Addressing Climate Risks in North Texas’ Preferred Future

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“Building cities that are green, inclusive and sustainable should be the foundation of any local and national climate change agenda.”

Cities and Climate Change: An Urgent Agenda
The World Bank
Region’s development pattern in 1950
Growth spreads - 2000
More Growth, More Spreading Under “BAU”

6.5 Million per 2010 Census

9 Million by 2030

12 Million by 2050
Even after $71 billion, we will have more congestion in 2030.

- Rail
- HOV/Managed
- Tollways
- Freeways
- Intelligent Transportation Systems
- And more

Legend:
- Areas with No Congestion
- Areas with Light Congestion
- Areas with Moderate Congestion
- Areas with Severe Congestion
- Roadways

From Mobility 2030
We do not meet the 8-hour ozone air quality standard

Non-Road Engines 36%
Point 10%
Area 4%
On-Road Vehicles 50%

Few smokestacks Many engines
We do not have enough water to satisfy projected needs

Lawns are significant water guzzlers

AVAILABLE
1.25 billion gallons per day

WATER NEEDS IN 2050
2.1 billion gallons per day
Business As Usual Won’t Work

Transportation

Energy

Air Quality

Water Supply

Environment

Vision North Texas launched in 2005
Vision North Texas

- Private-public-academic partnership
- Objectives
  - Increase awareness about expected growth
  - Serve as a forum for dialogue among all stakeholders about critical issues
  - Build support for initiatives that create a successful and sustainable future for North Texas
April 2005

A "REALITY CHECK" WORKSHOP
VISON NORTH TEXAS BEGAN WITH
Sustainable North Texas
Challenge: Can your table accommodate growth in a way that is more successful & sustainable?

NCTCOG 2000-2030 Forecast

Table 7 Headline: Emerging New Growth Centers Through Transit Oriented Development
Lots of Awareness & Dialogue
Compared 2030 Scenarios

Connected Centers

Return on Investment

Diverse, Distinct Communities

Green Region
Compared densities

4.3 persons per acre = existing average density of all urban land
down to 3.1 ppa in 2030 under BAU

4.2 to 5.2 ppa in 2030 under the different scenarios
DISCLAIMER: Each scenario represents a different development concept. Regional household and employment growth are assumed to be the same in each scenario; however, the location of the growth varies. Development intensity was manually redistributed to best represent each scenario’s regional development pattern. This data was created specifically for Vision North Texas and has not been evaluated for other uses. Responsibility for the use of this data lies solely with the user.
Better Transportation Outcomes

All scenarios reduce the average trip length by over 10% from “BAU”

40% to 150% more households within ¼ mile of a rail station

Hours stuck in traffic reduced up to 19%

Up to $6.9 billion saved in infrastructure costs
Less GHG Emissions

From 7% to 10% lower CO₂ emissions from transportation than “BAU”

Lower building energy consumption with higher intensity of development

Less paving = less impacts
Less ag land affected

More than half of ag land consumed by BAU would not be needed under all other scenarios.
All scenarios have significantly fewer new households in water supply watersheds than BAU.
1. Overview
2. People of North Texas
3. A Vision for North Texas
   a. Vision Statement
   b. Guiding Principles
   c. Preferred Future
4. Action Package
   a. Priority Action Tools
Policy Recommendations For:

Regional Ecosystem Framework

ECONOMY

Housing

Mobility

Climate Resilience

Education

HEALTH

Community Character & Form
2050 Preferred Future Diagram
Preferred Future

Reinvest in Inner Tier

Support Local Agriculture in Rural Areas

Be More Efficient in Outer Tier

Protect Natural Assets

Enhance Separate Communities

Preferred Future


Funded Roadway Recommendations*

Legend
- **Propose Mobility 2035 Recommendations**
- **Mobility 2030**
- **Completed Projects**

*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.

Postscript
Sustainable North Texas

2012 Congestion Levels

Cost of Congestion $4.5 Billion Annually

2035 Future Congestion Levels

Cost of Congestion $10.1 Billion Annually