Notice of Preparation of an Environmental Impact Report
State Route 37 Traffic Congestion Relief Project

The California Department of Transportation (Caltrans) District 4 is preparing an Environmental Impact Report (EIR) consistent with the requirements of the California Environmental Quality Act (CEQA), and a joint Environmental Assessment (EA) to meet the requirements of the National Environmental Policy Act (NEPA). The purpose of this Notice of Preparation (NOP) is to notify agencies, organizations, and individuals of this intent, and request input on the scope and content of the proposed EIR/EA.

Scoping Period for Receipt of Comments

Comments must be received by 5:00 P.M. on August 24, 2020. Send written comments to:

Caltrans District 4
Attn: Yolanda Rivas
P.O. Box 23660
Oakland, CA 94623-0660

Or by email to: StateRoute37@dot.ca.gov

Virtual Scoping Open House

A scoping open house will be a virtual on-line event on Wednesday July 22, 2020 at 6:00-7:30 PM. Attendees can ask questions on-line about the material presented during the meeting, however, all scoping comments must be submitted in writing by email or mail. Attendance at the virtual open house is not required to submit comments. Please visit https://dot.ca.gov/caltrans-near-me/district-4/d4-projects/d4-37-corridor-projects for more information.

Project Description

The Project is focused on traffic congestion relief, by improving traffic flow and peak travel times, and increasing vehicle occupancy within the travel corridor between Mare Island and SR 121 (the Project limits). SR 37 narrows from two lanes in each direction to one lane in each direction between Mare Island and SR 121. The highway has acceleration and deceleration lanes at some local intersections, and an existing median barrier along most of the route. Each of the following alternatives would reconfigure the existing SR 37 highway lanes from west of the SR 121 intersection to the Walnut Avenue overcrossing at Mare Island. Each alternative would involve widening at Tolay Creek bridge, but Alternative 1 involves a movable center median barrier while Alternatives 2 and 3 would have four lanes either part-time or full time (Alternatives 2 and 3 would be the same width). These alternatives would also involve installation of advance signs to alert drivers approaching the proposed lanes. To allow for advance signs, the overall project limits extend on SR 37 from approximately Lakeville Highway in Sonoma County to the Sacramento Street overhead in Vallejo, and on SR 121 approximately 1000 feet north of SR 37.
Alternative 1: Three-Lane Contra-Flow with Moveable Median Barrier and HOV Lane

This alternative proposes to convert the existing two-lane highway to a three-lane highway with a Movable Median Barrier (MMB) separating the two directions of traffic. The MMB would provide for two lanes during the peak period in the peak direction and a single lane in the non-peak direction. The additional lane is intended to a High Occupancy Vehicle (HOV) lane to provide an incentive for mode shift from single occupant vehicles.

This alternative includes the following:

- Three 12-foot wide lanes directionally divided by a movable barrier with no inside shoulder and 8-foot wide outside shoulders that would provide for shared bicycle usage. When there are two lanes open in one direction during the peak period, the movable inside lane would be an HOV lane;
- Approximately 48,000 linear feet (9.09 miles) of movable barrier to replace the existing median concrete barrier and reconstruction of the median from east of the Sonoma-Marin Area Rail Transit (SMART) at-grade crossing near SR121 to approximately 1500’ west of the Walnut Ave. Overcrossing structure;
- Storage of the Barrier Transfer Machine is anticipated to be along the median between the SR121/SR37 intersection and the SMART at-grade crossing at the west end and along the median approximately 1500’ west of the Walnut Avenue overcrossing structure;
- The median barrier would be moved at least twice per day to accommodate typical peak period directional flow traffic;
- Approximately 4 feet of widening along the corridor for a total roadway width of 54 feet; and,
- Approximately 25.6 feet of widening at Tolay Creek Bridge (Bridge No. 20-0090) for a total bridge width of approximately 67.6 feet.

The existing Sonoma Creek Bridge (Bridge No. 23-0063) provides a 50-foot roadway width between bridge railings. This alternative proposes a 3-lane section with narrower shoulder widths and lanes on the Sonoma Creek Bridge to avoid widening of the bridge. A design exception is needed for the nonstandard shoulders, travelled way at Sonoma Creek Bridge, median width, horizontal clearance, minimum vertical grade and side slopes.
Alternative 2: Convert Existing Outside Shoulders to HOV during Peak Periods (Part-time Use Lane)

This alternative proposes to use the existing highway shoulders to provide a traffic lane during the peak periods in the peak direction. During peak hours in the peak direction, the outside shoulder is proposed to act as an HOV lane for users while in the non-peak direction it would act as a shoulder. The outside lane would be for HOV use during peak periods to provide an incentive for mode shift from single occupant vehicles. Static signs are proposed to manage the part-time lanes. This alternative includes the following:

- Two 11-foot wide inside lanes separated by a median barrier with a 1- to 2-foot inside shoulder (4- to 6-foot wide median) and two 12-foot wide outside lanes and a 4-foot outside shoulder, for a total roadway width of 58 to 60 feet. During the peak period there would be two lanes in each direction, and the inside lane would be for general purpose use only. The outside lane would be for HOV use during peak periods. During the non-peak period there would be only one lane in each direction, and it would be a general-purpose lane (open to all vehicles) and the outside lane reverts to a shoulder;
- Reconstruction of approximately 46,000 feet (8.71 miles) of existing outside shoulder and conversion to a travel lane pavement section in each direction;
- The existing 32-inch-high concrete median barrier may need to be replaced with a new standard 42-inch-high concrete barrier for approximately 45,000 linear feet. The need to replace the median barrier has not been determined; and
- Approximately 25.6 feet of widening at Tolay Creek Bridge for a bridge width of approximately 67.6 feet.

The existing Sonoma Creek Bridge and can accommodate the proposed lane configuration except for the 4-foot outside shoulder.

Although this alternative includes a 4 foot outside shoulder, it cannot accommodate bicycles because the Sonoma Creek bridge would be too narrow to maintain an adequate shoulder for safe passage.

Design exceptions are required for the nonstandard travelled way, median, inside and outside shoulder widths, horizontal clearance, minimum vertical grade, side slopes and ramp entrance.

Alternative 3: Convert Existing Outside Shoulders to HOV (Regular Four-Lane Facility):

This alternative proposes to use the existing highway shoulders as traffic lanes. One lane in each direction would remain as a general-purpose lane, while an additional lane would be added for HOV use during peak periods to provide an incentive for mode shift from single occupant vehicles. Static signs are proposed to manage the lanes. This alternative includes the following:

- Two, 11-foot wide insides lanes, separated by a median barrier with a 1- to 2-foot inside shoulder (4- to 6-foot wide median) and two, 12-foot wide outside lanes with a 4 foot outside shoulder, for a total roadway width of 58 to 60 feet. There would be two lanes in each direction during all hours, however during the peak period one of the lanes in each direction would be restricted to HOV use;
- Reconstruction of approximately 47,200 feet (8.94 miles) of existing outside shoulder and conversion to a travel lane pavement section in each direction;
- Replace the existing concrete median barrier with standard concrete barrier for approximately 45,000 linear feet; the need to replace the median barrier has not been determined; and
• Approximately 25.6 feet of widening at Tolay Creek Bridge for a bridge width of approximately 67.6 feet.

The existing Sonoma Creek Bridge can accommodate the proposed lane configuration except for the 4-foot outside shoulder.

Although this alternative includes a 4 foot outside shoulder, it cannot accommodate bicycles because the Sonoma Creek bridge would be too narrow to maintain an adequate shoulder for safe passage.

Design exceptions are required for the nonstandard travelled way, median, inside and outside shoulder widths, horizontal clearance, minimum vertical grade, side slopes and ramp entrance.

**Features Common to All Alternatives**

**High Occupancy Vehicle Lane.** Each of the Build Alternatives would include a new HOV lane. For Alternative 1 the HOV lane would be adjacent to the center median (inside lane), and open only during the peak period in the peak direction of travel (an HOV lane and mixed flow lane in the peak direction, and a single mixed flow lane in the non-peak direction). For Alternatives 2 and 3, there would be an HOV lane in each direction that would be in addition to the existing mixed flow lane.

**Tolling.** Tolling has been proposed on SR 37 between the Mare Island and the SR 121 intersection, to be managed as a publicly owned toll facility subject to legislative approval. If approved, tolling would apply to all lanes. Tolling infrastructure, such as one or more toll gantries, is being considered as part of this project and would apply to all of the build alternatives. Tolls would be collected in each direction through Open Road Tolling (ORT), which involves cash-less free flow tolling without the need for toll booths. Tolls would be collected electronically using transponders carried in the car, and vehicles without transponders would be billed using photographs of the vehicle’s license plate.

At this preliminary stage of design, up to three overhead gantries may be needed for tolling. An overhead gantry would be installed on SR 37 spanning both directions approximately 1200 feet west of the Mare Island overcrossing. In the eastbound direction a gantry may be installed between the SMART track crossing and the Tolay Creek Bridge, just east of the SR 121 intersection. In the westbound direction, a gantry may be installed just east of the Tolay Creek bridge. Locations and the number of gantries would be determined during final design. Overhead readers and cameras would be installed on the gantries that would read vehicle toll tags and photograph vehicle license plates.

**Signs and Lighting.** New roadside and/or overhead signs would be placed along SR 37 in each direction, in advance of the beginning of the HOV lanes to inform drivers of the upcoming toll zone. The types of new signs would include:

• Signs along the side of the highway notifying drivers of the upcoming HOV lane. These signs would include information on the number of occupants for a qualifying HOV user, the hours of operation of the HOV lane, and penalties for single occupant vehicles using the HOV lane.
• Overhead and roadside signs would be installed to notify and inform drivers of the upcoming tolling zone and the applicable toll, and penalties for enforcement of the toll.
• Roadside signs for the upcoming exit ramps (these already existing along SR 37).

Overhead signs would require subsurface foundations within the median or alongside the highway. Subsurface excavation for the overhead signs may be up to 60 feet in vertical depth, depending on the subsurface conditions.
Lighting would be added along the corridor in advance of the tolling gantries, and at CHP observational areas. Lighting may also be added at local road intersections, to improve safety for vehicles entering or exiting the highway.

**CHP Observational Areas.** Observational areas for CHP vehicles to park, monitor, and enforce compliance with the HOV lanes and tolling may be installed at the beginning of the HOV Lane and toll gantries. Enforcement areas would be developed in consultation with the CHP.

**Pullout Areas.** Roadside pullout areas are proposed along the route for Alternatives 2 and 3 to accommodate disabled vehicles or for enforcement. The pullout areas would vary in length from approximately 400 feet to 700 feet, which include the taper areas, and would be located within a widened shoulder that can be accommodated with minimal or no environmental impact. Locations would also be spaced for design requirements such as adequate deceleration and acceleration, and driver sight distance. The pullout areas would accommodate emergency use such as a disabled vehicle, roadway maintenance vehicles or equipment, and CHP enforcement. Parking by the general public in the pullout areas would not be allowed.

**HOV Lane Transition.** Alternatives 2 and 3 may require transition lanes where the HOV lanes begin. At the eastern end of the project, there would be three lanes in the westbound direction; two lanes from westbound SR 37 plus one lane entering from the Walnut Avenue on-ramp. Currently, the on-ramp transitions quickly requiring a merge into westbound SR 37. With the project, the merging lane entering Walnut Avenue would be extended approximately 1000 to 1500 feet further west to provide a transition zone for vehicles to enter or exit the right-hand lane. The third eastbound lane would merge in this transition zone and two lanes would continue west (one HOV lane and one general purpose lane).

In the eastbound direction of SR 121 approaching the SR 121 intersection the highway has two through eastbound lanes and two left turn lane lanes. A third SR 37 eastbound lane would be added for a short distance to allow HOV users to merge. East of the Tolay Creek bridge there would be two lanes, one designated for HOV use and one general purpose lane.

**Slope Protection and Reinforcement.** Portions of SR 37 were originally constructed on fill, and there is recurring settlement in some areas. Where settlement has occurred or minor widening of the existing cross section of the highway is needed to accommodate the proposed improvements, reinforcement of the highway section would be performed. Design measures would include driving sheet pile along the edges of the highway shoulder area to help stabilize the roadway and slopes. Sheet piles typically consist of metal sheeting that are driven into the earth to form a subsurface wall that would help support the roadbed and help prevent or reduce uneven settlement. Once driven into the earth, the sheet pile would not be exposed, or would be minimally exposed where it is functioning as a retaining wall. In addition to sheet piles, rock slope protection may be added or reinforced, or engineered slopes would be installed. All of these measures would be designed to help correct existing recurring deformation of the SR 37 roadway structural section, and to allow for minimal widening of the roadbed to accommodate the proposed new lanes and improvements.

**Tolay Creek and Sonoma Creek Bridges.** The project limits include two bridge crossings, one at Sonoma Creek and the other at Tolay Creek. The Sonoma Creek Bridge has been previously widened for seismic strengthening and placement of a concrete median barrier. The existing Sonoma Creek Bridge can accommodate the proposed lane additions, and no structural work is proposed at this bridge or at its abutments.
The Tolay Creek bridge is a single span bridge and would be widened on one or both sides to accommodate the additional lanes. The existing abutments would be widened. The existing Tolay Creek channel would remain the same width, and no work is proposed in the channel except potential temporary construction access.

**Local Road Intersections.** SR 37 is a conventional highway, with connecting cross roads and driveways. These include access to Tolay Creek Road/Sears Point Road, Skaggs Island Road, Noble Road (providing access to Vallejo Flood and Wastewater District and Wing and Barrel Ranch), unnamed access roads, vista points and trail heads, and parking areas. The following summarizes the local road connections:

- At Noble Road a traffic signal may be added. This is a lightly traveled road and the signal would only activate when a vehicle approaches the SR 37 Noble Road intersection.
- At Skaggs Island Road, which is gated, the intersection may be converted to a right-in and right-out only (vehicles would no longer be permitted to cross opposing traffic to make a left turn).

Other existing roadway and driveway access would be maintained. These include Cullinan Ranch, the public access driveways on each side of Sonoma Creek, the existing intersection access at SR 121/Sears Point Road/Tolay Creek Road, the driveway to the San Pablo Bay National Wildlife Refuge office, and other private gated driveway access points.

**SMART Railroad (Northwestern Pacific Railroad).** This railroad line crosses SR 37 at grade between Tolay Creek and the SR 121 intersection. It is an active railroad, and there are crossing signals and swing arm barriers that activate when a train is approaching. The crossing signals and arms would need to be reconstructed to accommodate the additional proposed lanes.

**Drainage and Culverts.** Roadway widening would be minimized, and the existing drainage inlets and system would be maintained to the extent feasible. No changes to the existing drainage patterns are anticipated, other than the addition of pavement along the corridor. Existing culverts would be maintained, and if necessary, would be extended where shoulder widening is necessary.

There would be an incremental increase in stormwater runoff associated with the widening of the SR 37 shoulders. Treatment of this additional runoff would be incorporated along the highway where space permits, but because of the existing profile of the road off-site treatment options would be needed.

**Right of Way.** No new permanent right of way is anticipated. Temporary construction easements (TCE) may be needed for the roadway work at SR 121, Tolay Creek Bridge, Noble Road, the Cullinan Ranch public access intersection and other private access driveways to provide construction access. The duration of the TCEs are expected to be for one construction season.

**Construction Staging.** SR 37 traffic must be maintained during construction, and construction staging areas would be needed along or near the route for equipment and materials. Construction staging areas are determined during final project design but one potential location on private land has been preliminarily identified. The private land parcel would involve using a portion of the Wing and Barrel Ranch land adjacent to SR 37 off Noble Road; this would require agreement with the ranch and restoration of the site following completion of construction.

**Other Construction Activities and Requirements.** The construction contractor would be required to follow all standard requirements and procedures to be included during detailed design, specifications, and permits or other authorizations.
Potential Environmental Effects/Topics to Be Studied

Based on preliminary surveys and information, Caltrans identified the following main subject areas for analysis in the EIR/EA. The scope of environmental analysis could be modified based on input from this Notice of Preparation and project scoping.

- Aesthetics
- Agriculture
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Noise
- Tribal Cultural Resources
- Population/Housing
- Public Services
- Recreation
- Transportation
- Utilities/Service Systems
- Mandatory Findings of Significance
- Construction-Related Impacts