native American contacts will be conducted as part of the PA&ED phase.

Energy

The Proposed Project may impact the direct energy from vehicles using the facility (i.e., fuel consumption) and ongoing uses of energy such as roadway lighting, as well as energy consumption from new facilities. Energy uses related to construction equipment and vehicles would also occur. An Energy Analysis Report will be prepared to analyze the proposed project's future energy use.

Greenhouse Gas Emissions (GHG)

The proposed project is included in the RTP/SCS; therefore, would be consistent with California's GHG emissions reduction goals as outlined in Assembly Bill 32 and Senate Bill 32. However, the Proposed Project would be required to conduct a project-level greenhouse gas emissions analysis. The analysis will be included in the Air Quality Technical Study and will follow the most current and readily available guidance.

Hazards and Hazardous Materials

The Proposed Project has the potential to encounter hazardous wastes and materials including asbestos-containing materials in buildings and structures, aerially deposited lead in surface soils, yellow thermal plastic paint on roadways, and petroleum hydrocarbons at gas stations. These potential impacts are location-specific and will be investigated accordingly. An Initial Site Assessment was completed during the PID Phase and will be re-evaluated and revised during the current PA&ED phase to determine whether the proposed project requires preparation of a Preliminary Site Investigation.

Hydrology/Water Quality

A preliminary drainage study will be prepared to evaluate changes in localized hydrologic conditions and the hydraulic capacity of each culvert improvement. Improvements near the Fullerton Creek crossing under Alternative 4b are expected to include widening of the existing I-5 mainline bridge on the southbound side, and

potential reconstruction of the UPRR bridge. A combined Location Hydraulic Study and Summary Floodplain Evaluation Report will be prepared to evaluate potential impacts on affected channels. Construction activities have the potential for direct discharge of pollutants in proximity to several large channels. Potential non-stormwater discharges include construction materials, dredge and fill, and dewatering activities. A Water Quality Assessment Report will be prepared to evaluate the effects of construction on these channels. Additionally, the proposed project may include activities conducted within multiple drainage facilities. Impacts to channels may require consultation with the ACOE and the SARWQCB under the Clean Water Act. Build Alternatives 4A and 4B would increase total impervious surfaces; therefore, Caltrans-approved, post-construction treatment Best Management Practices (BMPs) as well as Design Pollution Prevention BMPs measures would be required to address any source control pollutants.

Land Use/Planning

The project limits traverse multiple cities including (from south to north) Tustin, Santa Ana, Orange, Anaheim, Fullerton, Buena Park, and La Mirada. Existing land use adjacent to the project limits include residential, commercial, tourist, medical, and industrial uses. Commercial facilities include the Santa Ana Zoo, Discovery Cube Orange County, Main Place Mall, Disneyland, Angel Stadium, several shopping centers, business, and office buildings. Residential areas consist of mobile home parks and single- and multi-family homes. Additionally, community services and facilities such as schools, churches, cemeteries, hospitals, and several parks and a recreational trail are also located adjacent to the project area. Other land uses include railroad and utility corridors. A Community Impacts Assessment (CIA) will be prepared to evaluate project effects related to land use, growth, community character and cohesion, traffic, and transportation, pedestrian, and bicycle facilities.

Noise

Build Alternatives 4A and 4B would add two Express Lanes, one northbound and one southbound between SR 22/SR 57 and SR 91 (Alternative 4A) and the OC/LA County line (Alternative 4B), which would result in changes in traffic levels within the project study limits; therefore, future traffic noise is projected to increase over the existing noise levels based on preliminary traffic analyses. Except for very few locations, the first-row, noise-sensitive receivers (residential, recreational, and institutional land uses) currently have noise abatement in the form of 12- to 14-foot-

high sound walls in place. During PA&ED a noise analysis will be conducted to evaluate the potential noise effects of each alternative. The analysis will be documented in a Noise Study Report. If the analysis indicates that noise abatement measure(s), such as sound walls, are needed and are found to be feasible and reasonable, a Noise Abatement Decision Report will be prepared to further evaluate recommended noise abatement measures.

Population/Housing

The Proposed Project is within a highly developed and urbanized area and is intended to address HOV degradation. As such, the Proposed Project is not expected to influence development patterns and growth. To better understand how the Proposed Project may impact surrounding communities, information on population and housing will be included in the CIA. In addition to the CIA, an Equity Analysis will be conducted to evaluate the needs of communities within the project corridor, determine whether the project would create disparities, address any disparities, and identify potential opportunities to address community needs through the Proposed Project.

Recreation

The following public parks and recreational facilities are located adjacent or close to the project boundary:

- Santiago Creek Bike Trail
- Santiago Park
- William Eldridge Park
- Santa Ana River Trail
- Morrison Park
- Betsy Ross Park
- Brookhurst Community Park
- Henry Boisseranc Park

This is not an exhaustive list but indicates that these types of resources may be affected by the Proposed Project. Potential impacts to public parks and recreational resources would be addressed as part of the analyses conducted during PA&ED.

Right of Way

Build Alternatives 3 and 4A would require additional right of way, which would impact three (3) parcels. Build Alternative 4B would also require additional right of way, which would impact 47 parcels. Most of the right of way required for Build Alternative 4B would be within the project corridor north of SR-91 up to the OC/LA County line. The right of way impacts of each Build Alternative will be evaluated and summarized in the Community Impact Assessment and in a Relocation Impact Report.

Transportation

In accordance with Caltrans' Transportation Analysis Framework (TAF) and the Transportation Analysis under CEQA (TAC) guidance documents, Vehicle Miles Traveled (VMT) will be analyzed during PA&ED and appropriate mitigation will be developed as warranted. A Transportation Management Plan will be prepared to address construction related impacts, including roadway closures, detours, access to public services, transit systems, and pedestrian facilities.