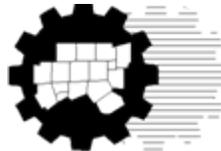


METROPOLITAN TRANSPORTATION UPDATE

Leadership Southwest
April 16, 2008

Dan Kessler
Assistant Director of Transportation
North Central Texas Council of Governments



METROPOLITAN TRANSPORTATION ISSUES

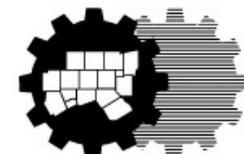
Growth

Funding

Corridor Preservation

Air Quality

**Legislative/Institutional
Challenges**



THE METROPOLITAN PLANNING PROCESS

Regional Perspective

Fourth Largest Metropolitan Area in the United States

Ranked 3rd in Population Growth Between 1990-2000 Adding Over 1 Million Persons

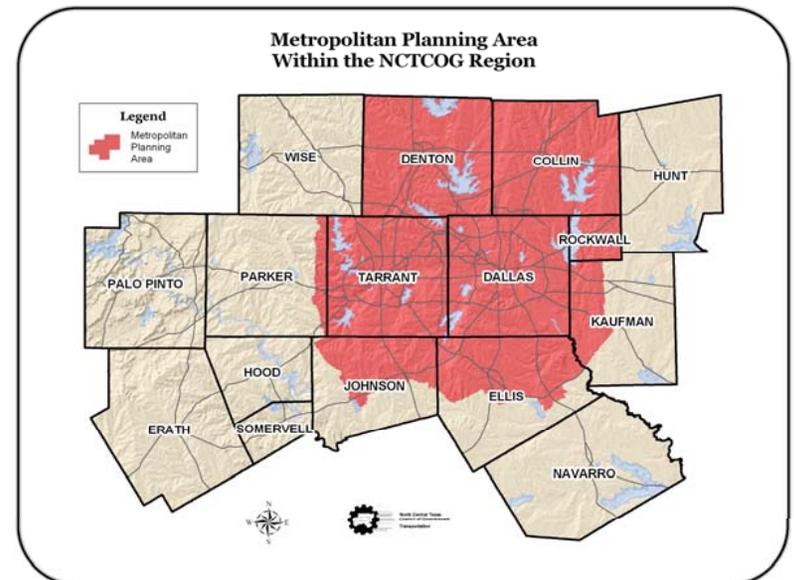
- **Current Growth Trend: Added nearly 850,000 Persons between 2000 and 2007 (Highest growth rate in at least last 50 years)**

Larger than 34 States in Population

Larger than 9 States in Land Area

Represent Over 34 Percent of the State's Economy

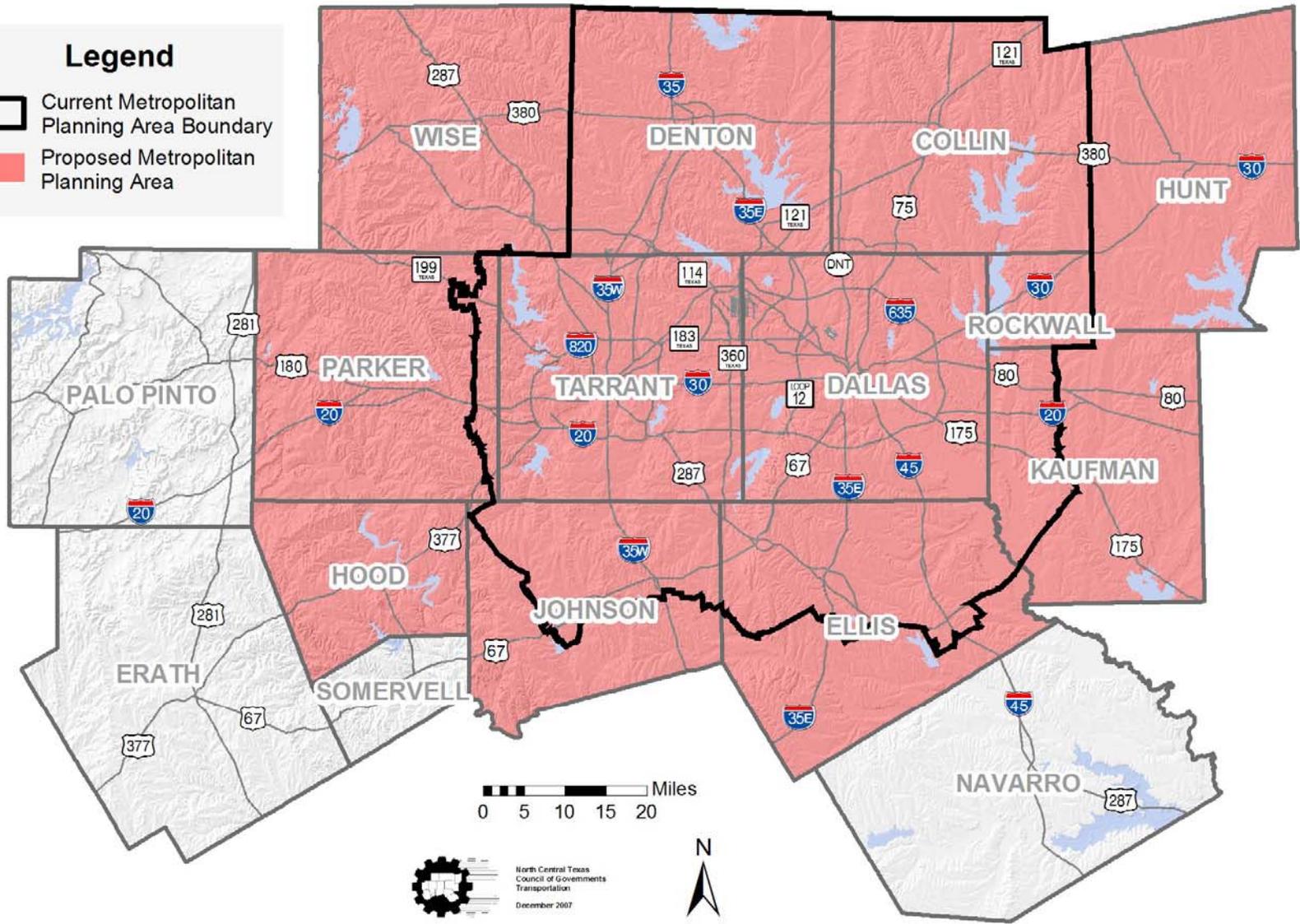
**6 Million Persons in Year 2006
Growing to Nearly 9 Million
Persons by the Year 2030**



Proposed 12-County Metropolitan Planning Area

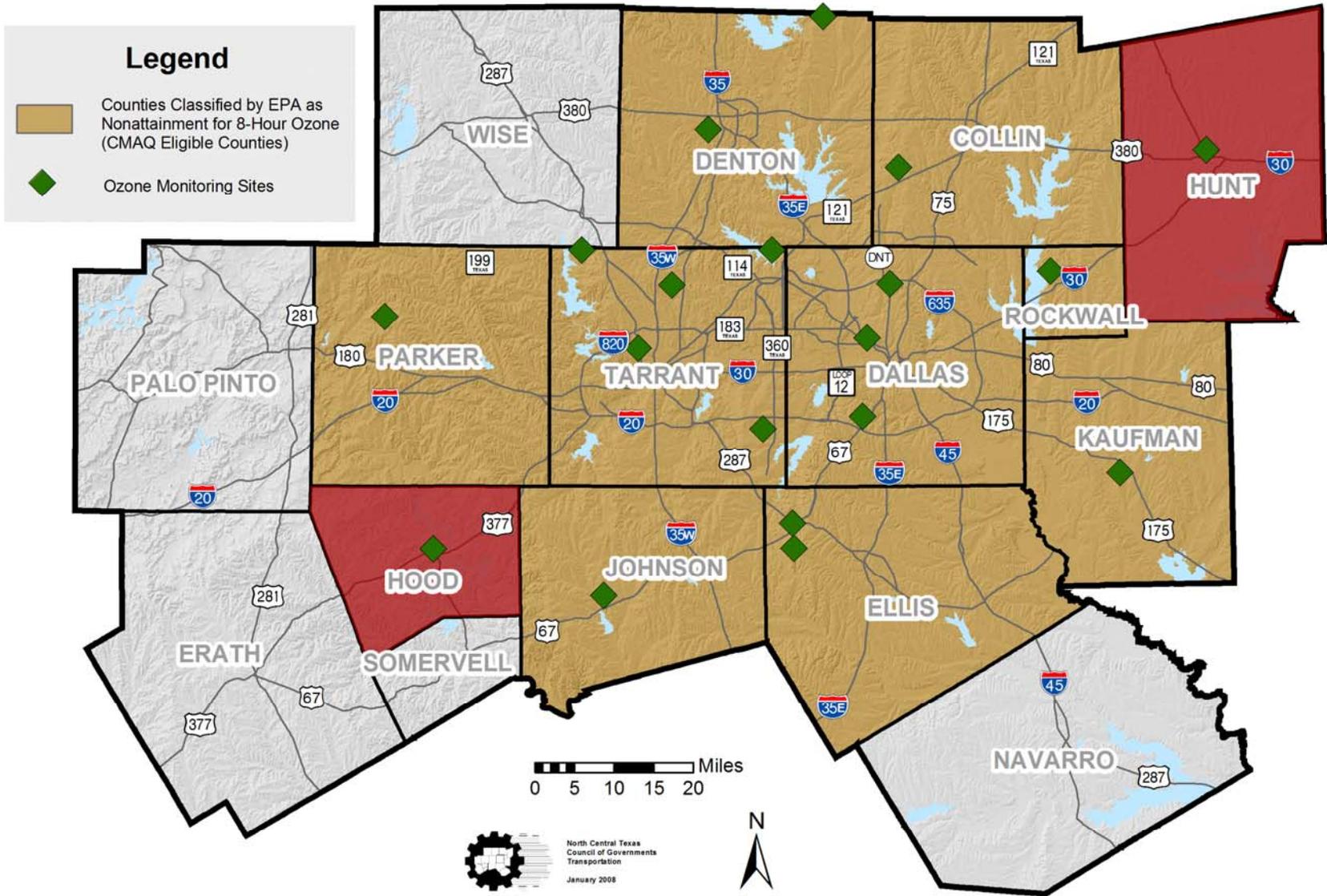
Legend

-  Current Metropolitan Planning Area Boundary
-  Proposed Metropolitan Planning Area



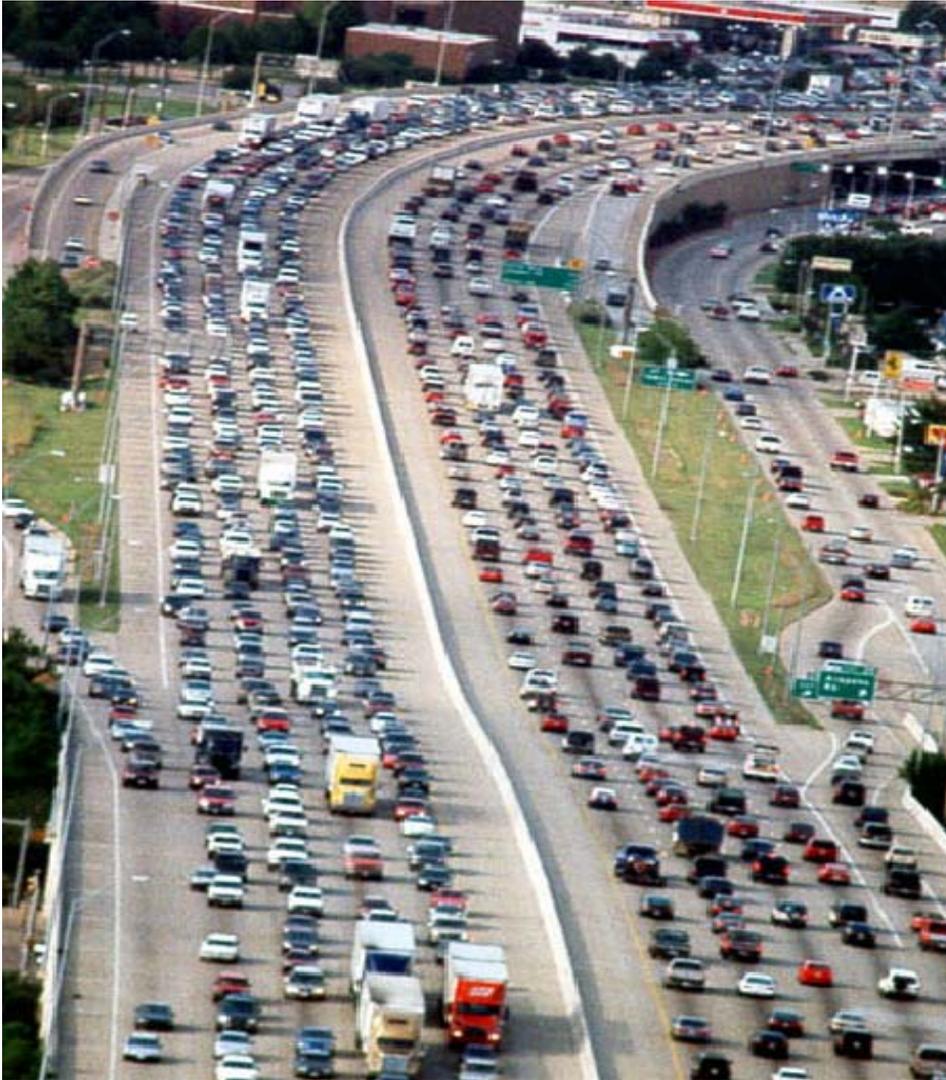
EPA PROPOSED OZONE STANDARD

Proposed 8-Hour Ozone Nonattainment Area at 75ppb



THE METROPOLITAN TRANSPORTATION PLANNING PROCESS

DFW Region - Major Issues



**Dramatic Growth in Single
Occupant Vehicles (SOV)**

**Increased Travel Time
and Costs**

**Nonattainment Area For
the Pollutant Ozone**

No “Regional” Transit

Suburban Sprawl

**Lack of Coordination in
Land Use and Transportation
Investments**

**MOBILITY 2030:
THE METROPOLITAN TRANSPORTATION
PLAN FOR THE DALLAS-FORT WORTH
METROPOLITAN AREA**



WHAT IS THE METROPOLITAN TRANSPORTATION PLAN?

**Represents Blueprint for Multimodal Transportation
System**

Responds to Adopted Goals

Mobility

Quality of Life

Financial/Air Quality

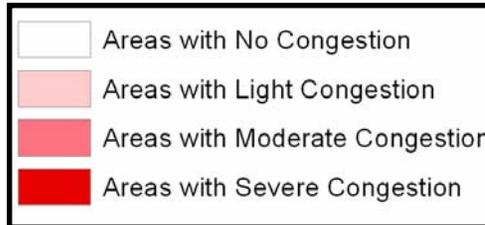
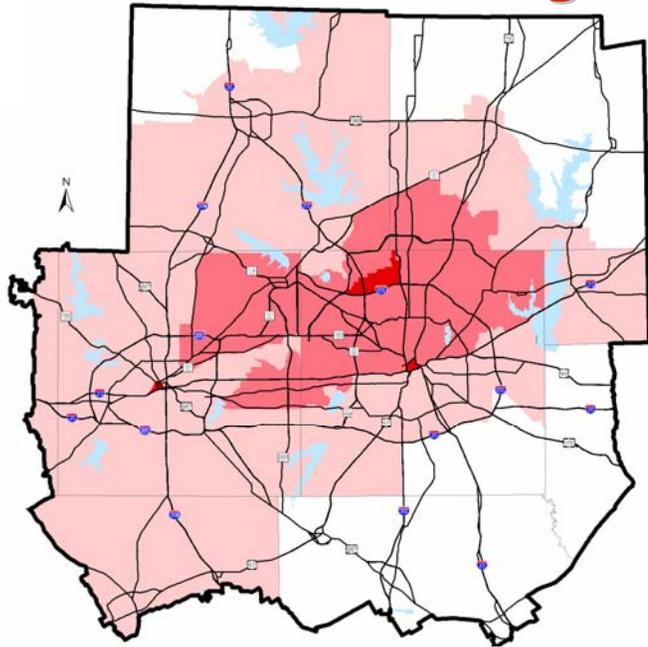
**Identifies Policies, Programs, and Projects for
Continued Development**

Guides Expenditures of Federal and State Funds

MOBILITY 2030: THE METROPOLITAN TRANSPORTATION PLAN

2007

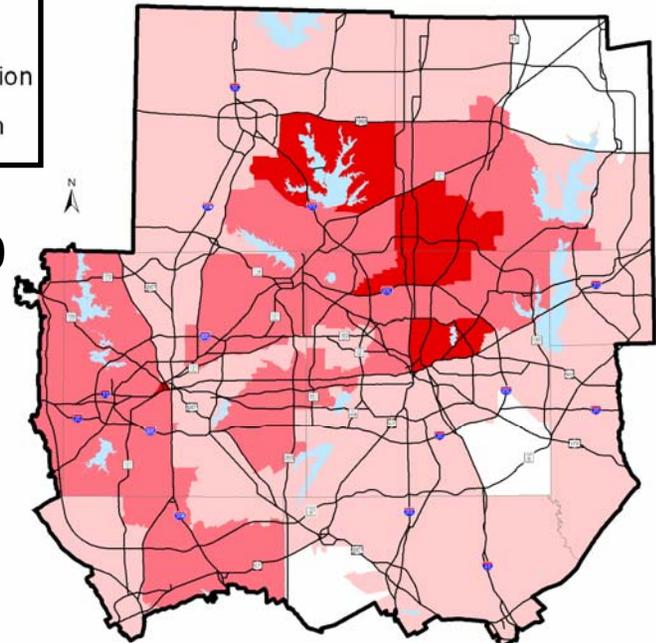
Regional Congestion Levels



	2007	2030	% Change
Population	5.9 M	8.5 M	44.1%
Employment	3.7 M	5.3 M	43.2%
VMT/Person	25.6	28.4	10.9%

	2007	2030	% Change
Vehicle Miles Traveled	151 M	241 M	59.6%
Roadway Capacity (Lane Miles)	31,000	41,000	32.3%
Daily Total Delay (Vehicle Hours)	1 M	1.7 M	70%
Annual Cost of Congestion	\$4.2 B	\$6.6 B	57.1%

2030



IDENTIFIED FUNDING NEEDS DALLAS-FORT WORTH REGION

(Updated Based on Mobility 2030 Funding Levels)

Metropolitan Transportation System Components	Funded Needs (Billions/2006 \$)	Unfunded Needs (Billions/2006 \$)
Operation & Maintenance	\$18.7	
Congestion Mitigation Strategies	\$2.1	
Bicycle & Pedestrian Facilities and Transportation Enhancements	\$1.1	
Rail and Bus Transit System	\$11.0 ¹	
HOV and Managed Facilities	\$3.3	
Freeway and Toll Road System	\$26.4	\$12.7²
Regional Arterial and Local Thoroughfare System	\$5.7	\$6.0
Additional Cost to Purchase Right-of-Way		\$1.1
Rehabilitation Costs	\$ 2.6	\$32.1
Goods Movement/Rail Freight Costs (Trans-Tx Corridor)		\$6.7
TOTAL	\$70.9 (55 %)	\$58.6 (45 %)
	\$129.5 Billion	

¹ \$3.4 billion obtained through Regional Transit Initiative

² Includes Freeway-to-Freeway Interchanges



The Metropolitan Transportation Plan

Funded Roadway Recommendations

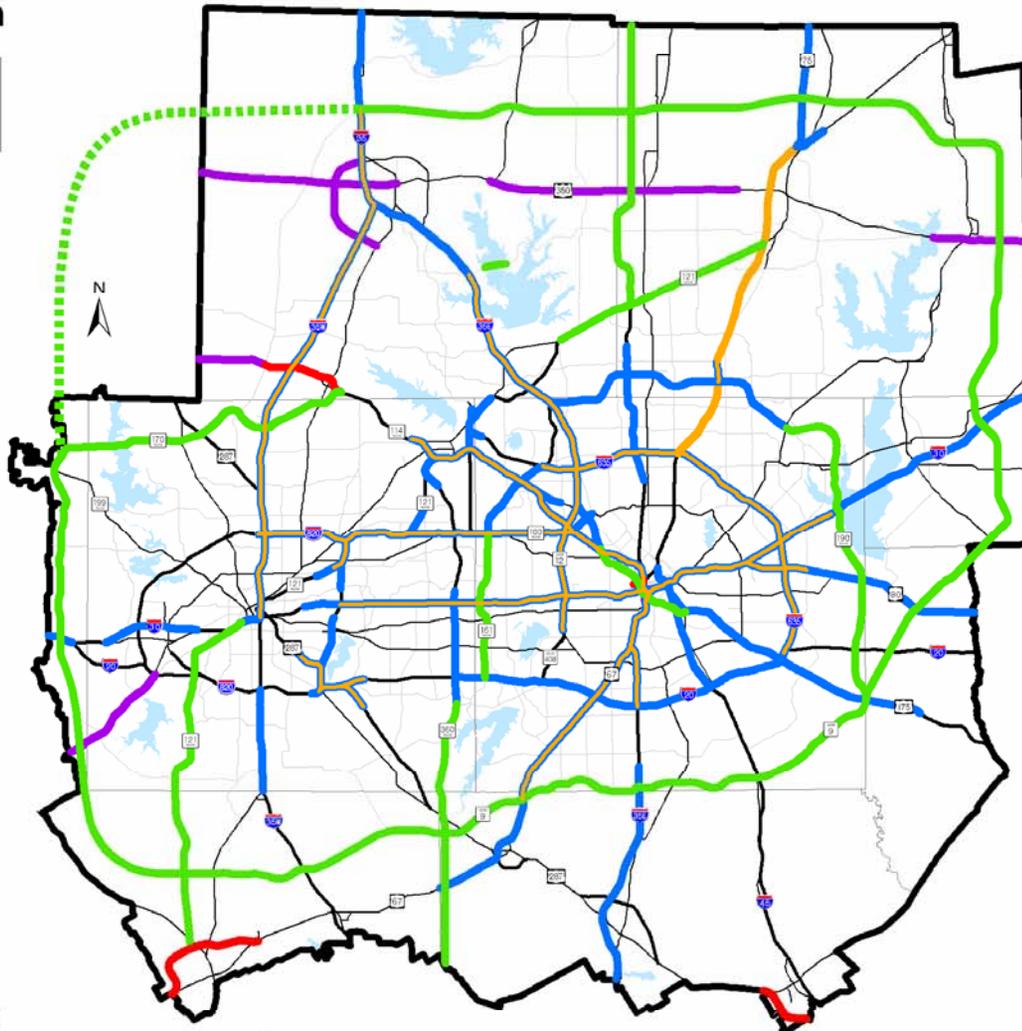
Legend

- New Freeway Facilities
- New Tollway Facilities
- Additional Capacity To Existing Freeway/Tollway
- HOV/Managed Lanes
- Improvements to Existing Freeway and HOV/Managed Lanes
- Selected New/Improved Regionally Significant Arterials
- Freeways/Tollways

Fort Worth CBD



Dallas 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.

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

Operational strategies to manage the flow of traffic should be considered in the corridors where additional freeway or tollway lanes are being considered.

\$29.8 Billion Regional Roadway System
 Additional Freeway/Tollway lane miles = 3,444
 Additional HOV/Managed lane miles = 626



North Central Texas
Council of Governments
Transportation



The Metropolitan Transportation Plan

Priced Facilities

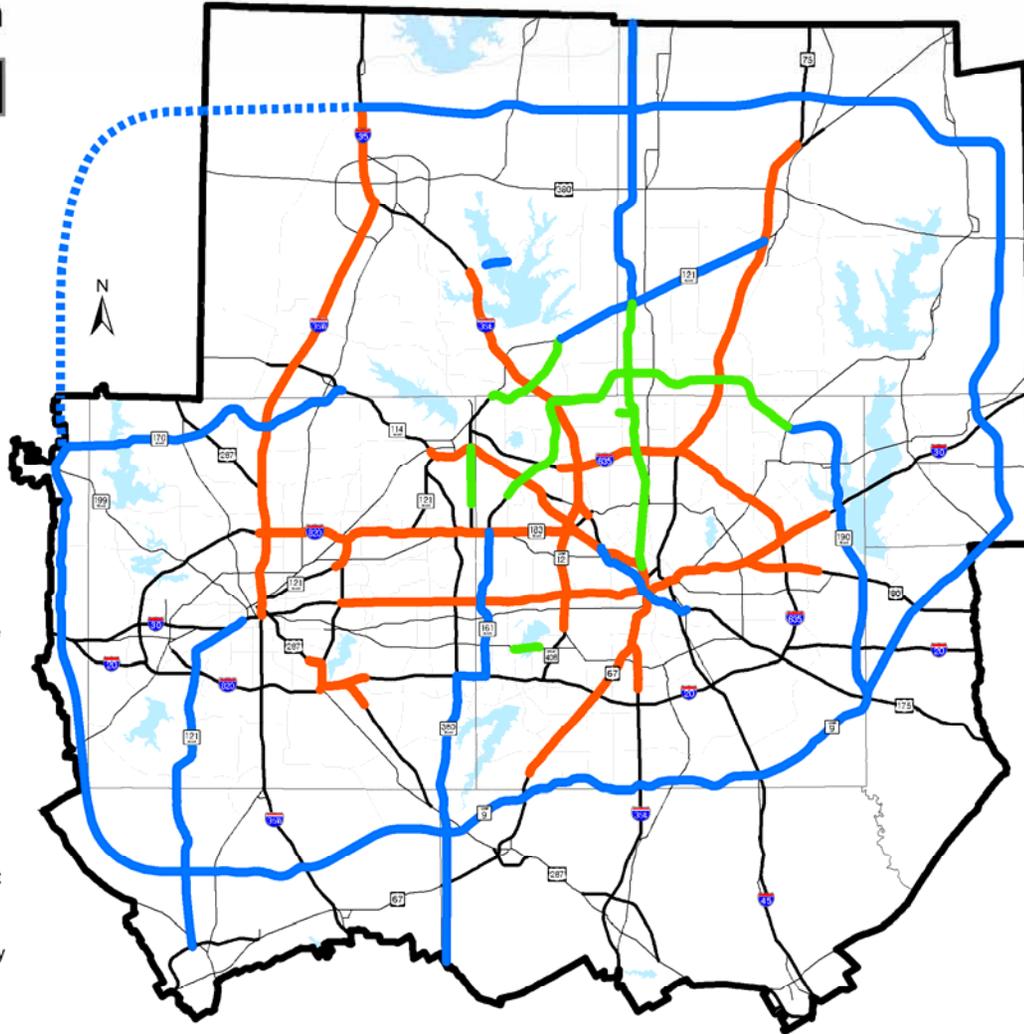
Legend

- Existing Toll Facilities
- Proposed Toll Facilities
- Proposed HOV/Managed Facilities*
- Freeways/Tollways

Fort Worth CBD



Dallas CBD



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

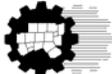
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* Existing lanes in corridor remain free. Toll charged on new capacity only and will include HOV incentives.



North Central Texas
Council of Governments
Transportation

\$17.7 Billion of Innovative Funding Strategies

January 11, 2007

Passenger Rail Recommendations

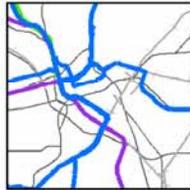
Legend

- Light Rail
- Light Rail - New Technology
- Regional Rail
- - - Regional Rail - Special Events Only
- + + + Existing Rail Corridors
- Highways

Fort Worth CBD



Dallas CBD

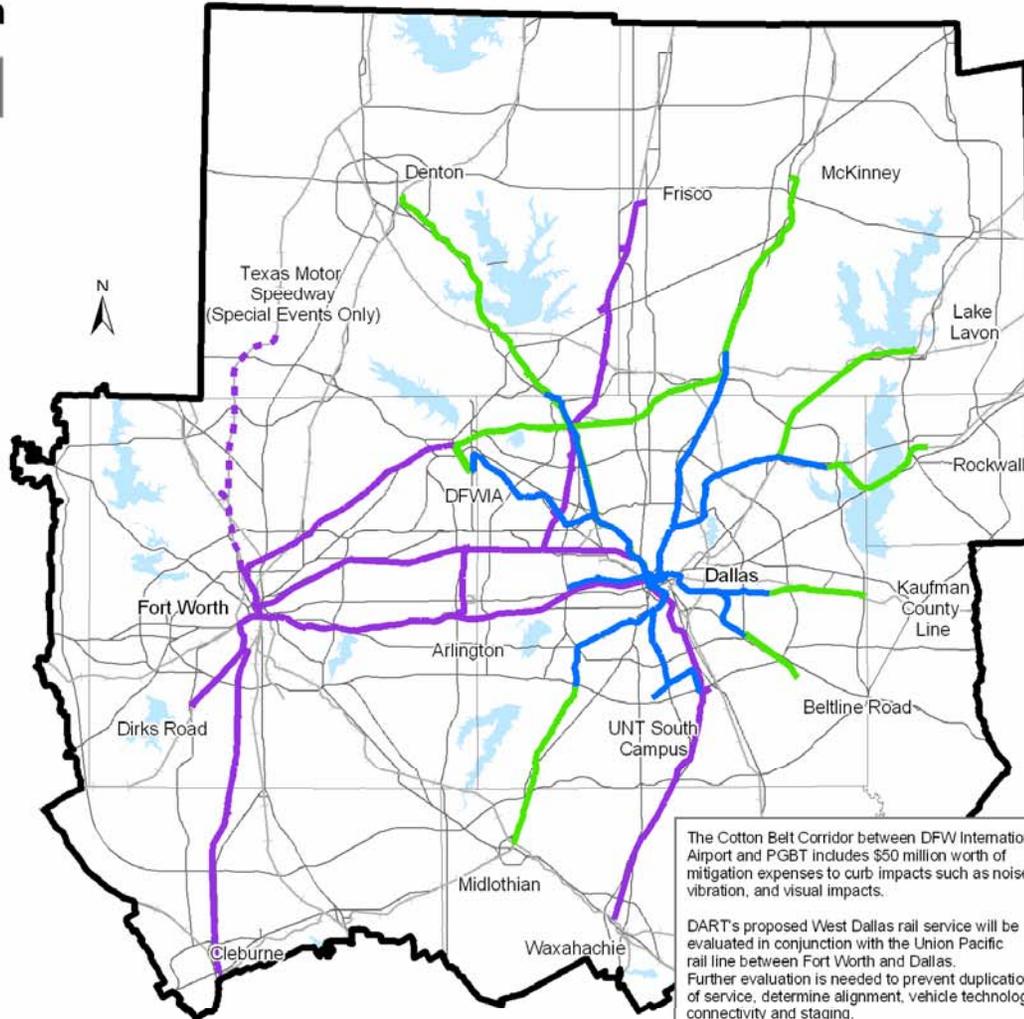


Corridor specific design and operation characteristics for the Intercity Passenger, Regional Passenger and Freight Rail Systems will be determined through capacity evaluation and ongoing project development. Refined rail forecasts are necessary to determine technology and alignment in Future Rail corridors.

All existing railroad rights-of-way should be monitored for potential future transportation corridors. New facility locations represent transportation needs and do not reflect specific alignments.

Institutional structure being reviewed for the region.

The need for additional rail capacity in the Dallas CBD, Fort Worth CBD, DFW International Airport, and other inter-modal centers will be monitored. A grade separation is needed for the Dallas CBD second alignment.



397 Additional Rail Miles
\$9.6 Billion

The Cotton Belt Corridor between DFW International Airport and PGBT includes \$50 million worth of mitigation expenses to curb impacts such as noise, vibration, and visual impacts.

DART's proposed West Dallas rail service will be evaluated in conjunction with the Union Pacific rail line between Fort Worth and Dallas. Further evaluation is needed to prevent duplication of service, determine alignment, vehicle technology, connectivity and staging.

DART's proposed SouthPort rail line extension will be evaluated in conjunction with the Dallas to Waxahachie rail service. Further evaluation is needed to prevent duplication of service, determine alignment, vehicle technology, connectivity and staging.

Rail Lines Under Consideration

Legend

- Existing Service, Programmed Projects and Projects Under Development
- Projects Pending Alternative Funding
- Existing Rail Corridors
- Highways

Fort Worth CBD



Dallas CBD



Corridor specific design and operation characteristics for the Intercity Passenger, Regional Passenger and Freight Rail Systems will be determined through capacity evaluation and ongoing project development. Refined rail forecasts are necessary to determine technology and alignment in Future Rail corridors.

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251 Rail Miles Pending Funding

Rail Corridors Identified For Further Evaluation (1)

Legend

- 2030 Rail Recommendations
- Rail Corridors Identified For Further Evaluation
- Existing Rail Corridors
- Highways

Fort Worth CBD



Dallas CBD



Corridor specific design and operation characteristics for the Intercity Passenger, Regional Passenger and Freight Rail Systems will be determined through capacity evaluation and ongoing project development. Refined rail forecasts are necessary to determine technology and alignment in Future Rail corridors.

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North Central Texas
Council of Governments
Transportation

(1) Represents additional transportation needs above and beyond those of the financially constrained recommendations.

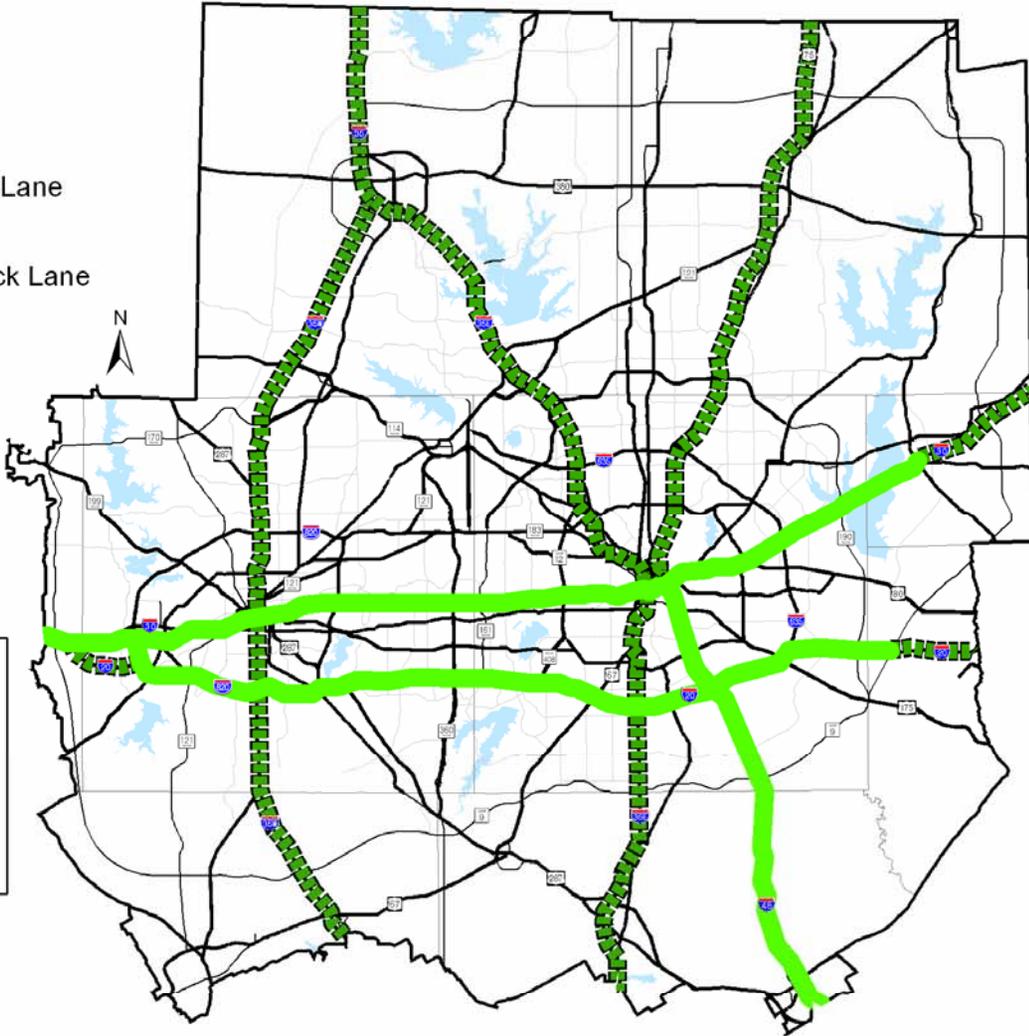
Truck Lane Recommendations

Legend

-  Recommended Near-term Truck Lane Restrictions
-  Potential Long-term Intercity Truck Lane Restrictions
-  Freeways
-  Major Roadways
-  Regional Arterials
-  County Boundaries
-  Metropolitan Planning Area Boundary
-  Major Lakes

- Recommendations Include:**
- 3 + lanes
 - Moderate to High Truck Volumes
 - Continuous system
- Further site specific study needed to evaluate:**
- Segments with geometric constraints
 - Current or pending reconstruction
 - Capacity and congestion levels
 - Public opinion

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





The Metropolitan Transportation Plan

Bicycle and Pedestrian Facilities

Legend

Recommended Veloweb Routes

- Completed: 112 miles
- Funded: 34 miles
- Needed: 289 miles

Candidate Veloweb Routes

- Completed: 7 miles
- Needed: 202 miles
- Freeways

County Boundaries

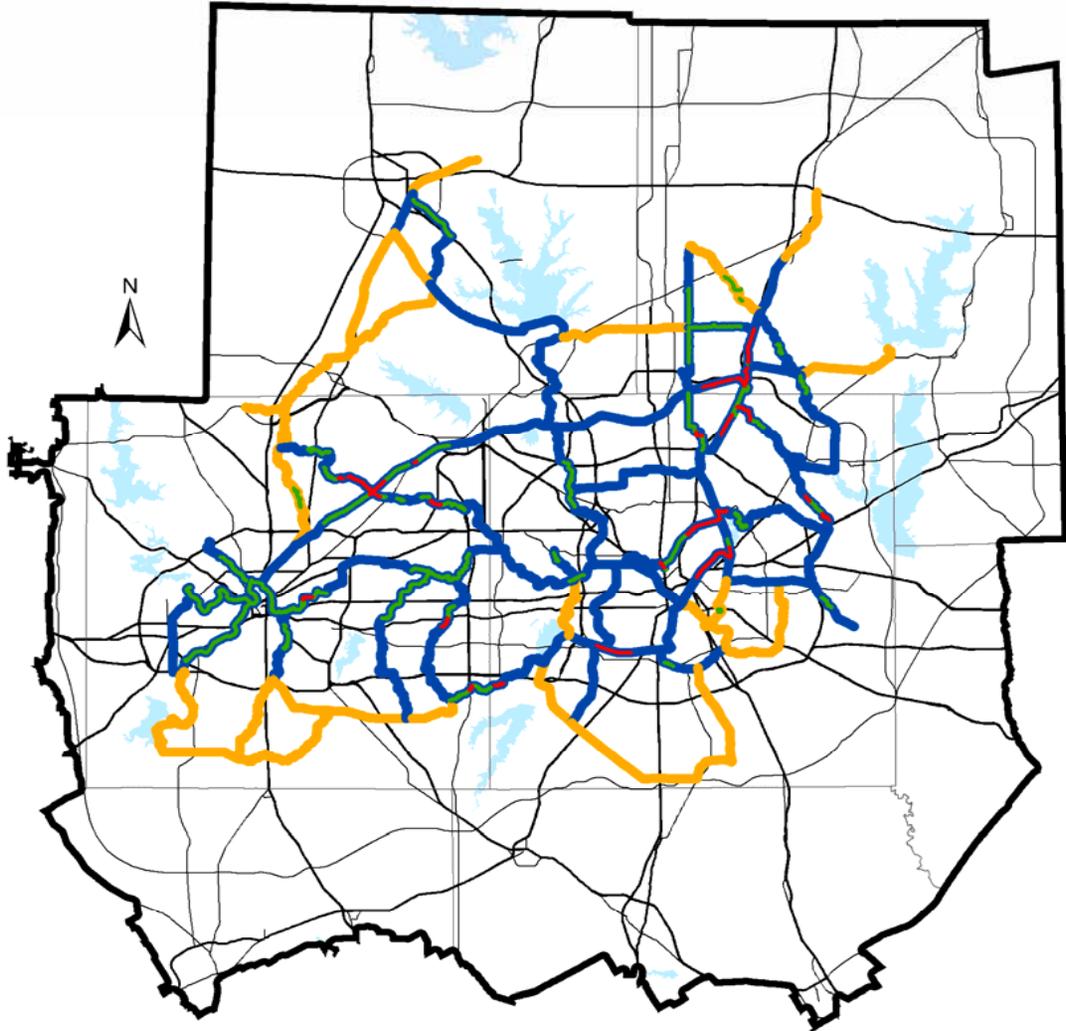
Metropolitan Planning Area Boundary

Major Lakes

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

All existing railroad rights-of-way should be monitored for potential future transportation corridors.

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

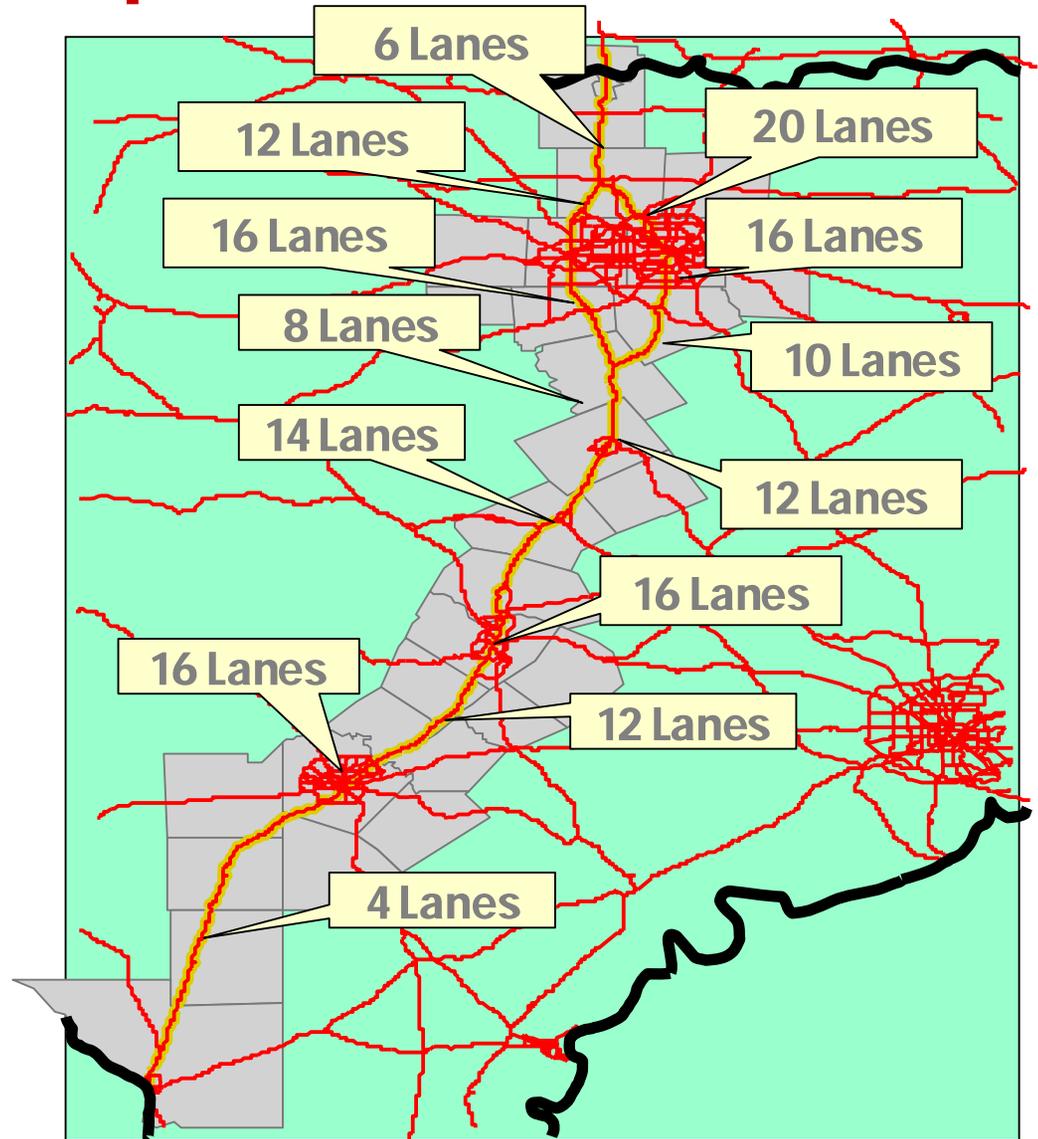


Purpose and Need

Statewide Transportation Demand

I.H. 35 Corridor: Total Lane Needs by 2020

Right-of-Way is not available to meet the needs of future growth.



Source: TxDOT 2003 Study



The Metropolitan Transportation Plan

Outer loop / Rail Bypass Regional Corridor

Legend

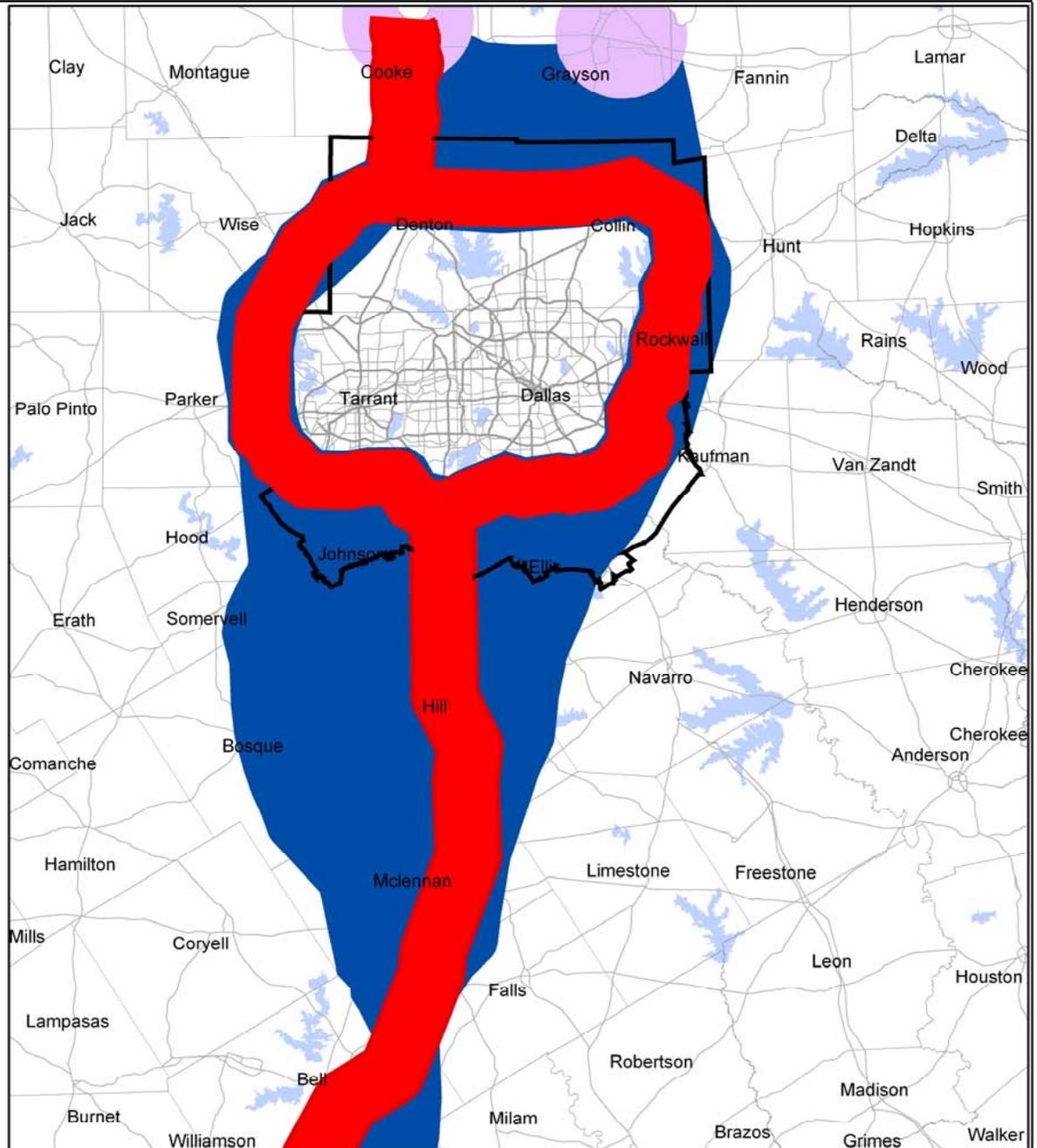
-  Regional Recommended Outer Loop / Rail Bypass Corridor
-  TxDOT TTC-35 Tier I Corridor
-  TxDOT TTC-35 Potential Connection Zones
-  Freeways
-  Major Roadways
-  Regional Arterials
-  County Boundaries
-  Metropolitan Planning Area Boundary
-  Major Lakes



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

All regional recommended corridors should be targeted for right-of-way preservation.

December 11, 2006





The Metropolitan Transportation Plan

Regional Outer Loop Staging

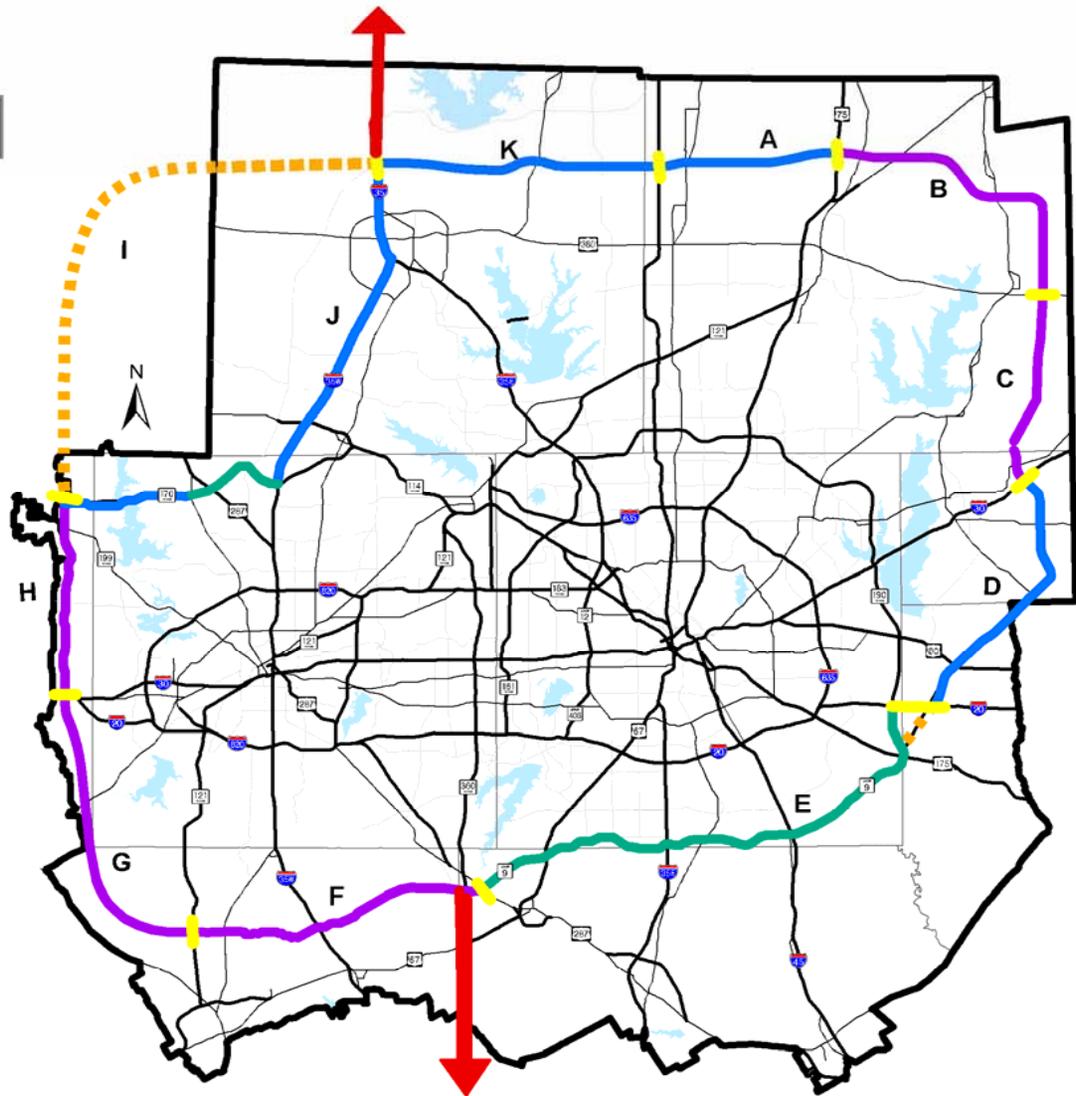
Segment Staging

- Operational By 2015
- Operational By 2025
- Operational By 2030
- - - Further Evaluation Needed
- North/South Interregional Corridors
- Segment Dividers
- Year 2030 Freeway Network

- A - North Collin County Outer Loop
- B - North/East Collin County Outer Loop
- C - East Collin County Outer Loop
- D - Rockwall/Kaufman County Outer Loop
- E - Loop 9 - Dallas/Ellis/Kaufman County
- F - F.M. 917 Corridor
- G - Southwest Corridor Outer Loop
- H - Parker County Outer Loop
- I - Wise County Outer Loop
- J - S.H. 170 / I.H. 35 Corridor*
- K - Northern Denton County Outer Loop

*The IH-35/SH-170 corridor can be developed as an interim Trans Texas Corridor/Regional Outer Loop segment until segment "I" is warranted.

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



Approximately 240 Center Main Line Miles
 Approximately 1440 Main Lane Miles

January 11, 2007



Outer Loop/Rail Bypass Study

Study Approach

- **Loop 9 Environmental Impact Statement (EIS)**
 - U.S. 287 in northwestern Ellis County (Midlothian) to I.H. 20 in eastern Dallas County (Mesquite)
 - Final Environmental Clearance (TxDOT) – Winter/Spring 2009
- **Remaining Outer Loop Segments (Roadway/Truck)**
 - To be divided into logical segments for individual study
 - Corridor refinement coordinated with counties, cities, special districts, and individual landowners
- **Freight Rail Bypass**
 - A single environmental study for the entire bypass route, including new utility/gas production capacity
- **Trans-Texas Corridor 35**
 - Conducted by the State as a separate study

Outer Loop/Rail Bypass Study

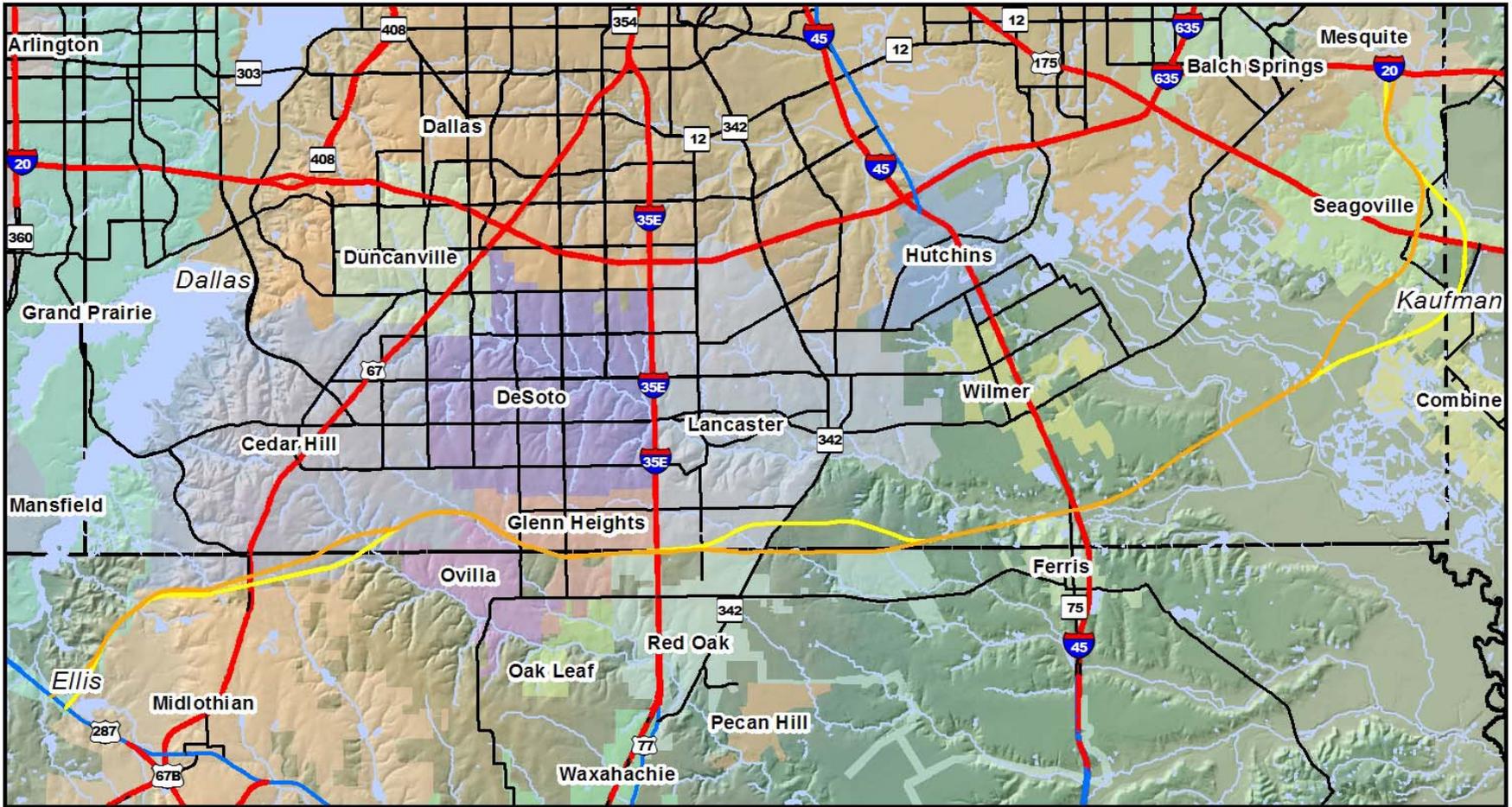
Utility Conveyance Modes and Projected Needs

- **Water**
 - 27% increased State demand by 2060 (17 to 21.6 million acre-feet) ¹
- **Wastewater**
 - \$6.4 billion needed to upgrade State facilities by 2025 ²
- **Natural Gas**
 - 45% increased U.S. demand by 2020 ³
 - Fracturing needs for one well = 4.5 million gallons of water (lifetime) ⁴
- **Electricity**
 - 45% increased U.S. demand by 2020 ⁵
- **Petroleum**
 - 62% increased U.S. demand by 2020 ⁶
- **Fiber-Optics**
 - 42% annual growth in bandwidth demand per home by 2030 ⁷

1 Water for Texas (2007), Texas Water Development Board
2 Report Card for Texas Infrastructure, American Society of Civil Engineers (2004)
3 Outer Continental Shelf Oil and Gas Issues: A Need for a Balanced View, American Association of Petroleum Geologists (2007)

4 Natural Gas Drilling: Facts and Issues, League of Women Voters in Tarrant County (2007)
5 Annual Energy Outlook Report, Energy Information Administration (2006)
6 Annual Energy Outlook Report, Energy Information Administration (2006)
7 Technology Futures, Inc. and OFS (2007)

Loop 9 Alternatives



Loop 9 Alignments

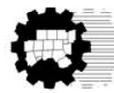
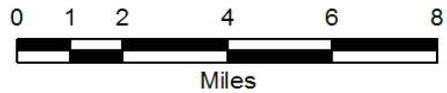
- Alternative 1
- Alternative 2

Roadways

- Primary Highway
- Secondary Highway
- Major Arterial

Other Items

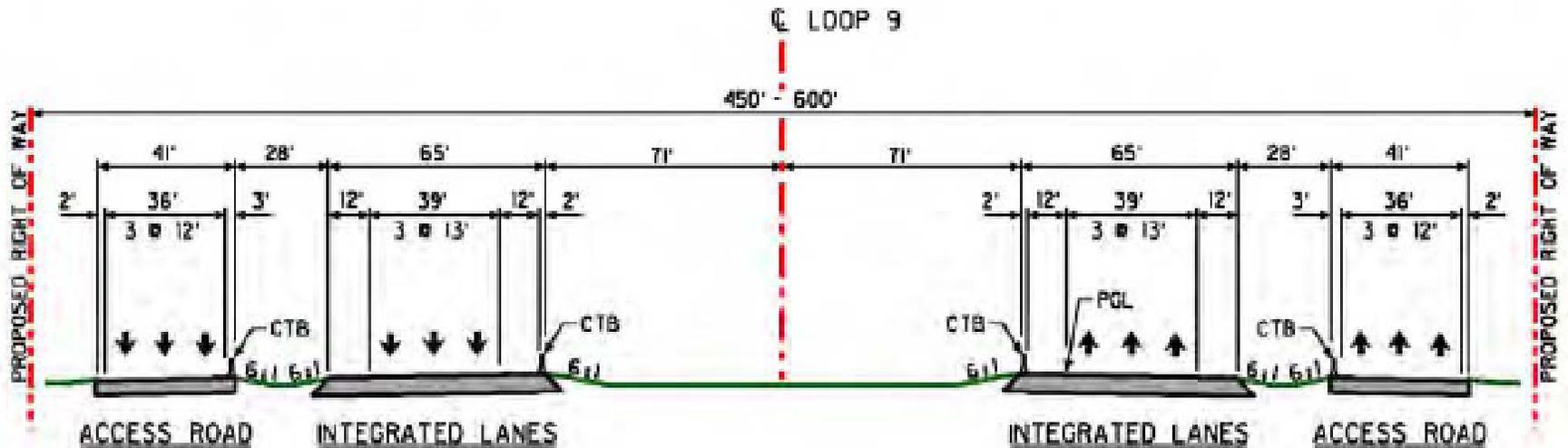
- County Line
- Lake
- Stream



North Central Texas
Council of Governments
Transportation Department

Outer Loop/Rail Bypass Study

Loop 9 Typical Section



6 Frontage Road Lanes (where applicable)

6 General Purpose Toll Lanes

Wide Median will be preserved for Dedicated Truck Lanes or Future Multimodal Facility (as warranted)

Width may expand due to Major Interchanges or Environmental Conditions that impact Geometric Design

Outer Loop/Rail Bypass Study

Loop 9 Status

- **Draft Environmental Impact Statement (DEIS) completed and submitted to TxDOT – Austin and Federal Highway Administration (FHWA) in September 2007.**
- **Public Hearing anticipated by Summer 2008.**
- **Final Environmental Impact Statement (FEIS) will be completed and submitted by Fall 2008.**
- **Record of Decision (ROD) expected by Spring 2009.**

METROPOLITAN TRANSPORTATION STRATEGIES

Innovative Transportation Funding

**Continued Implementation of a
Multimodal Plan**

Air Quality Transportation Improvements

Transportation System Management

Travel Demand Management

Sustainable Growth and Development