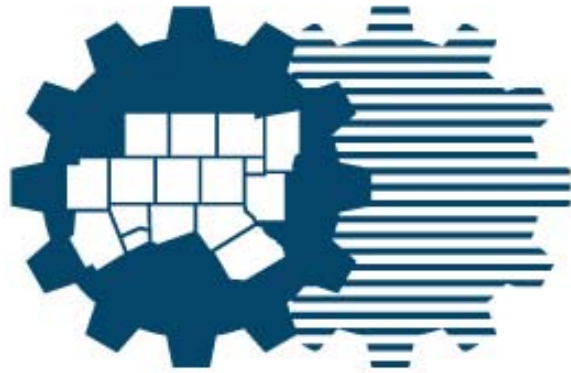




COMMISSIONER  
GARY FICKES

# Northeast Tarrant County Transportation Summit

*Mobility for the 21<sup>st</sup> Century*



North Central Texas  
Council of Governments

## 2030 Plan

*Dan Kessler*

*Assistant Director of Transportation - NCTCOG*

# FUNDING THE FUTURE

A Forecast of Transportation Finance

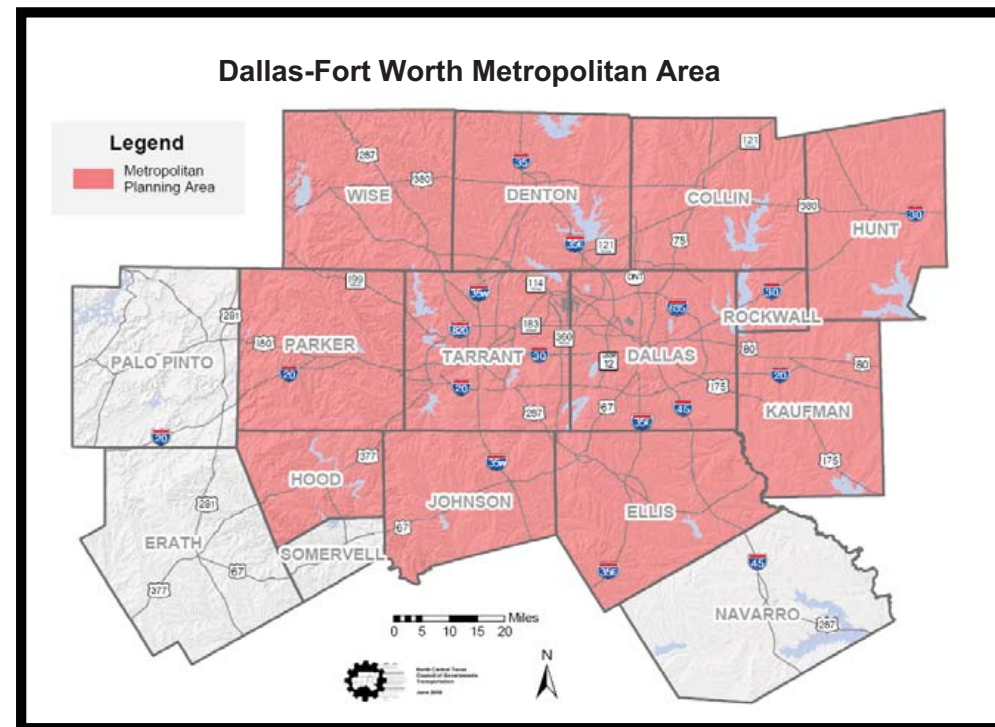
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Presented to  
Northeast Tarrant County  
Transportation Summit

**Dan Kessler**  
**Assistant Director, Transportation, NCTCOG**  
**Executive Director, TEMPO**  
**February 17, 2010**

# Metropolitan Area Perspective

- 4th Largest Metropolitan Area in the United States
- Ranked 3<sup>rd</sup> in Population Growth Between 1990-2000 Adding Over 1 Million Persons
- Ranked first for Population Growth among U.S. Metropolitan Areas during 2008
- Larger than 35 States in Population
- Larger than 5 States in Land Area
- Represents Over 34 Percent of the State's Economy
- 6.5 Million Persons in Year 2009
- Growing to 10 Million Persons by the Year 2035
- 12<sup>th</sup> Largest Metropolitan Economy in the World



# Dallas-Fort Worth Metropolitan Area: A Leading World Economy

Urban Area <sup>1</sup>	Country	2005 GDP	
		Billion US\$ <sup>2</sup>	Rank
Tokyo	Japan	\$1,191	1
New York	USA	\$1,133	2
Los Angeles	USA	\$ 639	3
Chicago	USA	\$ 460	4
Paris	France	\$ 460	5
London	UK	\$ 452	6
Osaka/Kobe	Japan	\$ 341	7
Mexico City	Mexico	\$ 315	8
Philadelphia	USA	\$ 312	9
Washington DC	USA	\$ 299	10
Boston	USA	\$ 290	11
Dallas/Fort Worth	USA	\$ 268	12
Buenos Aires	Argentina	\$ 245	13
Hong Kong	China	\$ 244	14
San Francisco	USA	\$ 242	15

<sup>1</sup>Urban agglomerations as defined by the United Nations

<sup>2</sup>Exchange rates based on "purchasing power parity"

# Transportation Funding Crisis

Construction costs have increased substantially over the past two decades (by 50% between 2002 and 2007).

Federal and state fuel taxes have not increased since the early 1990s.

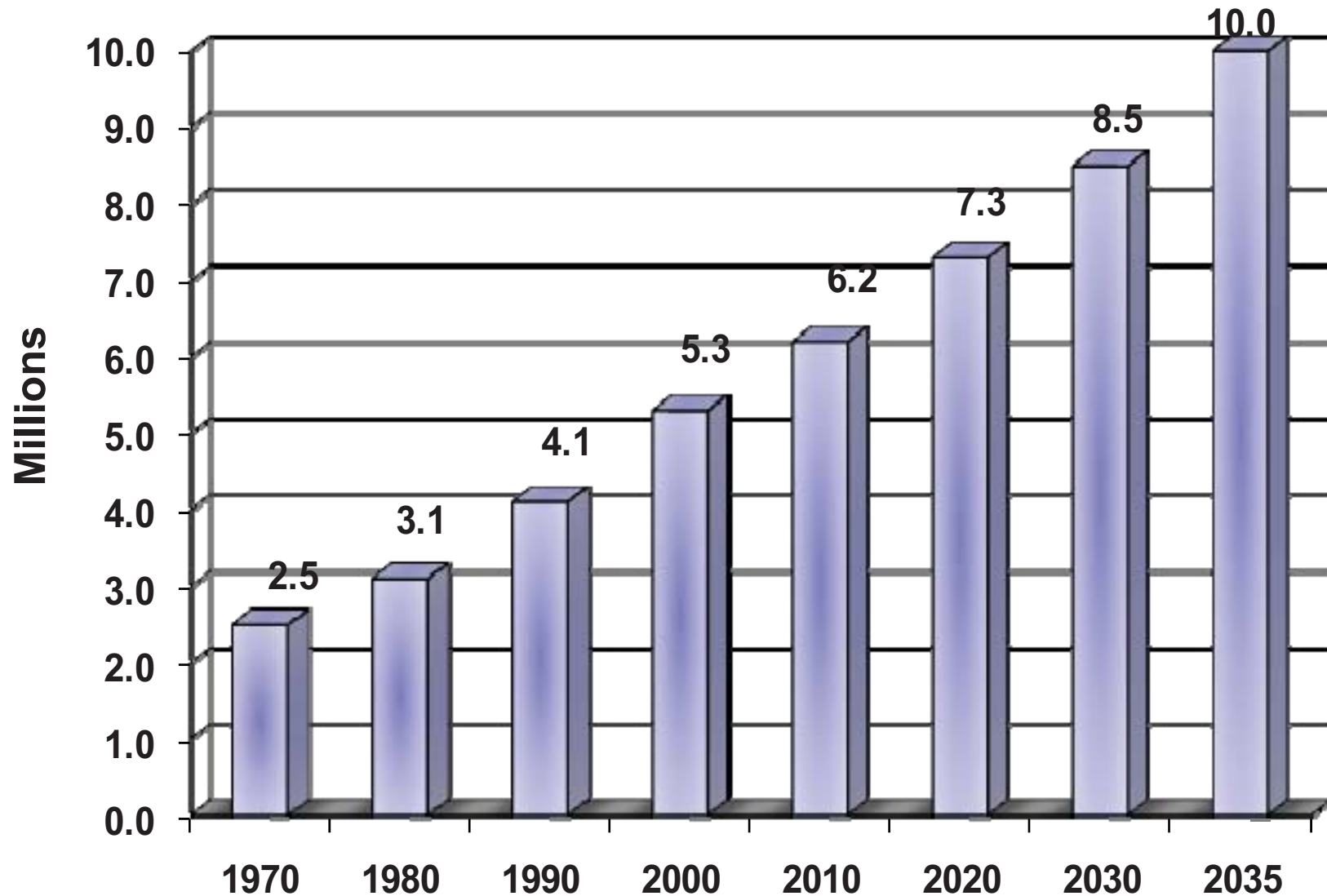
Texas is annually diverting over \$1Billion of State transportation revenues to non-transportation purposes.

Texas is a donor State.

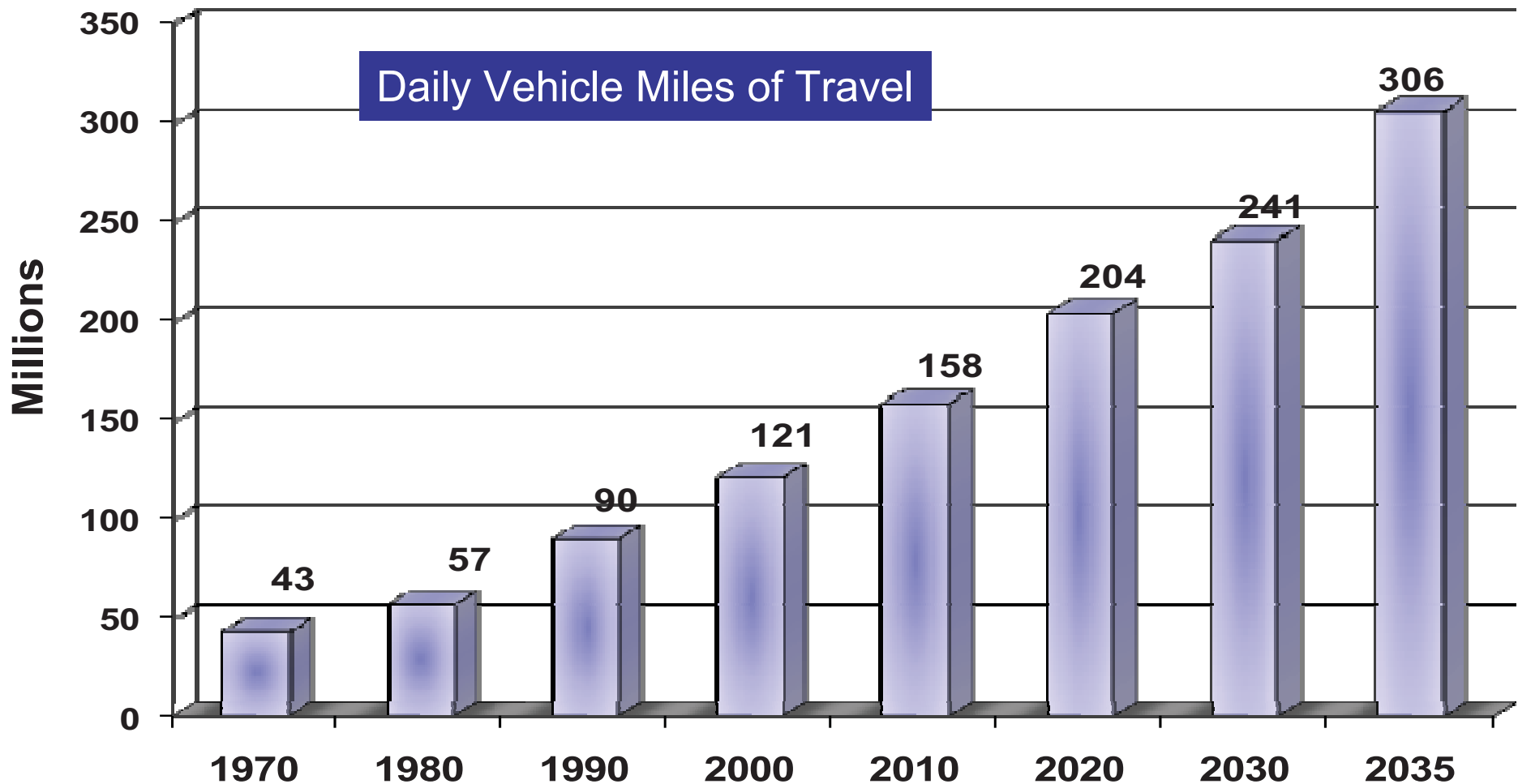
Dallas-Fort Worth is a donor region.

Dallas-Fort Worth population and travel demand continue to grow.

# Dallas-Fort Worth Metropolitan Area Population Growth (1970-2035)



# Dallas-Fort Worth Metropolitan Area Travel Demand Growth



# A Transportation Funding Crisis

U.S. Congress depositing general revenues to the Highway Trust Fund

States facing multiple rescissions in SAFETEA-LU program obligation authority

TxDOT using Proposition 12 bonds backed by general revenues for transportation funding

TxDOT using Proposition 14 bonds backed by Fund 006 and borrowing money to meet monthly cash flow needs

Transportation project costs increasing as regional projects languish, despite use of innovative financing and partnerships



# TEMPO/TxDOT WORKGROUP CHARGE

***“To develop a transportation revenue forecasting model, a range of reasonable model input assumptions, and to utilize this model to develop estimates of future available funding for capacity improvements.”***

# FUNDING THE FUTURE

## TRENDS Model Revenue Strategies

State Gasoline and Diesel Taxes

Federal Gasoline and Diesel Taxes

Indexing State and Federal Motor Fuels Tax

Vehicle Registration Fees

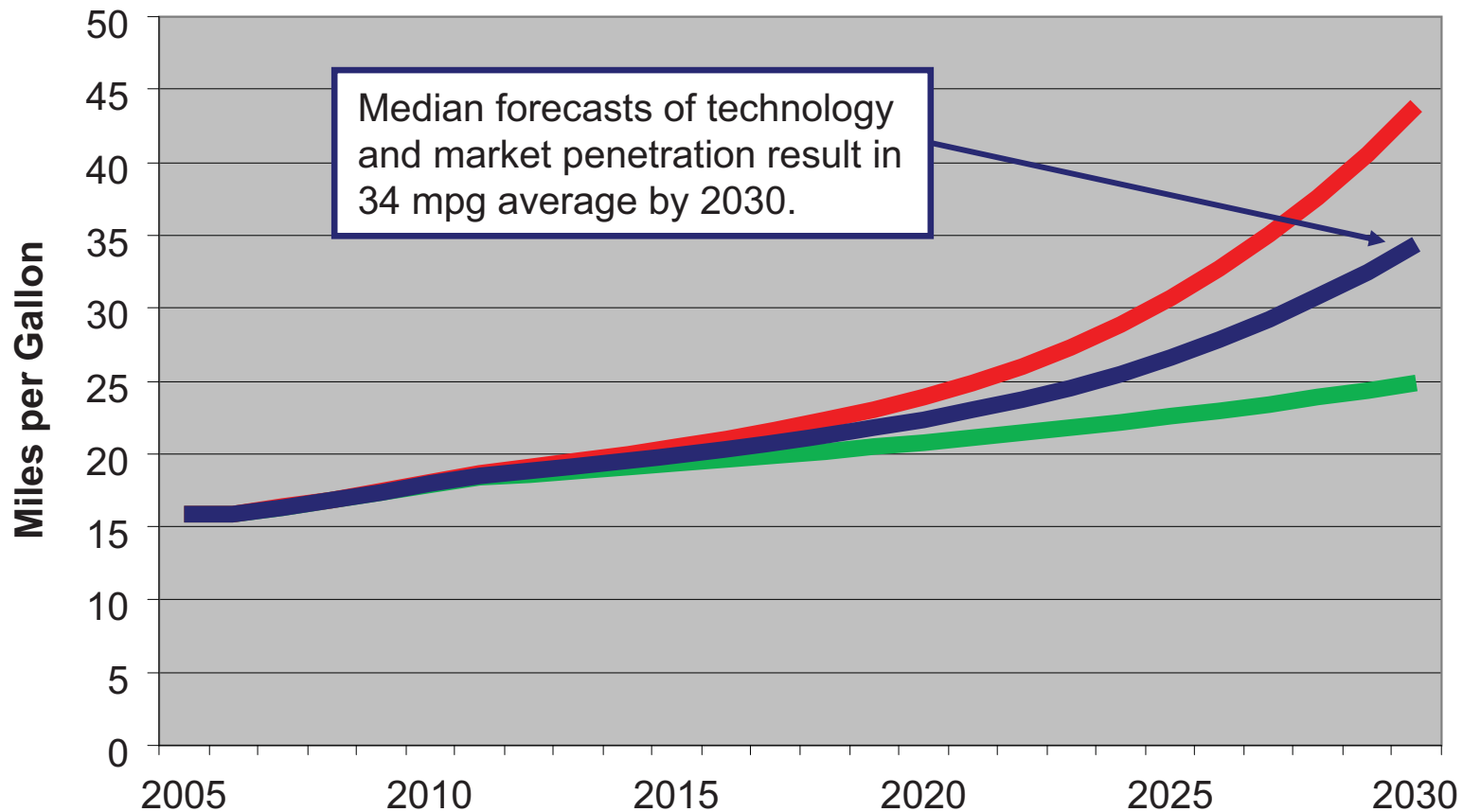
Vehicle Miles of Travel (Distance-based) Tax

Levels of Bond Financing

# TRENDS MODEL

Captures Fuel Efficiency Impacts and Provides Flexibility for Evaluating Future Scenarios

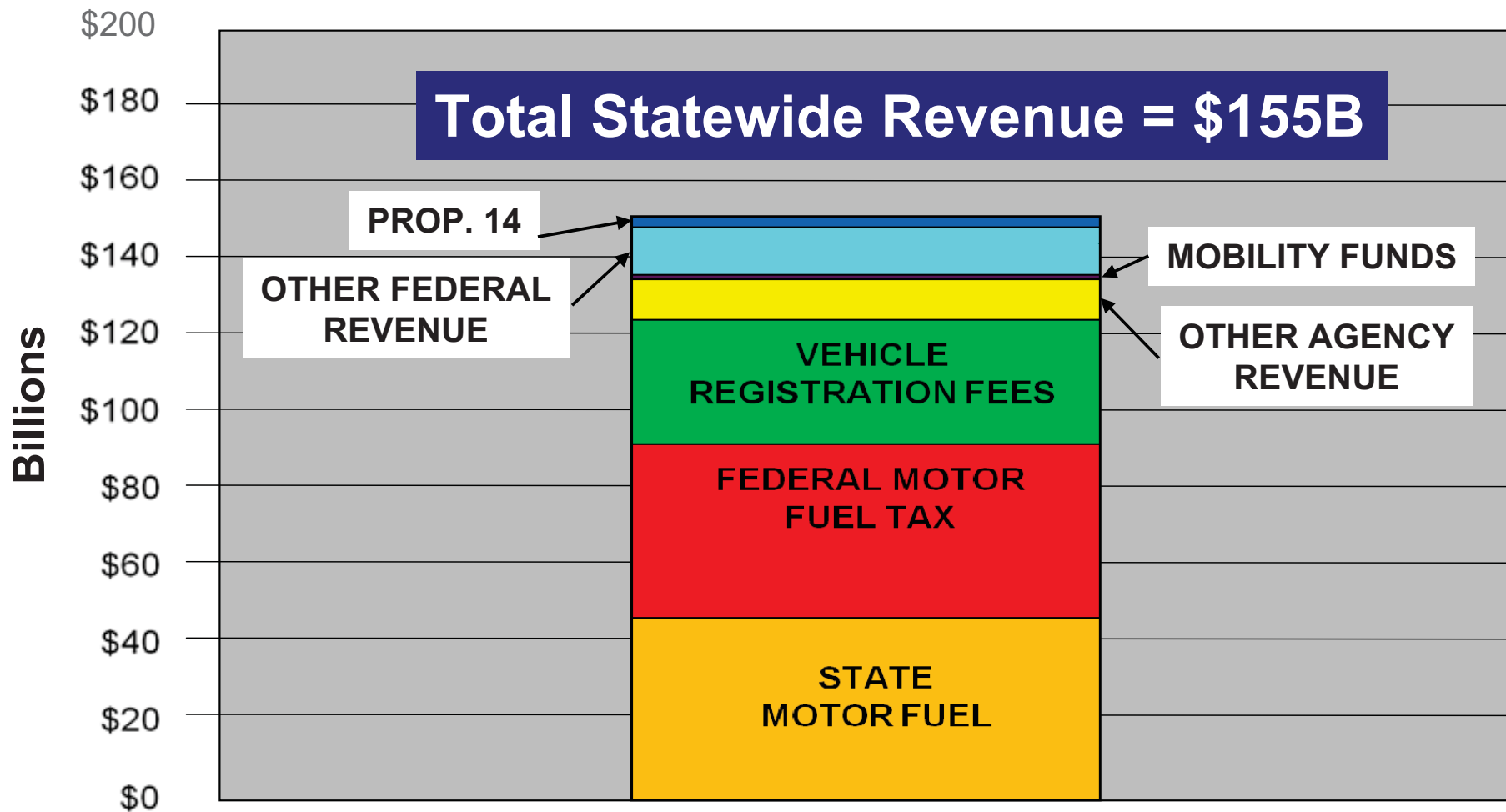
## Fuel Efficiency Scenarios



Source: Cambridge Systematics/TTI

# FUNDING THE FUTURE

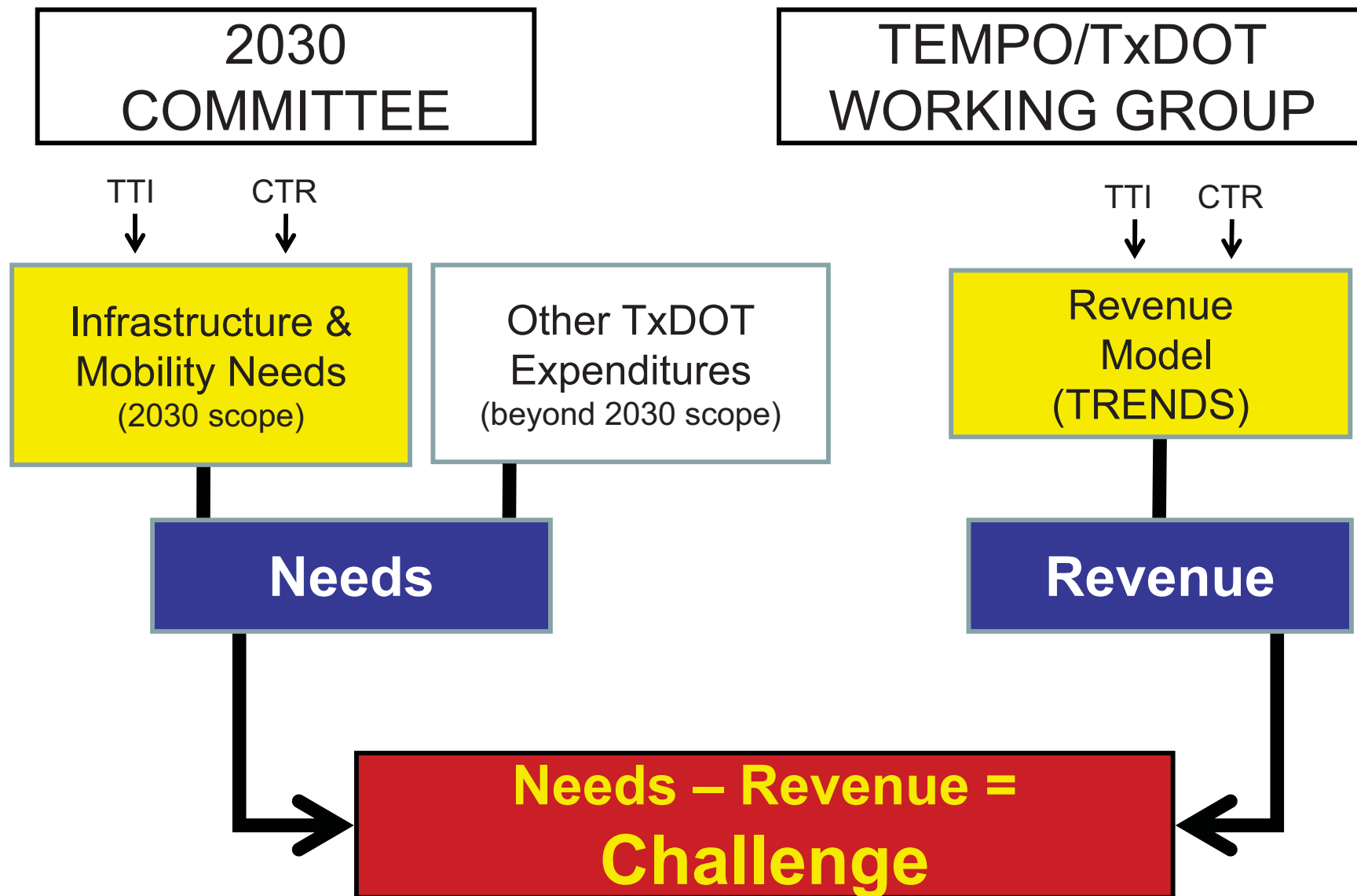
## TRENDS Provides a Baseline Revenue Forecast



Baseline revenue forecast in nominal dollars, 2009 to 2030 (adjusted for inflation)

# FUNDING THE FUTURE

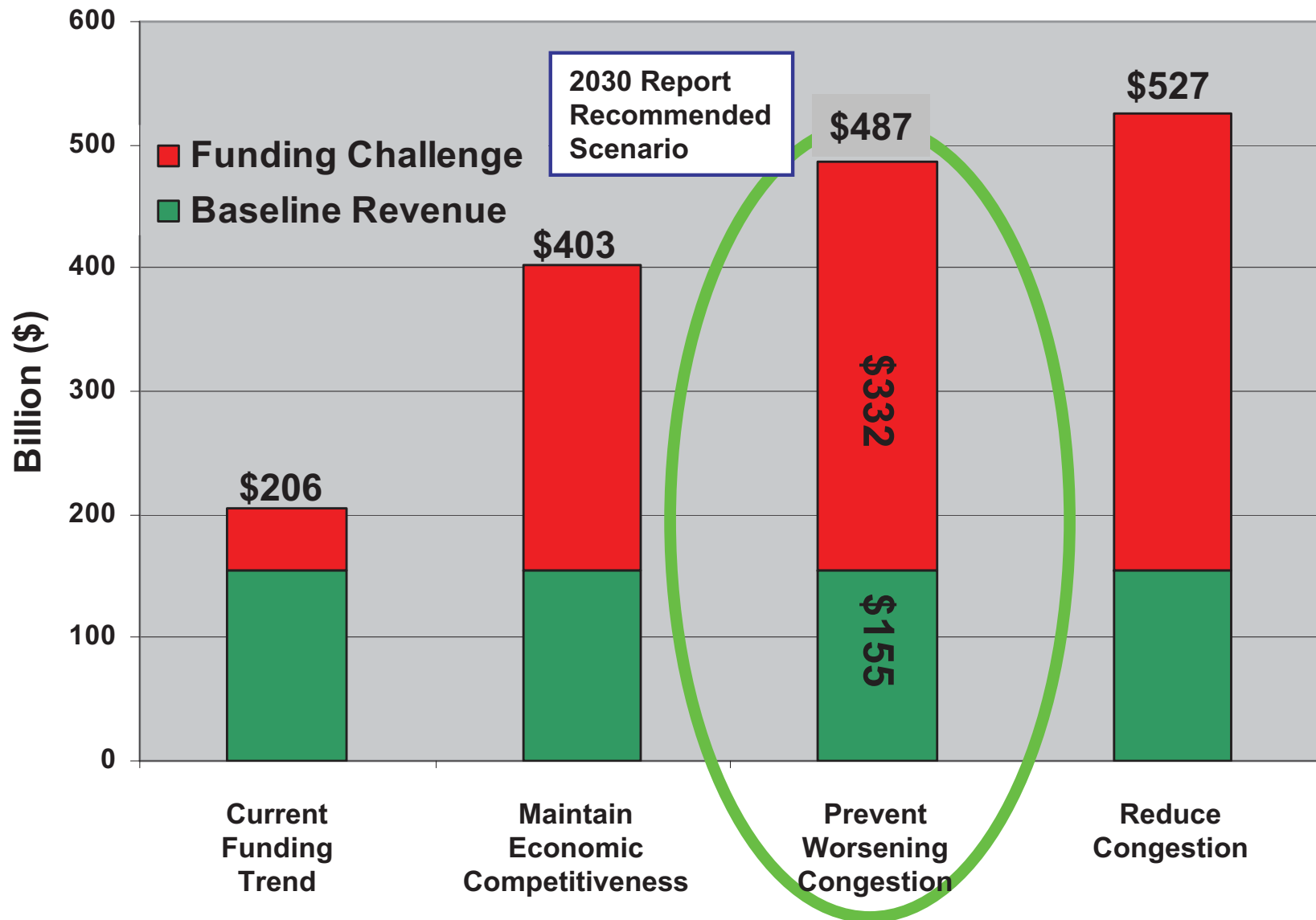
## Needs Versus Revenue



# FUNDING THE FUTURE

## Needed Revenue Challenge

### 2030 Committee Investment Scenarios



Total revenue needs increased by \$100B to include anticipated TxDOT encumbrances.

# Statewide TxDOT Funding by Category

## Years 2010-2020

Category	Current TxDOT Unified Transportation Program
1 – Preservation	\$10.616
2 - Metro Mobility	\$2.020
3 - Urban Mobility	\$0.401
4 - Statewide Mobility	\$0.056
5 - CMAQ	\$1.246
6 - Bridge	\$2.813
7 - STP Metro Mob/Rehab	\$2.106
8 - STP Safety (HES)	\$1.444
9 - STP Enhancement	\$0.676
10 - Supplemental Trans.	\$0.768
11 - District Disc.	\$0.728
12 - Strategic Priority	\$0.176
<b>Total</b>	<b>\$23.050</b>

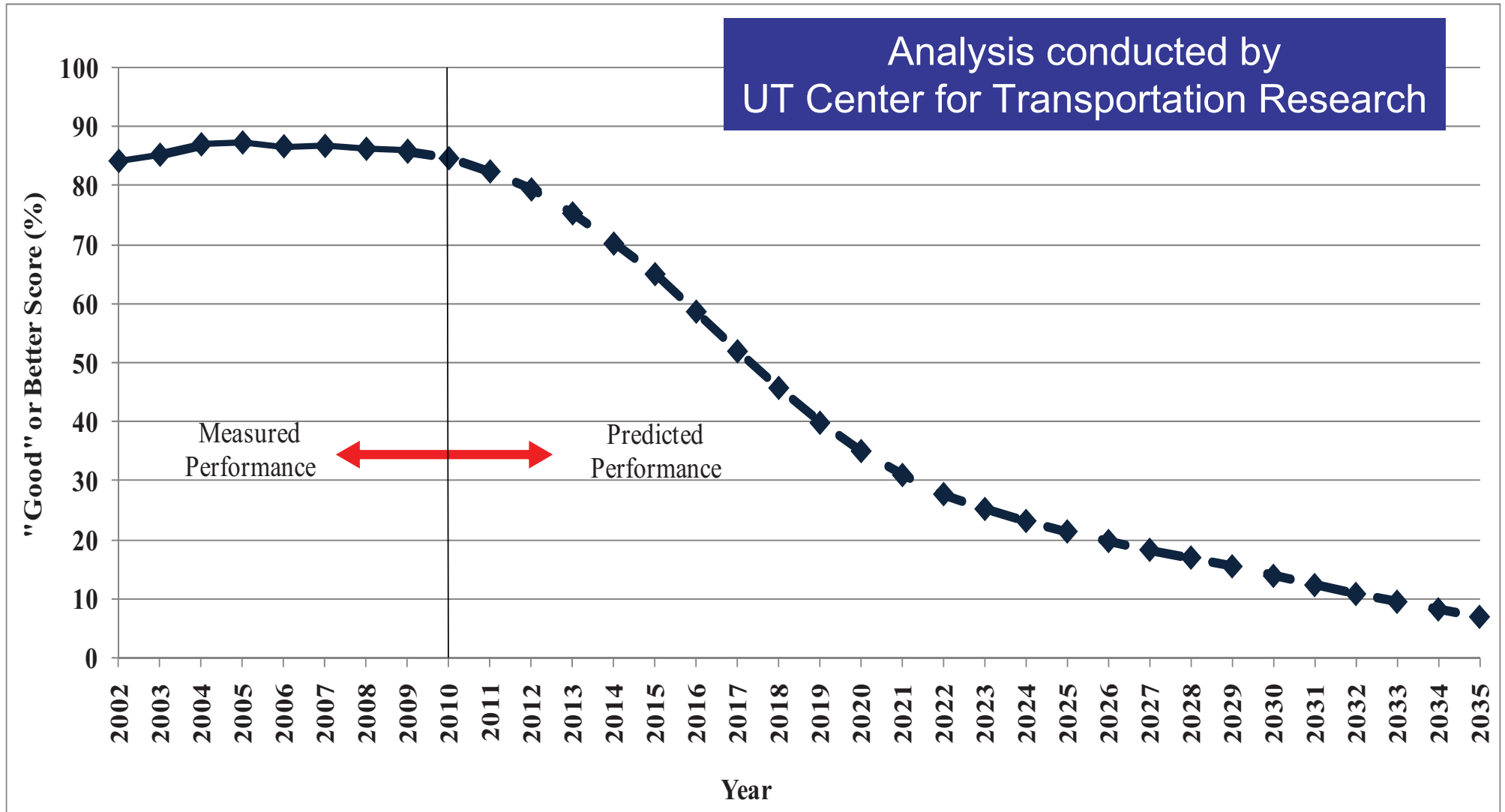
# Statewide TxDOT Funding by Category

## Years 2021-2035

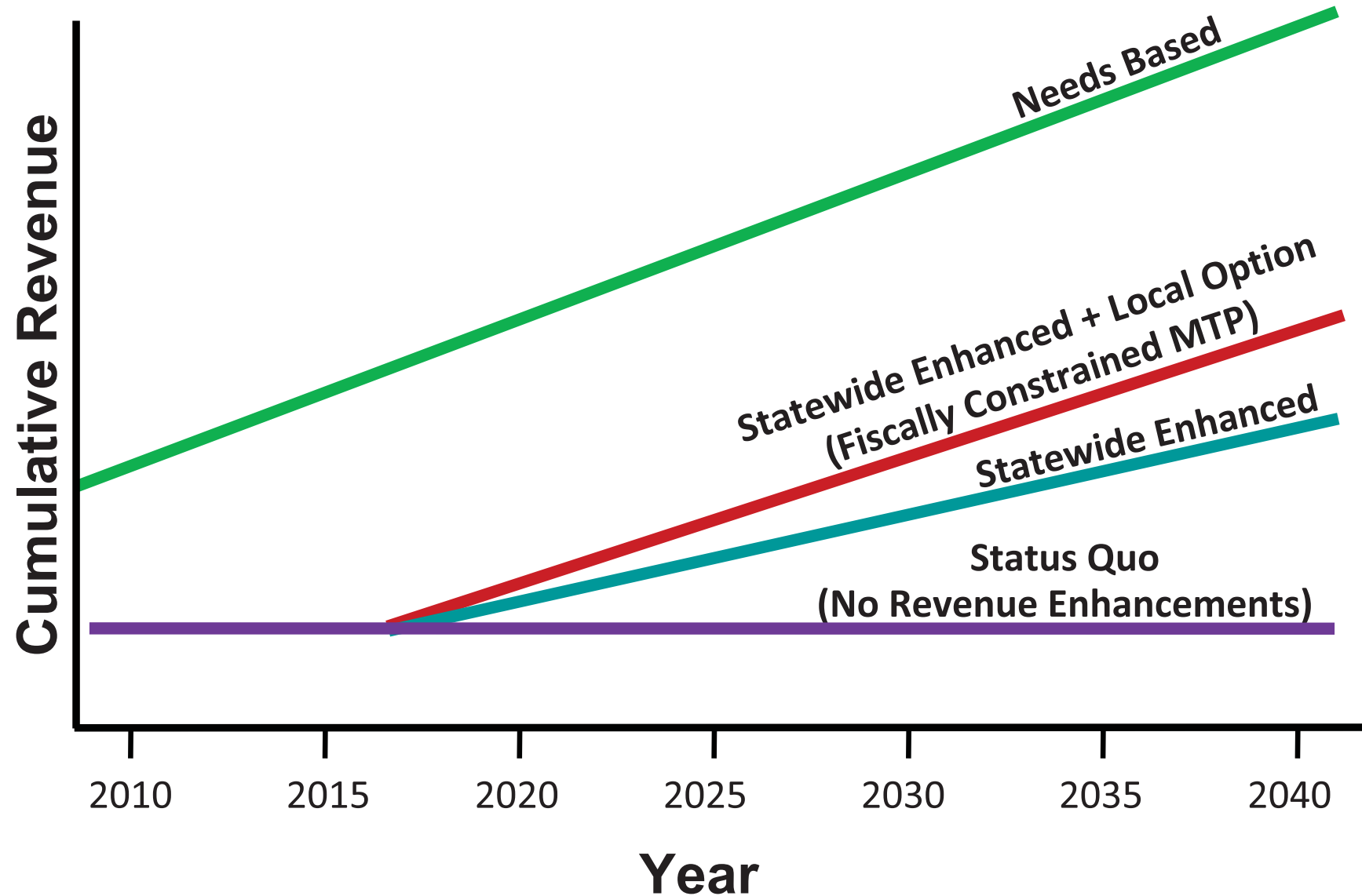
Category	Based On TRENDS Revenue Forecast
1 – Preservation	\$11.630
2 - Metro Mobility	\$0.000
3 - Urban Mobility	\$0.000
4 - Statewide Mobility	\$0.000
5 - CMAQ	\$2.230
6 - Bridge	\$3.750
7 - STP Metro Mob/Rehab	\$3.140
8 - STP Safety (HES)	\$1.950
9 - STP Enhancement	\$0.900
10 - Supplemental Trans.	\$0.490
11 - District Disc.	\$0.940
12 - Strategic Priority	\$0.000
<b>Total</b>	<b>\$25.030</b>



# Texas Pavement Quality Predictions Based On UTP/TRENDS Forecasts



# Metropolitan Transportation Plan Revenue Scenarios



# Status Quo Revenue

Peak-period travel times in Dallas-Fort Worth would nearly triple

Demographic growth would be severely impacted

Some bridges and highway lanes would be closed

Significant financial implications to Texas General Revenue

## 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



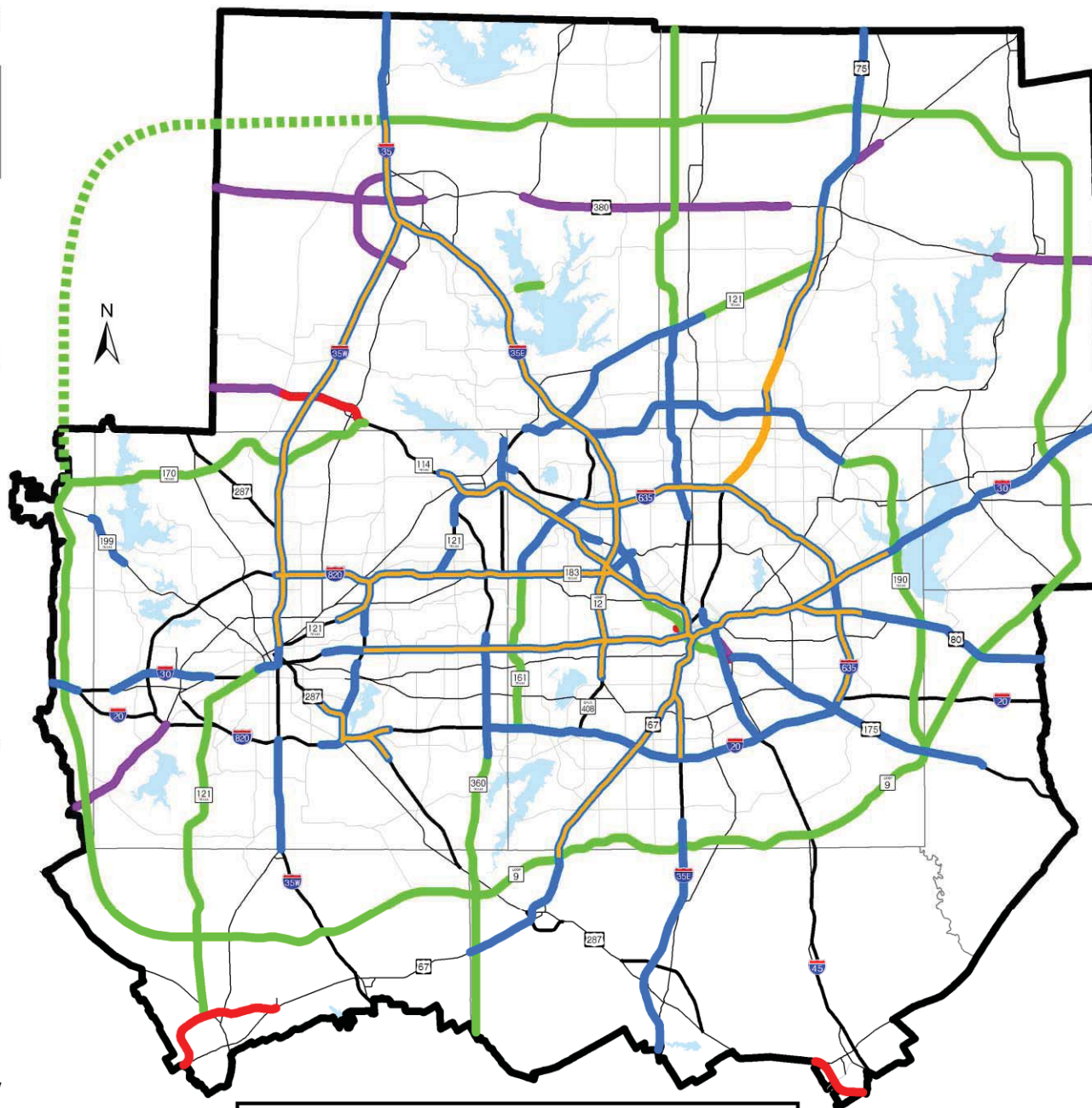
Corridor specific design and operational characteristics for the Freeway/Tollway system will be determined through ongoing project development.

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.

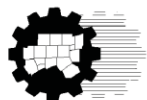
New facility locations indicate transportation needs and do not represent specific alignments

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



\$66.9 Billion Regional Roadway System

Additional Freeway/Tollway lane miles = 3,500  
Additional HOV/Managed lane miles = 730








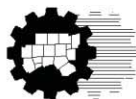
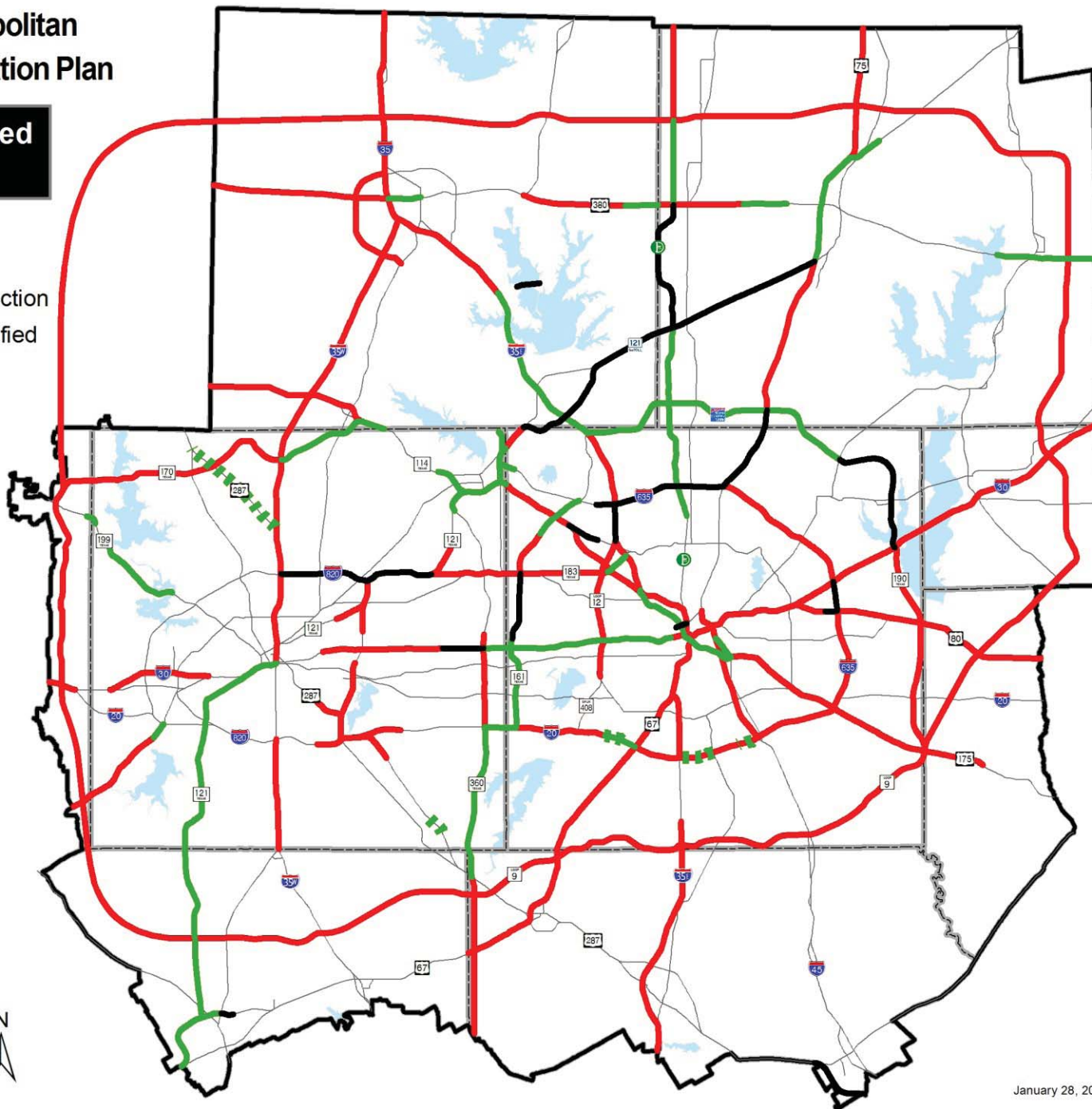
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### Freeway / Tollway System

-  Complete / Under Construction
-  Full / Partial Funding Identified
-  Funding Identified (FRONTAGE)
-  Not Funded
-  Highways



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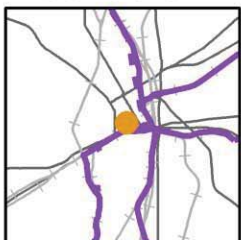
January 28, 2010

## Passenger Rail Recommendations

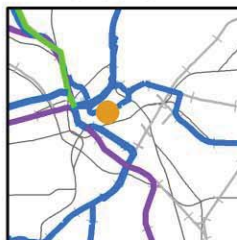
### Legend

- 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.

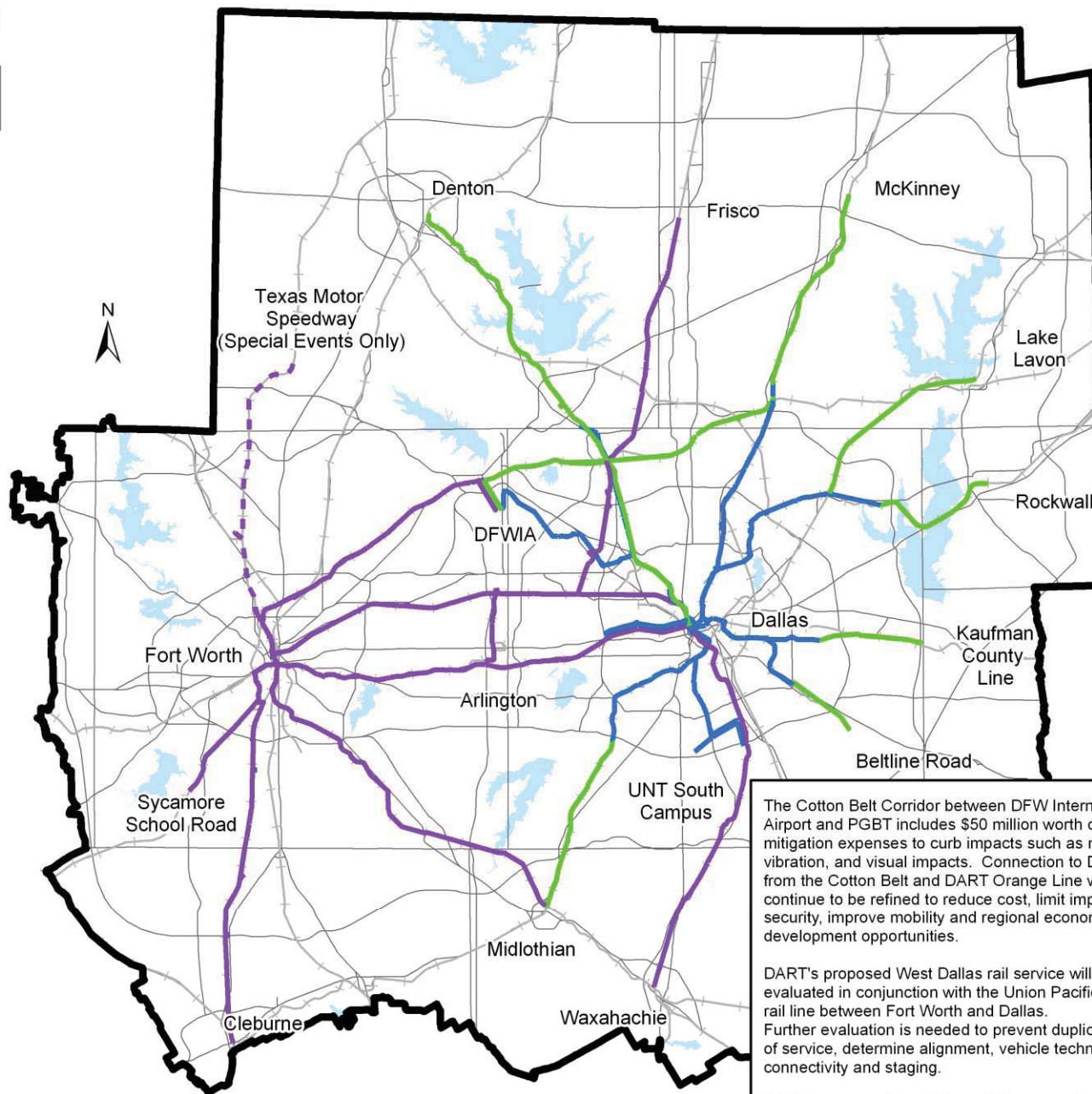
Corridor specific design and operation characteristics for the Intercity Passenger, Regional Passenger and Freight Rail Systems will be determined through capacity evaluation and ongoing project development. Refined rail forecasts are necessary to determine technology and alignment in Future Rail corridors.

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.

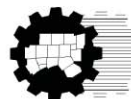
April 09, 2009



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.



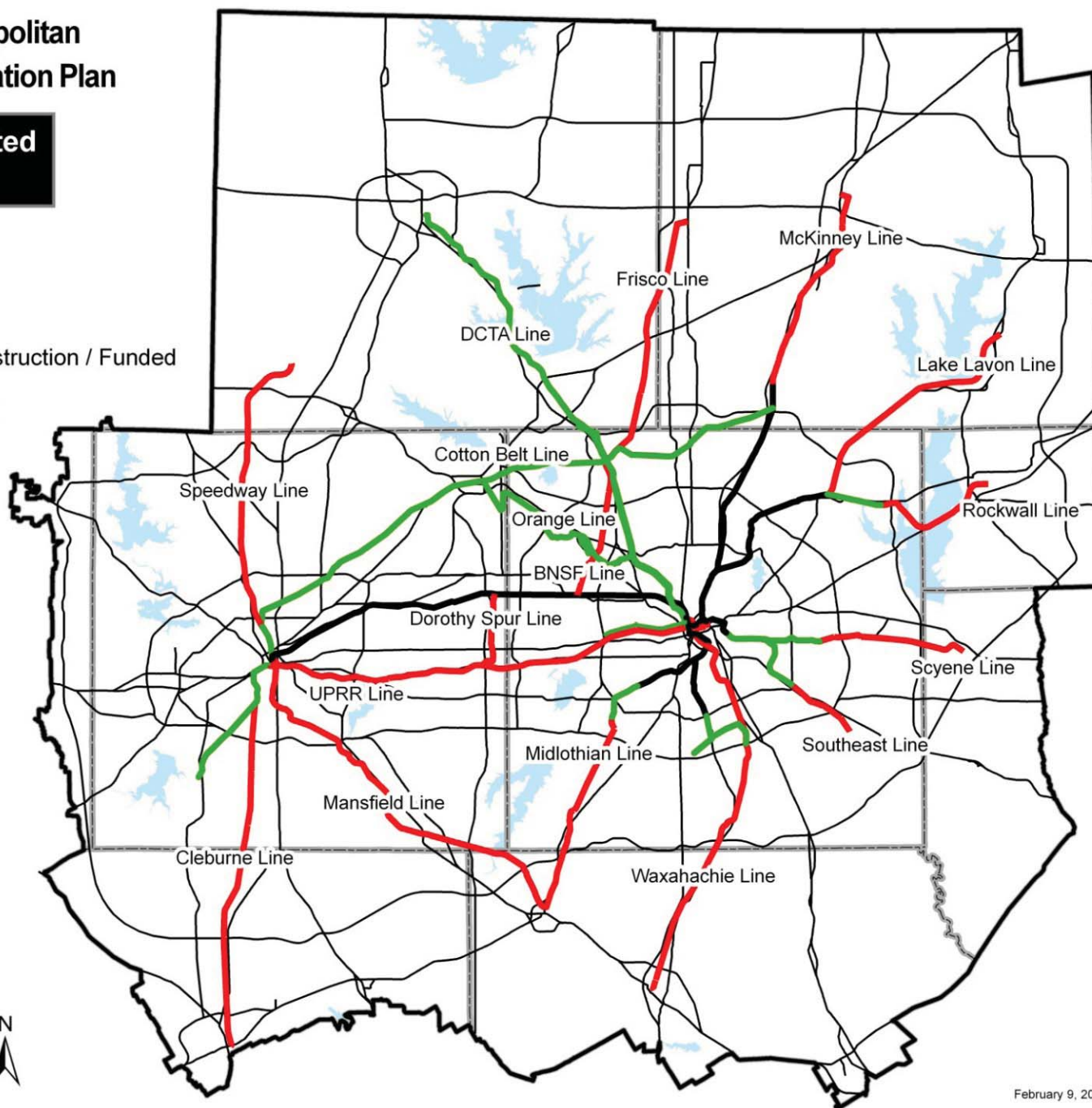
North Central Texas  
Council of Governments  
Transportation



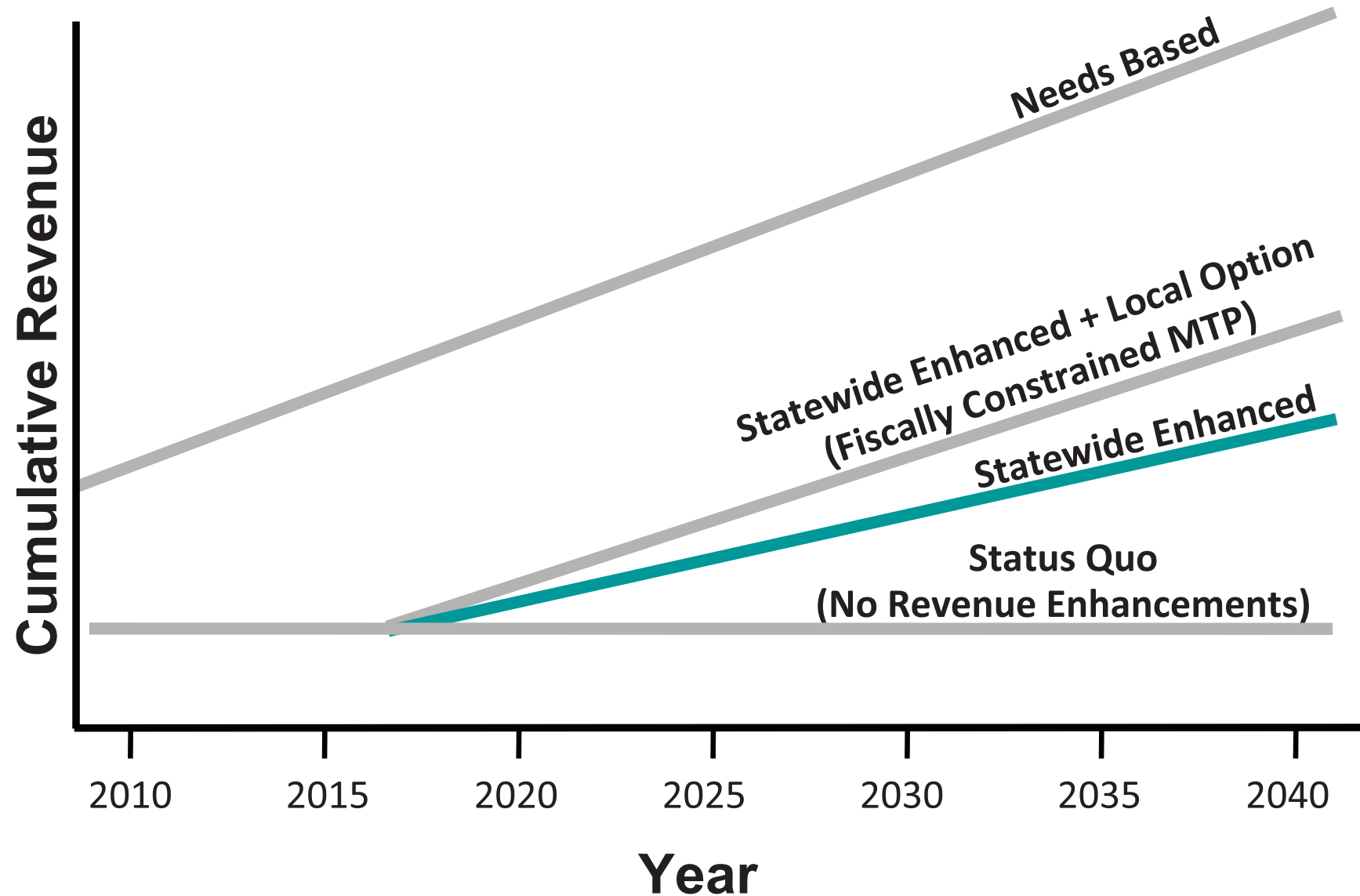
**Possible Projects Affected  
by Current Funding**

**Rail System**

- Existing Rail Corridors
- Rail Corridors Under Construction / Funded
- Rail Corridors Not Funded
- Highways



# Metropolitan Transportation Plan Revenue Scenarios





# Statewide Enhanced Revenue

## Revenue Strategies

Eliminate diversions from Fund 006

Allocate additional transportation user fees to Fund 006

Index fuel tax relative to vehicle fuel efficiency

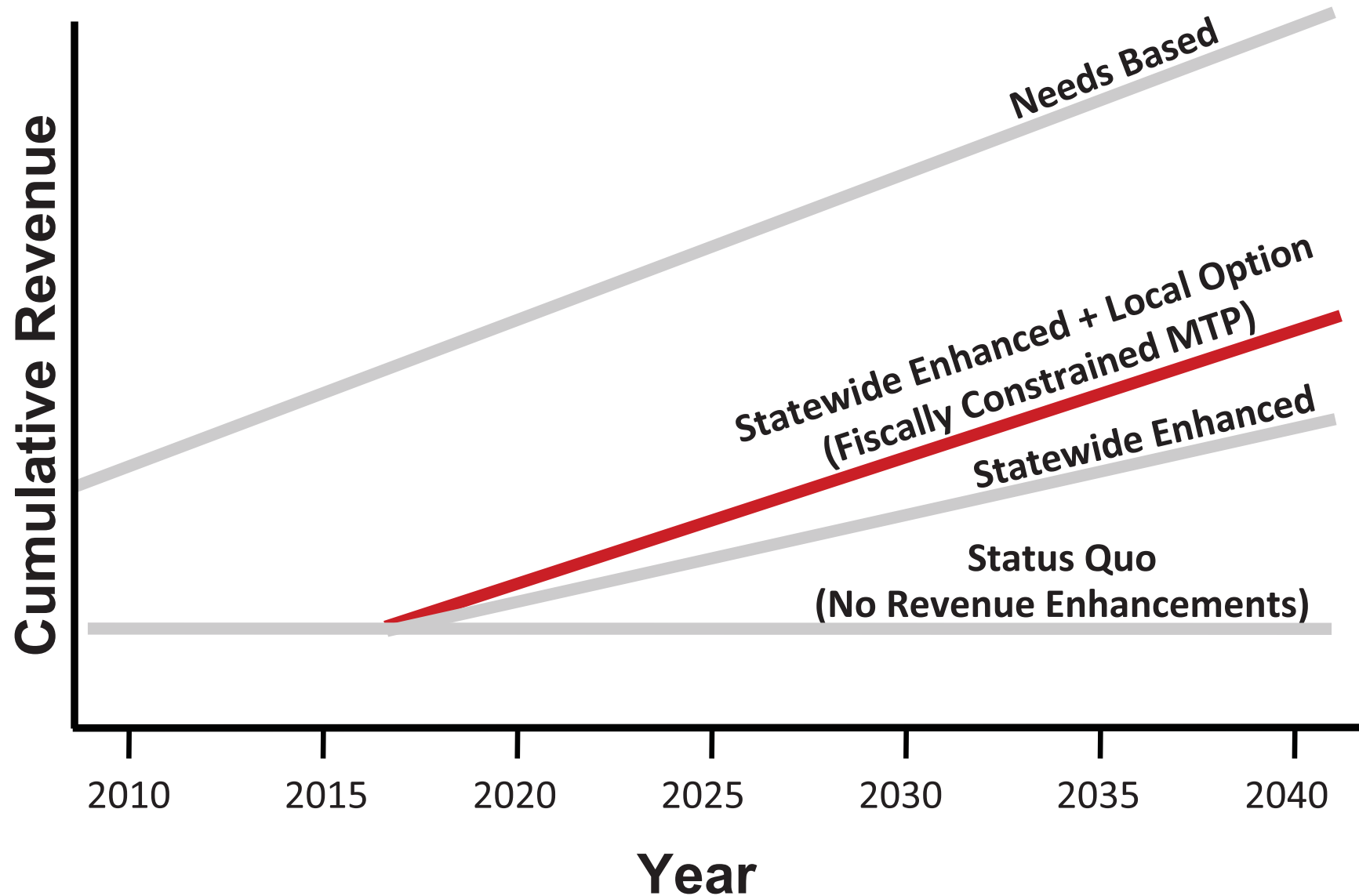
Increase gasoline and diesel taxes by 10 cents/gallon – direct revenue only to transportation

Standardize/Increase vehicle registration fees

# Potential Regional Transportation Funding Opportunities

Funding Source	Status/Funding Amount
U.S. TIGER Grants	February 17, 2010
ARRA 1	Additional \$0-40 to DFW Connector
New Proposition 12	\$450M
Additional Proposition 14	\$200M
NTTA	\$458M
ARRA 2	\$450M

# Metropolitan Transportation Plan Revenue Scenarios



# Local Option Revenue

Toll Roads

Managed Lanes

Public-Private Partnerships, including  
Comprehensive Development Agreements

Local Bond Programs

Authorizes local option elections for mobility  
improvement fee or motor fuels taxes

Sub-allocation of TxDOT funding programs  
targeted at leveraging local dollars

# Failure to Address Transportation Funding Needs

Gas tax funded capacity projects at risk

Legislative delay leads to greater imbalance  
with more toll projects

Current infrastructure will not be able to be  
maintained, especially bridges

Future implications of general tax revenue to  
Texas

Legislative inaction results in inefficient project  
delivery, and wasted maintenance today

Eventual cost, if ever, will be significantly higher

# FUNDING THE FUTURE

## Constraints Bring About Innovation

Utilize transportation funds to their intended purpose.

Identify long-term, sustainable transportation revenues.

Place greater emphasis on balancing land-use and transportation investments.

Continue our Region's development of a multi-modal transportation system.

Maximize system capacity through travel demand and transportation system management strategies.