

## **DFW Connector Receives National Award for Excellence**

*ACPA awards DFW Connector gold for outstanding project success*

([PRWEB](#)) March 11, 2016 -- The American Concrete Pavement Association (ACPA) bestowed the National Gold Award for Excellence in Concrete Pavement for Urban Divided Highways to Texas Department of Transportation's (TxDOT) Dallas/Fort Worth Connector (DFWC) at the ACPA 26th Annual Banquet, hosted in Bonita Springs, Florida on Dec. 4, 2015.

An independent panel of judges voted for the DFWC over 70 other projects in recognition of high quality workmanship and outstanding project success. Completed ahead of schedule, the project combined physical road improvements, environmental benefits and cost efficiency.

The eight-mile stretch of SH 114/121 had been experiencing traffic congestion due to increasing population and shared right-of-way along several sections of the highway. With total construction time under four years, the DFWC team tackled these issues with the addition of toll, frontage and general purpose lanes, as well as upgrades to portions of four highways, two interchanges and five bridges. Ultimately, in the widest section of the project, the improvements expanded highway capacity from 12 to 24 lanes.

The design-build team faced a set of unique challenges on the DFWC project. For example, the team constructed temporary pavements and detours in such a way to keep all traffic lanes open during peak travel times without adding to congestion. Right-of-way restrictions in the dense urban area created additional complexity, requiring frequent changes to the paving footprint. To avoid delays, the team invested in a specialized Guntert & Zimmerman paver which significantly reduced time spent changing the paving width.

Regarding the pavement design, engineers at The Transtec Group tackled a number of tasks including pavement thickness designs for all elements, advanced CRCP design for toll gantry block-outs, terminal joint designs, pavement transitions and jointing details. "It was challenging accounting for geometry, materials, and climate conditions during placement among other factors, but Transtec was able to provide very innovative solutions," said Transtec's Director of Engineering Mauricio Ruiz.

Innovative technologies included stringless paving, intelligent compaction, mix and materials optimization, ProVAL pavement profile analysis, and COMMAND Center temperature monitoring for mass concrete placement. These strategies ensured long-lasting pavements, cost savings and reduced the project schedule.

Completed more than a year ahead of schedule at a cost of \$1.02 billion, the DFWC now provides efficient transportation, with improved air quality thanks to increased capacity and reduced congestion.

The DFWC team was led by developer NorthGate Constructors, a joint venture of Fort Worth-based Kiewit Texas Construction L.P. and San Antonio-based Zachry Construction Corporation. The subconsultant responsible for pavement design was The Transtec Group.

The combined experience of the organizations involved in the DFW Connector serves as a leading example of successful project execution at this scale. "One of the most rewarding experiences was being able to partner with the contractor to optimize the concrete pavement mixture proportioning," said Ruiz. "Implementing combined aggregate blending that allowed a significant reduction in cementitious materials while still



producing a consistent and workable quality mixture is something to be proud of.”

About The Transtec Group: The Transtec Group is a pavement engineering firm that delivers exceptional engineering in pavement design, design/build, P3, construction, research, pavement surface testing, pavement software development, and technology implementation.

Transtec engineers pavements that reduce cost, accelerate schedules, and protect clients from risk. The firm has completed over 600 projects worth more than \$20 billion on five continents and is a minority-owned small business based in Austin, Texas. For more information, please visit [www.TheTranstecGroup.com](http://www.TheTranstecGroup.com).



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