

An Engineering Feat on One of the Busiest Corridors in the Nation

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The LBJ Express is a \$2.6-billion, 13-mile highway reconstruction project that has more than doubled the capacity of this major corridor spanning two municipalities. To accommodate the increased traffic, the LBJ Express project incorporated improvements to I-635 and I-35E in Dallas County, Texas. The project features rebuilt general highway lanes, two major interchanges, 12 arterial crossings, six collector street crossings, a continuous frontage road system and 13.3 miles of TEXpress Managed Lanes. The project began in late 2010, was completed on-budget and opened three months ahead of schedule in September 2015.

The design-build construction was led by Ferrovial Agroman, headquartered in Austin, Texas. The Ferrovial technical design team optimized the original LBJ Express design during the proposal phase by suggesting an alternative technical concept to replace the proposed tunneled TEXpress managed lanes concept with an open-air cantilevered design. This solution saved \$1 billion in construction cost and made the LBJ Express more feasible to build and attain funding—which provided cost savings to taxpayers and new travel choices for drivers.

The design-build delivery proved effective: An accelerated construction schedule—with more than 40,000



A look at the LBJ Express prior to construction

activities—advanced the project ahead of traditional construction methods by nearly a decade. It also allowed the entire 13-mile corridor to be under construction simultaneously and for redesigns to be incorporated as the project progressed.

The LBJ Express was an engineering challenge. More than 6 million cu yds of excavation had to be removed, 5.8 million sq ft of bridge decks had to be built and approximately 2 million sq ft of retaining walls were constructed, all while maintaining mobility for 270,000 motorists through one of the busiest corridors in the nation.

The LBJ Express is also a recognized model for its public-private partnership. The LBJ Infrastructure Group, a Cintra-led consortium, provided roughly four-fifths of the total financing for the project, or approximately \$2.21 billion of the total \$2.6 billion needed for the



Bird's eye view of the LBJ Express after construction is complete

project. The P3 enabled taxpayers to leverage \$490 million in public funds to receive more than four times the value in infrastructure enhancements and traffic relief.

The funding agreement represented a combination of public and private funds, including private equity (\$665 million), unwrapped private activity bonds made available by the U.S. Dept. of Transportation (\$615 million), \$496 million from the Texas Department of Transportation, and a U.S. DOT Transportation Infrastructure Finance and Innovation Act (TIFIA) loan of \$850 million, offered by the U.S. DOT to encourage private-sector involvement in U.S. highway projects.

The project has experienced impressive performance during operations as well. Since its opening, the LBJ Express has seen a 10-15% increase in the daily number of vehicles using the roadway, and overall congestion relief is averaging nearly 70% with speeds up by 15% across the entire highway. Not only is the LBJ Express providing drivers with additional mobility solutions, but it has also attracted new development along the corridor.

The new LBJ Express corridor continues to produce anticipated results and is described by TxDOT as the most comprehensive, complex project of its type in the country.

For more information about Ferrovial Agroman or the LBJ Express, visit www.fauscorp.com. ♦



The cantilevered design of the TEXpress lanes in the center of the roadway saved \$1 billion in construction cost.

PHOTOS: LBJ EXPRESS