MOBILITY 2025: THE METROPOLITAN TRANSPORTATION PLAN



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North Central Texas Council of Governments

Transportation Department

www.nctcog.org/trans

NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS

NCTCOG Established to Assist in...

Planning for Common Needs; Cooperating for Mutual Benefit; and **Coordinating for Sound Regional Development.**

NCTCOG's Purpose is to...

Strengthen Both the Individual and Collective Power of Local Governments and to Help Them Recognize Regional **Opportunities**;

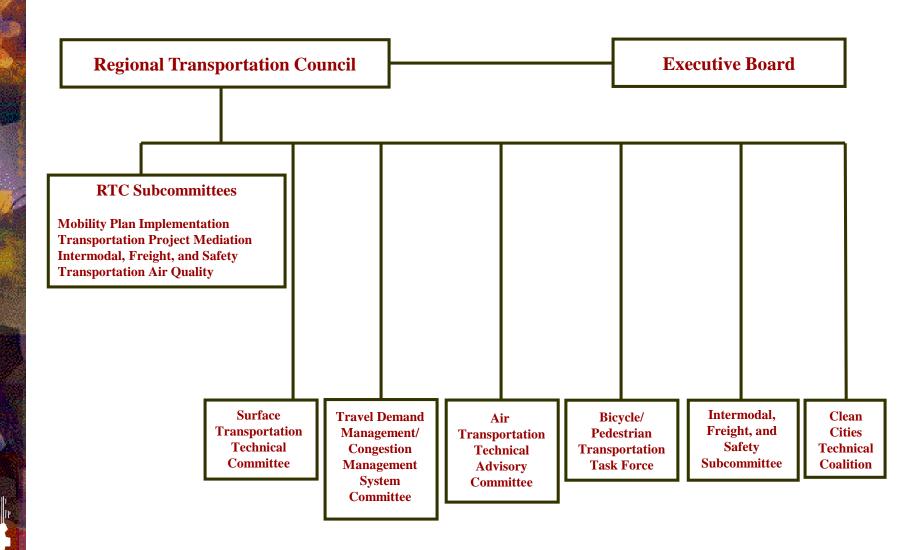
Eliminate Unnecessary Duplication; and Make Joint Decisions.

Administratively...

Executive Director Eight Departments



METROPOLITAN TRANSPORTATION PLANNING ADMINISTRATIVE STRUCTURE



METROPOLITAN TRANSPORTATION PLANNING WHAT WE DO

Metropolitan Transportation Plan
Transportation Improvement Program
Congestion Management System

Intelligent Transportation Systems
Transportation System Management
Travel Demand Management
Performance Monitoring

Air Quality Conformity Determinations
Unified Planning Work Program

METROPOLITAN TRANSPORTATION PLANNING REGIONAL PERSPECTIVE

Ninth Largest Metropolitan Area in the U.S.

Ranked Second in Population Growth Between 1990-2000 Adding Over One Million Persons

Larger than 27 States in Population

Larger than 16 States in Land Area

Represent Over 34 Percent of the State's Economy

Five Million Persons in Year 2000 Growing to Nearly Nine Million Persons by the Year 2030

METROPOLITAN TRANSPORTATION PLANNING OUR CHALLENGES

Accommodate Growth

Respond to Changing Demographics

Maintain and Operate Existing System

Integrate Technology

Improve Air Quality

Address Financial Constraints

Gain Public and Legislative Support

METROPOLITAN TRANSPORTATION PLANNING MOBILITY 2025 – AMENDED APRIL 2005

Identifies \$45 Billion of Policies, Programs, and Projects

Blueprint for Multimodal Transportation System Responds to Adopted Goals:

- Mobility
- Quality of Life
- Financial
- Air Quality

Identifies Policies, Programs, and Projects for Continued Development

Guides Expenditures of Federal and State Funds



The Metropolitan Transportation Plan, Amended April 2005

FINANCIAL CONSTRAINT SUMMARY

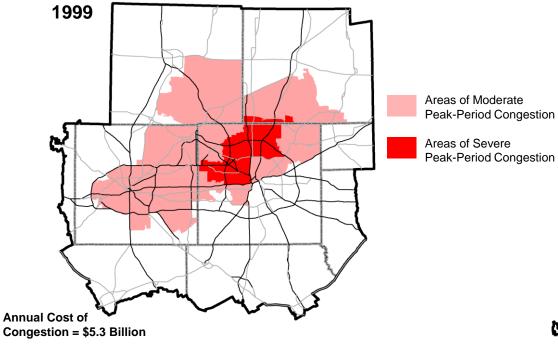
| Metropolitan Transportation System Components | Costs (Billions/2004 \$) | Revenue (Billions/2004 \$) | Revenue Initiative (Billions/2004 \$) |
|--------------------------------------------------------------------|-----------------------------|-------------------------------|------------------------------------------|
| Transit Operation & Maintenance | \$8.4 | \$8.4 | 0 |
| Roadway Operation & Maintenance | \$5.7 | \$5.7 | 0 |
| Congestion Mitigation Strategies | \$1.9 | \$1.9 | 0 |
| Bicycle & Pedestrian Facilities and Transportation Enhancements | \$1.0 | \$1.0 | 0 |
| Rail and Bus Transit System | \$8.3 | \$6.3 | 2.0 ¹ |
| HOV and Managed Facilities | \$1.5 | \$1.5 | 0 |
| Freeway and Toll Road System | \$12.4 | \$11.6 | \$0.82 |
| Regional Arterial and Local Thoroughfare System | \$5.8 | \$5.8 | 0 |
| TOTAL | \$45.0 | \$42.2 | \$2.8 |

¹ \$2.0 billion to be obtained through Regional Transit Initiative

²\$0.8 billion to be obtained through future Partnership Programs

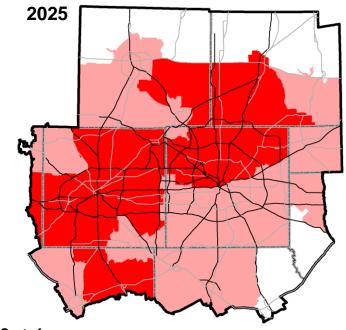
Mobility 2025: The Metropolitan Transportation Plan, Amended April 2005

REGIONAL CONGESTION LEVELS

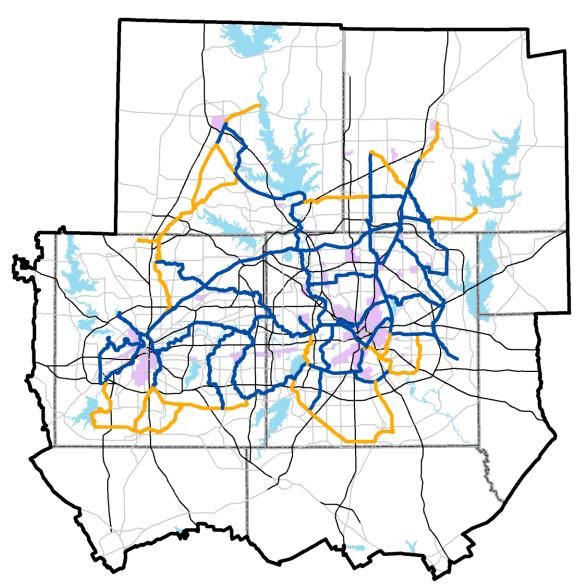


| | 1999 | 2025 | % Change |
|------------------------|--------|--------|----------|
| Vehicle Miles Traveled | | | |
| | 125 M | 233 M | 86% |
| Roadway Capacity | | | |
| | 23.2 M | 34.8 M | 50 % |
| Total Delay | | | |
| (Vehicle Hours) | 1.3 M | 2.8 M | 115% |
| % Roadways Congested | | | |
| | 38% | 53% | 39% |

| | 1999 | 2025 | % Change |
|------------|-------|-------|-------------|
| Population | 4.5 M | 8.0 M | 75% |
| Employment | 2.7 M | 4.9 M | 84% |
| VMT/Person | 29.05 | 29.31 | 1% |



Annual Cost of Congestion = \$11.5 Billion



The Metropolitan Transportation Plan, Amended April 2005

Bicycle and Pedestrian Facilities

Legend

Bicycle-Pedestrian Transportation Districts

Within all rail corridors all existing and planned stations are bicycle and pedestrian districts

Candidate Veloweb Routes

Recommended Veloweb Routes





New facility locations indicate transportation needs and do not represent specific alignments.

All Veloweb routes should be targeted for right of way preservation.

In addition to stand alone bicycle/pedestrian facilities, all transportation projects should be evaluated for basic safety accomodations and improvements to encourage cycling and walking.







LOCAL BENEFITS OF TRANSPORTATION SUSTAINABLE DEVELOPMENT STRATEGIES

Allows the choice of walking for short trips and the option of driving shorter distances.

Maximizes the use of public infrastructure.

Increases tax base in the district without reducing tax values of surrounding properties.

Creates a neighborhood with an authentic sense of place.



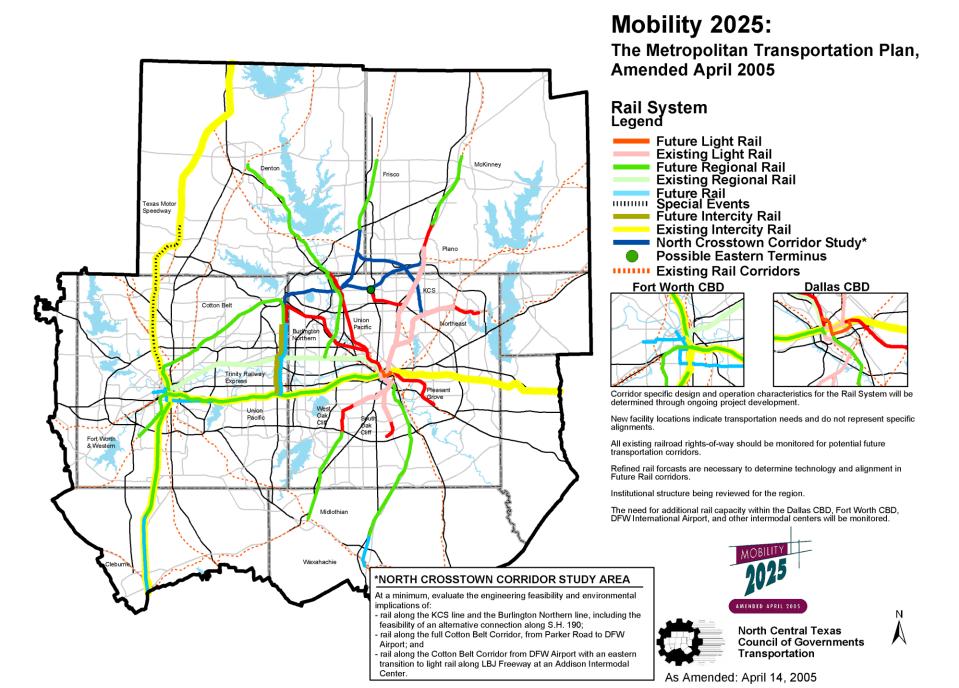
SOUTHLAKE TOWN SQUARE IS ...

A new "downtown" serving the City of Southlake and northeast Tarrant County.

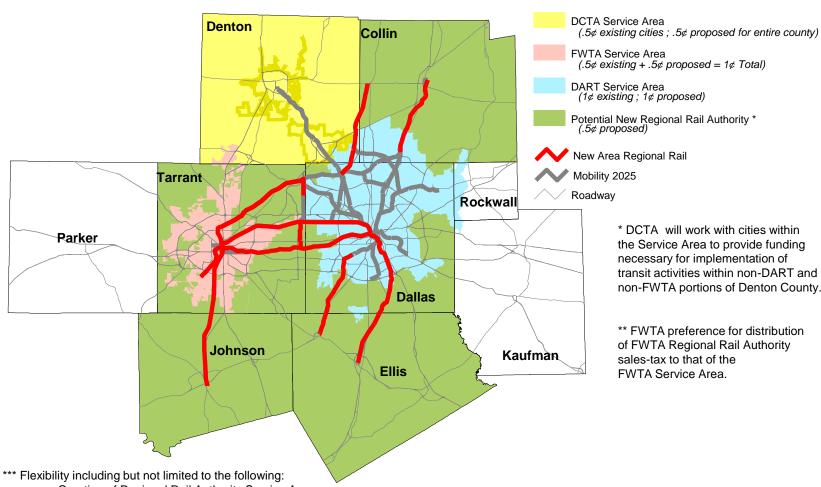
A community gathering space including Southlake Town Hall, library, and post office along with planned residential Brownstones.



A destination location made possible through exceptional pedestrian design, quality building design and construction, public spaces, and a mix of uses including restaurants, offices, and retail stores.



REGIONAL TRANSIT INITIATIVE PROPOSED STRUCTURE



- Creation of Regional Rail Authority Service Area
- · Able to Partner with other Authorities
- · Expand to Counties as Needed
- · Minimal "Feeder" Bus Service
- Additional Funding Includes: Air Quality Projects, Local Match, Bottleneck Improvements, etc.



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Intelligent Transportation Systems

Legend

Mobility Assistant Patrols

Communication Systems

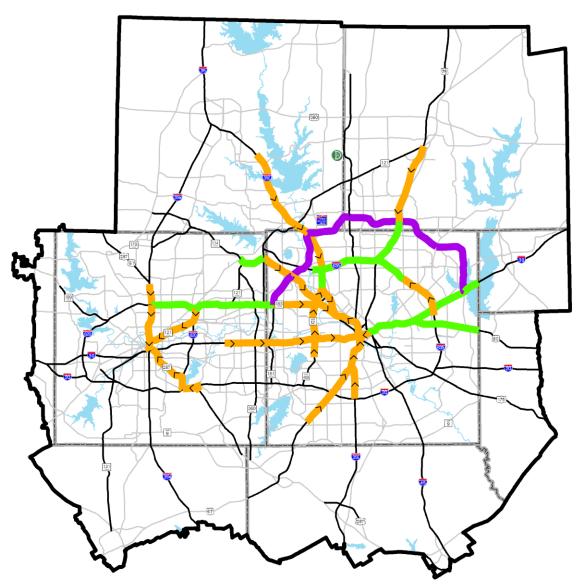
Advanced Traffic Management

- TxDOT Transportation Management Center (TMC)
- City Transportation Management Center
- Transit Management Center









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HOV and Managed Facility System

Legend

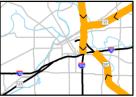
Reversible

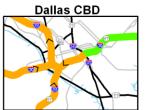
Managed HOV/Integrated Tollway

Two-Way

Freeways/Parkways

Fort Worth CBD





Corridor specific design and operational characteristic for the HOV and managed land recommendations, such as occupancy requirements and reversibility, will be determined through ongoing project development.

Arrows represent the predominant direction of travel during the morning peak period but do not represent specific design recommendations. Predominant direction of travel demand is reversed during the afternoon peak period.

All HOV and tollway facilities will be managed for mobility efficiency. Operational strategies to manage the flow of traffic should be considered in corridors where additional freeway or tollway lanes are being proposed.

Right-of-Way preservation should be encouraged in all freeway/tollway corridors to accommodate potential future HOV facilities.

New facility locations indicate transportation needs and do not represent specific alignments.







WHAT IS VALUE PRICING AND WHAT ARE MANAGED LANES?

Managed facilities mean more people in fewer vehicles, especially during the peak periods through travel behavior changes and design/operational improvements that can be adjusted as needed (can include incentives/restrictions).

Value Pricing is a technique to encourage travel behavior by setting the price of travel to different levels depending on desired outcome.



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Freeway / Tollway System

Legend

Improve Existing Freeway/Tollway

New Staged Freeway

New Staged Tollway

New Staged Parkway
Upgrade to Parkway

Preserve Right-of-Way

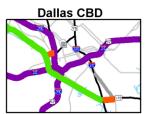
Truck Lane Demonstration Corridor*

*The Truck Lane Demonstration Corridor is a pilot program to determine and compare the feasibility, impacts, and effectiveness of:

 providing exclusive dedicated truck lanes through the corridor and on adjoning access/egress lanes and ramps, and

2) restricting trucks to operating only in certain lanes in the corridor.

Fort Worth CBD



Corridor specific design and operational characteristics for the Freeway/Tollway system will be determined through ongoing project development.

Additional and improved freeway/tollway interchanges and service roads should be considered on all freeway/tollway facilities in order to accommodate a balance between mobility and access needs.

All freeway/tollway corridors require additional study for capacity, geometric, and safety improvements related to truck operations.

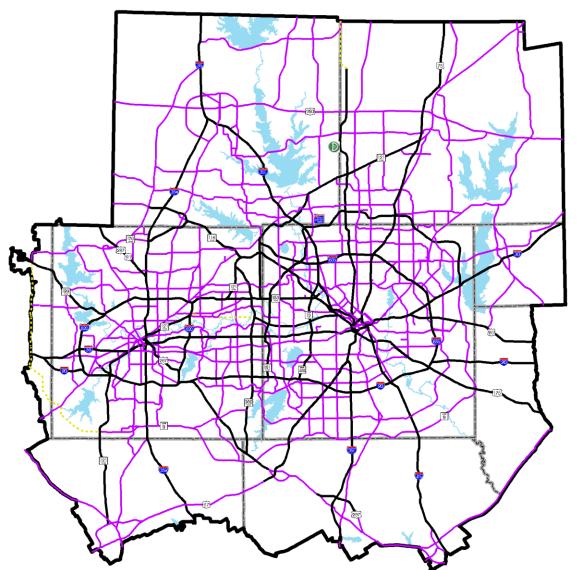
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The Metropolitan Transportation Plan, **Amended April 2005**

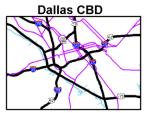
Regionally Significant Roadways*

Legend

Freeways and Tollways (Present and Proposed)Other Regionally Significant Roadways

Preserve Right-of-Way











^{*}Regionally Significant Roadways are derived from the following sources:

1) The National Highway System and National Highway System Intermodal Connectors (1995);

2) The Federal Functional Classification System (1997 Update); and

3) Regional Arterials as defined and adopted in NCTCOG's Regional Thoroughfare Plan (Amended May 10, 2001).



The Metropolitan Transportation Plan, **Amended April 2005**

Corridors Requiring Further Evaluation

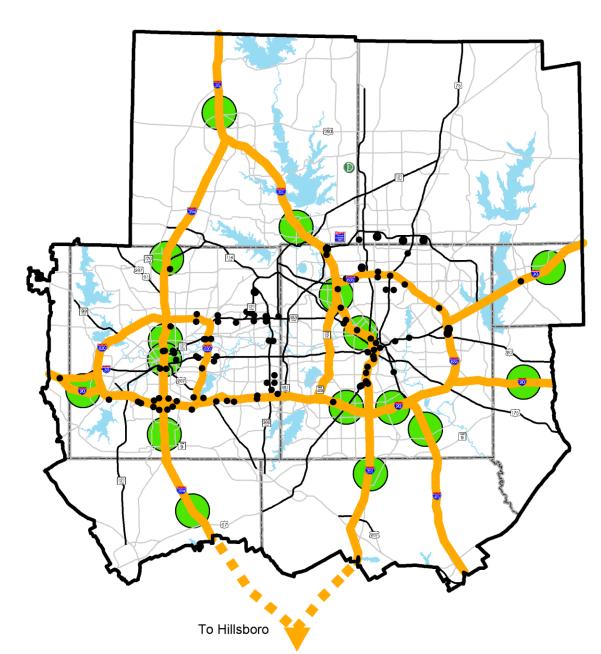
Legend

- Corridor Requiring Further Evaluation Before Placeholder Included in the Plan
- Freeways and Tollways (Present and Proposed)
- Other Regionally Significant Roadways









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Goods Movement Corridors Technology Deployment

Legend

- Speed Detection/ITS
- Dynamic Message Signs (Potential/Existing Sites)
- Truck Stop/NAFTA Kiosk (Potential Sites)

All freeway/tollway corridors require additional study for capacity, geometric and safety improvements related to truck operations.

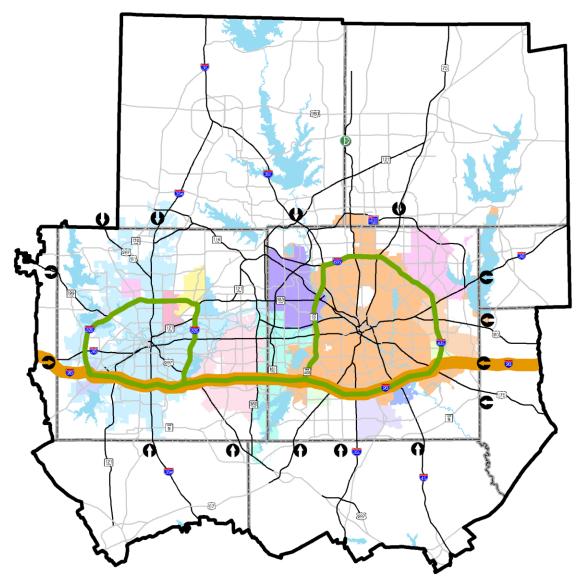
I.H. 35 E/W routes extend to Hillsboro with additional dynamic message signs and truck stops/NAFTA kiosks

ITS coordinated through TxDOT Transportation Management Centers









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Hazardous Materials Truck Route

Legend

Hazardous Cargo Route

Transuranic Radioactive Waste Cargo Route



Shipments



In accordance with the results of NCTCOG's Hazardous Materials Routing Study and FHWA guidelines:

- Through shipments must observe these routes. Through shipments are those not having both origin and destination points within the region.
- Shipments beginning or ending in the region are encouraged to observe these routes
- 3) Local shipments are encouraged to observe these routes.





