



DFW CONNECTOR

ALTERNATIVE DELIVERY PROGRAM

DEVELOPER: NorthGate Constructors JV

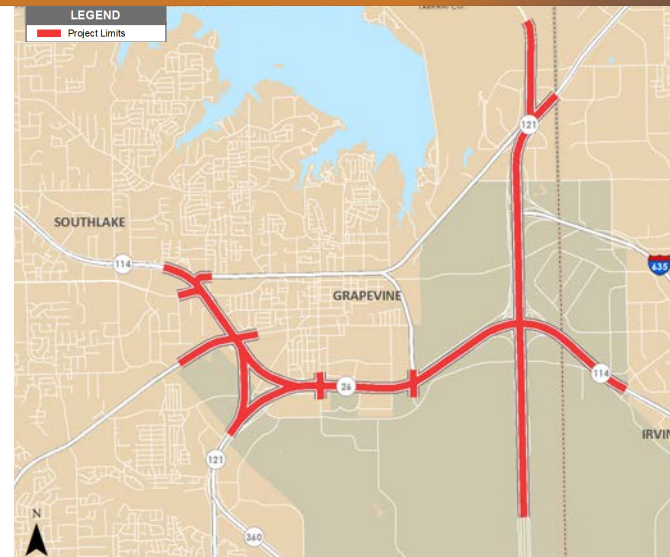


SUCCESS STORY



INNOVATIVE DELIVERY

A procurement process of 27 months incorporated best price negotiations and scope expansions to identify an apparent best value proposer to complete the project in phases based on available funding from contract execution in 2009 to delivery of key segments in 2014, 2017, 2018 and final ribbon cutting in August 2021.



PROJECT DESCRIPTION

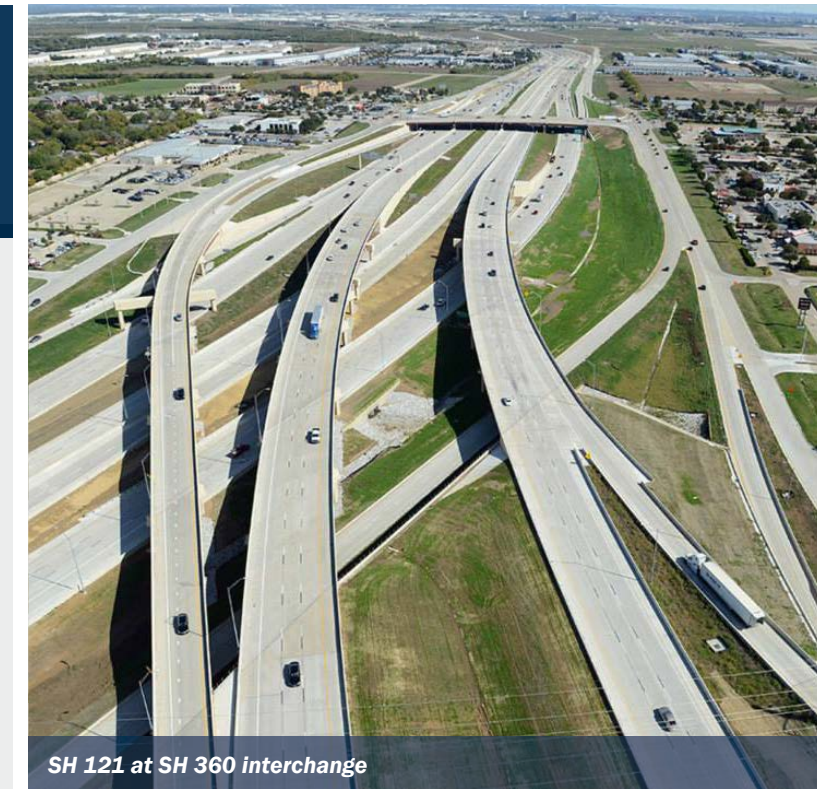
SH 114: FROM: SH 114L Business (Northwest Hwy)

TO: International Parkway

SH 121: FROM: SH 360 **TO:** FM 2499

LANE MILES:
201

TOTAL CONTRACT VALUE
\$1,608 million



SH 121 at SH 360 interchange

DESIGN-BUILD EFFICIENCIES

Procurement process divided the ultimate project into segments to allow TxDOT to secure pricing and tailor approved construction for segments deferred due to funding constraints.

25 MONTHS
of construction time saved with three of the five segments completed ahead of schedule.

INNOVATION OPPORTUNITIES

- The design-build team kept all traffic lanes open during peak travel times via innovative temporary pavements and detours.
- Integrated Material Tracking System electronically integrated bulk material hauling resources to provide real-time truck management and improved supply chain efficiencies.
- Intelligent Compaction technologies on roller equipment improved overall quality and reduced man hours for random testing.
- Telematics created real-time fleet management to improve safety and efficiency of fleet resources while monitoring idling hours to reduce environmental pollution.
- Incorporated \$260 million from the American Recovery and Reinvestment Act of 2009, the largest award for the Act.
- 4 ATCs were approved for incorporation into the CDA including deep foundation design optimizations and elevating the direct connector ramps at SH 26.

INNOVATION OPPORTUNITIES

- The initial project comprised 8.4 miles of SH 114 and SH 121 in Grapevine, Southlake and Irving, consisting of:
 - Subsequent deferred components including: new SH 121 and SH 360 ramps from the southbound SH 121 frontage road (William D. Tate avenue) to SH 121 and SH 360; two new mainlanes in each direction on FM 2499 from SH 121 to Denton Creek; and improvements to the SH 121/360 and I-635/SH 121 interchanges.
 - Improvements to the two interchanges, which included new direct connectors for SH 114, SH 121, and SH 360 at the SH 121/360 interchange, and new direct connectors at SH 26 and FM 2499 at the I-635/SH 121 interchange, which were constructed after securing funding in 2016 and 2017, respectively, under the Texas Clear Lanes initiative.

ADP PROGRAM LESSONS LEARNED

- First TxDOT project to utilize a design-build Comprehensive Development Agreement (CDA), which set the standard for future design-build projects procured by the TxDOT Alternative Delivery Program.
- Identified improvements for procurement process and contract language to improve best value selection process for future projects.

“ ” FHWA Administrator Mendez: Time is money, and Texas is saving taxpayers both with the DFW Connector. When it comes to building a model of transportation efficiency, the Lone Star State has done it faster, with a world-class transformation of highways that has raised the bar on project delivery.

PROJECT BENEFITS

Doubled the size of the existing highway system around the north entrance of the DFW International Airport and provided significant congestion relief under the Texas Clear Lanes initiative.

AWARDS

- 🏆 2011: American Road & Transportation Builders Association (ARTBA)'s 2011 Transportation Development Foundation's PRIDE Award.
- 🏆 2012: White House Champions of Change award.
- 🏆 2012: Design-Build Institute of America (DBIA)'s Transportation Owner of the Year Award.
- 🏆 2013: Design-Build Honor Award.
- 🏆 2014: WASHTO America's Transportation Award.
- 🏆 2014: FHWA Excellence Award for Project Development.
- 🏆 2014: American Road & Transportation Builders Association (ARTBA)'s P3 Project of the Year Award.
- 🏆 2015: ACPA's National Gold Award for Excellence in Concrete Pavement for Urban Divided Highways.
- 🏆 ACPA's Globe Award.
- 🏆 General Contractors of America's Alliant Build America Award.