



## New East-West Corridor and Interchange Will Provide Congestion Relief for the City of Victorville

### Background

San Bernardino Associated Governments (SANBAG), the City of Victorville (City), and the California Department of Transportation (Caltrans), in association with other key federal and state agencies, have partnered to construct a new interchange along Interstate 15 (I-15) within the City to improve residential and commercial access, and enhance the overall operation of the freeway. Scheduled to begin construction next year, the new interchange will lie between existing I-15 interchanges at Bear Valley Road and Palmdale Road (State Route 18) uniting La Mesa Road on the west side of the freeway with Nisqualli Road on the east side, thereby providing an additional and much-needed east-west corridor in the Victor Valley.

“Providing another east-west corridor in the Victor Valley has been a critical need for years, and we’re about to see it become a reality.”

- **Brad Mitzelfelt,**  
SANBAG Vice-  
President and First  
District Supervisor



*The design team incorporated a distinctive “V” for Victorville in the design of the overcrossing’s four wingwalls, welcoming motorists to the “Key City of the High Desert.”*

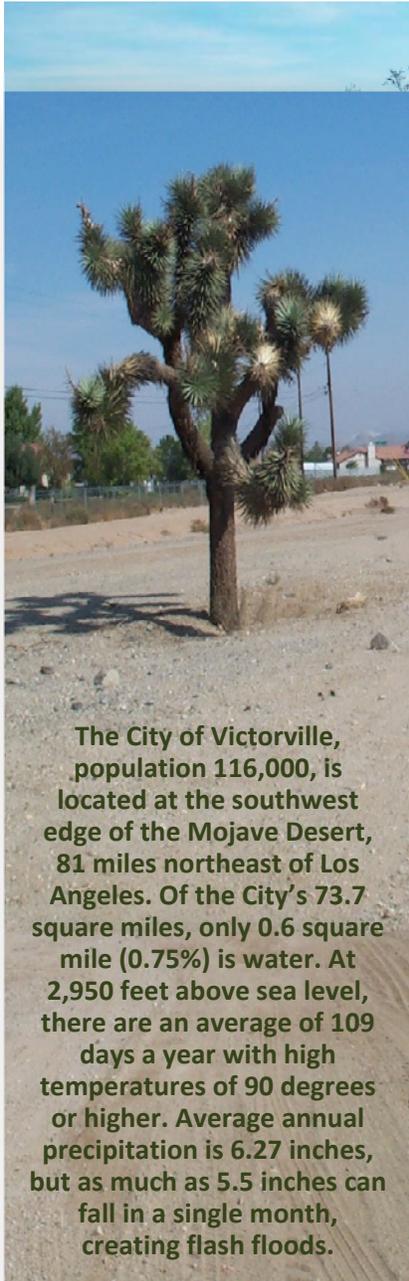
The Victor Valley, with a population of about 350,000, has only two east-west principal arterial roads that cross I-15 – Bear Valley Road and Palmdale Road. In addition to the I-15 which divides the Valley, east-west circulation is also hindered by other physical barriers, including the Mojave River and BNSF Railway. This project will benefit a large number of residents in the area by providing an alternative to the two congested routes. After many years of effort by the City, this project is now ready to start construction in January 2012.

This project will construct a new interchange on I-15 between the heavily congested Bear Valley Road and Palmdale Road. Bear Valley Road is one of the most congested roads in the Inland Empire, carrying approximately 60,000 to 70,000 vehicles per day. Palmdale Road carries up to 54,000 vehicles per day. Of all the roads in San Bernardino County, Bear Valley Road had the most complaints about congestion according to a SANBAG survey.

### Project Description

The full-service I-15/La Mesa Road/Nisqualli Road Interchange will play a vital role in the City’s infrastructure. The two-span, cast-in-place, post-tensioned concrete overcrossing will provide three through lanes in each direction with additional turn lanes at the freeway ramp connections. Two existing frontage roads, one on each side of the freeway, will be realigned to create intersections with La Mesa and Nisqualli roads, respectively. The overcrossing will accommodate I-15 future expansion to 10 lanes, including four mixed-flow and one high-occupancy vehicle (HOV) lane in each direction. The City has





**The City of Victorville, population 116,000, is located at the southwest edge of the Mojave Desert, 81 miles northeast of Los Angeles. Of the City's 73.7 square miles, only 0.6 square mile (0.75%) is water. At 2,950 feet above sea level, there are an average of 109 days a year with high temperatures of 90 degrees or higher. Average annual precipitation is 6.27 inches, but as much as 5.5 inches can fall in a single month, creating flash floods.**

been responsible for preparation of the following: preliminary design; environmental document; final design; environmental permits; plans, specifications and estimates; acquiring rights-of-way; and relocating utilities. This project received cooperation and partnership among multiple federal and state agencies. Caltrans, in cooperation with the City has provided oversight and approval for all project phases.

### **Multiple Agency Coordination Reduces Environmental Impacts**

The environmental resource agencies – U.S. Army Corps of Engineers, Lahontan Regional Water Quality Control Board (RWQCB) and the California Department of Fish and Game all worked cooperatively with the City and Caltrans to obtain the required regulatory permits. Through an extensive collaboration effort with the agencies, the City was able to reduce impacts to Waters of the United States by more than 78 percent to the Oro Grande Wash (from 3.85 acres to 0.84 acre), a natural wash running through the interchange and tributary to the Mojave River.

### **Maximizing Benefits with Minimal Cost Implications**

The decrease in permanent impacts to non-federal Waters of the United States results in several benefits to both the project and the environment,

with minimal cost implications. Working collaboratively with City officials and the resource agencies, Parsons Brinckerhoff applied traditional transportation infrastructure engineering design principles to address the structures and materials needed to construct the project using the most conservative standards to maintain public safety and mitigate potential impacts. This collaboration resulted in a design that utilizes the natural streambed instead of a hard culvert. The alternative design also increases infiltration rates, vital to the Mojave Desert's arid environment. Also, rather than fill in a portion of the natural wash to create a straight path, the design allows flow in a linear fashion during high-flow conditions while a low-flow water diversion maintains the original meander of the

“Through the collaboration of the City, Caltrans, Parsons Brinckerhoff, RWQCB, Army Corps of Engineers, and Department of Fish and Game, the design was revamped...to simultaneously maintain the integrity and utility of the infrastructure, but also made material changes germane to the localized biological resources.”

- *Eric Weiss,*  
California Dept. of  
Fish and Game  
Environmental  
Scientist





Wash. Other benefits include:

- Reduced drainage system lengths and decreased fill volume needed by steepening the side slopes
- Increased filtration potential and preservation of the historical flow path by adding a low-flow perforated pipe in an abandoned sector of the Wash

“This interchange will reduce gridlock in the City, and will provide emergency personnel an additional arterial to travel from the east to the west side of the City.”

- **Ryan McEachron**,  
City Councilmember  
and SANBAG Board  
Member

- Smaller footprint needed to decrease flow velocities by altering the original outlet structures
- Replacing rip-rap as the original energy dissipation solution by adding stilling basins equipped with baffle piers
- Reduced flow velocities and increased filtration by adding a splash wall to split the flow into separate flow lines



### Funding

Congressman Jerry Lewis, in cooperation with Congressman Howard “Buck” McKeon, provided federal funding for the right-of-way acquisition. The County Transportation Commission and SANBAG programmed federal funds for the design (plans, specifications and estimates), additional state funding for right-of-way, and federal funding for construction. Because there was federal funding on the project with certain deadlines, Caltrans and the resource agencies expedited their reviews and approvals to meet those deadlines.

Despite the economic downturn and a reduction in revenues, the City and SANBAG have worked together to fund and deliver this important project.

The City is funding 50 percent of the construction from development impact fees, and SANBAG is funding the other 50 percent and



administering the construction. The California Transportation Commission awarded \$21 million to SANBAG for this project from Proposition 1B Corridor Mobility Improvement Account funds.

The remainder of SANBAG funds will come from the voter-approved Measure I half-cent sales tax. SANBAG worked with the City to reduce the construction schedule from 24 months to 18 months, resulting in time and cost savings. Bids were recently opened by SANBAG, with the low bid 25 percent below the engineer's estimate. The total construction cost is estimated at \$44 million.

The project has been successful to date due to the cooperation and assistance of many government agencies at the city, county, state and federal levels. Significant benefits to the public include improved safety, reduced congestion, economic improvement, and environmental preservation.

**A Stimulus for Local Job Creation**

SANBAG estimates immediate creation of 650 direct jobs and 1,625 indirect jobs attributable to this project, of which more than 70 percent will be in the construction, manufacturing, wholesale trade, and retail trade sectors, providing new employment opportunities for low-income workers.

