

Client:
Arizona
Department of
Transportation

**Constructed
Value:**
\$183 million

Project Duration:
2001–2003

Parsons' Services:
Project-wide
design,
construction
inspection
and testing



The Superstition Freeway renovation project is the largest single highway construction contract in Arizona history. Now that Phoenix is the seventh largest metropolitan area in the country, this stretch of U.S. Highway 60 has become in desperate need of expansion and improvement. The project is using schedule advancing

design-build delivery and will add much-needed high-occupancy vehicle (HOV) lanes on the 13 miles of U.S. 60 between Interstate 10 and the Val Vista interchange. It will also include a fly-over ramp

connecting the existing HOV lanes on I-10 to the new HOV lanes on U.S. 60.

In May of 2001, the Arizona Department of Transportation (ADOT) made a best value selection of a design-build team with Parsons as its prime designer. The team's winning proposal contained numerous design innovations including the wide open spaces concept which reduces the need for retaining walls along the highway and brings 10,000 new trees to the corridor. In addition, an innovative plan to maintain traffic during con-

struction was proposed that went far beyond ADOT's requirements. The plan is to keep 38 of the 40 on- and off-ramps open during peak hours of traffic, with a temporary counterflow lane on I-10 to prevent its closure over numerous weekends.

In addition to one HOV lane in each direction, auxiliary lanes between interchanges and additional lanes east of the Alma School Road interchange are being added. Other project elements include: noise reduction efforts—sound walls and berms—new lighting in the median, bridge widenings, a rubberized asphalt overlay, and a state-of-the-art freeway management system that includes closed circuit television cameras, changeable message signs, ramp meters, vehicle count stations, and an upgrade to the regional traffic control center.

In the Tempe segment, two steel pedestrian bridges over U.S. 60 designed by Parsons are being built. One bridge will replace an existing concrete structure that required ADA upgrades. The other is a new bridge designed with a local artist to address pedestrian and bicycle access for a local park and school.

The Parsons team, with many design-build projects to its credit, committed



Above: HOV
fly-over ramp

Top: Rendering of Superstition Freeway

Bottom: Earthwork at Rural Road



to a 26-month project duration, which will beat ADOT's anticipated schedule by one year. Design began nearly two months prior to a formal notice to proceed in order to get sufficiently ahead of construction. Ten months later, Parsons and its team of seven subconsultants have essentially completed the design of the project.

A strong early start and this team's design experience resulted in a model design-build project for both ADOT and Parsons. In fact, this on-schedule and under-budget performance contributed to this project's inclusion among three projects to receive the Parsons Transportation Project of the Year award in January 2002.