MOBILITY 2035: THE METROPOLITAN TRANSPORTATION PLAN FOR NORTH CENTRAL TEXAS
Development Process

Introduction to Mobility 2035 (12 Public Meetings) ➔ Complete Dec 2009

Development of Goals and Priorities (3 Public Meetings) ➔ Complete Jun 2010

Determination of Funding Scenarios ➔ Complete Oct 2010

Evaluate and Develop Policies, Programs, and Projects ➔ Complete Nov 2010

Program and Project Selection (3 Public Meetings) ➔ Complete Dec 2010

RTC Approval (9 Public Meetings) ➔ Approved Mar 10, 2011

Executive Board Approval ➔ Complete Mar 2011

US DOT Air Quality Conformity Determination ➔ Approved July 14, 2011

Expiration of Mobility 2035 ➔ Expires July 14, 2015
What is Mobility 2035?

- Represents a Blueprint for a Multimodal Transportation System
- Responds to Goals
- Identifies Policies, Programs, and Projects for Continued Development
- Guides Expenditures of Federal and State Funds
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

Maximize Existing System
- Infrastructure Maintenance
  - Maintain & Operate Existing Facilities
  - Bridge Replacements
  - $27.3
- Management and Operations
  - Improve Efficiency & Remove Trips from System
  - Traffic Signals and Bicycle & Pedestrian Improvements
  - $4.8
- Growth, Development, and Land Use Strategies
  - More Efficient Land Use & Transportation Balance
  - $3.9

Strategic Infrastructure Investment
- Rail and Bus
  - Induce Switch to Transit
  - $18.9
- HOV/Managed Lanes
  - Increase Auto Occupancy
- Freeways/Tollways and Arterials
  - Additional Vehicle Capacity
  - $46.2

Mobility 2035 Expenditures Actual $, billions) $101.1
Mobility 2035 Recommendations Maps

www.nctcog.org/trans/mtp/2035

Facility recommendations indicate transportation need. Corridor specific alignment, design, and operational characteristics for the freeway/tollway system will be determined through ongoing project development.

Corridor specific alignment, design, and operational 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.

*See High Speed Rail map for additional inter-region rail access.
Facility recommendations indicate transportation need. Corridor specific alignment, design, and operational characteristics for the freeway/tollway system will be determined through ongoing project development.
Facility recommendations indicate transportation need. Corridor specific alignment, design, and operational characteristics for the freeway/tollway system will be determined through ongoing project development. Tolls are/will be charged on new capacity only and will include HOV incentives. Existing lanes in corridors remain free.
Facility recommendations indicate transportation need. Corridor specific alignment, design, and operational characteristics for the freeway/tollway system will be determined through ongoing project development. Regionally Significant Arterials provide necessary transportation support to the freeway/tollway system and access to and from local land uses.
Facility recommendations indicate transportation need. Corridor specific alignment, design, and operational characteristics for the freewy/tollway system will be determined through ongoing project development.

*Projects represent additional transportation needs above and beyond those of the financially constrained recommendations of Mobility 2035.
Facility recommendations indicate transportation need. Corridor specific alignment, design, and operational characteristics for the freeway/tollway system will be determined through ongoing project development.

*Major roadway projects identified in previous metropolitan transportation plans but not included in the financially constrained recommendations of Mobility 2035.
Designated Regionally Significant Arterials

Legend

Regionally Significant Arterials

Major Roads

Regionally Significant Arterials provide necessary transportation support to the freeway/tolllway system and also provides access to and from local land uses.
Corridor specific alignment, design, and operational 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.

*See High Speed Rail map for additional inter-region rail access.
Rail Vision Considerations

Legend

- Completed Projects
- Mobility 2035 Recommendations
- Corridors for Future Evaluation*
- Rail Lines

All existing railroad rights-of-way should be monitored for potential future transportation corridors. Facility recommendations indicate transportation need. Corridor specific alignment, design and operational characteristics for the rail system will be determined through ongoing project development.

*Projects represent additional transportation needs above and beyond those of the financially constrained recommendations of Mobility 2035.
High/Higher Speed Passenger Rail Recommendations

Legend
- Funding Sources
  - High Speed Rail Access
  - Passenger Rail Recommendations
  - HSR/Regional Rail
  - Integrated Corridor
  - High Speed Rail
  - High Speed Rail (Grade Separated, 110-150+ mph) or Higher Speed Rail (At Grade, 79-110 mph)
  - Completed Rail Projects

North Central Texas Council of Governments
March 16, 2011

Corridor specific alignment, design, and operational 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.
Facility recommendations indicate transportation need. Corridor specific alignment, design, and operational characteristics for the Regional Veloweb system will be determined through ongoing project development.
Levels of Congestion

2012
Congestion Levels
Cost of Congestion: $4.5 billion

Legend
Congestion Index*
- No Congestion
- Light Congestion
- Moderate Congestion
- Severe Congestion

2035
Congestion Levels
Cost of Congestion: $10.1 billion

*Congestion Index is based on a percent increase in travel time.
Levels of Congestion: 2012

Legend

- **No Congestion**
- **Light Congestion**
- **Moderate Congestion**
- **Severe Congestion**
- **Major Roads**

Fort Worth CBD
Dallas CBD

Cost of Congestion: $4.5 billion

*Congestion Index is based on a percent increase in travel time.
Levels of Congestion: 2020

Legend

- No Congestion
- Light Congestion
- Moderate Congestion
- Severe Congestion

Cost of Congestion: $5.9 billion

*Congestion Index is based on a percent increase in travel time.
Levels of Congestion: 2030

Legend
- No Congestion
- Light Congestion
- Moderate Congestion
- Severe Congestion

Fort Worth CBD
Dallas CBD

Cost of Congestion: $8.3 billion

*Congestion Index is based on a percent increase in travel time.
Levels of Congestion: 2035

Legend

Congestion Index*
- No Congestion
- Light Congestion
- Moderate Congestion
- Severe Congestion

Major Roads

Cost of Congestion: $10.1 billion

*Congestion Index is based on a percent increase in travel time.
Levels of Congestion: 2035 No-build

Legend

Congestion Index*
- No Congestion
- Light Congestion
- Moderate Congestion
- Severe Congestion

Major Roads

Fort Worth CBD

Dallas CBD

Cost of Congestion: $12.1 billion

*Congestion Index is based on a percent increase in travel time.
Levels of Congestion: 2035 Build-out

Legend

<table>
<thead>
<tr>
<th>Congestion Index*</th>
<th>No Congestion</th>
<th>Light Congestion</th>
<th>Moderate Congestion</th>
<th>Severe Congestion</th>
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<tbody>
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Cost of Congestion: $9.7 billion

*Congestion Index is based on a percent increase in travel time.
Cost of Congestion

2012 Congestion Levels

Cost of Congestion: $4.5 billion

2035 Congestion Levels

Cost of Congestion: $10.1 billion

2035 No-build Congestion Levels

Cost of Congestion: $12.1 billion

Mobility 2035 Expenditures (actual $, billions) $101.1

- Infrastructure Maintenance
  - Maintain & Operate Existing Facilities
  - Bridge Replacements
  - $27.3

- Management and Operations
  - Improve Efficiency & Reduce Travel Time
  - $4.8

- Growth, Development, and Land Use Strategies
  - More Efficient Land Use & Transportation Balance
  - $3.9

- Rail and Bus
  - Increase Transit Ridership
  - $18.9

- HOV/Managed Lanes
  - Increase Auto Occupancy
  - $46.2

- Freeways/Tollways and Arterials
  - Additional Vehicle Capacity

Legend
- Congestion Index
  - None
  - Low
  - Moderate
  - Severe
  - Congestion Index to know as it relates to
  - Major Roads
  - Congestion Status is based on a

March 10, 2011
<table>
<thead>
<tr>
<th>Regional Performance Measures</th>
<th>2012</th>
<th>2035</th>
<th>No-build</th>
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<tbody>
<tr>
<td>Population</td>
<td>6,651,887</td>
<td>9,833,378</td>
<td>9,833,378</td>
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<tr>
<td>Employment</td>
<td>4,210,178</td>
<td>6,177,016</td>
<td>6,177,016</td>
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<tr>
<td>Vehicle Miles of Travel (Daily)</td>
<td>176,461,914</td>
<td>279,426,796</td>
<td>252,669,404</td>
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<td>Hourly Capacity (Miles)</td>
<td>42,353,458</td>
<td>50,698,448</td>
<td>41,938,766</td>
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<td>Vehicle Hours Spent in Delay (Daily)</td>
<td>1,112,878</td>
<td>2,490,143</td>
<td>2,980,988</td>
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<td>Increase in Travel Time Due to Congestion</td>
<td>31.5%</td>
<td>44.8%</td>
<td>58.1%</td>
</tr>
<tr>
<td>Annual Cost of Congestion (Billions)</td>
<td>$4.5</td>
<td>$10.1</td>
<td>$12.1</td>
</tr>
</tbody>
</table>
Air Quality Conformity Analysis

- Nine County Region is in Nonattainment for the Pollutant Ozone (Ozone = Nitrogen Oxides and Volatile Organic Compounds)

- Demonstrates that Projected Emissions from Transportation Projects are Within Emission Limits (Motor Vehicle Emissions Budgets) Established in the State Implementation Plan

- Transportation Projects that are Consistent with Air Quality Planning Goals are Eligible for Approval and Federal Funding

www.nctcog.org/trans/air/conformity
Air Quality Conformity Analysis

Emissions of Nitrogen Oxides (NOx)

2009 Attainment Demonstration NOx Motor Vehicle Emission Budget = 186.81 tons/day

Analysis Years:
- 2012: 133.09 tons/day
- 2020: 57.57 tons/day
- 2030: 46.71 tons/day
- 2035: 49.53 tons/day

Emissions of Volatile Organic Compounds (VOC)

2009 Attainment Demonstration VOC Motor Vehicle Emission Budget = 99.09 tons/day

Analysis Years:
- 2012: 83.95 tons/day
- 2020: 58.20 tons/day
- 2030: 58.39 tons/day
- 2035: 63.41 tons/day

*Includes reductions from RTC initiatives of 4.38 tons/day
**Includes reductions from RTC initiatives of 3.59 tons/day
To find out more about Mobility 2035 and the Air Quality Conformity Analysis, visit us at:
www.nctcog.org/mobility2035
www.nctcog.org/trans/air/conformity

or e-mail comments and questions to: mobilityplan@nctcog.org