

DALLAS - FORT WORTH, TX
INNOVATION
CONCESSION

- \$1.8B Total Investment
- 13mi Length
- 2009-2061 Concession period
- 2014 Opening date

One of America's most innovative and complex road building projects, the North Tarrant Express was built by Ferrovial Construction and is managed by Cintra.

In 2009, Cintra was chosen to lead a partnership that created the North Tarrant Express, a project that is improving mobility, relieving congestion and preparing for future growth along a corridor of highly traveled highways in North Texas.



The NTE is a 13.25 miles highway located in the **Dallas-Fort Worth area in north Texas**. It is dedicated to improving mobility along a series of highways vital to the region, including IH-820 and SH 121/183.

The **North Tarrant Express** corridor has been one of the most congested in the United States. Drivers have been choosing the new managed lanes since the facility opened in 2014 because it offers faster, safer and more reliable travel.

Managed Lanes: A New Mobility Concept

The NTE is unique in its category: a dynamic highway built inside a congested urban highway that has been upgraded and is being operated and maintained at no charge to users and taxpayers throughout the concession period. The addition of the managed lanes (called “TEXpress lanes” in Texas) doubles the road’s carrying capacity. Drivers can choose between the free lanes and the new managed lanes, which carry a toll that fluctuates during the day depending on traffic conditions in the corridor.

The project has been honored with two national awards from the American Road & Transportation Builders Association for their efforts in caring for the environment and relations with the community during the project implementation highlighting the Comprehensive Environmental Protection Program. The prestigious Infrastructure Journal also recognized NTE as the “2009 Global Transport Deal of the Year”.

A Public-Private Partnership with the State of Texas

The NTE project created about 2,000 jobs in North Texas, contributing to the job creation and economic development recovery in the United States. Additionally, a significant number of the region’s small businesses, contractors, suppliers and vendors were involved in this critical project.

Fauna Protection and Relocation

In North Tarrant Extension Segment 3A prior to begin with the drill shaft in Trinity River Bridge, was necessary assess the current status of **freshwater native mussel** population in order to contribute their conservation and persistence. The mussel have to be removed and relocate upstream by specialist in relocation of this

macro invertebrates. While the construction was in progress, the water condition was controlled by NTE Environmental Department.

Mitigation measures consisted of the removal of the live specimens and relocation out of the construction zone to **prevent accidental burying** of specimens and potential death caused by sediment entering the waterway as a result of the construction activities.

Scientists identified and relocated **33 native freshwater mussels** and identified an additional **66 shell-only** specimens; the four species of freshwater mussels recovered during survey activities are:

- Fragile papershell (*Leptodea fragilis*)
- Giant floater (*Pyganodon grandis*)
- Southern mapleleaf (*Quadrula apiculata*)
- Yellow sandshell (*Lampsilis teres*) [shell-only]

No state-listed freshwater mussels or Species of Greatest Conservation Need were identified during the freshwater mussel survey of the West Fork of the Trinity River and an unnamed tributary of the West Fork of the Trinity River.

In addition to avoidance and minimization, mitigation for temporary project impacts that might occur to mollusk habitat consisted of implementing **water quality measures**.

Prior to sediment disturbance in the river by bridge construction background concentration levels of Polychlorinated Biphenyl, Total Organic Carbon and Total Suspended Solids were established to provide data needed to deal with sediments that could affect the water quality, native freshwater mussels habitat and Total Maximum Daily Load concentrations in the river if disturbed.

While the construction was in progress, erosion and sedimentation control devices were installed along the river bank to control run-off, turbidity curtains deployed in the river, and real-time surface water turbidity measurements were taken to continually monitor the water conditions.

During construction, eight active **red-winged blackbird nests** were discovered in conflict with construction. All eight nests were protected and monitored, and project schedule was adjusted, until nesting was completed.

Bluebonnet Contractors, LLC; NTEMP; and the North Tarrant Express Project were chosen by an independent panel of environmental specialists as a recipient of the **ARTBA 2014 Globe Award** for environmental excellence. The Globe Awards are an annual competition to honor and draw attention to private-sector firms and public-sector transportation agencies that do an outstanding job in **protecting and/or enhancing the natural environment** in the planning, design and construction of U.S. transportation infrastructure projects.

The Construction Stage

The construction consists of:

- 84 bridges of 3.8 million square feet of deck area
- 7.7 million cubic yards of earthwork
- 290,000 linear feet of pipes/culverts
- 2.7 million square feet in 157 retaining walls
- 800,000 tons of paving
- 214,000 linear feet of drilled caisson shafts
- 458,000 linear feet of prestressed concrete beams
- 32 million pounds of rebar tied.

Ferrovial Construction was awarded the TxDOT Office of Civil Rights' Small Business Advocacy Award in 2013 for outstanding DBE service on the project.