

Interstate 10, Arizona

Papago Freeway Tunnel

1990



The original plans for the Papago Freeway followed an alignment through a section of downtown Phoenix that could have disrupted established neighborhoods. Planners created several designs to accommodate local traffic and minimize impact on the community, including an elevated freeway. Phoenix residents chose instead to go underground.

The Papago Freeway Tunnel is a six-block, 2,887-foot section of roadway that travels below grade and supports 13 acres of a 30-acre park above. The “tunnel” is actually a series of bridges that are connected side by side to cover the section of Interstate 10. When it opened in 1990, it allowed completion of the final segment of I-10 and provided a public green space for Phoenix residents. By 2015, the tunnel carried more than 230,000 vehicles, including 11,000 trucks, per day.

Traffic through the Deck Park Tunnel on Interstate 10.

“Completion of the Papago Freeway is far more than construction of concrete and steel. It represents a successful culmination of a state, city, and federal partnership forged by the challenge of a concerned public.”

—Thomas Willett,
Federal Highway Administration,
at the Papago Freeway Tunnel dedication on Aug. 10, 1990.



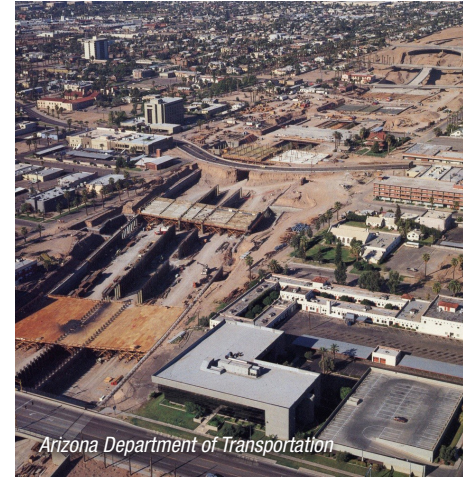
U.S. Department of Transportation
Federal Highway Administration

Contributions & Crossroads
Our National Road System’s Impact on the U.S. Economy and Way of Life

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The Deck Park Tunnel during construction in the late 1980s.

Quick Facts

- At nearly 2,500 miles, I-10 stretches between Jacksonville, Florida, and Santa Monica, California, carrying coast-to-coast passenger and truck traffic across the southern United States.
- The original plans for I-10 through Phoenix included an elevated freeway with wide, arcing “helicoil” ramps designed to minimize disruption of city streets and the utility grid. However, Phoenix residents voted against this construction, forcing planners to reconsider the design.
- Engineers and designers rose to the challenge by designing a six-block, 2,887-foot section of the freeway below grade with a public park on top. The below-grade section, officially called the Papago Freeway Tunnel and more popularly known as the Deck Park Tunnel, is technically not a tunnel, but rather 19 bridges lined side by side, that support 13 acres of the 30-acre Margaret T. Hance park atop the bridge decks.
- The structural portion of the tunnel cost more than \$55 million and the electrical and mechanical components cost an additional \$20 million.
- The 20-mile portion of I-10 through Phoenix cost more than \$500 million, with an additional \$150 million in right-of-way costs. Federal aid, administered through the Federal Highway Administration, accounted for 95 percent of the construction costs. The project employed thousands through the 1980s and was the most expensive freeway segment on the Interstate System when it opened in 1990.
- The opening of this segment also marked the completion of I-10 coast-to-coast. The estimated total federal and state cost for construction of I-10 was \$5 billion. In 2015, the Papago Freeway Tunnel carried more than 230,000 vehicles, including 11,000 trucks, per day.
- For the Papago Freeway Tunnel project, public buy-in was an important component of the planning process. Innovative solutions, albeit more expensive than conventional solutions, were used to ensure that continuity of historic and commercial districts of established neighborhoods were preserved.
- The project incorporated many other elements with the local citizens in mind, including soundproof walls, pedestrian bridges, and color and decoration of the concrete walls. The team also removed more than 800 palm trees, maintaining them at a nursery during construction and returning them to the same neighborhoods afterward.

Reference and Additional Information

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