

**APPENDIX F
SYSTEM LEVEL ANALYSIS**

INDEX	
Appendix Label	Title
Figure F-1	Prioritization of Improvements
Figure F-2	2030 Funded Roadway Improvements
Figure F-3	2030 Passenger Rail Recommendations
Figure F-4	Variable Toll Rates
Figure F-5	Toll Rate Inflation Adjustments
Figure F-6	2019 Priced Facilities
Figure F-7	2025 Priced Facilities
Figure F-8	2030 Priced Facilities
Figure F-9	Environmental Justice Travel Survey Zones
Figure F-10	Traffic Survey Zones: Daily Trips on Existing (2009) Priced Facilities
Figure F-11	Traffic Survey Zones: Daily Trips on Future (2010-2030) Priced Facilities

**Maintenance and Operation
of Existing Facilities**

**Improve Efficiency of
Existing Facilities**

Trans. System Management
Intelligent Trans. Systems

Remove Trips From System

Carpool/Vanpool Program
Pedestrian/Bicycle Facilities

Induce Switch to Transit

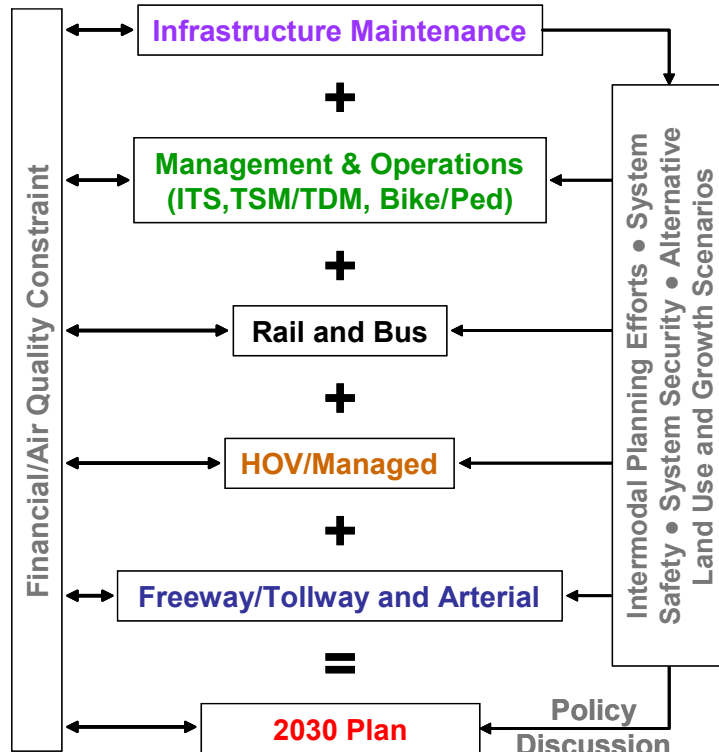
Bus/Commuter Rail/Light Rail

Increase Auto Occupancy

HOV System

**Additional Single Occupant
Vehicle Capacity**

Freeway/Tollway
Regional Arterial



Regional Priced Facility System Analysis



Figure 1
Mobility 2030 - 2009 Amendment
Prioritization of Improvements

Texas Department of Transportation

Date Created: December 2010

Source: NCTCOG, 2010

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.

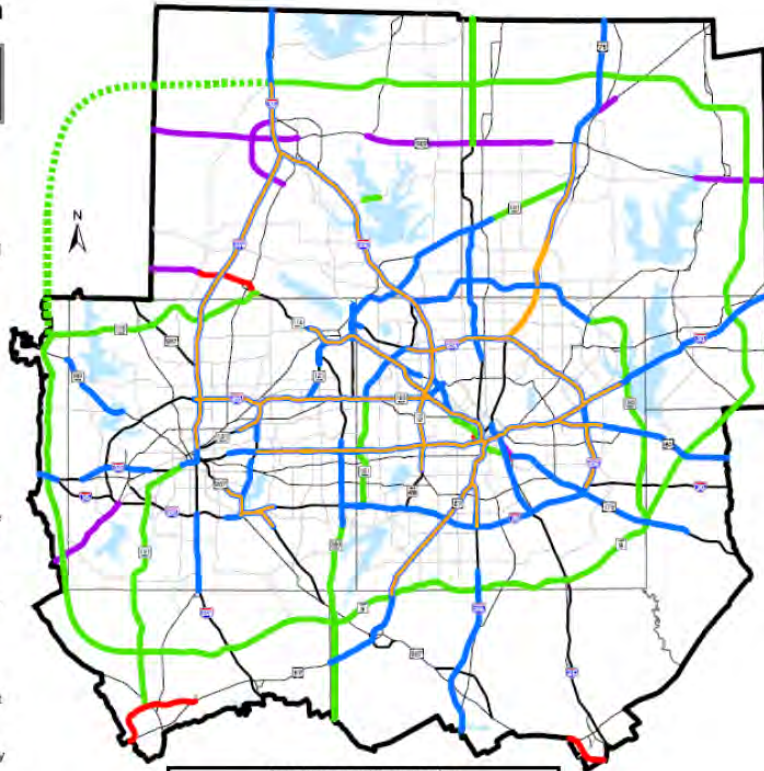
All Freeway/Tollway corridors require additional study for capacity, geometric, and safety improvements related to truck operations.

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.



North Central Texas
Council of Governments
Transportation



\$62.3 Billion Regional Roadway System

Additional Freeway/Tollway lane miles = 3,560
Additional HOV/Managed lane miles = 739

August 13, 2009

Regional Priced Facility System Analysis



Figure 2
Mobility 2030 - 2009 Amendment
2030 Funded Roadway Improvements

Texas Department of Transportation

Date Created: December 2010

Source: NCTCOG, 2010

Mobility 2030 The Metropolitan 2009 AMENDMENT Transportation Plan

Passenger Rail Recommendations

Legend

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

Fort Worth CBD



Dallas CBD



The Dallas and Fort Worth Streetcar systems are included in the plan and final alignments will be determined by each city.

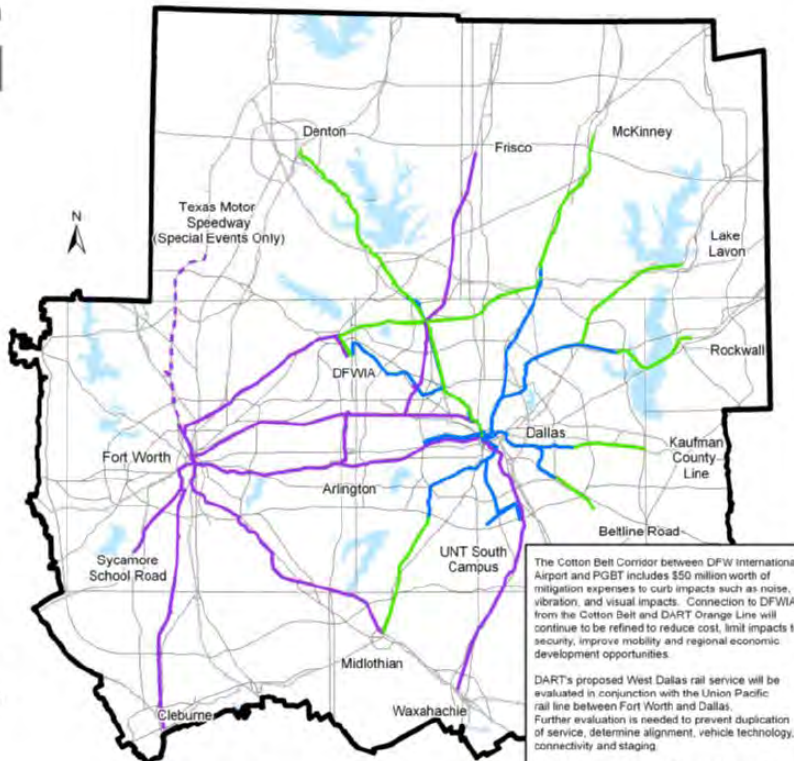
Corridor specific design and operation characteristics for the Intercity Passenger, Regional Passenger and Freight Rail Systems will be determined through capacity evaluation and ongoing project development. Refined rail forecasts are necessary to determine technology and alignment in Future Rail corridors.

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.

April 09, 2009



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. Connection to DFWIA from the Cotton Belt and DART Orange Line will continue to be refined to reduce cost, limit impacts to security, improve mobility and regional economic development opportunities.

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.



North Central Texas
Council of Governments
Transportation

Regional Priced Facility System Analysis



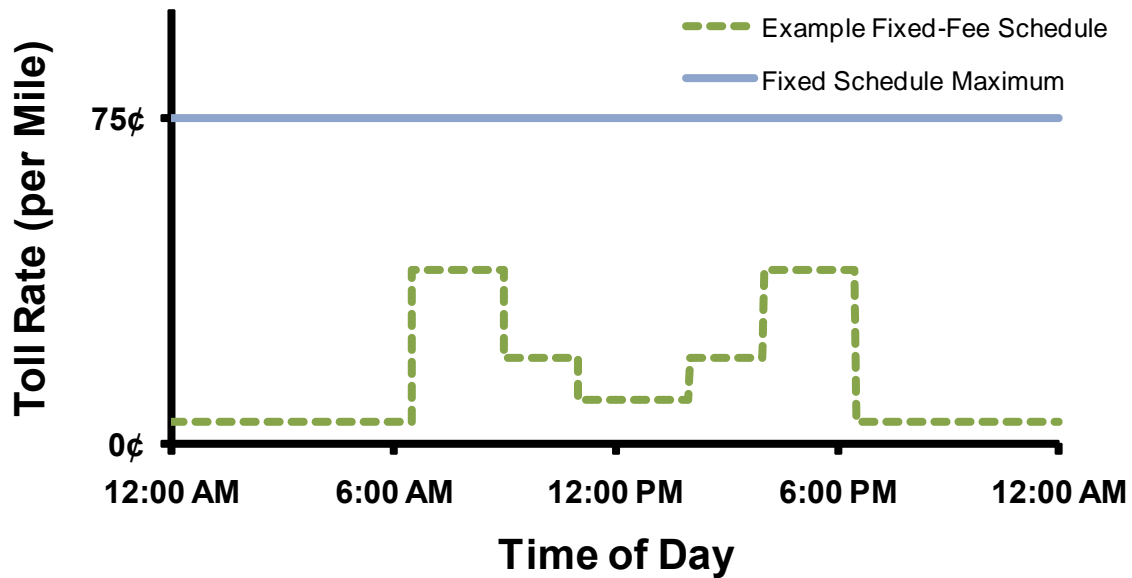
Figure 3 **Mobility 2030 - 2009 Amendment** **2030 Passenger Rail Recommendations**

Texas Department of Transportation

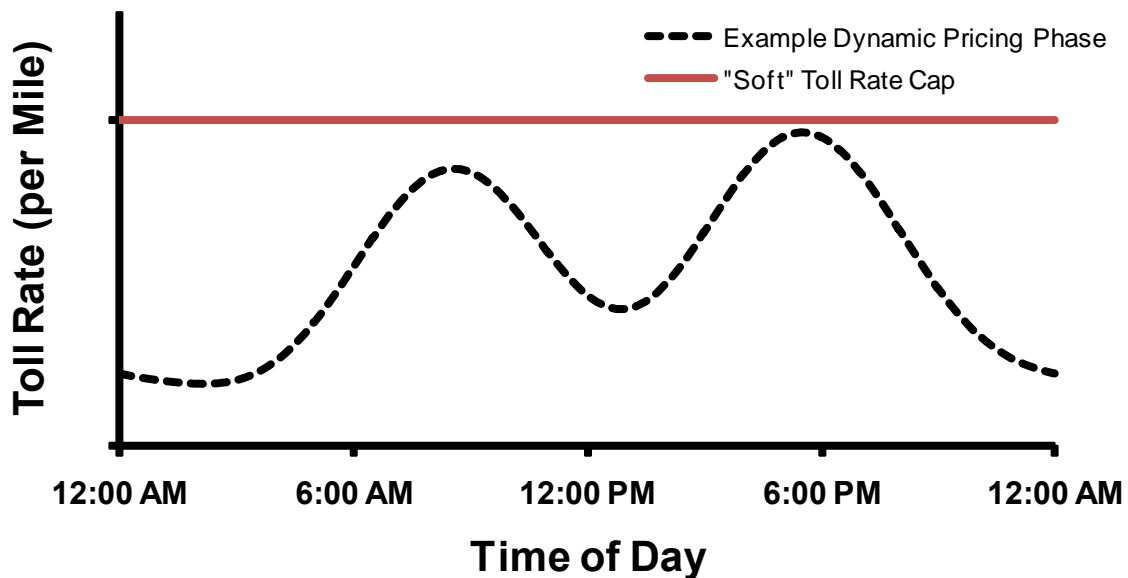
Date Created: December 2010

Source: NCTCOG, 2010

Variable Rate Tolls (First Six Months)



Variable Rate Tolls (After Six Months)



Regional Priced Facility System Analysis

Figure 4 – Variable Toll Rates

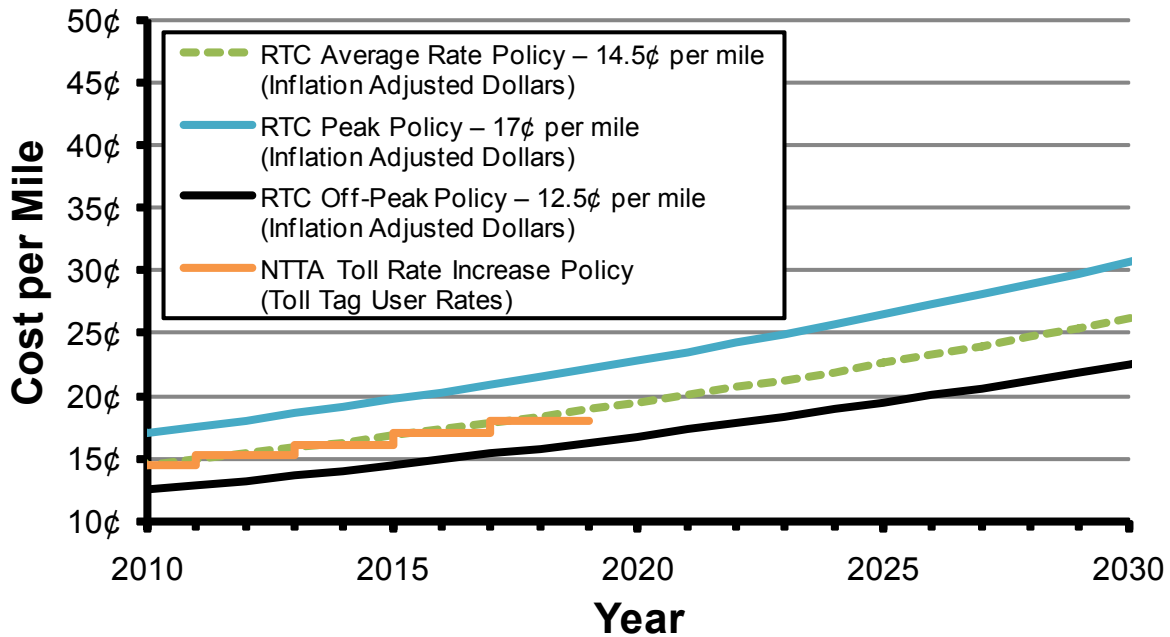


Texas Department of Transportation

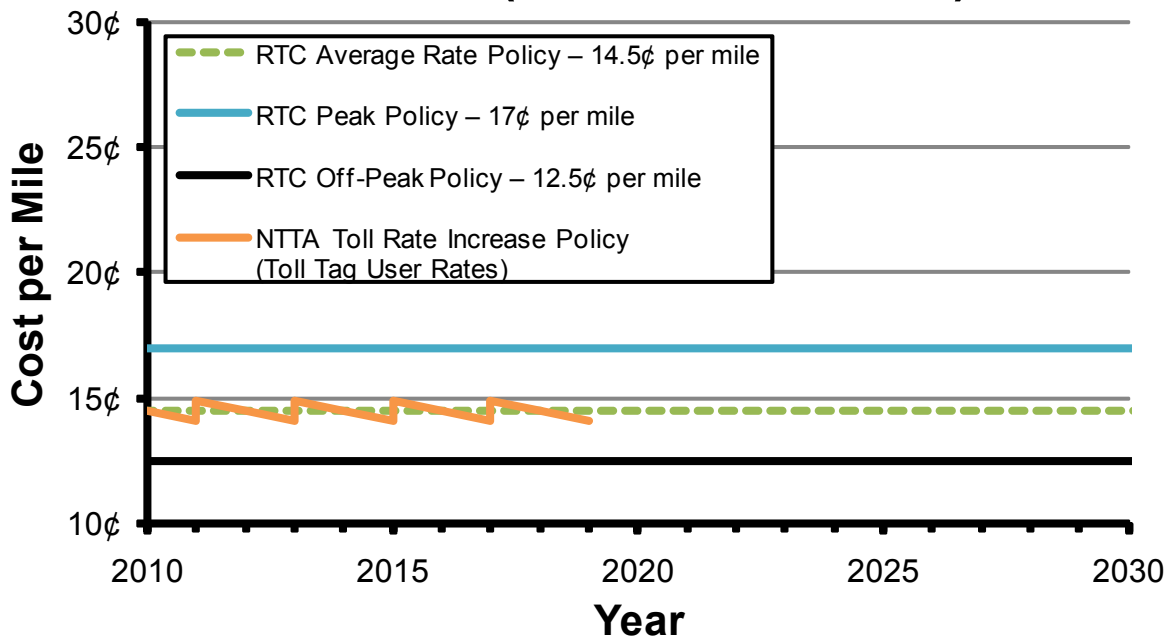
Date Created: December 2010

Source: NCTCOG, 2010

Toll Rates (Inflation Adjusted)



Toll Rates (Constant Dollars)



Regional Priced Facility System Analysis

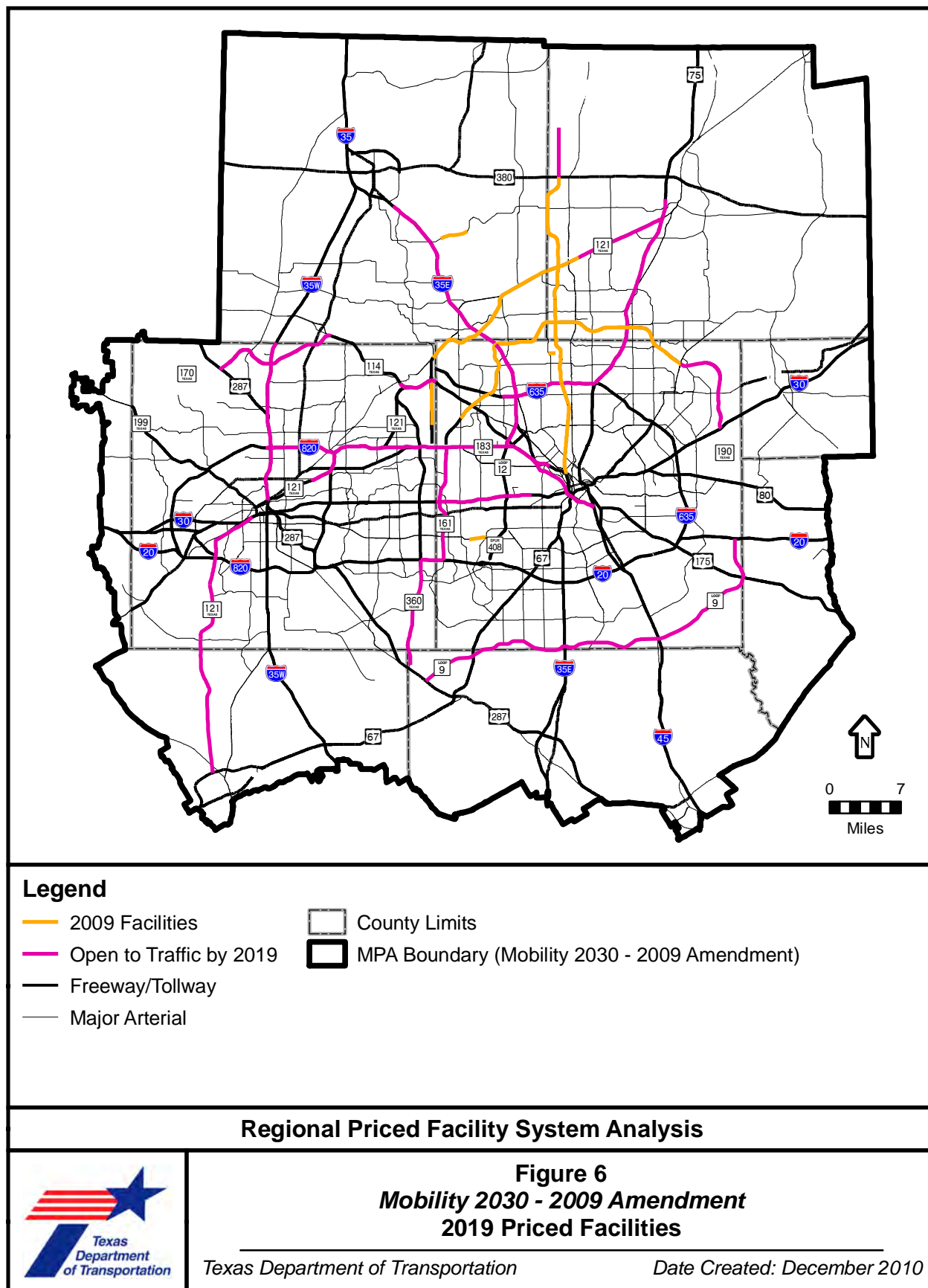


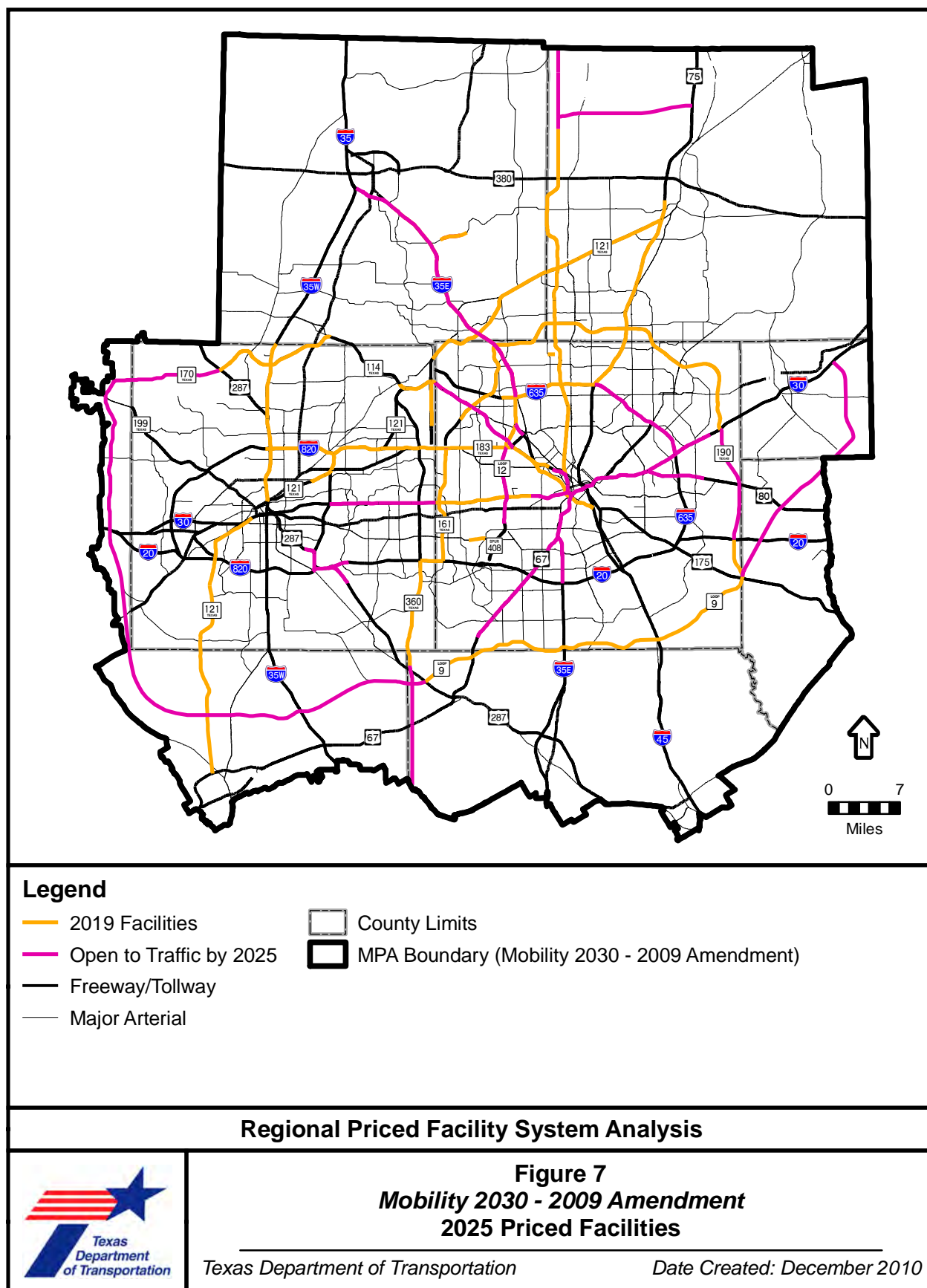
Figure 5 – Toll Rate Inflation Adjustments

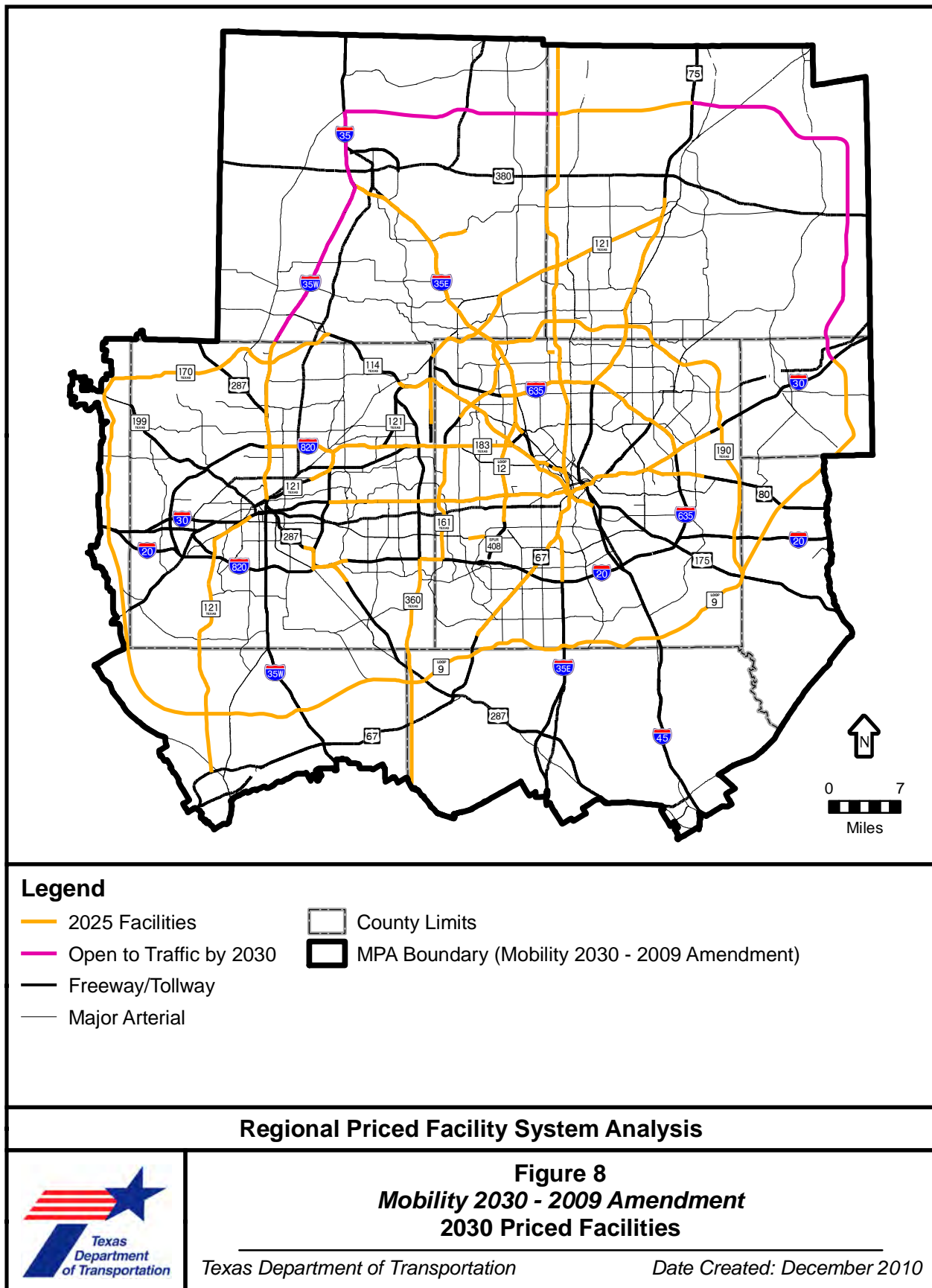
Texas Department of Transportation

Date Created: December 2010

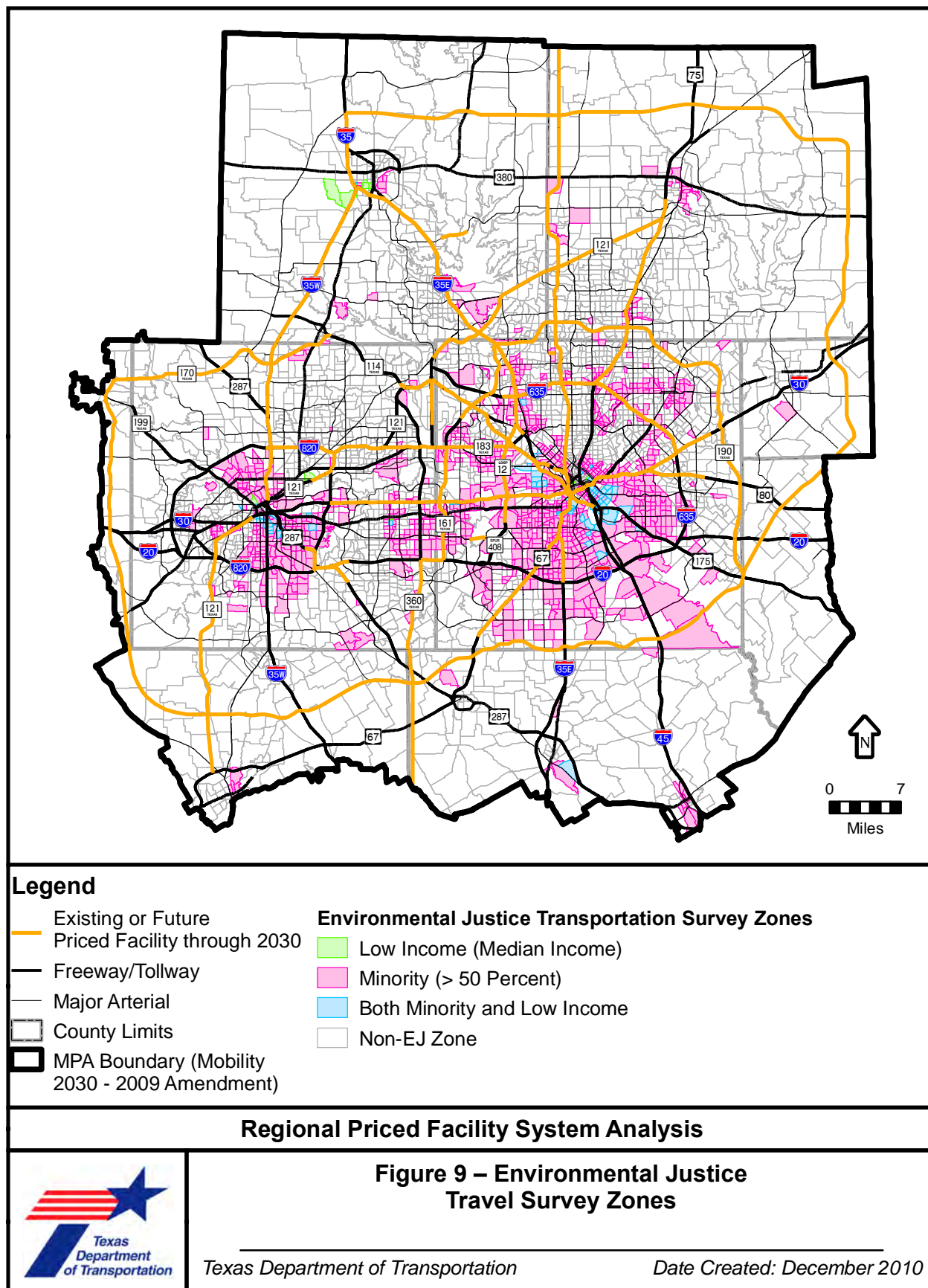
Source: NCTCOG, 2010

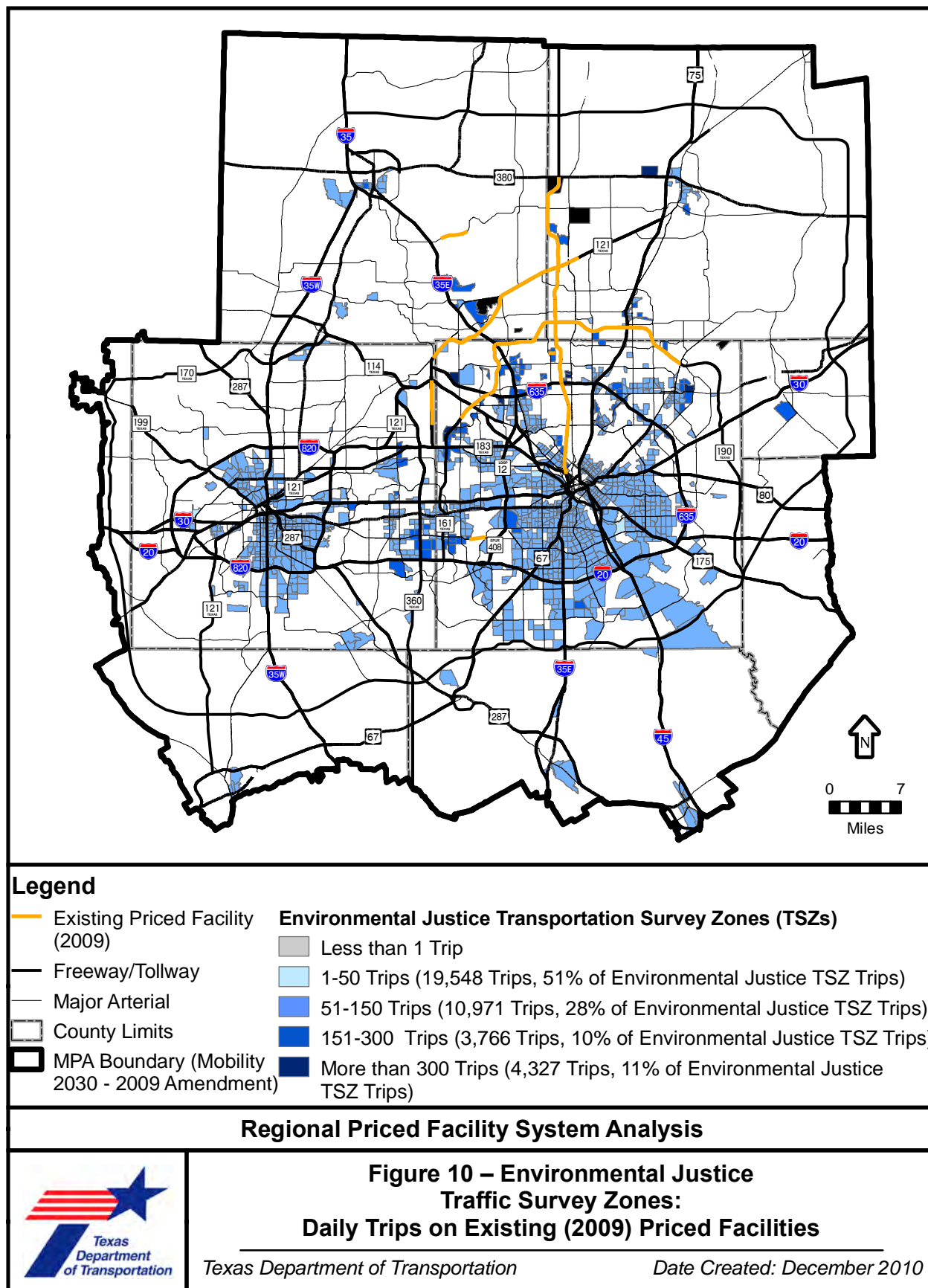




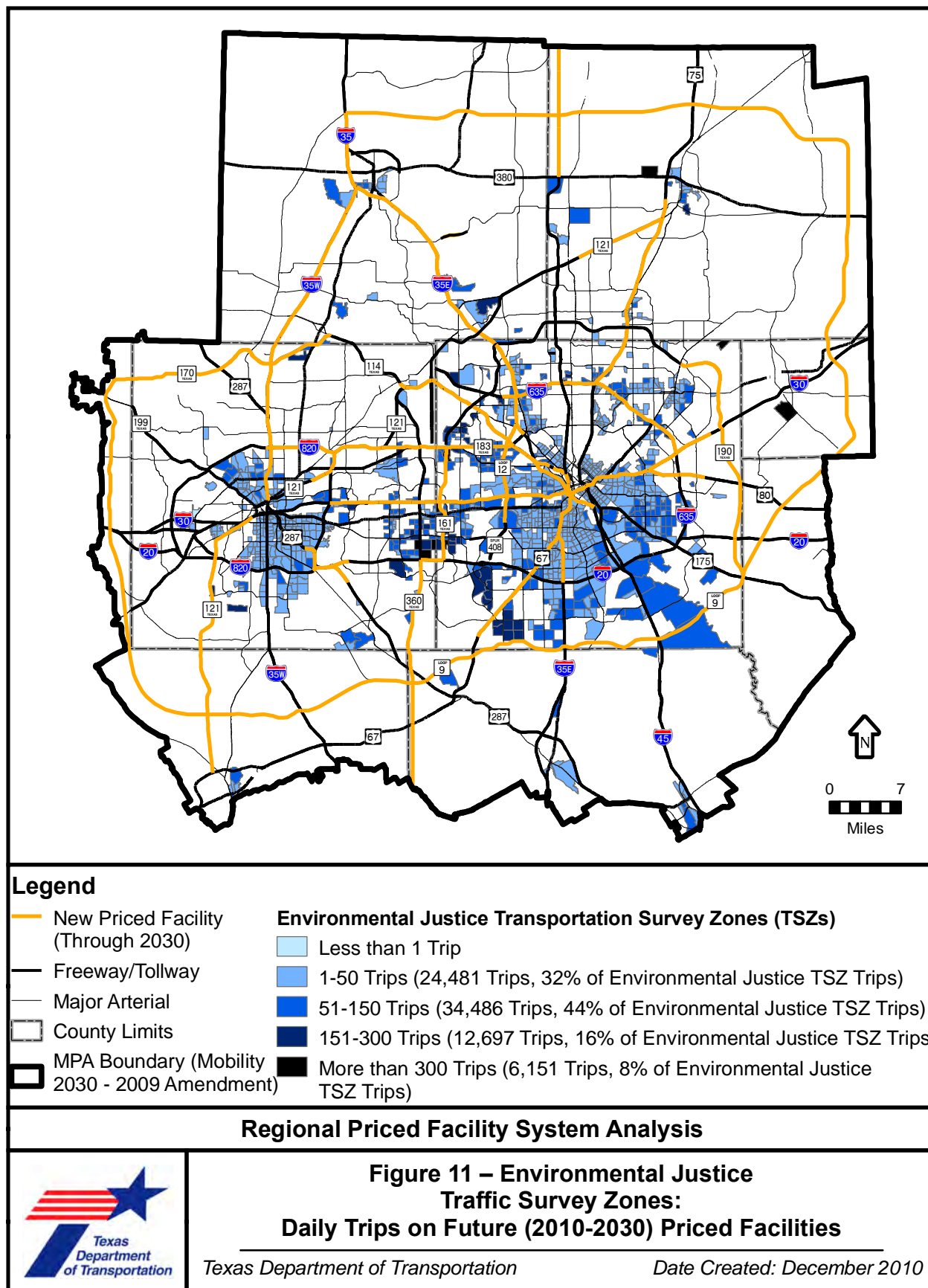


Source: NCTCOG, 2010





Source: NCTCOG, 2010



Source: NCTCOG, 2010