

The East Branch

SH 190 Transportation Study

Presentation to Sunnyvale Town Council
May 23, 2005

Presentation Outline

- Transportation Planning Process
- Project Overview
- Transportation Needs & Issues
- Development of Alternatives
- Environmental Process & Concerns

Transportation Planning Process...

Step 1 & 2 include:

- The Transportation Needs of the Dallas-Fort Worth Area are Identifying through the Development of a Metropolitan Transportation Plan (MTP)
 - MTP is required for the region to receive federal transportation funding
 - MTP is financially-constrained
 - Effort is led by the North Central Texas Council of Governments (NCTCOG)
 - Local governments, transit agencies, tolling authorities & TxDOT are involved in the process

Step 1: Identify
Regional Needs



Step 2: Metropolitan
Transportation Plan



Step 3: Planning, Design
& Environmental



Step 4: Detailed
Construction Plans



Step 5: Acquired
Right-of-Way

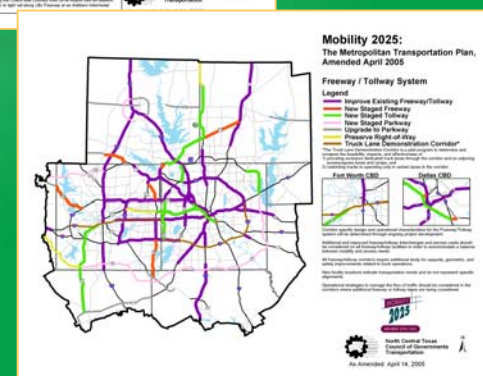
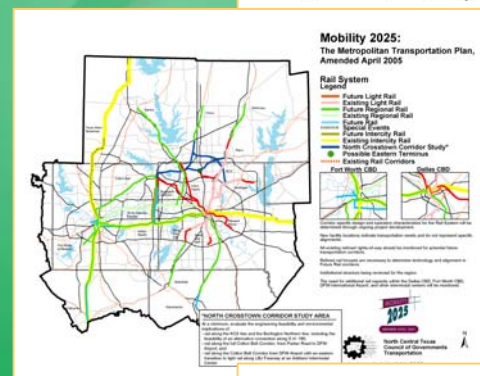
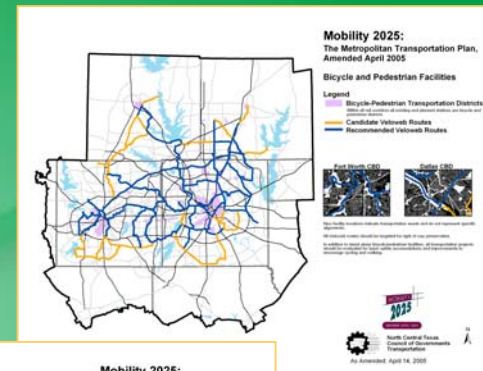
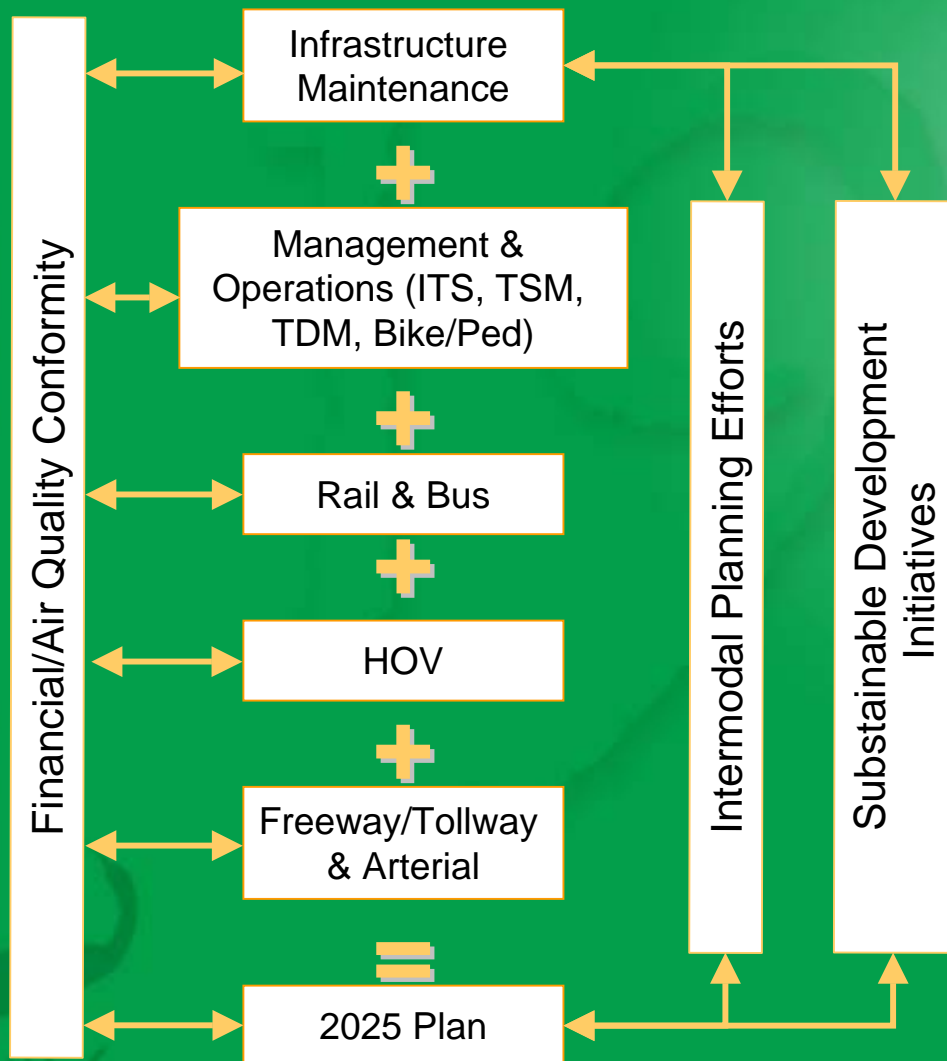


Step 6: Construction



Step 7: Open to Traffic

Transportation Planning Process










For more information, go to:
<http://www.nctcog.org/trans/mtp/>

Mobility 2025:

The Metropolitan Transportation Plan,
Amended April 2005

Freeway / Tollway System

Legend

-  Improve Existing Freeway/Tollway
-  New Staged Freeway
-  New Staged Tollway
-  New Staged Parkway
-  Upgrade to Parkway
-  Preserve Right-of-Way
-  Truck Lane Demonstration Corridor*

*The Truck Lane Demonstration Corridor is a pilot program to determine and compare the feasibility, impacts, and effectiveness of:
1) providing exclusive dedicated truck lanes through the corridor and on adjoining access/egress lanes and ramps, and
2) restricting trucks to operating only in certain lanes in the corridor.

Fort Worth CBD



Dallas CBD



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

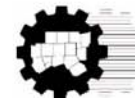
Additional and improved freeway/tollway interchanges and service roads should be considered on all freeway/tollway facilities in order to accommodate a balance between mobility and access needs.

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.

SH 190
Study Area



North Central Texas
Council of Governments
Transportation



As Amended: April 14, 2005

SH 190 Status

Shown in MTP but, no right-of-way or construction funding has been allocated for this project

So why study SH 190 now?

TxDOT is beginning the SH 190 study now to help preserve a corridor, if needed, & allow local governments to plan ahead for future development & transportation needs

Transportation Planning Process...

Step 3 Elements include:

- Development of Alternatives
- Travel Demand Studies & Analysis
- Environmental Studies & Documentation
- Public Involvement
- Agency Involvement
- Preliminary Engineering

We are
Here

Step 1: Identify
Regional Needs

Step 2: Metropolitan
Transportation Plan

Step 3: Planning, Design
& Environmental

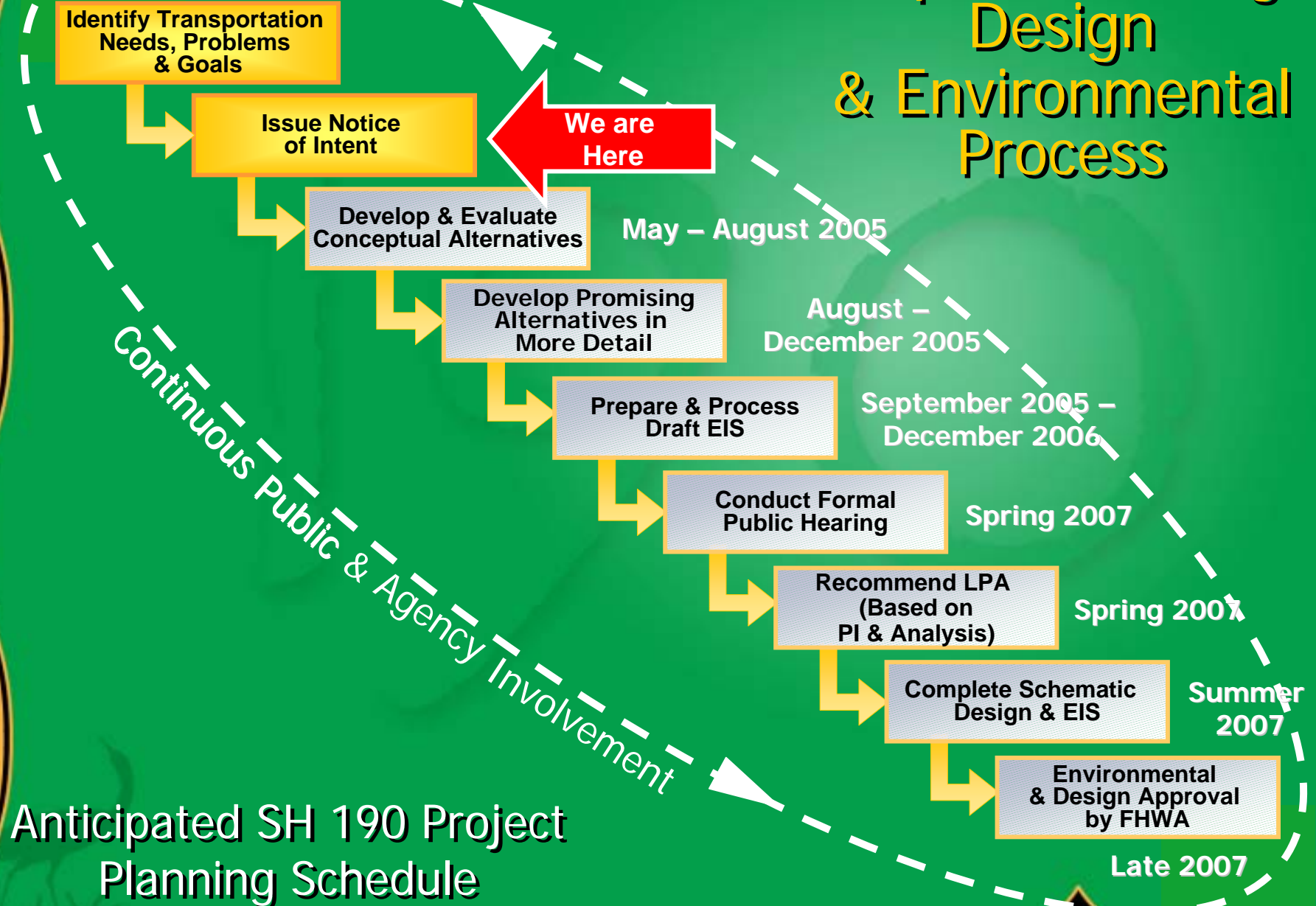
Step 4: Detailed
Construction Plans

Step 5: Acquired
Right-of-Way

Step 6: Construction

Step 7: Open to Traffic

Step 3: Planning, Design & Environmental Process



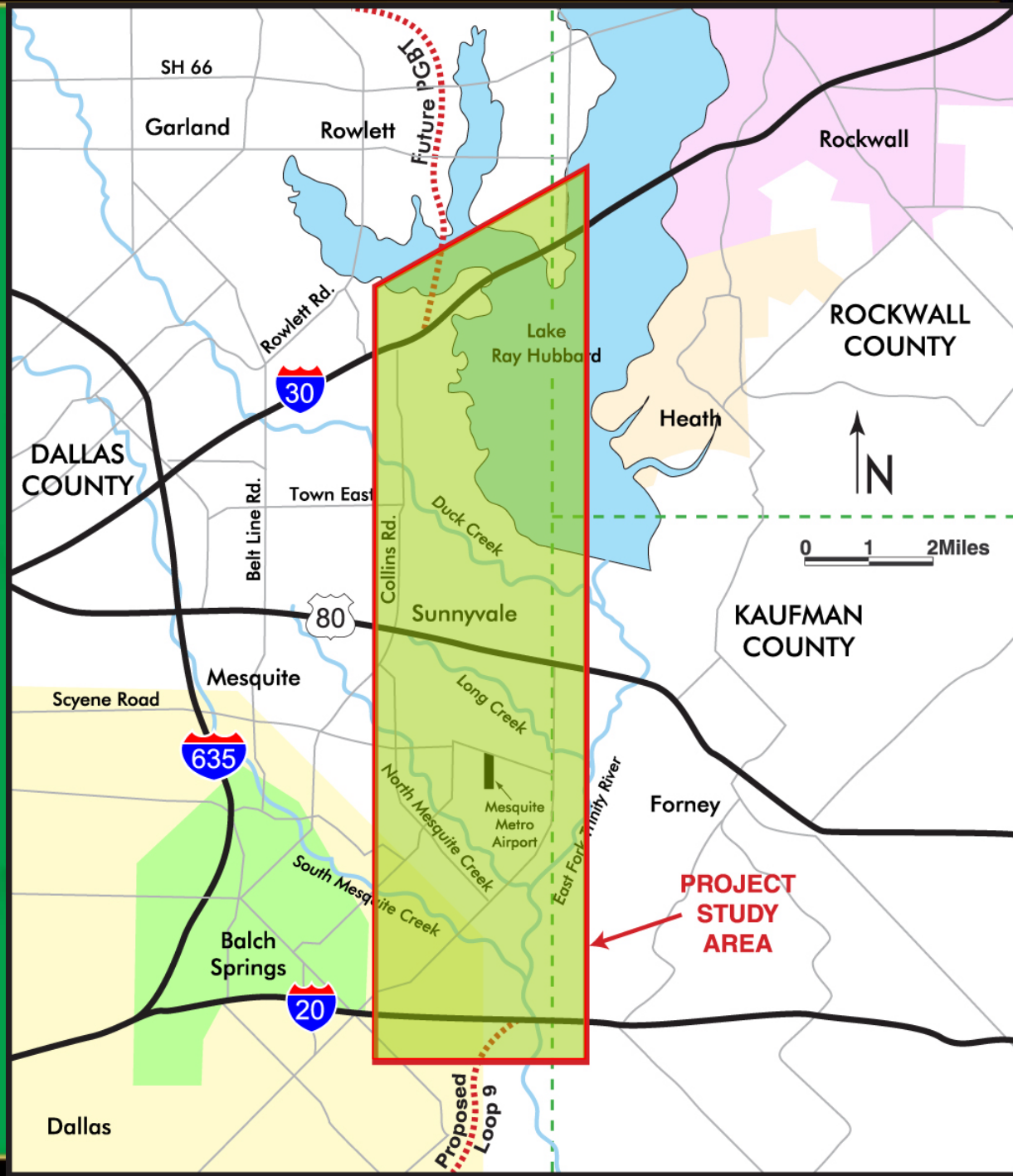
Project Scope & Objective

Determine the feasibility of developing a new roadway from IH 30 to IH 20 in eastern Dallas County to improve local north-south transportation & complete the regional (eastern) SH 190 Loop connecting the President George Bush Turnpike extension at IH 30 to the proposed Loop 9 at IH 20. If feasible:

- What type of roadway is warranted
- The location of roadway
- The potential social, economic & environmental effects of building the roadway

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SH 190 Project Study Area



Public & Agency Involvement

Staff Work Group

- Staff from Affected Agencies & Jurisdictions
- Affected Resource Agencies

Elected Official Briefings

- Policy Leaders / Senior Staff



Public

- Residents
- Property Owners
- Business Owner
- Business Associations
- Environmental Groups
- Other Interested Groups/Persons

City/Town Workshops

- City/Town Officials
 - County Officials
 - Community Leaders
- (recommendations to be shown at Public Meetings)*

Public Involvement Activities

- Project Website (www.theeastbranch.org)
- Project Mailing List
- City/Town Workshops
- Project Newsletters
- Presentations (upon request)
- Project Kiosk
- Quarterly Updates to Elected Officials
- Open House / Public Meetings
- Open House / Public Hearing



Transportation Needs & Issues

- Adding Capacity to Serve Transportation Demand for 2025 & Beyond
 - Increasing Population (Past, Present & Future)
 - Increasing Development
 - Increasing Traffic
- Improving Transportation System Linkages

Increasing Population

City/Town	1970	1980	1990	2000	Estimated 2030	Change from 1970 to 2000	Change from 2000 to 2030
Garland	81,437	138,857	180,650	215,768	241,767	134,331 165%	25,999 12%
Sunnyvale	995	1,404	2,228	2,693	11,554	1,698 171%	8,861 329%
Mesquite	55,131	67,053	101,484	124,523	157,259	69,392 126%	32,736 26%
Heath	520	1,459	2,108	4,149	17,669	3,629 698%	13,520 326%
Balch Springs	10,464	13,746	17,406	19,375	34,247	8,911 85%	14,872 77%
Forney	1,745	2,483	4,070	5,588	43,825	3,843 220%	38,237 684%
Rockwall	3,121	5,939	10,486	17,976	53,265	14,855 476%	35,289 196%
Dallas County	1,327,321	1,556,390	1,852,810	2,218,372	2,817,191	891,051 67%	598,819 27%

Source: 1970 through 2000 data from US Census Bureau. Projected 2030 data from the North Central Texas Council of Governments.

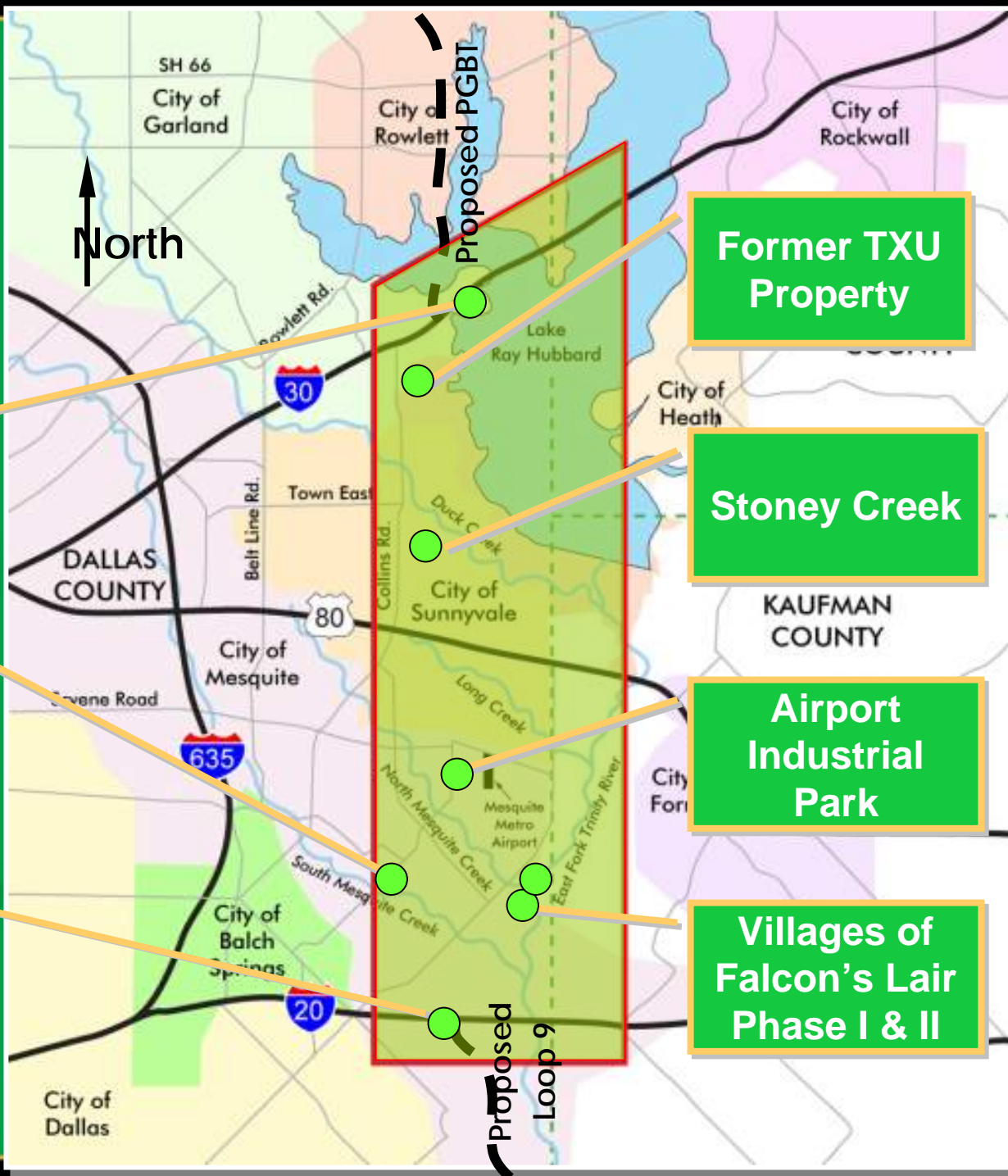
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Increasing Development

Bass Pro & Accompanying Shops, etc.

Lucas Farms Development

Falcon's Lair Industrial Development

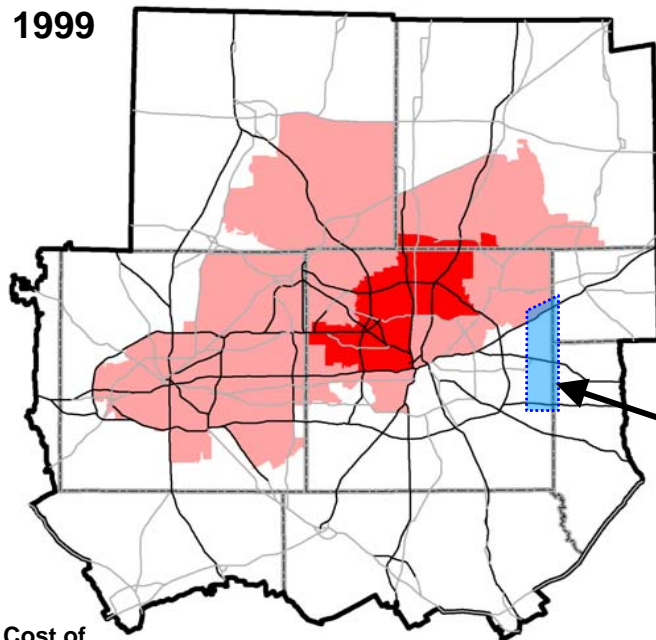


Mobility 2025:

The Metropolitan Transportation Plan, Amended April 2005

REGIONAL CONGESTION LEVELS

1999

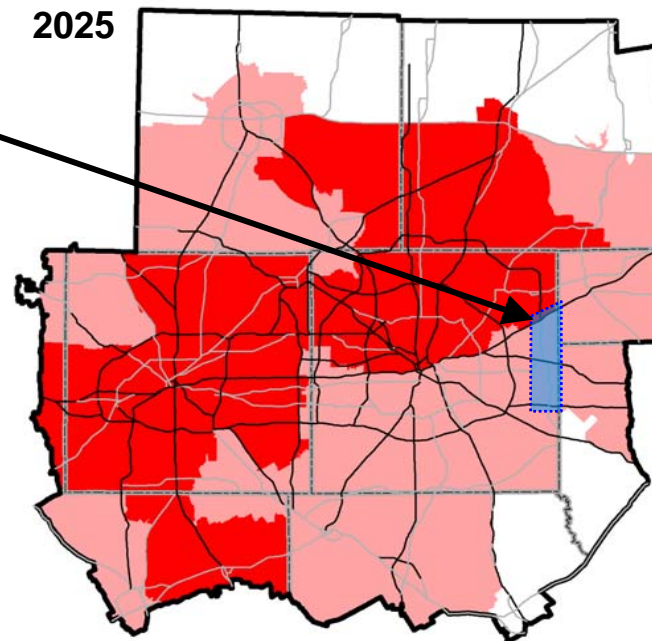


- Areas of Moderate Peak-Period Congestion
- Areas of Severe Peak-Period Congestion

Annual Cost of
Congestion = \$5.3 Billion

	1999	2025	% Change
Population	4.5 M	8.0 M	75%
Employment	2.7 M	4.9 M	84%
VMT/Person	29.05	29.31	1%

2025



SH 190
Study Area

Annual Cost of
Congestion = \$11.5 Billion

	1999	2025	% Change
Vehicle Miles Traveled	125 M	233 M	86%
Roadway Capacity	23.2 M	34.8 M	50 %
Total Delay (Vehicle Hours)	1.3 M	2.8 M	115%
% Roadways Congested	38%	53%	39%

As Amended: April 14, 2005

Increasing Traffic

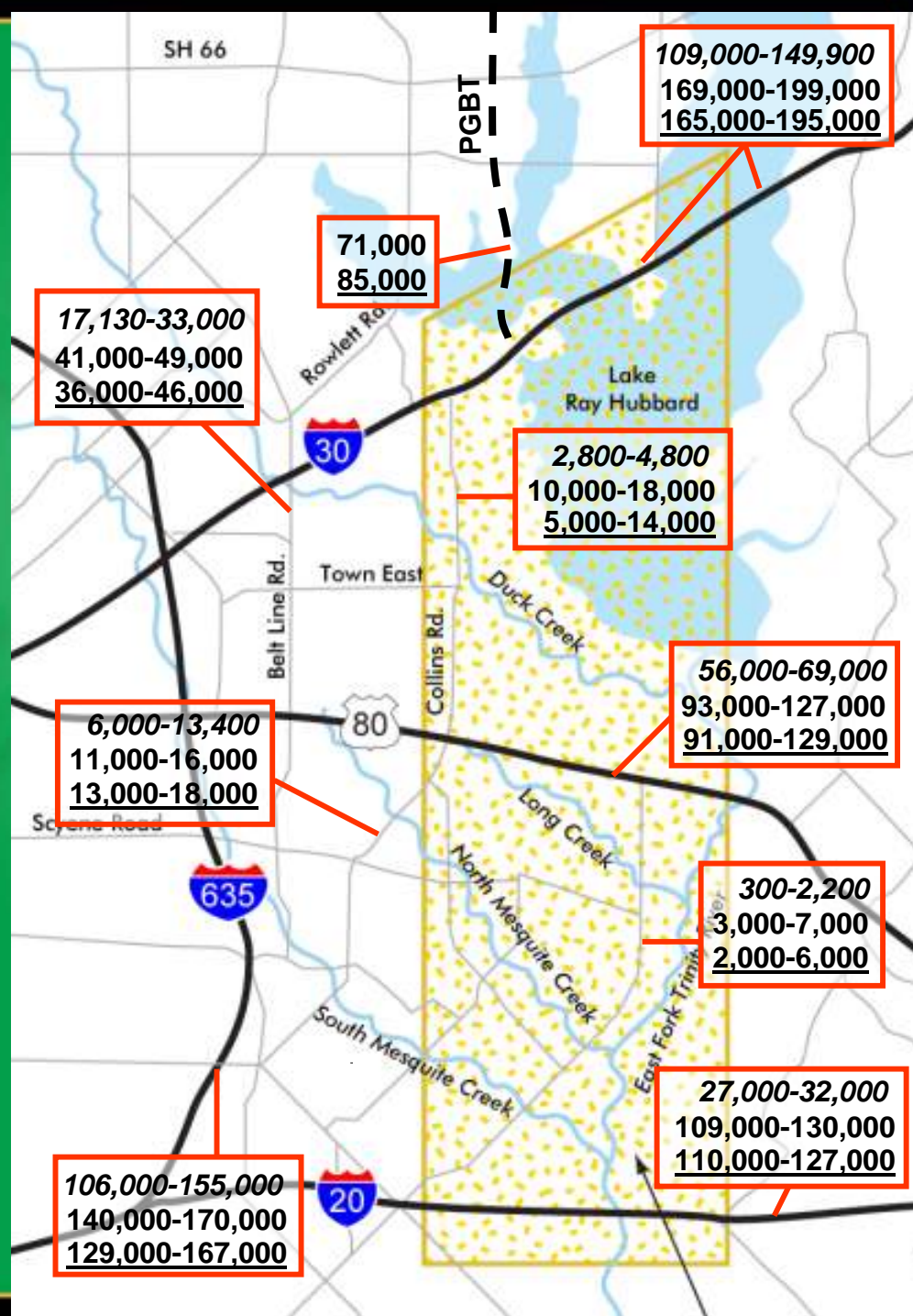
Daily Traffic Volumes

XX,XXX 1995-1999 Traffic Counts*
 XX,XXX 2025 SH 190 No Build**
XX,XXX 2025 Build**
 (SH 190 Arterial Assumed)

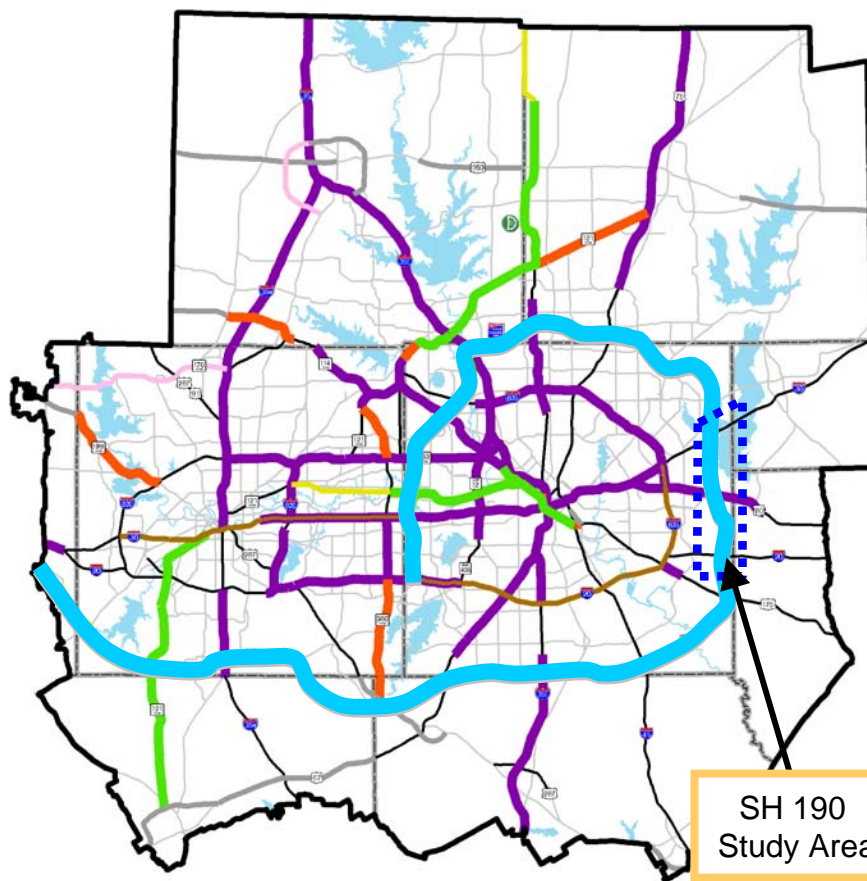
Notes:

* Arterial street volumes based on 1995, 1996 or 1999 TxDOT traffic counts. Freeway volumes based on 2003 TxDOT traffic counts.

**Volumes based on *Mobility 2025 (2004 Update)*. For The East Branch study, a more detailed sub-area model will be developed utilizing 2030 demographics.



System Linkages



SH 190
Study Area

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North Central Texas
Council of Governments
Transportation



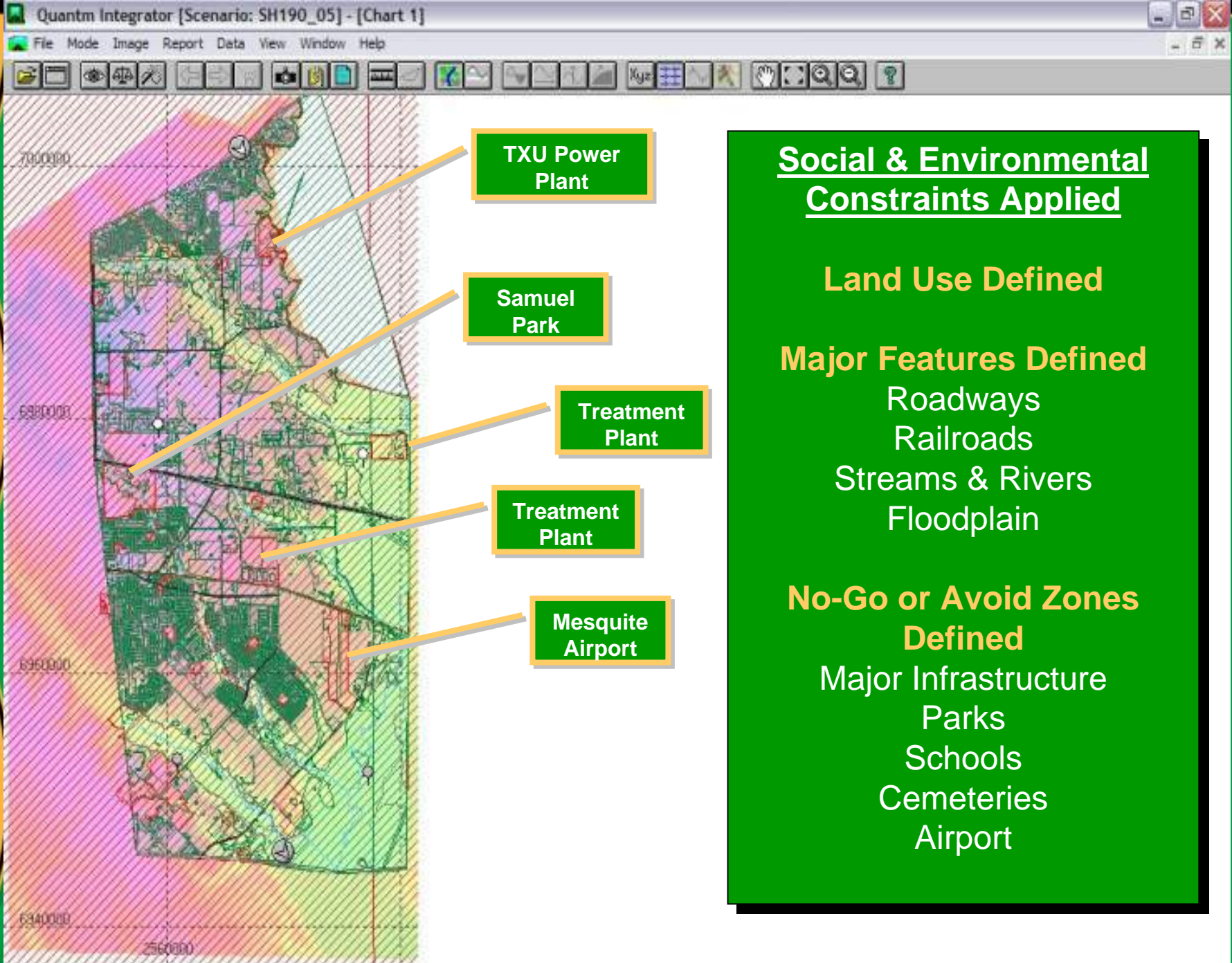
As Amended: April 14, 2005



Carter-Burgess

Alignment Development

- Must meet TxDOT & FHWA Design Standards
 - Design Speed
 - Typical Section (Number of Lanes, Type of Median, Right-of-Way Width, etc.)
- Tolling vs. Non-Tolled Facility
- Access Management
- Interchange Location at IH 30 / PGBT



Social & Environmental Constraints Applied

Land Use Defined

Major Features Defined

Roadways
Railroads
Streams & Rivers
Floodplain

No-Go or Avoid Zones Defined

Major Infrastructure
Parks
Schools
Cemeteries
Airport

Example Alignment Computer Model Run

Without any applied
Social or
Environmental
Constraints

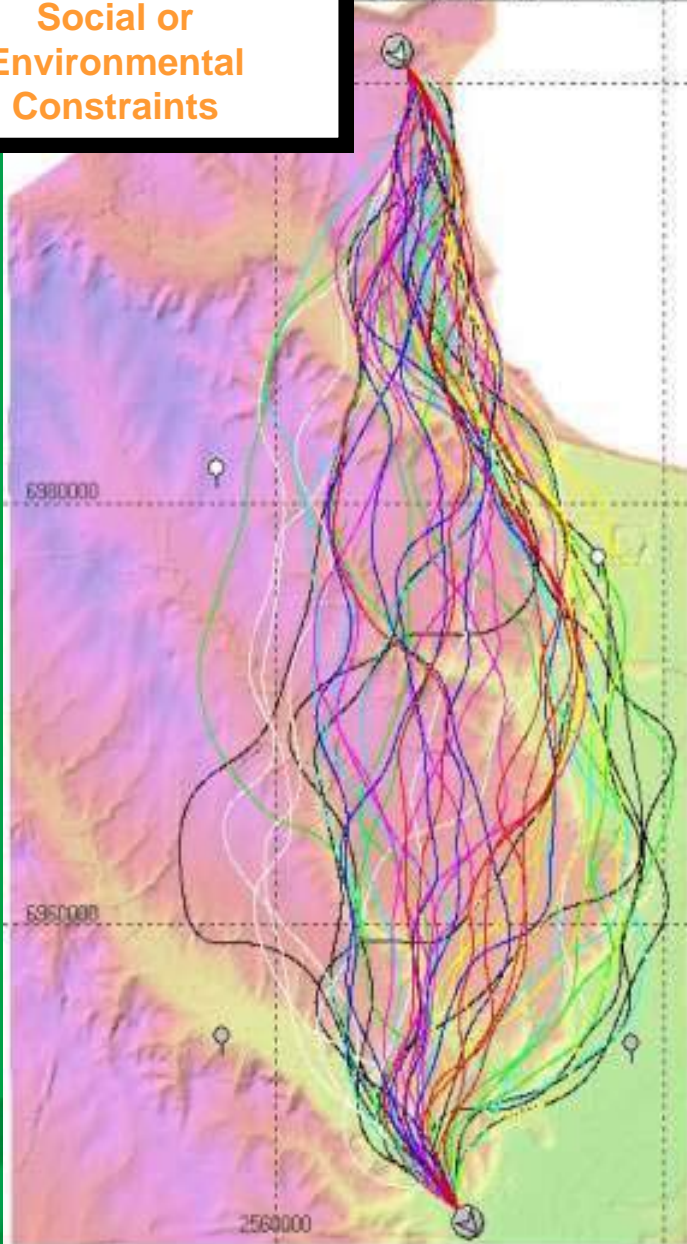


Chart 1 - Plan view

Example Alignment Computer Model Run

With applied Social or
Environmental
Constraints

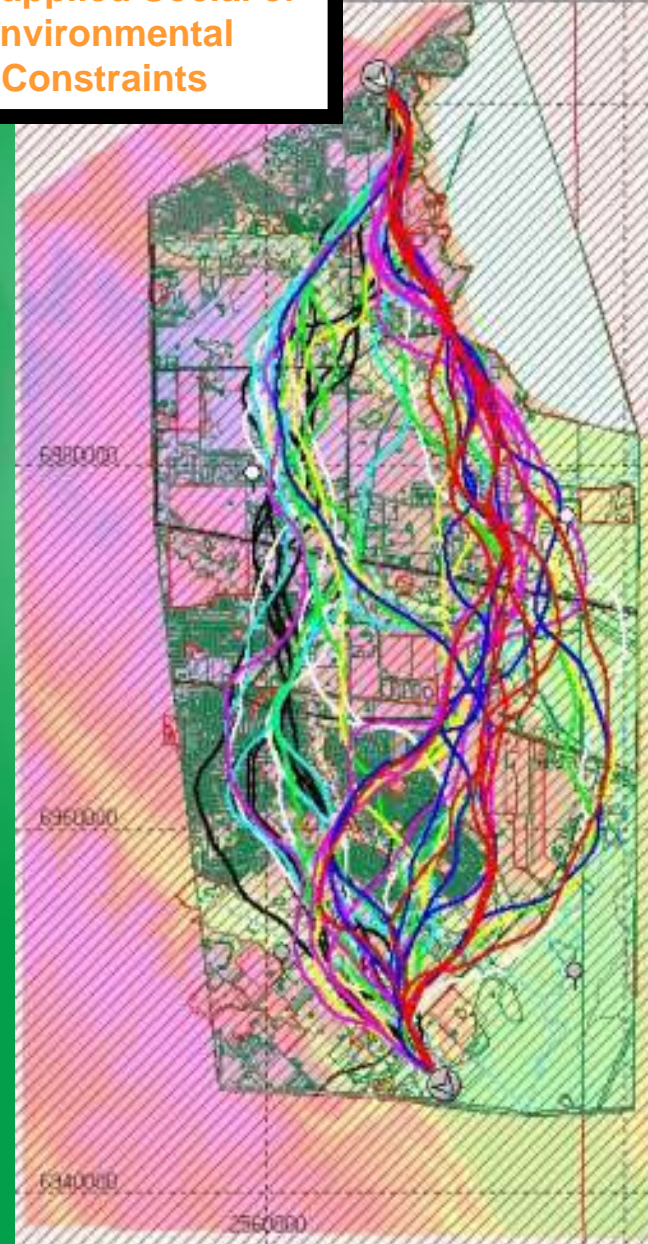
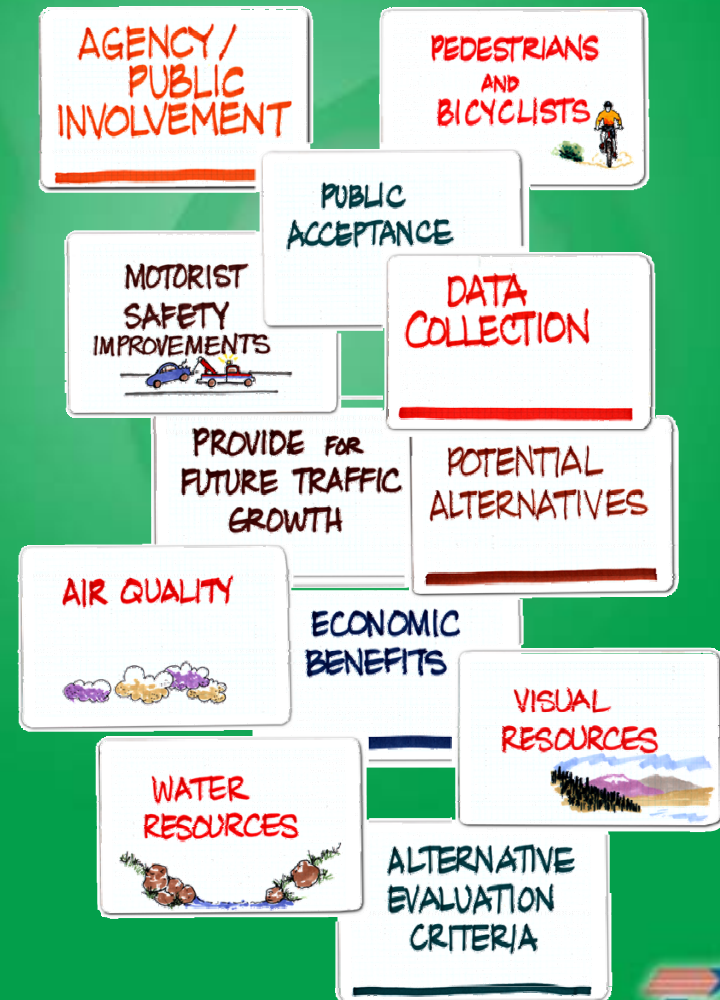


Chart 1 - Plan view

Environmental Issues/Concerns

- Social
 - Building Displacements
 - Noise
 - Schools & Parks
 - Cultural Resources
 - Quality of Life & Aesthetics
- Economic
 - Economic Impact
 - Land Use / Development
- Natural Environment
 - Water Quality
 - Vegetation / Wildlife Habitat
 - Wetlands
 - Floodplains



Environmental Documentation

- An Environmental Impact Statement (EIS) will be Prepared
- Must Follow All Federal & State Regulations, Guidelines & Executive Orders
- The EIS is a Decision-Making Document
- As a Minimum, Two Build Alternatives & the No Build Alternative will be Evaluated

Context Sensitive Design

- Help the Roadway Blend into the Community & Complement the Driving Experience
- Can Include Items Such as:
 - Landscaping
 - Hardscape
 - Bridges
 - Retaining Walls
 - Lighting
 - Sound Walls
 - Community Gateways
- Some Items May Require Local Cost-Sharing

Finding a Balance...

NTTA

TxDOT

NCTCOG

Regional Transportation Needs vs.
Right-of-Way Requirements

DRMC

Cities

Towns

Counties

The Environment



Aesthetics



Development



For More Information:

Visit the project web site:
www.theeastbranch.org

or contact:

Timothy M. Nesbitt, P.E.
Project Manager

Texas Department of Transportation
P.O. Box 133067
Dallas, Texas 75313-3067
Phone: 214-320-6100
Fax: 214-320-4470

Sandy Wesch-Schulze, P.E., AICP
Consultant Project Manager

Carter & Burgess, Inc.
7950 Elmbrook
Dallas, Texas 75248
Phone: 214-648-0145
Fax: 214-648-5632