How Shall We Grow?
Gray vs Green Infrastructure?

John Promise, P.E.  Director of Environment & Development
North Central Texas Council of Governments

New Partners for Smart Growth Conference
February 7, 2008
We’re big and getting bigger ...

Only six states added more residents during the 1990’s than the 16-county North Texas region.

California 4,111,627
Arizona 1,465,404
Georgia 1,708,237
Texas 3,865,310
Florida 3,044,452
North Carolina 1,420,676
No. Texas 1,197,527

... and still growing
North Texas Region – 2005

Households
Population & area = State of Maryland

5.8 Million People

Jobs

3.6 Million Jobs
North Texas Region – 2030

Households

5.4 Million Jobs

9.1 Million People

Vision North Texas
Understanding Our Options for Growth
For Transportation Improvements:

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

Result: Even Worse Congestion
Growth Impacts Water Quality

- Several segments do not meet water quality standards
- Storm water runoff from developed areas may cause flooding, stream bank erosion, and pollution of streams and lakes
- Working with more than 100 cities & counties under State stormwater permit to address pollution from new and redevelopment projects
Growth Affects Many Assets

- Energy
- Water Supply
- Open Spaces
- Water Quality
- Storm Water Management
- Air Quality
- Urban Forest
- Agricultural Lands

Vision North Texas: Understanding Our Options For Growth
What Are Our Options for Growth?
Ten Principles

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

ULI North Texas
Urban Land Institute, North Texas District Council
The University of Texas at Arlington

North Central Texas Council of Governments
Why Vision North Texas?

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
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 Headline: Emerging New Growth Centers Through Transit Oriented Development
Stakeholders wanted MORE ... thus Vision North Texas Phase 2 in 2006/07
MORE ... scenario choices

Modeling suggests more compact scenarios for North Texas could reduce transportation costs by $15 billion

Vision North Texas  Understanding Our Options For Growth
MORE ... local examples of best practices

Library of Technical Tools

CLIDE Awards

Training on Form-Based Code & others

Vision North Texas  Understanding Our Options For Growth
MORE ... money for incentives

Sustainable Development:
$40 million from MPO, then
$40M more, still want more
MORE ... stakeholder involvement

Subregional Workshops
MORE ... analysis tools such as greenprinting
and ... New Policy Direction

“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
Just beginning Phase 3
North Texas 2050
2050 Regional Vision Statement

Regional Infrastructure Framework

Guiding Principles

One or more preferred scenarios

Decision Gamebook with incentives

Vision North Texas
Understanding Our Options For Growth
Will continue to analyze gray infrastructure needs
But adding equally sophisticated tools to analyze Green Infrastructure

Lands that Provide Associated Benefits for Human Populations

Lands that Support Natural Ecosystem Values and Functions

Source: The Conservation Foundation
Regional Ecosystem Framework for North Texas

Eco-Logical: An Ecosystem Approach to Developing Infrastructure Projects
Prepared by the Steering Team
April 2006
Signed by the Steering Team Partners’ Leadership

Dale Bosworth, Chief of Forest Service
Forest Service
U.S. Department of Agriculture

Richard Capka, Acting Administrator
Federal Highway Administration
U.S. Department of Transportation

Kathleen Clarke, Director
Bureau of Land Management
U.S. Department of the Interior

George S. Dunlop, Principal Deputy
Assistant Secretary
Department of the Army

H. Dale Hall, Director
U.S. Fish and Wildlife Service
U.S. Department of the Interior

Fran Mainella, Director
National Park Service
U.S. Department of the Interior

Anne Miller, Director
Office of Federal Activities
U.S. Environmental Protection Agency

Diane Regas, Director
Office of Wetlands, Oceans, and Watersheds
U.S. Environmental Protection Agency

James R. Walpole, General Counsel
National Marine Fisheries Service
National Oceanic and Atmospheric Administration

Benefits for the Steering Team Partners

BLM: Improved resource conservation during land use plan development
EPA: Greater flexibility to do environmental good
FHWA: Streamlined project development and improved mitigation opportunities
NOAA Fisheries Service: Early application of science for solutions
NPS: Using science to protect natural resources while providing visitor experience
USACE: Finding the balance to keep waters clean and clear
USDA FS: Stewardship of natural resources and facilitated use of public lands
USFWS: One conservation framework, endless possibilities for partnership

Vision North Texas Understanding Our Options for Growth
Well-Established Regional GIS Data Clearinghouse

**Users**
- Member governments
- Business Development
- Non-Profit organizations
- Real Estate
- Media
- Public

**Contributors**
- Cities
- Counties
- State Agencies
- Federal agencies
- NCTCOG Staff
- Private Companies

General Features (Buildings, Parks, Development, etc...)

Special Boundaries (Census, City, Zoning, Landuse, etc...)

Parcel boundaries (Collected from Appraisal Districts)

Street Network

Aerial photography
Have Digital Ortho-Photography at 6 inch resolution

Have appraisal district data for 2 million parcels
Now a Federal Requirement
TRANSPORTATION CONSULTATION PROVISION

Applies to metropolitan & statewide plans

Directs MPOs to “consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation and historic preservation”

Requires consultations to, as appropriate:

- Compare transportation plans with State conservation plans or maps
- Compare transportation plans to inventories of natural or historic resources

SAFETEA-LU SECTION 6001
Greenprinting is a key analysis tool for green infrastructure ...
well underway with TPL on first subarea greenprint
Vision North Texas
Southeastern Subregional Workshop

• Involved diverse stakeholders in visioning for their subregion
• Addressed 1,900 square mile area
• Input forum for greenprinting
Key Aspects of VNT Greenprint

• Included as part of a regional visioning effort
• Covers extensive & diverse area
  – Regional Framework
  – Detailed Greenprint Model for a Subregion
• Structured for regional & local decision-making
  – Part of North Texas 2050 infrastructure design
  – Tool for use by individual cities, conservancies & property owners
Table #2 Report from Morning Exercise

Table # 2 Model

Vision North Texas Understanding Our Options for Growth
Table #9 Report from Morning Exercise

Table #9 Model

Vision North Texas  Understanding Our Options For Growth
How important are the group’s preliminary greenprinting priorities to the stakeholders I represent?

a. Essential to take action in the next year
b. Important to take action as resources become available
c. Not a good use of regional resources
d. I don’t know enough about this issue to decide

Total Votes - 74

- A: 41%
- B: 54%
- C: 1%
- D: 4%
Relating Green to Gray

Green Infrastructure and Gray Infrastructure

Both Require:

- **Strategic planning** to ensure optimal / functional systems
- **Financing** for design and maintenance
- **Management** to maintain services & maximize benefits

Ideally Are:

- **Planned simultaneously** before development
- **Given equal priority** in the planning process
- Planned as complimentary systems
- **Given equal attention** in the funding process

Source: The Conservation Foundation
VISION is...

an inspiring picture of a preferred future