



## Mobility 2035: The Metropolitan Transportation Plan for North Central Texas

Central Texas Chapter of the Appraisal Institute  
Chad Edwards, Program Manager

North Central Texas Council of Governments

February 22, 2011

# Presentation Topics

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- ▶ What is the Metropolitan Transportation Plan (MTP)?
- ▶ How is the MTP Built?
- ▶ How is the MTP Funded?
- ▶ What are Some the Programs and Projects Included in the MTP?
- ▶ What are the Impacts on Congestion, Air Quality, and Near-term Projects?

# What is the Metropolitan Transportation Plan?

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- ▶ Represents a Blueprint for a Multimodal Transportation System

- ▶ Responds to Goals

  - Mobility

  - Quality of life

  - System sustainability

  - Implementation

- ▶ Identifies Policies, Programs, and Projects for Continued Development

- ▶ Guides Expenditures for Federal and State Funds

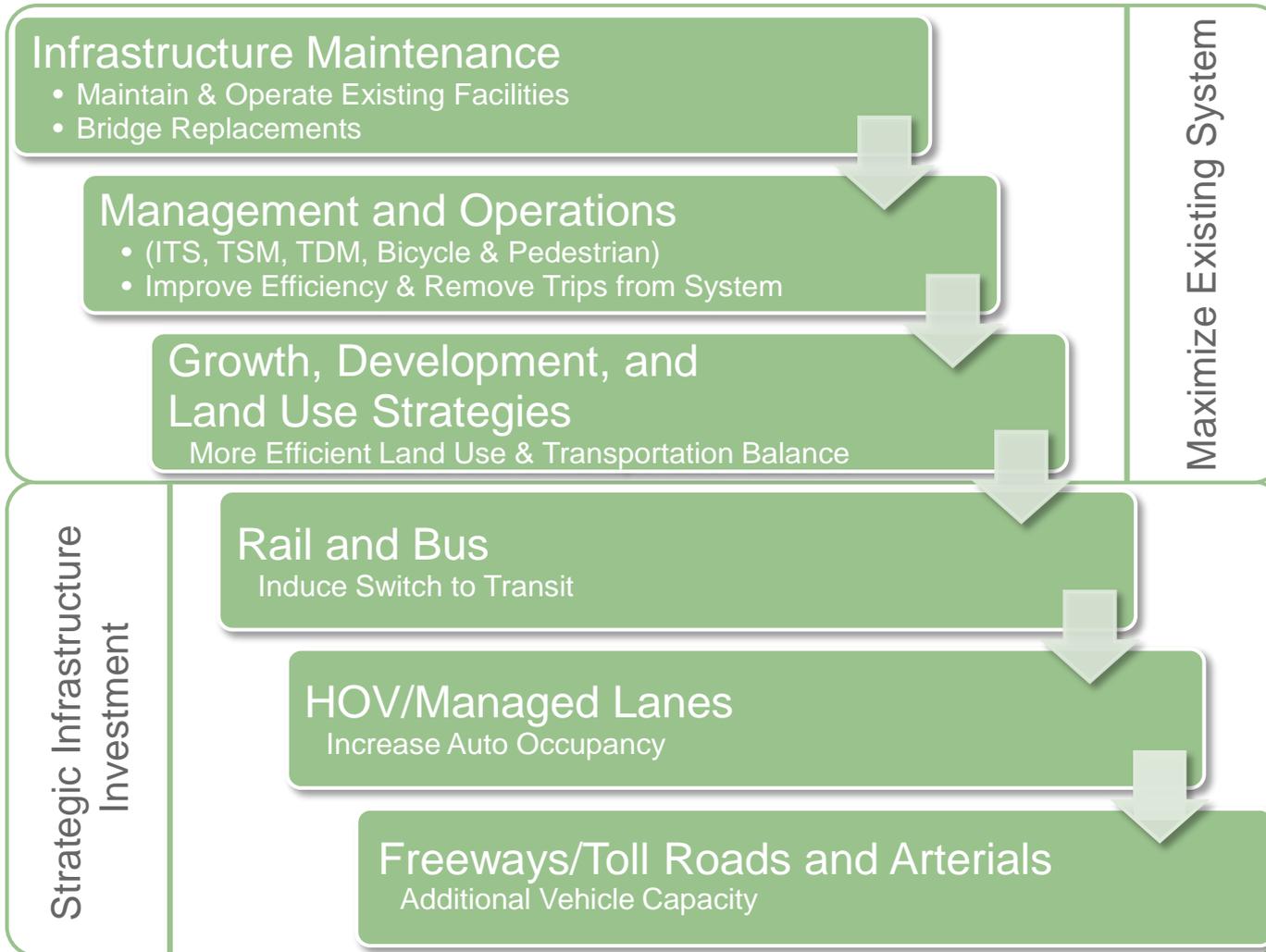
# Metropolitan Transportation Plan

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## Major Policy Objectives

- ▶ Needs Exceed Available Revenue
- ▶ Can't Build Our Way Out of Congestion
- ▶ Maximize Existing System
- ▶ Use Sustainable Development Strategies to:
  - Reduce demand on transportation system
  - Provide multimodal options
- ▶ Emphasis on Environmental Aspects and Quality of Life Issues of Programs and Projects
- ▶ Invest Strategically in Infrastructure

# Prioritization of Improvements



***Considered Throughout the Process***

## **Policy Discussions**

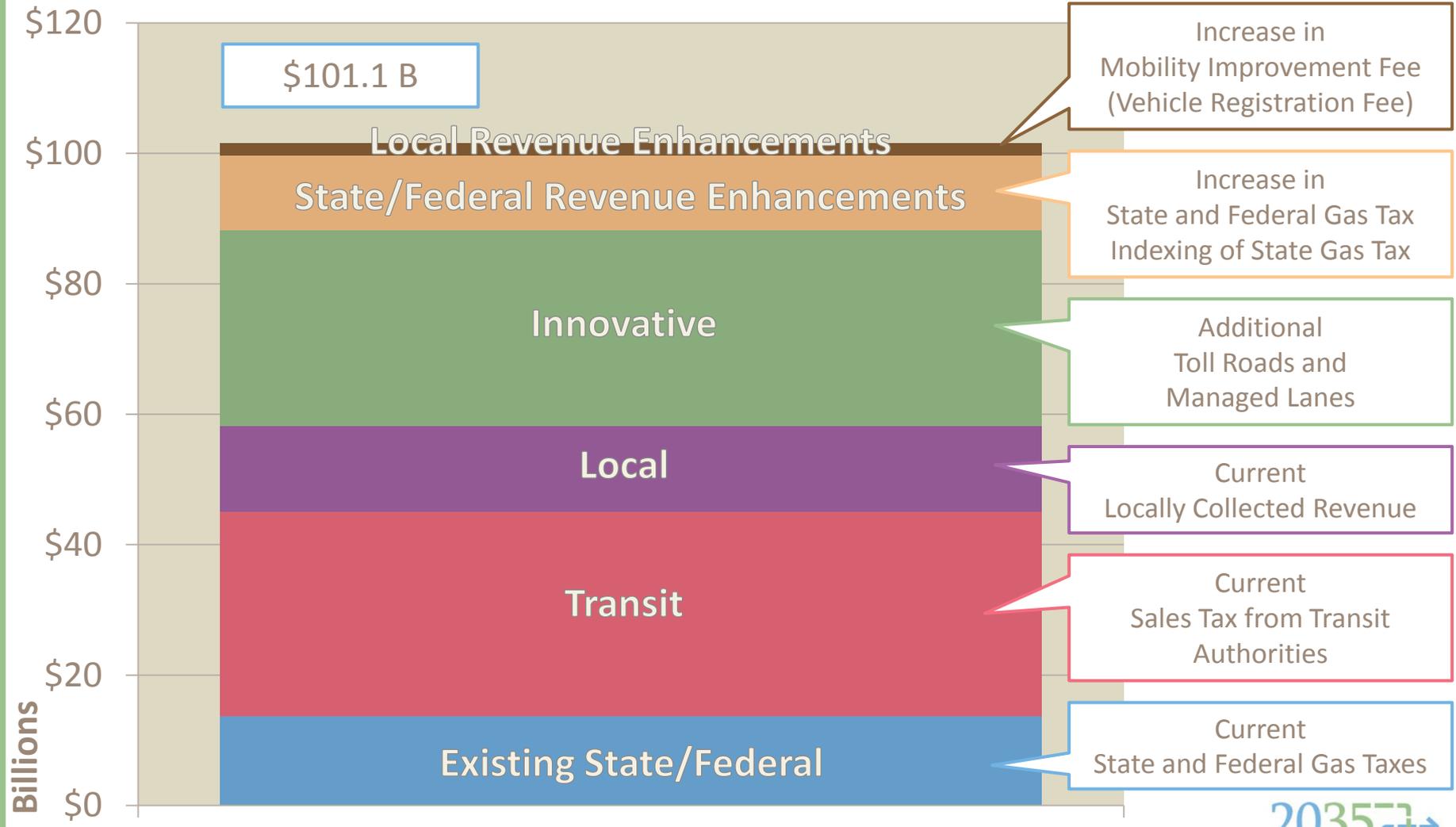
- *Intermodal Planning Efforts*
- *System Safety*
- *System Security*
- *Environmental Justice*
- *Environmental Stewardship*

## **Air Quality Impacts**

## **Financial Constraints**

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# Revenue Sources



Costs are adjusted for "total project cost" and "year of expenditure" consistent with SAFETEA-LU planning requirements. "Actual Dollars" reflects the effect of inflation over time.



**DRAFT****Mobility 2035 Financial Scenarios (Actual \$)**

Funding Strategies	Existing	Enhanced + Local Option
State Fuel Tax (per gallon)	\$0.20 (existing)	+\$0.05 in 2020 & +\$0.05 in 2030
State Fuel Tax Indexing	-	To Fuel Efficiency by 2015
Federal Fuel Tax (per gallon)	\$0.184 (existing)	+\$0.05 in 2020 & +\$0.05 in 2030
Mobility Improvement Fee (Vehicle Registration )	\$60 (existing)	+\$10 in 2015 & +\$10 in 2025
Toll Roads, Managed Lanes, CDA, and PPP	Currently Funded Facilities	Additional Facilities
Other Assumptions	-Regional Partners Continue to Implement Projects -Reliance on Local Entities to Fund Projects Locally	Same as Existing plus: -End 80% of Diversions Incrementally by 2025 -Maintenance: TxDOT Addresses Pavement Conditions; MPO Funds Bridge Replacements
Total Revenue (\$B)	<b>\$74.9</b>	<b>\$101.1</b>
Additional Revenue from Status Quo (\$B)		<b>+\$26.2</b>

# Prioritization of Improvements

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Maximize Existing System	<b>Infrastructure Maintenance</b> <ul style="list-style-type: none"> <li>• Maintain &amp; Operate Existing Facilities</li> <li>• Bridge Replacements</li> </ul>	\$27.3
	<b>Management and Operations</b> <ul style="list-style-type: none"> <li>• (ITS, TSM, TDM, Bicycle &amp; Pedestrian)</li> <li>• Improve Efficiency &amp; Remove Trips from System</li> </ul>	\$4.8
	<b>Growth, Development, and Land Use Strategies</b> More Efficient Land Use & Transportation Balance	\$3.9
Strategic Infrastructure Investment	<b>Rail and Bus</b> Induce Switch to Transit	\$18.9
	<b>HOV/Managed Lanes</b> Increase Auto Occupancy	\$46.2
	<b>Freeways/Toll Roads and Arterials</b> Additional Vehicle Capacity	
<b>Mobility 2035 Expenditures (Actual \$, Billions)</b>		<b>\$101.1</b>

# Maximize Existing System

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## Infrastructure Maintenance

- Maintain & Operate Existing Facilities
- Bridge Replacements

### ▶ Shared Maintenance of:

- On-System Facilities with TXDOT
- Off-System Facilities with Local Governments

### ▶ Focused Effort to Replace Bridges in Need of Repair

# Maximize Existing System

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## Management and Operations

- (ITS, TSM, TDM, Bicycle & Pedestrian)
- Improve Efficiency & Remove Trips from System

## ▶ System Management

- Intersection Improvements
- Traffic Signal Improvements
- Freeway and Arterial Bottleneck Removal
- Work Zone and Special Events Management

## ▶ Demand Management

- Employer Trip Reduction Program
- Vanpool, Park-and-Ride Facilities, and Transportation Management Associations

## ▶ Safety

- Freeway Incident Management Program
- Regional Mobility Assistance Patrol Program

# Maximize Existing System

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Growth, Development, and Land  
Use Strategies  
More Efficient Land Use & Transportation Balance

## ▶ Sustainability

- Sustainable Development Funding Program
- Sustainable Growth Management and Development Tools
- Transit-Oriented Development Implementation Program
- NCTCOG Brownfield Revolving Loan Fund Program

## ▶ Land Use

- Alternative Future Program
- Land Use-Transportation (LUTR) Connection

## ▶ Livability and Transportation

## ▶ Center for Development Excellence Program

# Strategic Infrastructure Investment

## Rail and Bus Induce Switch to Transit

### Funded Rail Recommendations\*

**Legend**

**Funding Sources**

- Public
- Public and Private
- HSR/Regional Rail Integrated Corridor\*\*
- Major Roads

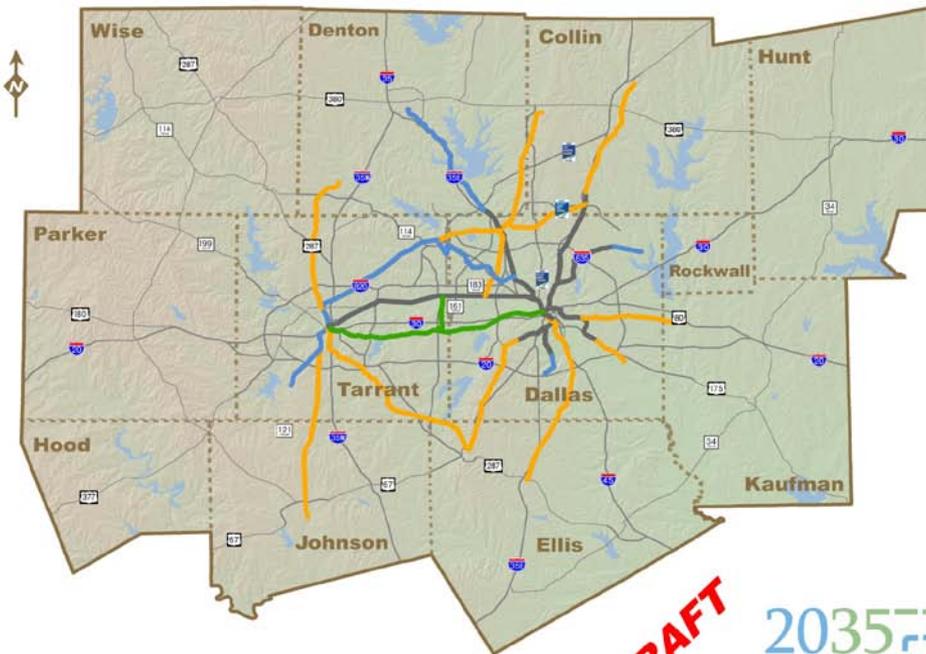
Mobility 2030 - 2009 Amendment

Completed Projects

#### Fort Worth CBD



#### Dallas CBD



Project staging and phasing will be utilized to maximize expenditures.

\*Local option revenue may be allocated to passenger rail and/or other transportation projects within each county.

\*\*See High Speed Rail map for additional inter-region rail access

**DRAFT** 2035 mobility



North Central Texas  
Council of Governments

December 7, 2010

2035 mobility

# Funded Rail Recommendations\*

## Legend

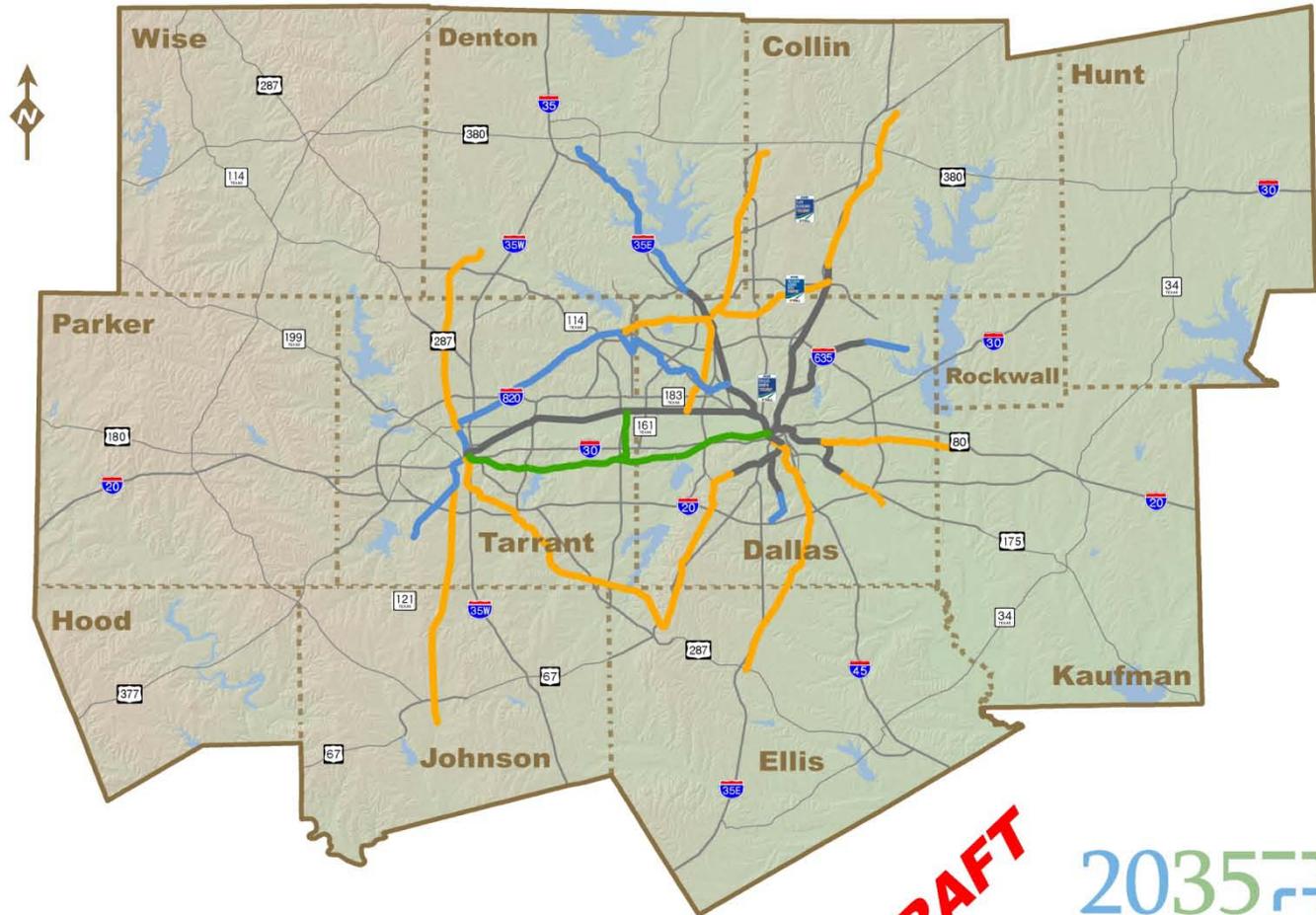
### Funding Sources

- Public
  - Public and Private
  - HSR/Regional Rail Integrated Corridor\*\*
  - Major Roads
- 
- Mobility 2030 - 2009 Amendment
  - Completed Projects

### Fort Worth CBD



### Dallas CBD



Project staging and phasing will be utilized to maximize expenditures.

\*Local option revenue may be allocated to passenger rail and/or other transportation projects within each county.

\*\*See High Speed Rail map for additional inter-region rail access



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December 7, 2010

# Passenger Rail Recommendations\*

## Legend

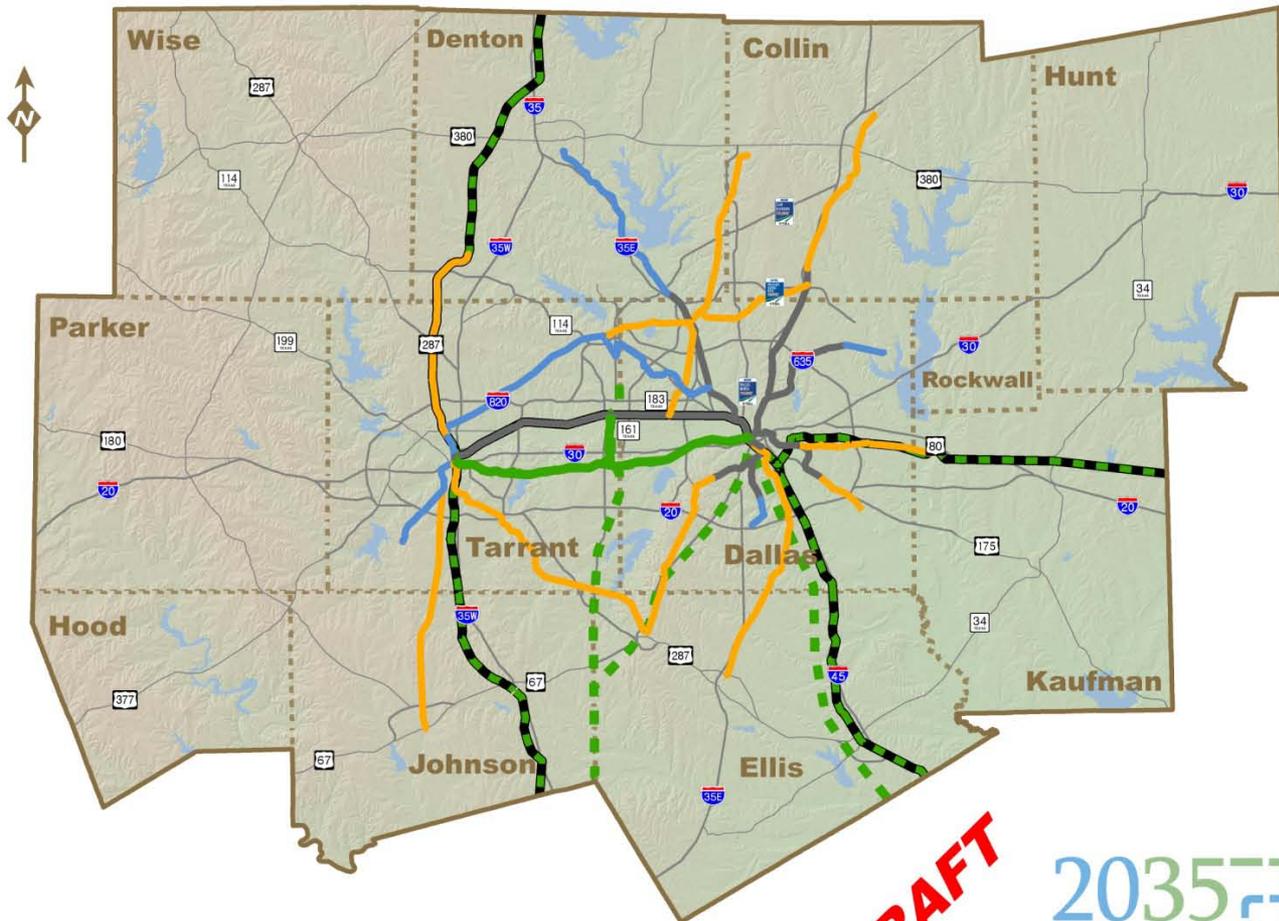
### Funding Sources

-  Public
-  Public and Private
-  HSR/Regional Rail Integrated Corridor\*\*
-  Higher Speed Rail (79-110 mph)
-  High Speed Rail (110-150+ mph)
-  Major Roads
-  Completed Projects

### Fort Worth CBD



### Dallas CBD



Project staging and phasing will be utilized to maximize expenditures.

\*Local option revenue may be allocated to passenger rail and/or other transportation projects within each county.

\*\*See High Speed Rail map for additional inter-region rail access

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January 20, 2010

# 2035 Rail Vision Considerations



## Legend

- Completed Projects
- Mobility 2035 Recommendations
- Corridors for Future Evaluation\*
- Major Roads



\*Corridors represent potential connections through region by regional rail or high speed rail. Mode is yet to be determined based on future analysis.

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2035  
mobility



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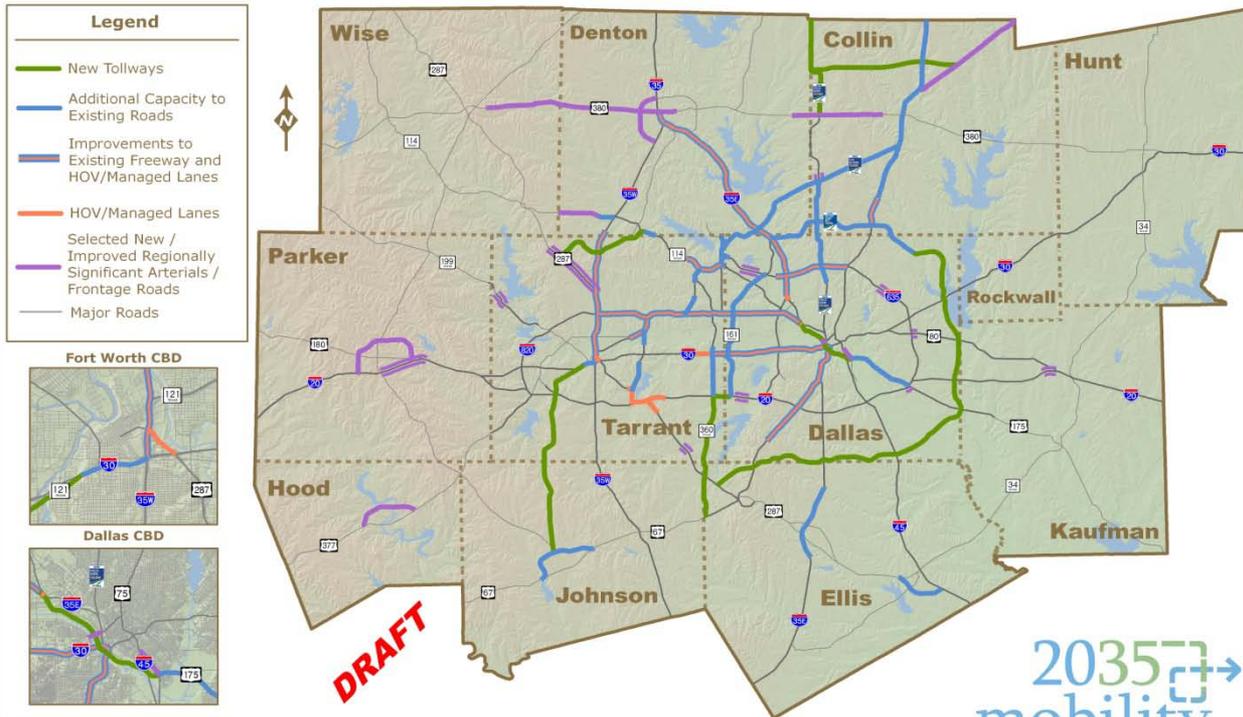
January 21, 2011

# Strategic Infrastructure Investment

HOV/Managed Lanes  
Increase Auto Occupancy

Freeways/Toll Roads and Arterials  
Additional Vehicle Capacity

## Funded Roadway Recommendations



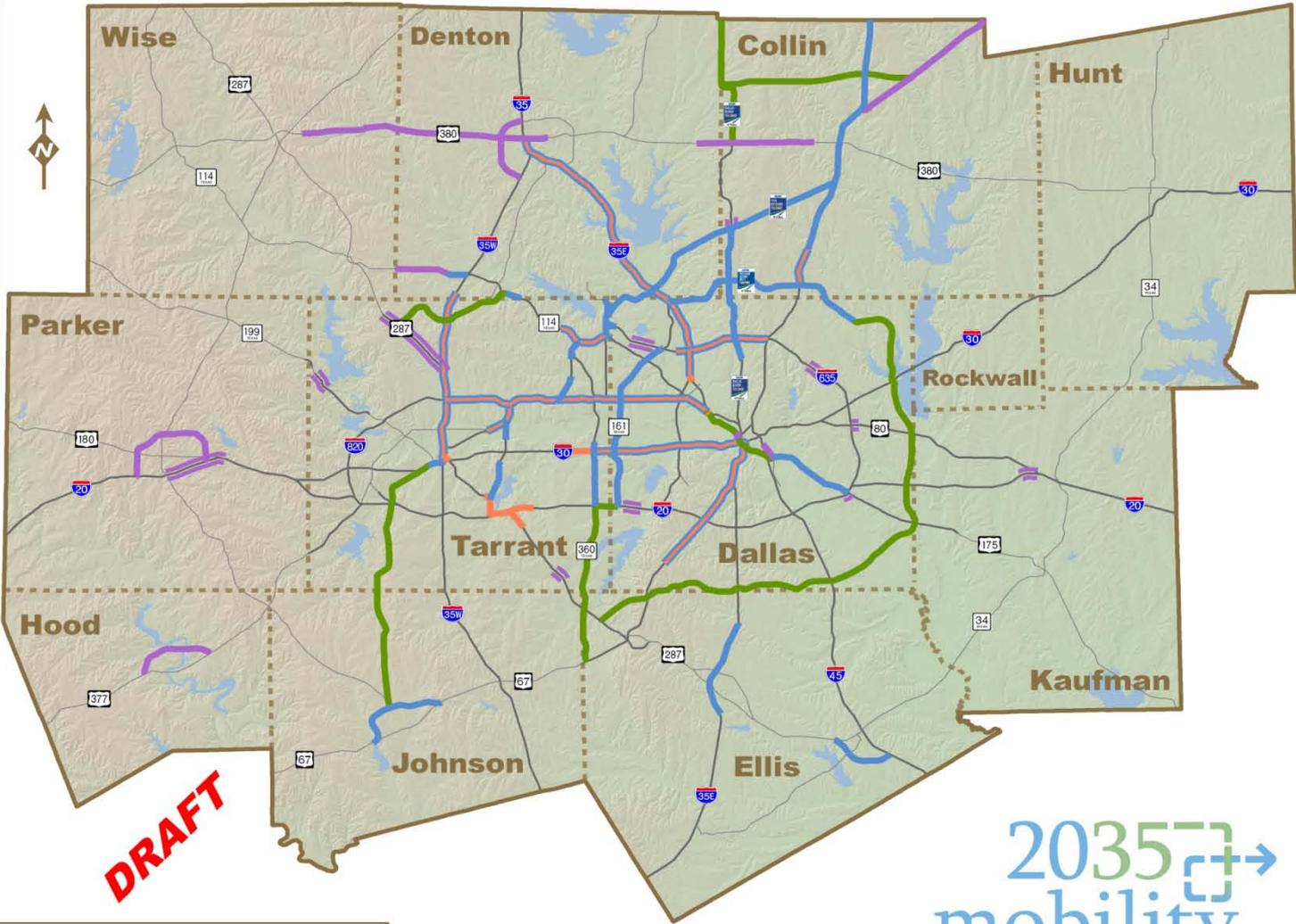
Costs for public funded roadways maintain the regional 69/31 split.

Roadway improvements are based on the assumptions that Statewide Enhanced dollars go toward capacity improvements rather than maintenance. Local option revenue allocated to passenger rail and/or other transportation projects within each county.

# Funded Roadway Recommendations

**Legend**

-  New Tollways
-  Additional Capacity to Existing Roads
-  Improvements to Existing Freeway and HOV/Managed Lanes
-  HOV/Managed Lanes
-  Selected New / Improved Regionally Significant Arterials / Frontage Roads
-  Major Roads



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**Fort Worth CBD**



**Dallas CBD**



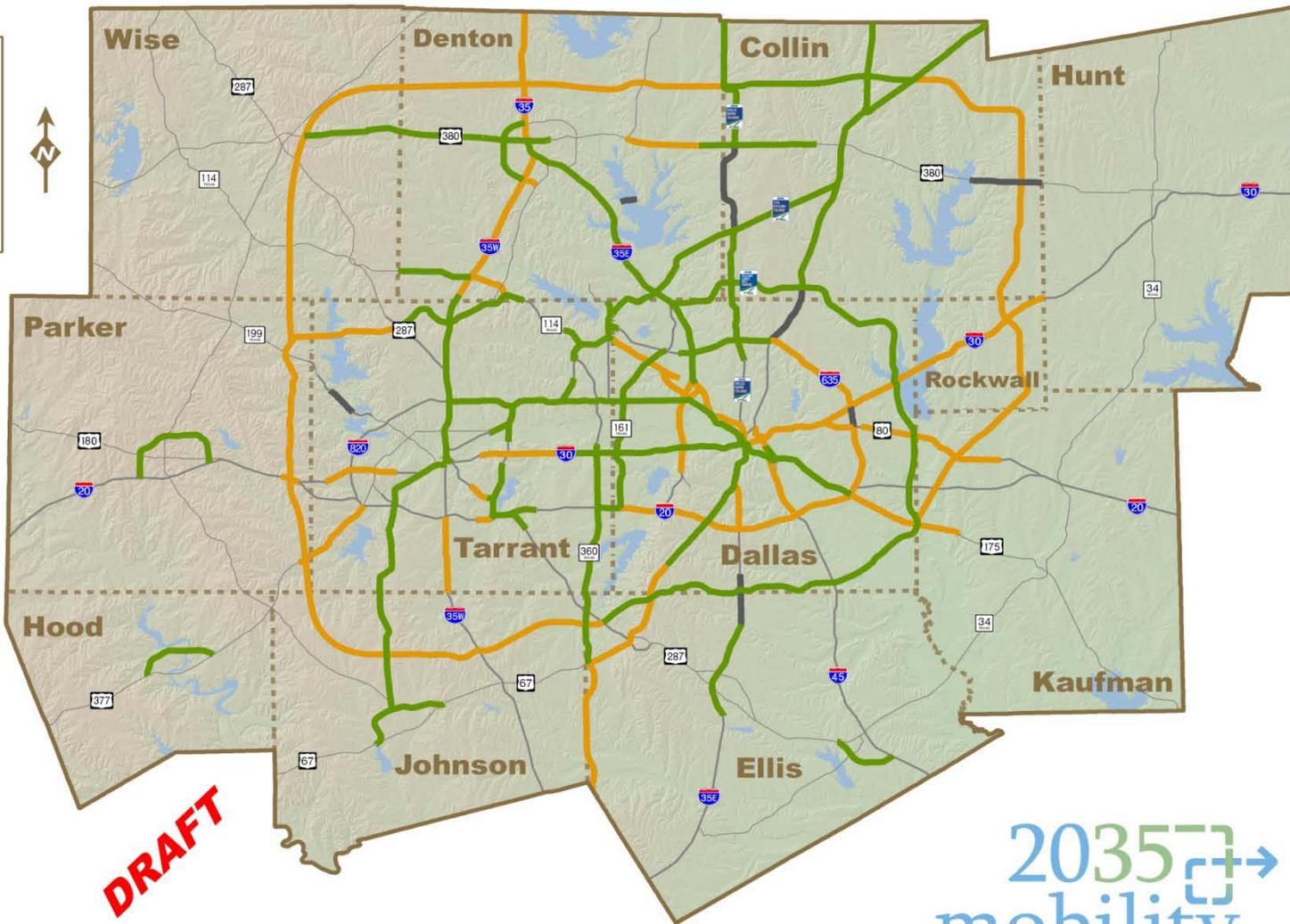
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# 2035 Roadway Vision Considerations

**Legend**

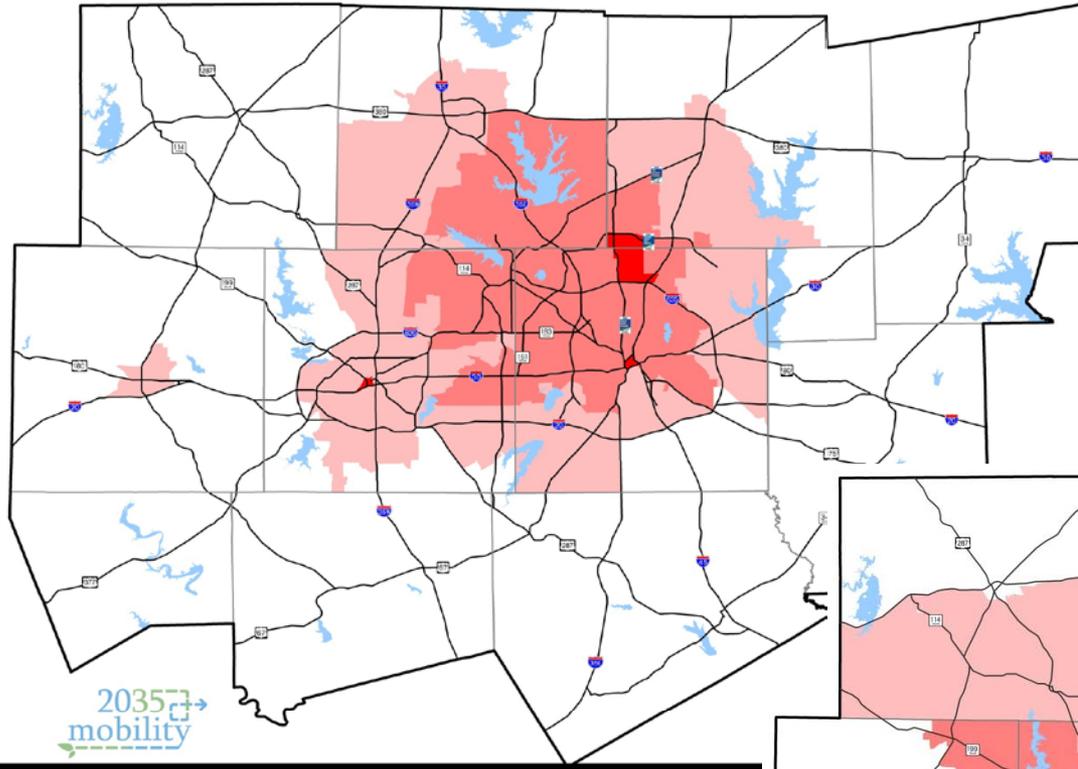
- Completed Projects
- Mobility 2035 Recommendations
- Corridors for Future Evaluation\*



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New Plan –  
2010 Congestion Levels

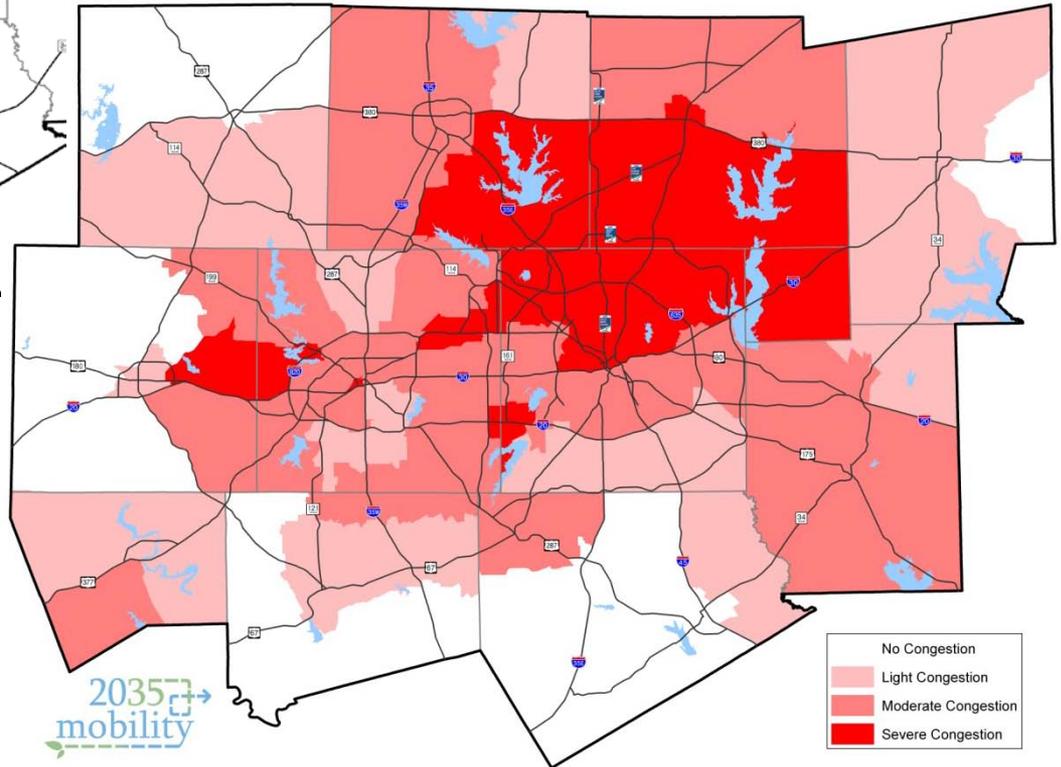


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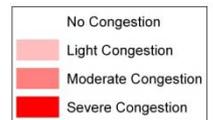
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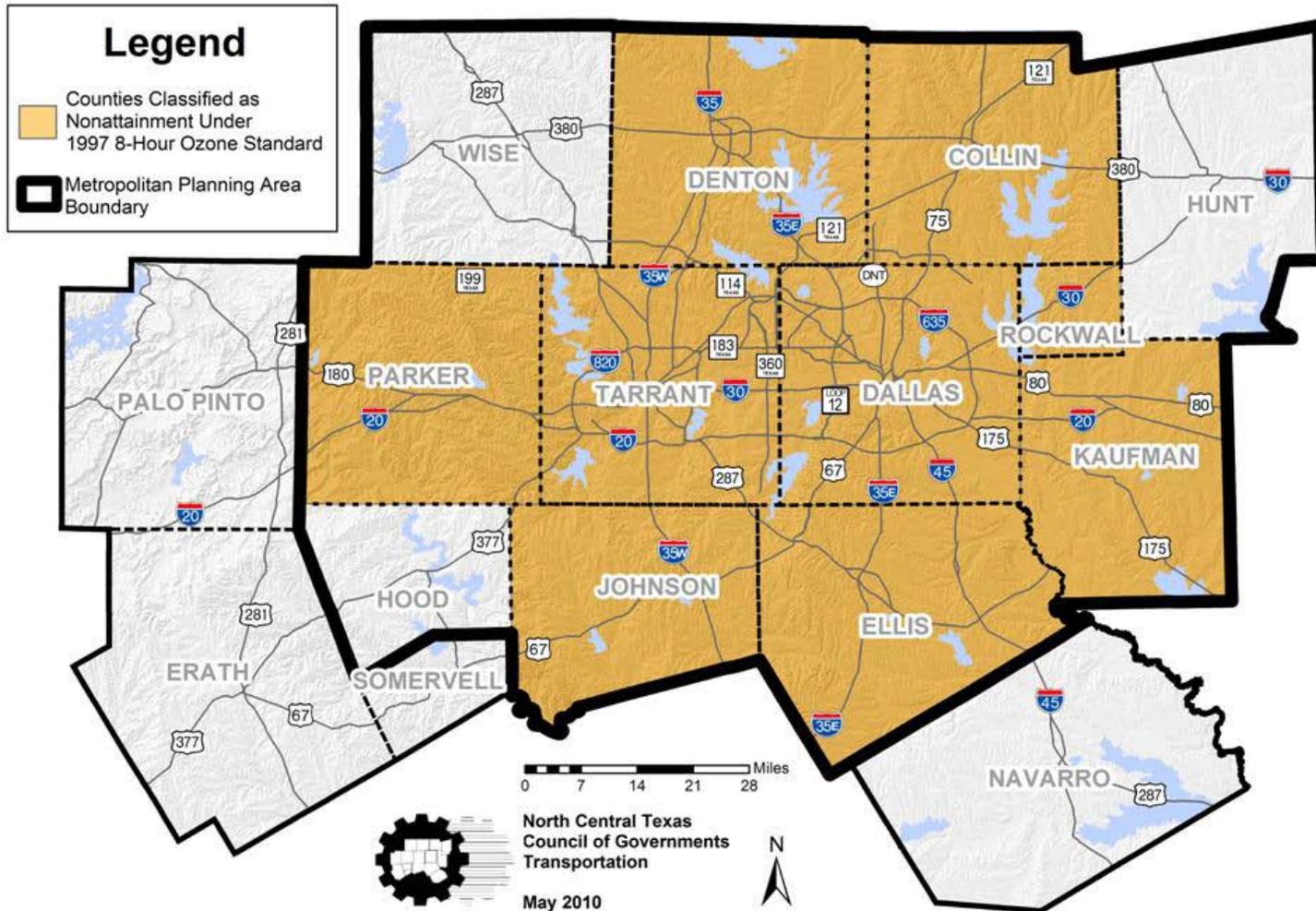
New Plan –  
2035 Future Congestion Levels



2035  
mobility



# Nonattainment Area Map



# Air Quality Conformity Analysis

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## Purpose

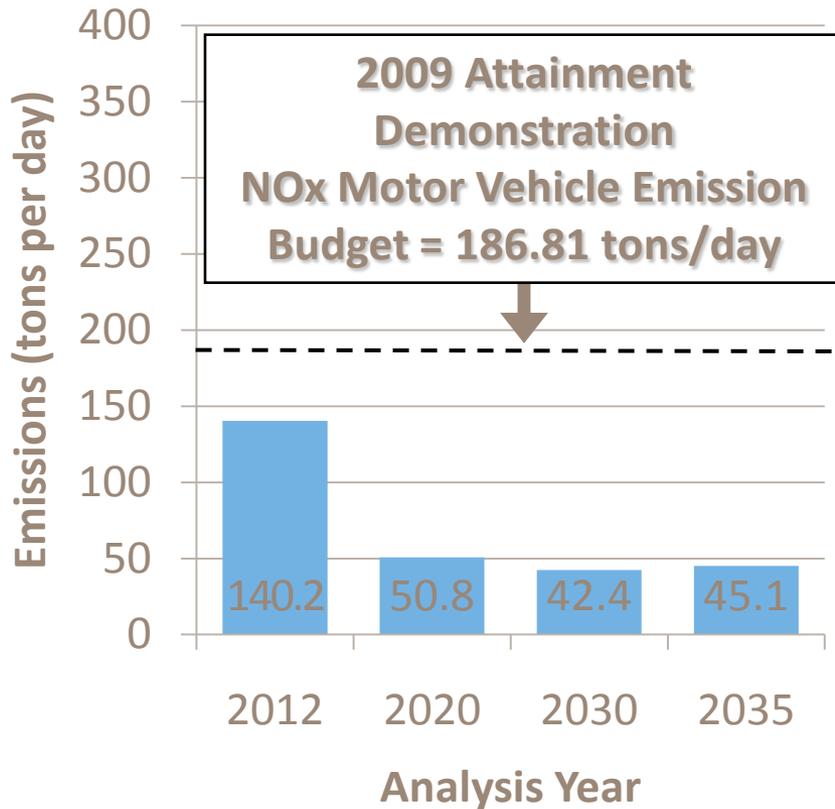
- ▶ Demonstrates that Projected Emissions from Transportation Projects are within Emission Limits Established in the State Implementation Plan
- ▶ Ensures Federal Funding and Approval is Applied to Transportation Projects that are Consistent with Air Quality Planning Goals

## Nonattainment Area for Ozone

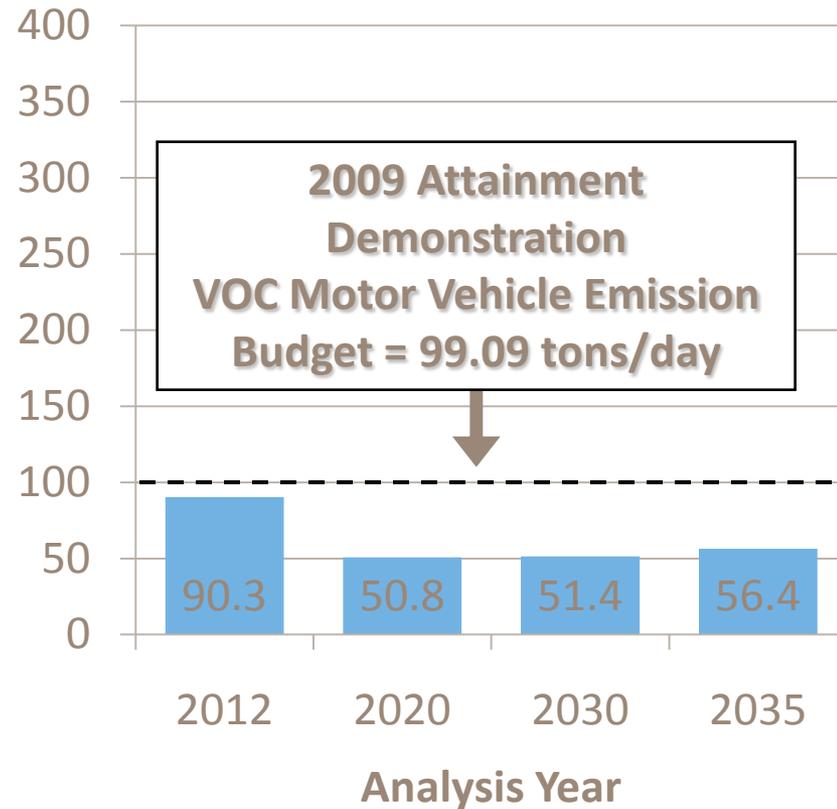
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# Air Quality Conformity

## Emissions of Nitrogen Oxides (NOx)



## Emissions of Volatile Organic Compounds (VOC)



Emissions may not exceed budgets

# 2011-2014 TIP Document Updates

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## ▶ Transportation Improvement Program

- Provides Staged Implementation of Near Term Projects
- Outlines Transportation Funds for 4-Year Cycles

## ▶ TIP Document Modifications Include

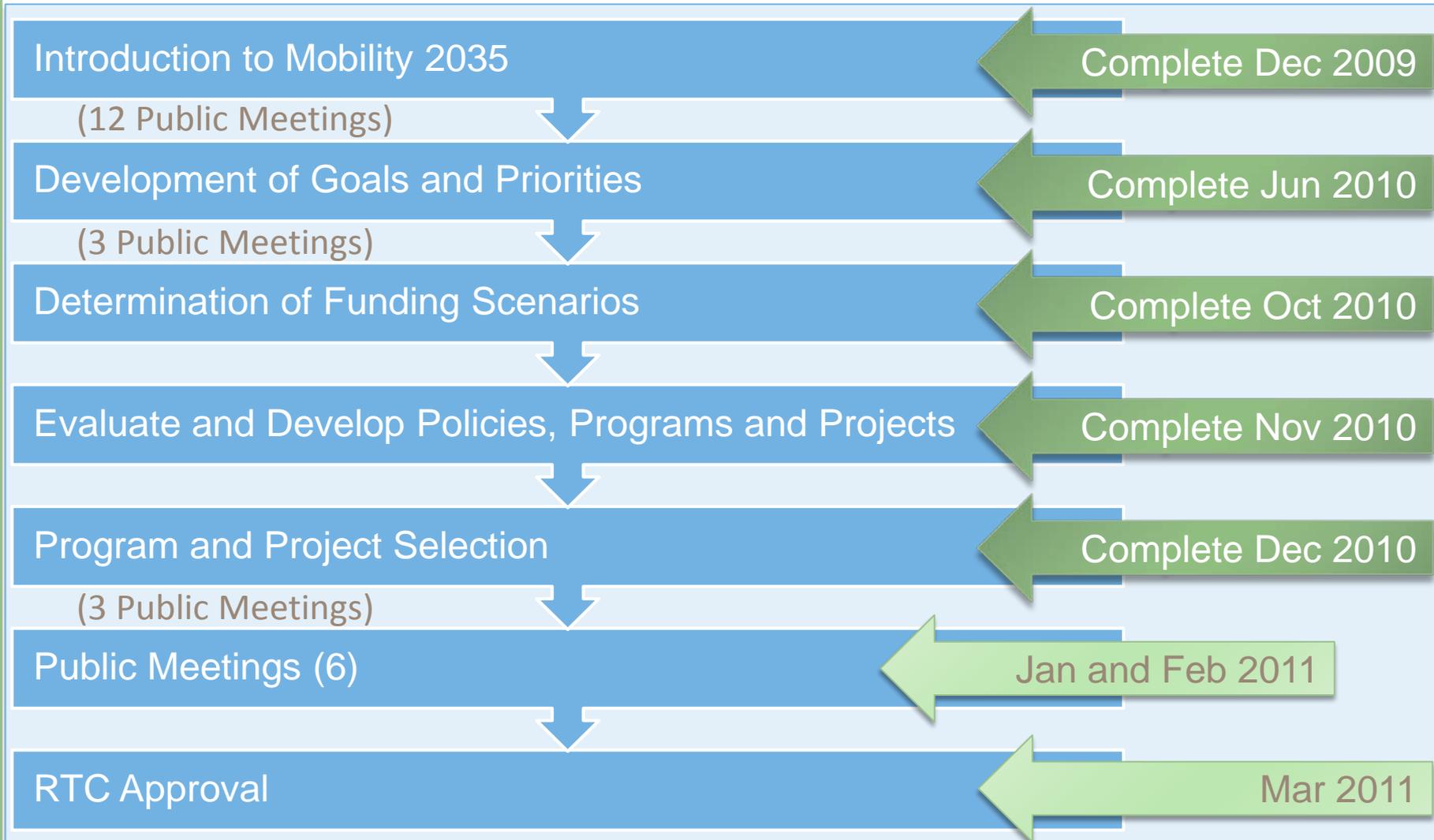
- Updating Projects with New Mobility 2035 Plan References
- Updating 2011-2014 Chapters and Appendices with New Conformity and 2035 Plan Language
- Make Minor Updates to Projects to Ensure Plan and TIP Consistency

<http://www.nctcog.org/trans/tip/>

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# Development Process



# Contact Information

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To find out more about Mobility 2035, please visit us at:

[www.nctcog.org/mobility2035](http://www.nctcog.org/mobility2035) or

e-mail: [mobilityplan@nctcog.org](mailto:mobilityplan@nctcog.org)

Dan Lamers, P.E., Senior Program Manager

817.695.9263 or [dlamers@nctcog.org](mailto:dlamers@nctcog.org)

Chad Edwards, Program Manager

817.608.2358 or [cedwards@nctcog.org](mailto:cedwards@nctcog.org)

