Sustainable North Texas: Many Shades of Green

John Promise, P.E.
Director of Environment & Development
North Central Texas Council of Governments
Fact: Green is Red Hot

General Public nationwide has been awakened by:

- global warming
- high fuel prices
- water shortages
- poor air quality

Pressure on governments and businesses to turn GREEN
But what does Green mean?

How GREEN are you/we willing to be?
Green = Sustainability?

Meeting the needs of today without compromising the ability of future generations to meet tomorrow’s needs
What is NCTCOG’s Role?

NCTCOG is a voluntary association of, by and for local governments. By state statute, the purpose of a council of governments is “to make studies and plans to guide the unified, far-reaching development of the region, eliminate duplication, and promote economy and efficiency in the coordinated development of a region.”
Expanding NCTCOG’s Services under “Sustainable North Texas”

- Sustainable Sites & Buildings  ★
- Sustainable Public Rights-of-Way  ★
- Sustainable Communities & Region
  
  VNT I/II  ★  VNT III  ★  REF  ★
Entities trying to accelerate the Green Revolution
Standards and rating systems designed to assist

LEED®

Green Built North Texas

G Green Globes

NATIONAL GREEN BUILDING STANDARD™

Walk the Walk Architects Leading the Sustainable Evolution™

Energy

Money Isn’t All You’re Saving
Some cities already pursuing

• City of Frisco
  – Adopted Energy Star rating as requirement for all new homes

• City of Dallas
  – Adopted requirement for all new homes to be 15% better than 2006 IECC plus water conservation measures beginning Oct ‘09

• City of Rowlett
  – Adopted LEED certification for municipal buildings and Energy Star similar to Frisco
Other Examples

- City of Fort Worth
  - Sustainability and Green Building Task Force seeking to “create a sustainability program versus a green building plan”

- City of Arlington
  - Prepared a citywide ‘Carbon Footprint”

- City of Plano
  - Have had a Sustainability Director for several years, facilitating a collaborative of cities
We’ve already been involved

Sustainable North Texas

Storm integrated Water Management
the comprehensive drainage criteria & design resource for North Central Texas

Cool Energy!
Tips for the North Central Texas Home
Produced by the North Central Texas Council of Governments

2002 Winner of Multiple Awards
Communication Excellence & Conservation/Reuse Awards
National Association of City & County Health Officials - 2nd in the nation

Texas Smartscape

Keep Texas Beautiful

Use Less Pesticides & Fertilizers
Reduce Storm Water Pollution
Conserve Water
Beautify Your Home
What to Look For in 2009

- Many cities want to be greener
- New 2009 international codes are expected to be 15-30% more energy efficient
- What are cities willing to do themselves? Own buildings? Own vehicle fleet?
- Anticipate federal initiatives to make us less dependent on foreign oil
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Region has grown rapidly
Only **six states** added more residents during the 1990’s than the 16-county North Texas region.
Projected Growth

1.9 Million HH

1.5 Million HH

3.4 Million HH

Year 2000

NCTCOG 2000-2030 Forecast

Year 2030

1.5 Million HH

2.3 Million Jobs

5.4 Million Jobs

3.1 Million Jobs
Sustainable North Texas

For Transportation Improvements:

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

Currently + Add $71 Billion = Year 2030

Projected Growth & Transportation
Projected Growth & Air Quality

- Urbanized area of the region violates the 8-hour federal health standard for ground level ozone
- Transportation funding is dependent on air quality conformity
- Mobile Sources are the leading cause of Nitrogen Oxide emissions
- There is an ongoing process of developing an 8-hour ozone attainment demonstration State Implementation Plan

Source: Revisions To The State Implementation Plan for the Control of Ozone Air Pollution - Attainment Demonstration for the Dallas/Fort Worth Ozone Nonattainment Area, TNRCC, February 24, 1999, Figure 2.7-4
Projected Growth & Energy

- North Texas is 4th largest metro area in the nation – thus uses lots of energy

- Texas has by far the highest potential for renewable energy among all states

- National studies suggest up to 90% of all buildings in America will be replaced/rehabbed by 2050

Source: Texas State Energy Conservation Office (SECO)
Projected Growth & Water Supply

- By 2050, Dallas – Fort Worth area will require 2.2 billion gallons per day.
- Currently available resources can provide 1.6 billion gallons per day, representing a 32% shortfall.
- Satisfying demand will require:
  - Development of a major lake in East Texas and/or purchase of developed water from Oklahoma or other Texas sources.
  - Increased reuse of treated wastewater.
  - Local conservation programs.
Projected Growth & the Environment

- Each of our major rivers has sections that do not meet the state’s designated water quality standards.

- Storm water runoff from developed areas may cause flooding, stream bank erosion, and pollution of streams and lakes.

- More than 100 local governments are required in state-issued permits to address storm water pollution from development & redevelopment.

- Insufficient natural areas with functioning ecological systems in developed areas.
Complex Issues Facing the Region

Transportation

Energy

Air Quality

Water Supply

Environment

Solutions Emphasize Sustainable Approach
Center of Development Excellence
Mission Statement

The mission of the Center of Development Excellence is to promote quality growth in North Central Texas that

- enhances the built environment,
- reduces vehicle miles of travel,
- uses water & energy resources effectively & efficiently, and
- helps advance environmental stewardship in order to ensure continued economic vitality and provide the highest attainable quality of life for all residents.
10 Principles of Development Excellence

1. Development Options
2. Efficient Growth
3. Pedestrian Design
4. Housing Choice
5. Activity Centers
6. Environmental Stewardship
7. Quality Places
8. Transportation Efficiency
9. Resource Efficiency
10. Implementation
Vision North Texas: Understanding Our Options for Growth

Charter Sponsors

North Central Texas Council of Governments
ULI North Texas
Urban Land Institute, North Texas District Council
The University of Texas at Arlington
Goals of Vision North Texas
Private-Public Partnership

1. Increase public awareness of the growth that’s projected for our region
2. Educate participants about the implications of regional growth
3. Understand the options we have for accommodating that growth
4. Create a forum for discussion about public and private sector actions
What VNT Is Not

- A requirement
- An effort to create a new level of regional government
- A change toward regional decision-making
- An overall land use or zoning plan for the Metroplex
Vision North Texas began with a “Reality Check” workshop

April 2005
Challenge: Can your table accommodate growth in a way that is more successful & sustainable?

Table # 7 Model

NCTCOG 2000-2030 Forecast

Table 7 Headline: Emerging New Growth Centers Through Transit Oriented Development
Results from analyses ...

All scenarios much better than NCTCOG’s 2030 forecasts

<table>
<thead>
<tr>
<th>Data of Interest</th>
<th>Rail</th>
<th>Infill</th>
<th>Polycentric</th>
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</thead>
<tbody>
<tr>
<td>Total Vehicle Hours of Delay</td>
<td>-24%</td>
<td>-19%</td>
<td>-32%</td>
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<tr>
<td>Lane Mile Needs</td>
<td>-56%</td>
<td>-40%</td>
<td>-72%</td>
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<tr>
<td>Financial Needs (in billions)</td>
<td>-$12.1</td>
<td>-$8.8</td>
<td>-$15.6</td>
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<tr>
<td>Roadway Pavement Needs</td>
<td>-2.8 sq. mi.</td>
<td>-2.0 sq mi</td>
<td>-3.5 sq. mi.</td>
</tr>
<tr>
<td>Air Quality Emissions (NO\textsubscript{x})</td>
<td>-4%</td>
<td>-4%</td>
<td>-8%</td>
</tr>
</tbody>
</table>

*Based on reduction in Level of Service “F” roadways compared to NCTCOG’s 2030 forecast - updated*
Used Keypad Polling for Real-Time Feedback

- Anonymous
- Ability to have 100% response
- Immediate
How well do you think today’s scenarios reflect our region’s choices?

1. They are a good reflection of the realistic range of choices we have.
2. We need choices that represent even more dramatic change from the NCTCOG forecast.
3. These scenarios reflect choices are not realistic.
Stakeholders wanted MORE …
thus Vision North Texas
Phase 2 in 2006/07
Modeling suggests more compact scenarios for North Texas could reduce transportation costs by $15 billion.
MORE ... local examples of best practices

CLIDE Awards

Training on Form-Based Code & others

Library of Technical Tools
MORE ... money for incentives

Sustainable Development:
$40 million from MPO, then
$40M more, still want more
MORE ... regional coalition-building

Four Subregional Workshops

Leadership Summit
“The time has come to work together on regional land use issues. We need a ‘regional gamebook’ to grow successfully.”

--- Fort Worth Mayor Mike Moncrief
Stakeholder Input: Should we set regional investment priorities based on a preferred growth scenario?

- Regional Visioning Workshop (April 2005): 83% support
- Leadership Summit (September 2006): 94% for a regional urban form
- Four Subregional Workshops (2007/2008): 90% to 96% support
Have Begun Phase 3
North Texas 2050
Live/Work/Play Scenarios

Regional & subregional workshops generated many scenarios for 2030 ... combining into a few alternative visions
Alternative 2030 Scenarios

• **Business as Usual** = current trends
• **Connected Centers**, with more choices about how people connect to where they live, work and play, more transit
• **Return on Investment**, by maximizing use of existing infrastructure thru infill
• **Diverse Distinct Communities**, with different sorts of communities & centers across region
• **Green Region**, emphasizing natural assets & green development
Big Event ... Regional Summit 2008

• First, having subregional meetings to review the alternative visions ... do these properly represent your views? (2nd week of November)

• Then, holding a Regional Summit 2008 to discuss these alternative visions ... how should we compare and contrast? (December 9th)
North Texas 2050

will address regional investments, including:

- Water
- Waste
- Energy
- Green infrastructure: open space & natural assets
- Gray infrastructure: transportation & land use
2050 Regional Vision Statement

Regional Investment Framework

Guiding Principles

One or more preferred scenarios

Decision Playbook with incentives
VISION is...

an inspiring picture of a preferred future

visionnorthtexas.org