

 **US 75**  
Corridor Study

# Welcome

to the  
US 75 Corridor Study

Public Meeting

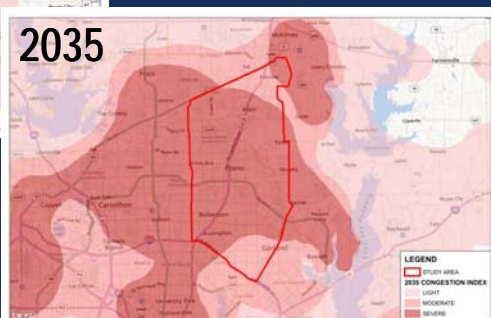
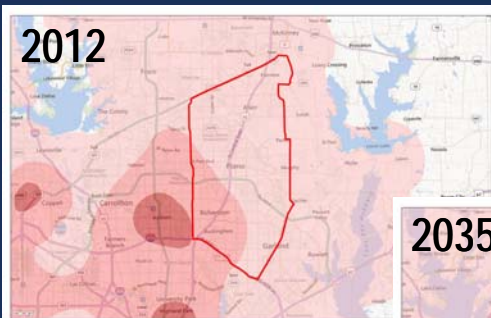


## US 75 Corridor Study Area



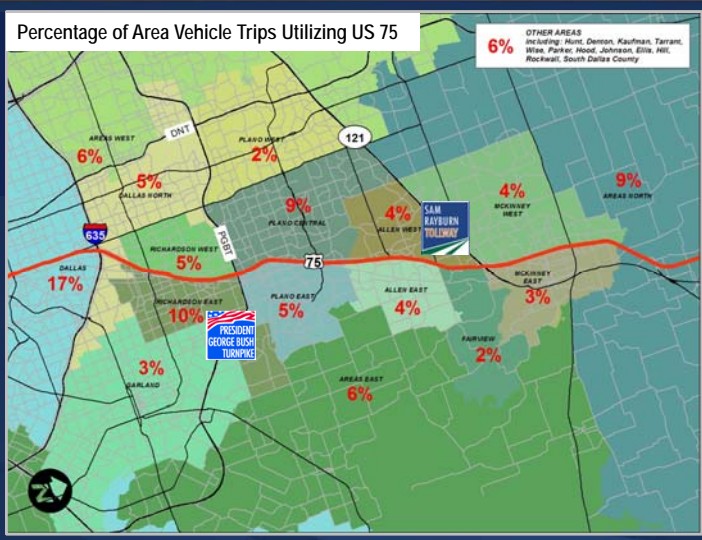
The map displays the US 75 corridor study area, highlighted in orange. The route starts in McKinney at the top and extends south through Allen, Plano, Richardson, and Dallas. Other cities shown include Frisco, Fairview, Lucas, Parker, Murphy, Wylie, Sachse, Addison, and Garland. Major highways are marked with their respective shields: 121, 75, and 635. The DNT (Dallas North Tollway) is also indicated.

# Existing and Future Congestion Levels

A do-nothing approach does not address the severe congestion in the region resulting in more stop and go or standstill traffic conditions.

# Where is US 75 Traffic Going?

- Values represent the percentage of US 75 motorists that originate or have destinations in a particular area. Total = 100%.
- 17% of US 75 Traffic travels to/from south of I-635.
- A growing level of traffic is accessing areas north of I-635.

# US 75 Traffic



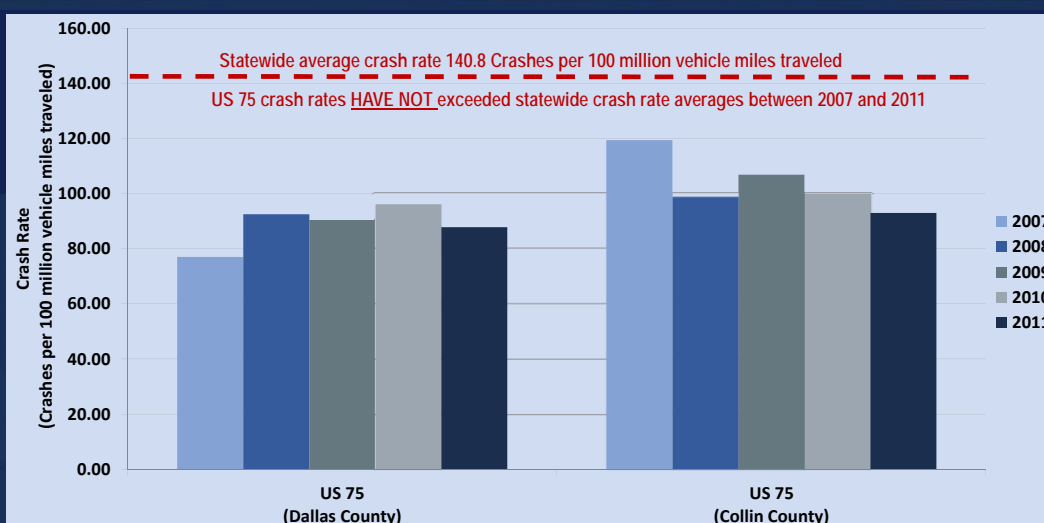
| Location           | 2012 Existing Daily Vehicle Traffic | 2035 Projected Vehicle Traffic with No Improvements | 2035 Projected Daily Vehicle Demand** |
|--------------------|-------------------------------------|---|---------------------------------------|
| I-635 to Campbell  | 225,000                             | 245,000*  | 450,000                               |
| Campbell to Legacy | 150,000                             | 250,000   | 500,000                               |
| Legacy to SH 121   | 105,000                             | 225,000   | 400,000                               |

\* Limited by capacity

\*\* Vehicles that desire to utilize US 75 Freeway based on NCTCOG Regional Travel Demand Model, if congestion was not an issue.

- As congestion increases, motorists who want to use the US 75 Freeway will seek other routes due to congestion.
- Based on NCTCOG data, significant traffic growth is projected on the US 75 mainlanes.
- Existing congestion will increase from an average of 2.5 hours/day to 8-10 hours/day if no transportation improvements are made.

# US 75 Accident Data



# US 75 Corridor Need and Purpose

### Goals and Objectives

- Meet the Future Mobility and Accessibility Needs of the US 75 Corridor
- Enhance Environmental Quality and Quality of Life
- Support Economic Development in the Corridor
- Improve Public Safety
- Facilitate Financing/Funding

**Need** – North-south mobility improvements are needed in the US 75 Study Area to accommodate increasing traffic volumes on US 75 that have resulted from increasing population and employment growth in Dallas and Collin counties.

**Purpose** - To address the future mobility and accessibility needs of the US 75 corridor while enhancing environmental quality and quality of life, supporting economic development, improving public safety, and facilitating financing options.

# US 75 Shared Solution

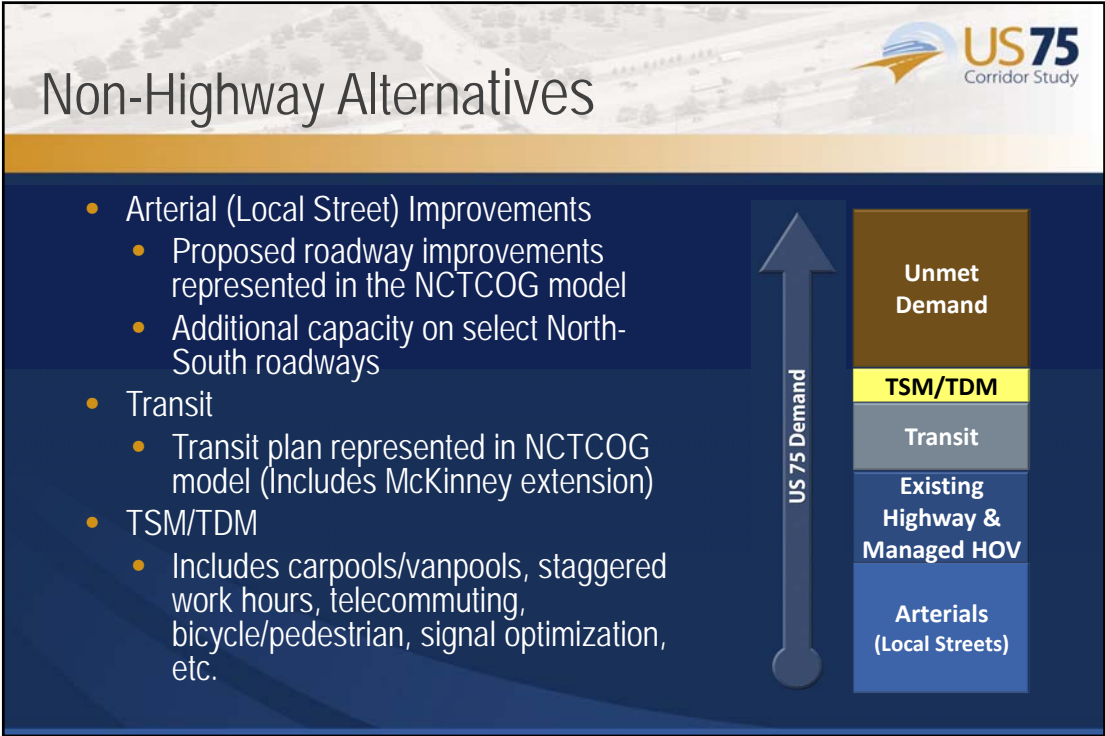
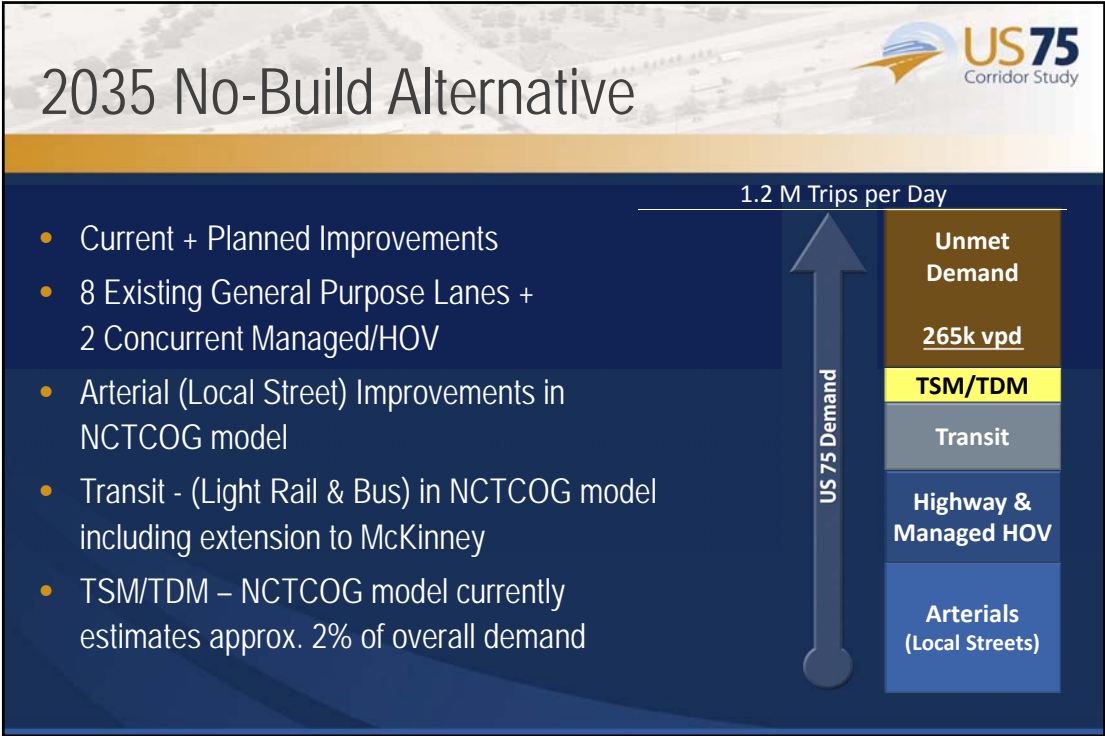
A wide range of solutions will need to work together to address the overall demand in the US 75 Corridor, including...

- Transportation Systems Management (TSM)
- Travel Demand Management (TDM)
- Transit
  - DART Rail (Current Service Plan)
  - Bus Service
- General Purpose Freeway Lanes
- Managed/Toll Lanes
- Arterial (Local Street) Improvements
  - Super Arterial (limited access/overpasses)
  - Operational Improvements



US 75 Demand

|                              |
|------------------------------|
| Unmet Demand                 |
| TSM/TDM                      |
| Rail                         |
| Transit                      |
| Highway                      |
| Managed Lane                 |
| Arterials<br>(Local Streets) |





## Alternatives With Limited Right-of-Way (ROW)



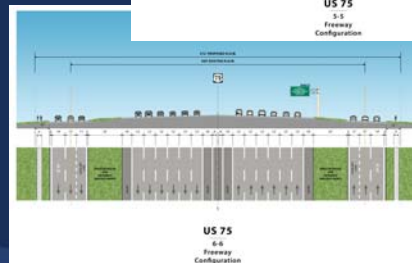
- No-Build Alternative
- An ultimate 2 Lane reversible Managed Lane would require additional ROW to add shoulders.
- An interim reversible without inside shoulders would require minimal ROW.



## General Purpose Lane Alternatives



- Considers only General Purpose Lanes to be added
- Considers ultimate 10 and 12 lane alternatives
- Results in additional 24 to 36 feet ROW on both sides



## Managed Toll Lane Alternatives



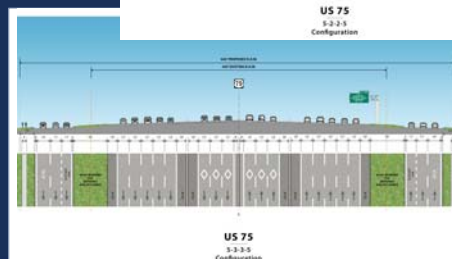
- Considers only Managed Toll Lanes added
- Considers the addition of 2 and 3 Managed Lanes in each direction
- Results in additional 21 to 60 feet of ROW on both sides
- Elevated and/or depressed sections may be considered to reduce required ROW



## General Purpose + Managed Toll Lane Alternatives



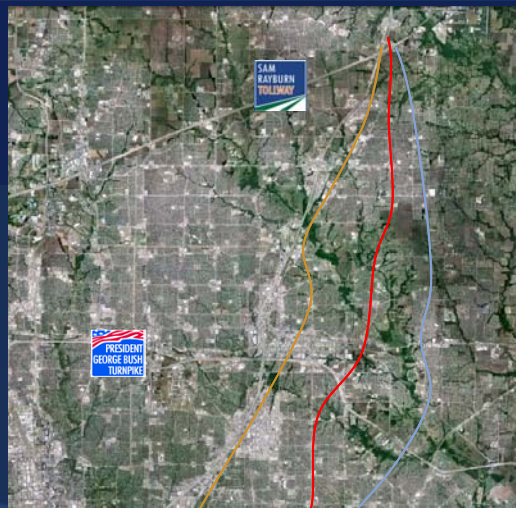
- Considers the addition of one General Purpose Lane each direction
- Considers the addition of 2 and 3 Managed Lanes in each direction
- Results in additional 33 to 80 feet of ROW on both sides
- Elevated and/or depressed sections may be considered to reduce required ROW



## New Location Alternative



- Considers the addition of 3 toll lanes each direction
- Considers one alternative east of existing US 75
- Considers another alternative generally following the DART rail line
- Results in 180 to 300 foot ROW



## What are Managed/Express Lanes?



### Managed Lanes

- Provides a reliable/predictable choice for commuters.
- High Occupancy Vehicles (HOV) are allowed for a reduced rate.
- Single Occupancy Vehicles (SOV) pay a toll to utilize Managed Lanes.
- The toll rate is adjusted throughout the day based on the level of congestion.
- Access into and out of the Managed Lane is provided at specific locations along the corridor.



### NCTCOG Managed Lane Policy

- Express Lanes/HOV Lanes (Blue Lines)
  - Fixed-fee schedule to ensure 50 mph speed guarantee.
  - SOV will pay full rate.
  - HOV 2+ can use lanes for free.
  - Review and adjust tolling schedule and auto occupancy requirements over time.
- Managed Lane (Orange Lines)
  - Fixed-fee schedule initially, transitioning to dynamic pricing to ensure 50mph speed guarantee.
  - SOV and HOV 2+ will pay full toll.
  - HOV 3+ will receive 50% discount initially to be phased out over time.



# Preliminary Alternative Evaluation Matrix



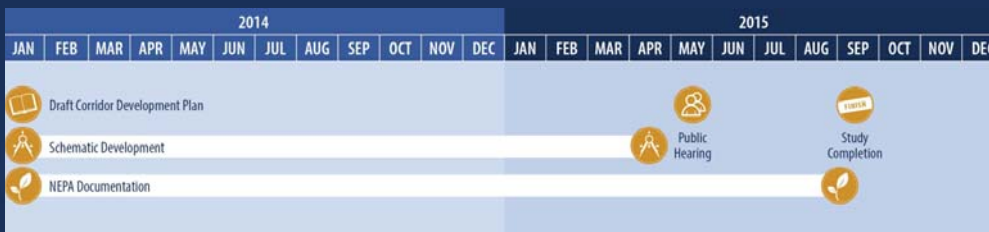
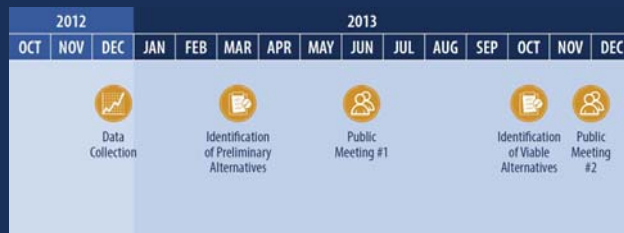
|   | WSP     |         |         | Preliminary Alternative (P) / (U) |          |          |          |         |         | New Alternative |          |
|---|---------|---------|---------|-----------------------------------|----------|----------|----------|---------|---------|-----------------|----------|
|   | PA      | UP      | UA      | PA                                | UP       | UA       | UP       | UP      | UP      | UP              | UP       |
| <b>TRAFFICABILITY</b>                                     |         |         |         |                                   |          |          |          |         |         |                 |          |
| Preliminary Estimated Capacity (vehicles per day)         | 240,000 | 270,000 | 286,000 | 300,000                           | 323,000  | 380,000  | 380,000  | 400,000 | 480,000 | 580,000         | 580,000  |
| Potential to Reduce Congestion                            | ++      | +       | +       | 0                                 | +        | +        | ++       | 0       | +       | +               | 0        |
| Potential to Reduce Vehicle-Trips                         | ++      | +       | +       | 0                                 | 0        | +        | +        | +       | +       | +               | 0        |
| Reliability   | ++      | 0       | 0       | +                                 | +        | ++       | +        | +       | +       | +               | 0        |
| Operational Configuration Serves Corridor Needs           | ++      | +       | +       | +                                 | +        | ++       | 0        | +       | +       | 0               | +        |
| <b>SOCIAL AND ENVIRONMENTAL</b>                           |         |         |         |                                   |          |          |          |         |         |                 |          |
| Relocation of Existing Commercial/Residential Development | 0       | 0       | ++      | ++                                | ++       | ++       | ++       | ++      | ++      | ++              | ++       |
| Exped Direct Environmental Resource Impacts               | 0       | 0       | ++      | ++                                | ++       | ++       | ++       | ++      | ++      | ++              | ++       |
| Potential to Significantly Improve Air Quality            | ++      | ++      | ++      | ++                                | ++       | ++       | ++       | ++      | ++      | ++              | ++       |
| <b>ECONOMIC DEVELOPMENT</b>                               |         |         |         |                                   |          |          |          |         |         |                 |          |
| Improve Access to Key Economic Benefit Areas              | ++      | ++      | ++      | ++                                | ++       | ++       | ++       | ++      | ++      | ++              | 0        |
| Consistent with Comprehensive Land Use Plan               | 0       | 0       | ++      | ++                                | ++       | ++       | ++       | ++      | ++      | ++              | ++       |
| <b>ENGINEERING</b>  |         |         |         |                                   |          |          |          |         |         |                 |          |
| Preliminary Estimated Cost including ROW (\$ in millions) | \$ 150  | \$ 180  | \$ 200  | \$ 2,000                          | \$ 1,500 | \$ 1,500 | \$ 1,200 | \$ 800  | \$ 700  | \$ 1,100        | \$ 1,200 |
| Implementation Cost                                       | ++      | +       | ++      | ++                                | ++       | ++       | ++       | ++      | ++      | ++              | ++       |
| Constructability  | ++      | +       | +       | +                                 | +        | +        | 0        | +       | +       | +               | ++       |
| Maintenance of Traffic                                    | ++      | +       | +       | +                                 | +        | +        | +        | +       | +       | ++              | ++       |
| Design/Operational Flexibility                            | ++      | +       | +       | +                                 | ++       | ++       | ++       | 0       | +       | ++              | ++       |
| ROW   | ++      | ++      | ++      | ++                                | ++       | ++       | ++       | ++      | ++      | ++              | ++       |
| <b>FINANCE</b>  |         |         |         |                                   |          |          |          |         |         |                 |          |
| Potential for Toll Financing                              | ++      | +       | +       | +                                 | ++       | ++       | ++       | ++      | ++      | ++              | ++       |

Recommended Alternatives for Further Evaluation...

- No-Build
- 4-3-3-4
- 5-2-2-5
- 5-3-3-5

|                                  |     |
|----------------------------------|-----|
| Very significant negative rating | --- |
| Significant negative rating      | --  |
| Neutral                          | 0   |
| Significant positive rating      | +   |
| Very significant positive rating | ++  |

# US 75 Project Schedule



# US 75 Project Work Group Committee



## Counties

- Dallas
- Collin

## Agencies

- TxDOT
- FHWA
- NCTCOG
- NTTA
- DART
- TTI

## Cities

- McKinney
- Allen
- Fairview
- Plano
- Richardson
- Dallas
- Garland



# Contact Information



Project Website Information:

[US75mobility.com](http://US75mobility.com)  
[keepitmovingdallas.com](http://keepitmovingdallas.com)

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