

# Arroyo Seco Parkway

## SAFETY AND OPERATIONAL ENHANCEMENT

### Purpose & Need

The Arroyo Seco Parkway Safety and Operational Enhancement project (project) would enhance safety along a 4.81-mile segment on Arroyo Seco Parkway (SR-110) between the Figueroa Street off-ramp (PM 25.78) and Orange Grove Avenue (PM 30.59). SR-110 is a scenic roadway running mostly parallel to the Arroyo Seco Channel and is a vital corridor linking the cities of Pasadena and Los Angeles.

Built in 1940 as the first freeway in the western United States, the design of SR-110 predates current highway standards with narrow lane widths, lack of shoulders, and short on- and off-ramps that do not provide adequate acceleration/ deceleration distance for merging and exiting vehicles. As a result, the project area experiences accident rates that are twice as high as comparable state facilities.

There is a need to provide engineering solutions to address safety issues attributed to the outdated design and geometric constraints of the parkway, focusing on the improvements of on- and off-ramp entrances and exits. The proposed project improvements would address existing traffic conflicts by allowing vehicles more efficient ingress and egress from the on- and off-ramps along the parkway while preserving SR-110 as an important state scenic and historic resource.

### Proposed Alternatives

#### Alternative 1 No Build Alternative:

No action alternative

#### Alternative 2 Hard Shoulder Running:

The existing outside lane would be converted to a permanent shoulder used as a part-time travel lane during congested periods. Drivers would be able to use the new shoulder as a third lane, but only during these periods. During other times, there will only be two open lanes on SR 110, plus the shoulder. Lanes will be controlled using overhead Dynamic Message Signs (DMS) located strategically along the corridor to dynamically switch between shoulder and driving lane mode of operations in response to prevailing traffic conditions. A Queue Warning System (via DMSs) and improvements to four emergency pull-out areas will also be included.

#### Alternative 3 Dynamic Flex Lane:

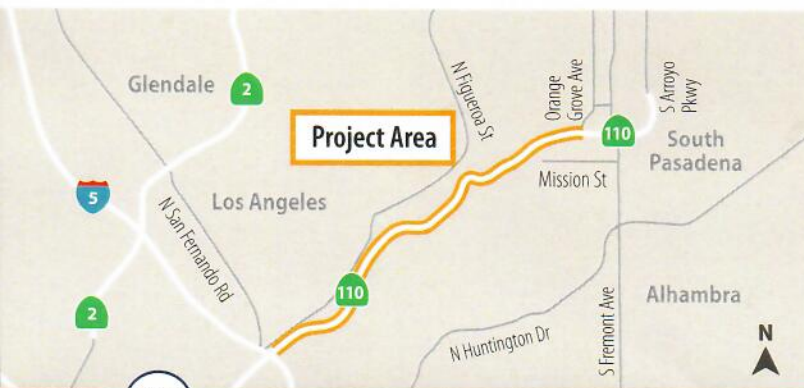
Similar to Alternative 2, the Dynamic Flex Lane alternative would use variable lane operations depending on traffic conditions. For this alternative, the third (outside) lane would be closed to through traffic during the non-congested periods. However, drivers will always be able to use the portion of lane between the on- and off-ramps, but only to enter and exit the Parkway safely. During congested periods, drivers will be able to use all three lanes. Similar to Alternative 2, DMSs, a Queue Warning System, and improved pull-out areas will be used to enhance safety and operations.

#### Alternative 4 Speed Reduction:

This alternative would reduce the posted speed limit from 55 miles per hour (mph) to 45 mph. The improvement includes modification of emergency pull-out areas, but no other changes to the physical Parkway or its operations.

#### Alternative 5 Two-Lane Option:

This alternative would reduce the Parkway to two lanes in each direction and convert the right outside lane to a permanent shoulder. This shoulder would provide space for increased acceleration and deceleration distances for on- and off-ramps. No overhead dynamic lane control signs would be needed.



### Stay Connected

For additional information, please contact Jason Roach at (213) 897-0357, or via e-mail at [SR110ArroyoSecoEA33150@arellanoassociates.com](mailto:SR110ArroyoSecoEA33150@arellanoassociates.com).