

## PURPOSE AND NEED FOR THE PROJECT

The City of Redding is replacing the Cypress Avenue Bridge, and improving adjacent intersections on either side, for several important reasons:

- ▶ To bring it up to modern seismic (earthquake) standards. The existing bridges are considered deficient in that area by the California Department of Transportation Structure Division.
- ▶ To ensure it is structurally sound and safe for motorists. Caltrans considers the existing bridge decks functionally obsolete and the bridge guard railing substandard. The new bridge spans will meet modern standards. The existing bridges are being replaced, since the long-term cost of rehabilitation of the existing bridges exceeds the cost of a new bridge.
- ▶ To ensure adequate traffic flow on what is a major east-west artery connecting residential and commercial areas west of the Sacramento River to extensive commercial development to the east. With the two additional traffic lanes (from four to six) provided in the new bridge, the present “bottleneck” will be removed and levels of service maintained.
- ▶ To enhance safety for motorists, particularly traveling through the intersections immediately to the east and west. Between 1998 and 2003, there were 68 accidents, including 26 injury-related accidents, between the intersections of Cypress/Athens and Cypress/Hartnell. The Total Traffic Accident Rate is 0.84 accidents/million vehicles, which is higher than the average statewide rate of 0.584 for a similar roadway. The proposed project will shorten vehicle backups on the approaches to the signalized intersections, which should reduce the rate of rear-end accidents.
- ▶ The bridge also is designed to be architecturally attractive, enhancing a primary gateway into the City. The improvements from the existing bridge include pedestrian overlooks, bridge lighting, and decorative street lighting.
- ▶ The project will be completed in three major stages and will include the construction of new foundations and piers in the river channel and demolition and removal of the existing piers. Two lanes of traffic in each direction will be maintained on the bridge at all times, with the exception of short-term lane closures during off-peak hours.

## **PROJECT STAGES AND TRAFFIC CONTROL**

**Stage 1:** During the first stage of construction, traffic will remain on the existing bridges. The existing south sidewalk will be closed, and pedestrian access will be restricted to the sidewalk on the north side of Cypress Avenue. All construction activity will occur to the south of the existing bridges.

**Stage 2:** The eastbound traffic will be moved onto the newly constructed spans to the south, and the westbound traffic will be routed onto the former eastbound bridge. Pedestrian traffic will be moved to the new sidewalk on the south side of Cypress Avenue. All construction during the second stage will be on the north side of the bridge where the existing westbound bridge will be removed and replaced.

**Stage 3:** Both the westbound and the eastbound traffic will be moved onto the new bridge to the north, and pedestrian traffic will remain on the south sidewalk. All construction activity will occur between the two new bridges, with removal and replacement of the existing eastbound bridge. This stage will be followed by another minor stage, in which the median area will be finished prior to final striping of traffic lanes on the bridge.

## **APPROACH WIDENING AND INTERSECTION IMPROVEMENTS**

The approach roadways will be widened consistent with the bridge widening (i.e., to the south). A retaining wall will be constructed along the south side of Cypress Avenue west of Hartnell Avenue to minimize the impact of earth fills on the adjacent property. A single dedicated right-turn pocket will be provided for eastbound Cypress Avenue to southbound Hartnell Avenue movements.

A short retaining wall will be constructed on the north side of Cypress Avenue just east of Athens Avenue to contain the fill for a dedicated right-turn pocket on Cypress Avenue. The existing Park Marina Drive/Parkview Avenue intersection will be reconfigured to make Parkview Avenue a through street to Cypress Avenue, with Park Marina Drive terminating in a tee intersection with Parkview Avenue.