

21st-century technology manages rush-hour traffic

By Marice Richter April 16, 2014

Free lanes combined with toll lanes give commuters choice on 4 miles of DFW Connector

The free ride on the new toll lanes on the DFW Connector will end by the beginning of May, and motorists will get a taste of the future of commuting through the area.

"This is a different way to manage transportation through the most congested corridors on existing pathways that are 50 to 60 years old," said Robert Hinkle, director of corporate affairs for NTE Mobility Partners, which is managing the \$2.5 billion reconstruction of 13.3 miles of SH 183 and Loop 820, known as the North Tarrant Express.

"The reconstructed roads are safer and more efficient, using 21st-century technology and incorporating lessons learned over the years," Hinkle said.

Managed lanes

Unlike toll roads such as SH 121, the DFW Connector, North Tarrant Express and other area projects combine free lanes with toll lanes, giving commuters a choice.

The DFW Connector's TExpress lanes on SH 114 opened April 1 for a one-month free test drive to make them available for the busy NCAA Final Four and Duck Commander 500 NASCAR race weekend while toll equipment testing continued.

In May tolling will be phased in for a six-month period of static toll rates of 67 cents during non-peak travel times to \$1 during rush-hour periods for driver-only vehicles, according to the Texas Department of Transportation, which managed this \$1.1 billion project.

After that, toll rates are intended to become dynamic or variable, depending on the time of day and traffic volume, officials said.

"Our goal is to keep the [toll] lanes moving at a minimum of 50 mph at all times," said Lisa Walzl, a spokeswoman for TxDOT.

Dynamic tolls possibly postponed

However, TxDOT officials are already hinting that the switch to dynamic tolling could be postponed beyond the six-month static rate period because of the large capacity of the road.

"We have a lot of capacity on SH 114," said Tony Hartzel, TxDOT public information supervisor. "Around Main Street in Grapevine, the road is 24-lanes wide, including the frontage roads."

Since the DFW Connector is the gateway to the north entrance of the Dallas/Fort Worth International Airport, TxDOT officials said they predict that growth and increased traffic in the Dallas-Fort Worth area will eventually support the need for that much capacity.

DFW Connector

The DFW Connector project expanded roadway capacity in an 8.5-mile area where four highways converge including SH 114 and SH 121 in Grapevine.

The project involved construction of two interchanges and about 39 bridges, according to TxDOT officials.

But toll lanes were only built along a 4-mile segment of SH 114, between the area from about Kimball Avenue to Freeport Parkway. Since the toll lanes were created to serve thru traffic, they can only be accessed from the two ends, near Kimball in Southlake or Freeport in Irving.

"There is no way for people driving north from the [SH 121/SH 360 merge] to access those lanes," said Mike Pacelli, transportation manager for the city of Grapevine. "The only real benefit within Grapevine is that they take some of the traffic out of the general purpose [free] lanes."

Although completion of the Connector project has relieved a lot of the congestion problems in this area, formerly known as the Grapevine Funnel, there are bottleneck problems during peak periods, particularly in the SH 121/SH 360 merge area on the outskirts of the project area, Pacelli said.

Since the toll lanes opened, traffic has steadily increased during the free introductory period, Walzl said.

TxDOT officials said they will not know how steady traffic will remain once drivers have to pay to drive these lanes.

Toll tags

The 21st-century technology of the toll lanes means there will be no toll booths or collection system. Drivers are encouraged to use toll tags or will be billed by mail.

Discounted rates will be available for vehicles with a valid North Texas Tollway Authority TollTag, TxTag or EZ TAG on their windshields. Further discounts are available for vehicles preregistered as high-occupancy, meaning at least one passenger besides the driver. To preregister, visit www.DriveOnTEXpress.com.

Toll rates will be posted on electronic signs to guide drivers onto the toll lanes. When the tolls become dynamic, electronic sensors throughout the corridor will measure congestion every few minutes and electronically recalibrate the rates, TxDOT officials said.

LBJ and NTE

The DFW Connector's TEXpress lanes are the second to open in the Dallas-Fort Worth area. A 3.2-mile segment between Preston Road and Greenville Avenue opened on the LBJ Express in December.

The LBJ lanes are still operating under the six-month introductory static-pay period, so there is no information on the success of dynamic tolling, Hartzel said. Usage numbers also are not available yet, he said.

The North Tarrant Express will have toll lanes along the entire 13.3-mile stretch between I-35W in Fort Worth and Industrial Boulevard in Euless. The project is expected to be complete by the end of this year, about six months ahead of schedule.

"The tolls [on NTE] will begin on day one when the road opens," Hinkle said.

Reconstruction of I-35W from downtown Fort Worth to the U.S. Hwy. 287 interchange are part of the North Texas Express project and will be completed in phases through 2017, Hinkle said.