e How will I know how much I am paying?

No Frontage roads and freeway main lanes have no additional cost. Express lane users will see changeable message signs specifying the toll rate. Motorists will then be able to decide whether to use the managed lanes.

Will there be toll booths?

No. The managed lanes are all-electronic. Motorists may use electronic transponders such as a TxTag or TollTag, or they may use a pay-by-mail option and be billed at a higher rate than tag users for their

Do I need a different toll tag?

The North Texas Tollway Authority is expected to handle toll collection and customer service. If you already have a TxTag or TollTag, you do not need to do anything else.

Why are prices different on managed lanes compared to toll roads?

Managed lanes are a traffic management strategy designed to keep traffic moving, even during peak hours. The 50 mph goal for travel in managed lanes means toll rates could be higher than on existing toll roads. Motorists can still choose to travel in "gas tax" lanes adjacent to the managed lanes.

l already pay gas taxes. Managed lanes are double taxation, aren't they?

No. Motorists are not forced to use managed lanes. The use of pricing is an option that helps keep traffic moving. Each managed lane corridor also will have safer, rebuilt main lanes for those who don't want to use the managed lanes.

Why are there plans to build managed lanes throughout North Texas?

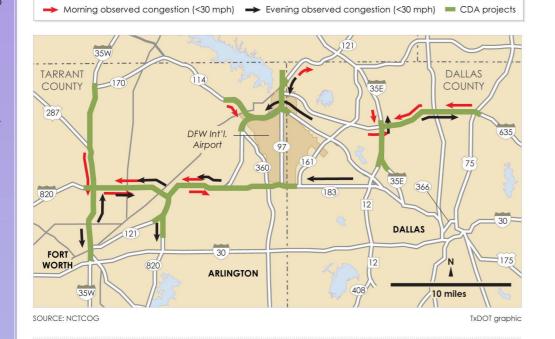
Managed lanes provide motorists a choice. They keep traffic and the North Texas economy moving. The planned network of managed lanes takes a long-term view to address congestion well into the future, including maintenance of

Aren't these designed for the rich?

Studies show that all types of motorists use them at least occasionally. Their choice is often based upon the importance of arriving at a specific destination on time. Managed lanes are not necessarily a 5-day-a-week commuting option.

RECURRING SEVERE CONGESTION

Recurring traffic congestion is predictable and usually happens on a daily basis. Congestion occurs when demand exceeds the capacity of a facility. Typical causes of recurring congestion include bottleneck locations associated with geometric design deficiencies, weaving/merging locations, long-term construction work zones, poor traffic-signal timing, and over-capacity locations. Here are some of the most severely congested areas during morning and evening hours:



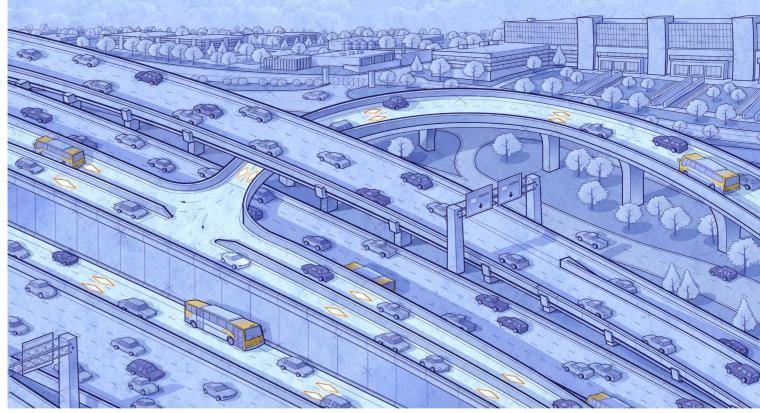
A VISION FOR THE FUTURE



Artist rendering of the future intersection of LBJ Freeway at Preston Road featuring managed lanes (lowest level), main lanes (middle level) and frontage roads at Preston Road Bridge (upper level).

FOR MORE INFORMATION:

North Central Texas Council of Governments Transportation Department 817-695-9240 transinfo@nctcog.org



TxDOT illustration by Dean Hollingsworth

HOV-Managed lanes

uality transportation contributes to our state's economy and every Texan's quality of life. North Texas' exponential growth means more cars added to already congested roads. This challenges our region's quality of life through higher fuel costs, lost productivity and increased vehicle emissions.

The region's transportation network continues to expand to keep people, goods and services moving through the fourth-largest metropolitan region in the country. The next step in that evolution features managed lanes. The base for managed lanes was created with the 84-mile highoccupancy vehicle (HOV) lane network in place today.

The primary function of HOV lanes is to move more people in fewer cars. HOV lanes are one strategy used to help meet

federal clean-air requirements.

Much of the region's existing HOV network was designed to provide immediate relief, but will be updated to managed lanes over time. Managed lanes make more efficient use of the HOV system and relieve traffic on existing highways.

Construction is under way on dozens of miles of managed lanes, which can be used by all motorists willing to pay for a higher level of service. The price will vary depending on congestion and is lower for car-pools. Managed lanes will provide a safe, reliable and efficient trip while easing congestion, improving air quality and providing commuting options as millions more people call North Texas home. *

TxDOT illustration

evel of Demand | Air quality | New Lanes | Efficiency/Evolution of HOVs | Safety and Predictability

LEVEL OF DEMAND

Why not just build more lanes?

Adding more lanes to a highway might provide short-term relief. Those new lanes would fill up quickly over time - most likely within a decade.

- In urban North Texas, an ambitious transportation network expansion program can't entirely keep up with the rapid pace of population growth. We can't build our way out of congestion.
- Today, the average cost per mile of the 13-mile North Tarrant Express is \$162 million. The cost is \$143 million per mile for the DFW Connector and \$207 million for the LBJ Express.
- Demand to use LBJ Freeway is so great that, if funding were available, 31 lanes could be built and then be filled up by 2030. A combination of 20 main lanes, managed lanes and frontage road lanes are all that can be built.

NORTH CENTRAL EXPRESSWAY

A 10-mile stretch from downtown Dallas to LBJ Freeway was rebuilt in the 1990s, going from eight total lanes

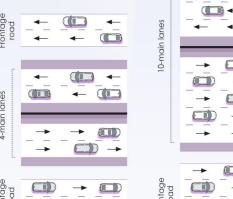
(four main lanes and four frontage road lanes) to 16 lanes (10 main lanes and six frontage road lanes). From 2000 to 2008, traffic on Central at Northwest Highway has almost doubled in vehicles per day:

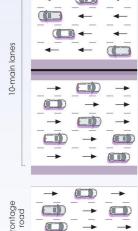
U.S. 75 in 2008 (288,000 vehicles per day)



U.S. 75 in 2000 (146,000 vehicles

per day)





NOTE: Not to scale. General representation only

TxDOT graphic

AIR QUALITY

How do managed lanes help with air quality?

Keeping traffic moving at 50 mph on the managed lanes reduces vehicle emissions. And the addition of managed lanes will ease congestion on the other highway lanes and surrounding city streets.

- North Texas is a non-attainment area for ozone. putting the region at risk of losing highway
- North Texas' air quality has improved in the past decade. But more improvement must be made to meet federal guidelines.
- High-occupancy vehicle (HOV) lanes are an important part of a regional clean-air plan.
 - Since 1991, North Texas has implemented HOV lanes to help improve air quality by encouraging car-pooling and transit use.
 - As the region added population, leaders took the initiative to expand its HOV network and add managed lanes. The expanded network provides a commuting alternative and improves air quality by managing excess HOV capacity.

NEW LANES

What is the difference between a toll road and a highway with managed lanes?

The primary difference is to provide motorists a choice to pay for a higher level of service. Motorists can choose to drive in the managed lanes or choose to drive in the main lanes. Additionally, a highway with managed lanes primarily features free lanes. Managed lanes are designed to keep traffic moving on at least a portion of the road at all hours of the day – even peak hours. This is achieved by responding to demand by increasing or decreasing the price. A toll road, on the other hand, features a static toll on all main lanes. Motorists may encounter congestion on all toll road lanes during peak hours.

- The region adds more than 100,000 new residents per year.
- North Texas, already home to 6.5 million people, will grow to 9 million residents by 2030.
- More residents mean more cars and more vehicle emissions. More than 4.5 million vehicles are registered in the four urban counties. Based on current ownership rates, that number will grow to almost 6 million vehicles by 2030.
- At the same time, state and regional road-building plans call for adding 7,307 lane miles to the 12-county area by 2035, a 16 percent increase from the total of 46.167 lane miles in 2010.

EFFICIENCY OF HOV SYSTEM

How did we get to the need for managed lanes?

The high-occupancy vehicle lane system evolved from only allowing buses to include car-pools and van-pools. Still, HOV lanes had room for more vehicles, even during peak hours. Managed lanes are the most efficient way to use that capacity.

- Managed lanes make efficient use of excess HOV capacity by allowing drivers to choose to pay extra for a higher level of service. HOV and transit users still receive a discount.
- The price will vary depending on congestion levels, with the goal of a 50 mph trip.
- Managed lanes give motorists an option to get more quickly to their destinations - such as the airport, work, day-care or other important appointments.
- Without managed lanes and their revenue, the NTE and LBJ would not have had enough funding to be rebuilt. Developer teams take the financial risk for building and for operations and maintenance costs for 52 years.

SAFETY AND PREDICTABILITY

How will managed lanes help my commute?

They will be barrier-separated, with dedicated entrance and exit ramps. And they will feature electronic toll collection. All of these factors will result in a safe and reliable 50 mph trip.

- Barrier-separated lanes reduce a large portion of weaving and merging traffic. They separate local drivers entering and exiting a highway from motorists passing through the corridor.
- A managed lane system means a more predictable 50 mph commute for motorists.
- A higher percentage of managed-lane trips could be bus and van-pool users, lowering the demand for automobile usage.



Looking east on Northeast Loop 820 near Rufe Snow Drive This level of congestion is all too familiar to drivers of the 214,000 vehicles a day that use it.

HOW DO MANAGED LANES OPERATE?

Managed lanes are lanes where traffic is kept moving at a faster, more reliable speed (50 mph) by adjusting the toll rate up and down as the number of vehicles increases or decreases respectively. Drivers can enter and exit the managed lanes at select points along the roadway and pay a toll to ensure a faster, more predictable trip time.

GROUND-LEVEL LAYOUT

Improved Reconstructed New managed lanes (Toll) Reconstructed Improved frontage free lanes free lanes frontage roads roads

SUB-SURFACE LAYOUT

Reconstructed Improved Reconstructed Improved frontage free lanes frontage free lanes roads roads

NOTE: Illustration depicts example managed lane design only.

TxDOT graphic

TxDQT photo