

# Regional Mobility Initiatives

Vol. III, No. 2  
August 1998

**Major Investment Studies** are a critical step in the transportation planning process, providing for a detailed assessment of transportation alternatives in each corridor with emphasis on public involvement.



Metropolitan Planning regulations included in the Intermodal Surface Transportation Efficiency Act (ISTEA) require that a major investment study be initiated whenever a regional transportation system improvement is being considered which may potentially use federal funds. Major Investment Studies (MIS) are a sub-component of a more comprehensive metropolitan transportation system planning process undertaken by the Metropolitan Planning Organization (MPO). Through the development of the metropolitan transportation plan, corridors are evaluated from a regional perspective for major transportation improvements such as freeways, toll roads, high occupancy vehicle (HOV) lanes, and rail facilities. Each major investment study then focuses on a detailed assessment of transportation alternatives in a corridor providing a more focused and refined analysis of alternatives. The MIS planning phase serves as a bridge between the regional planning process and the more detailed project design and engineering phases.

*This issue of **Regional Mobility Initiatives** highlights three overlapping major investment studies currently underway in Northwest Dallas County. NCTCOG, serving as the MPO, is making efforts to facilitate the coordination of planning activities among the three studies.*



Photos courtesy of DART

Four major investment studies have been completed in the Dallas-Fort Worth Metropolitan Area since federal guidance on major investment studies became available in 1993. These include the Dallas North Central and Northeast Corridors led by Dallas Area Rapid Transit (DART), and the Interstate 635 and Trinity Parkway/Santa Fe Corridors led by the Texas Department of Transportation (TxDOT) Dallas District. Each of these studies centered on the evaluation of a wide range of system alternatives and extensive public involvement to arrive at locally preferred alternative. Currently, major investment studies are underway in nine corridors across the area. In its role as the Metropolitan Planning Organization, NCTCOG is taking the lead to ensure agency coordination when study areas overlap. Three such overlapping studies are featured in this publication. Initiated prior to the development of MIS requirements in 1993, seven additional environmental studies are also being completed. These studies will include documentation on work accomplished to fulfill both the major investment study and environmental planning requirements concurrently. The exhibit provided on page 9 shows the status of ongoing major investment and environmental studies across the Dallas-Fort Worth Metropolitan Area.

---

## Major Investment Study Process

*Major investment studies consider all reasonable alternatives for addressing the transportation demands of the corridor as well as other related issues such as local government land use policies, neighborhood and community goals, environmental issues, and economic development.*

While federal regulations require that major investment studies be performed, the specific procedures have been left to the planning agencies within each metropolitan area. NCTCOG, with the cooperation and coordination of the Texas Department of Transportation, the North Texas Tollway Authority, Dallas Area Rapid Transit, and the Fort Worth Transportation Authority, established a methodology for conducting major investment studies in the Dallas-Fort Worth Metropolitan Area. These guidelines ensure that federal requirements are met and that consistency among studies is achieved within the major investment study planning process.

Each major investment study should consider a broad range of reasonable concepts and alternatives for the corridor under study. Initially, all major modes of transportation should be addressed and considered. Through a screening process, many concepts may be eliminated and the remaining evaluated in more detail as the process continues. The evaluation must be in sufficient detail to allow for a meaningful comparison of alternatives and concepts allowing for the technical, social, and environmental questions to be answered to the satisfaction of the citizens and agencies involved in the process. In addition, depending on the study, federal regulations allow for an environmental impact statement (EIS) or an environmental assessment (EA) to be performed

concurrently with the major investment study. In this case, the level of detail must be sufficient to meet these federal requirements. The process must be open to the public and all potentially affected agencies so that there is clear understanding of the rationale for the recommendations of the study. Continuous public and agency involvement ensures that the evaluation process reflects both the corridor's and community's needs and desires. Involvement is critical in the major investment study process since the goal of this extensive multi-agency coordination effort is the designation of a Locally Preferred Alternative for the corridor.

### Three requirements necessary for every major investment study:

- Consideration of a broad range of alternatives
- Evaluation in sufficient detail to compare alternatives
- Extensive public involvement

The procedures outlined in the NCTCOG publication, ***Performing Transportation Major Investment Studies: A Cooperative Approach for the Dallas-Fort Worth Area***, are intended to ensure that each major investment study conducted in the Dallas-Fort Worth region satisfies all federal and state requirements regardless of the agency conducting the study. This document also helps to ensure that the recommendations of each major investment study are based on a consistent methodology.

---

## Major Investment Study Coordination

*Overlapping major investment studies require special attention to ensure that study processes are coordinated and study findings are compatible. NCTCOG, serving as the Metropolitan Planning Organization, is assisting in the coordination of these efforts.*

Three overlapping major investment studies are currently underway in Northwest Dallas County. The areas being studied are the Northwest Corridor, State Highway 183/Trinity, and Loop 12/Interstate Highway 35E. Because these major investment studies overlap significantly, a higher level of communication and coordination between the three studies is required. Many of the same local governments and interested parties will be impacted by all three studies. NCTCOG's emphasis will be placed on coordination in three areas: public involvement, data sharing, and decision making.

### Public Involvement

All public meetings for the three overlapping studies mentioned above will be coordinated both in terms of schedule and information presented. Each major investment study will have specific public involvement requirements to reach consensus. Information from the three studies will be available for review and discussion at all public meetings. An 18-month schedule of public meetings will culminate in consensus on locally preferred alternatives for each corridor.

### Data Sharing

The technical data that is necessary for the successful completion of a major investment study is extensive. A base year travel model validation is required to ensure that the computer generated travel forecasts are accurate. The model validations for these three studies will be closely coordinated to allow for the seamless evaluation of transportation options. The three studies will all use the same baseline network assumptions and the same year 2020 demographic assumptions. In addition, any transportation alternatives that are

identified for any one of the three studies will be screened for their potential impact on the other two study areas. Travel forecasts for these three areas will also be developed in a



combined manner, providing for the consistent evaluation of alternatives among the three corridors.

### Decision Making

Due to their close proximity, the recommendations from each study will likely impact each other. Therefore, the Locally Preferred Alternative for each of these three studies will be combined, reviewed, and evaluated to ensure that they will be compatible and represent the most cost-effective improvements for the entire system.

A requirement of the major investment study process is that the Locally Preferred Alternative must fall within the financial constraint requirements of the metropolitan transportation plan. Once consensus is achieved within each corridor, NCTCOG staff will take the lead in incorporating each study's recommended findings into ***Mobility 2020: The Metropolitan Transportation Plan.***

## Northwest Corridor Major Investment Study

*The Northwest Corridor contains several of the largest major employment centers in the region with many critical transportation issues to be addressed in order to maintain mobility in this heavily congested corridor.*

In 1995, the Northwest Corridor contained over 37 percent of all jobs in the region on less than 7 percent of the land area. Often referred to as a linear central business district, employment is anticipated to continue to grow in the corridor at a rate of 1.8 percent per year, resulting in an additional 395,000 jobs by the

year 2020. The number of jobs will exceed population by more than 336,000 making the corridor a magnet for workers, thus generating significant travel demand. Population is also expected to grow significantly, however, with a 39 percent increase projected between 1995 and 2020.

The majority of the population growth is expected to occur in the northern and northwestern portions of the corridor. Employment growth, although more dispersed, is likely to continue to be concentrated in major activity centers such as the Dallas Central Business District, Medical/Market Center, and Dallas Parkway.

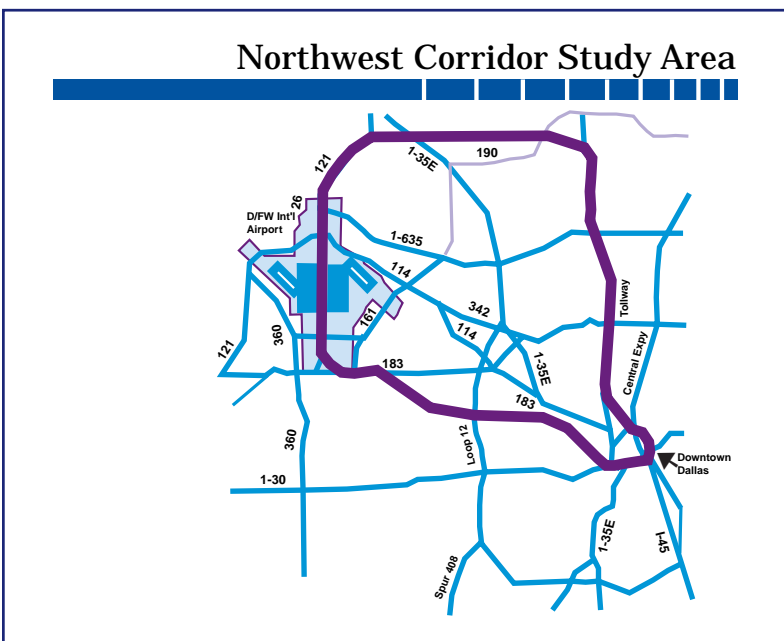
Today, many of the major roadways in the corridor are congested during peak travel periods. Future committed roadway improvements are not projected to keep pace with the additional travel demand. The prevalent travel patterns are northwest to southeast and southeast to northwest. Thus, the Northwest Corridor Major Investment Study will focus on this travel movement. The study will evaluate alternatives that serve this traditional suburb-to-central-city travel pattern, as well as the "reverse commute" travel. East to west and north to south movements crossing the corridor are being addressed by the other major investment studies described in this publication.

The goal of this major investment study is to evaluate and develop transportation alternatives which:

- provide additional capacity for the heavily traveled radial directions
- reduce congestion
- improve transit service



Photos courtesy of DART



## Transportation Alternatives for Consideration

***Mobility 2020: The Metropolitan Transportation Plan*** calls for the construction of commuter rail, light rail, and high occupancy vehicle lanes in the Northwest Corridor. This major investment study will focus on refining the Plan's recommendations. The travel patterns, identified deficiencies, and the DART System Plan are being used to specify several alignments and operating concepts for each mode or technology being studied. A No-Build scenario with a Congestion Management System will be considered initially. Depending on the outcome of this analysis, high occupancy vehicle lanes, commuter rail, and light rail transit will be evaluated along with highway improvements. Additional travel demand management and transportation system management strategies will also be considered to relieve traffic congestion in the corridor.

High occupancy vehicle lanes will be evaluated on Interstate Highway 35E and State Highway 114. Both light rail transit and commuter rail alignment options will be considered on rights-of-way that could link the Dallas Central Business District to Farmers Branch, Carrollton, and North Irving. Light rail design options including double-track and single-track alternatives will be evaluated.

System interface issues including direct access to Dallas/Fort Worth International Airport and connections to the Las Colinas Area Personal Transit System, the North Irving Transit Center, the Freeport Market Area, the Medical/Market Center, and Love Field, will be included in the study. The potential for interfacing transit service with the proposed North Crosstown transit corridor in Carrollton, and the Webb Chapel/Harry Hines Corridor, will also be evaluated.

## Public Involvement Process

The major investment study will target outreach efforts to citizens, elected officials, other agencies, organized interest groups, and the DART Board. The committee structure will process community input and forward recommendations to the DART Board at various major milestones during the study. To gather input from the public, three work groups will be created. Each group will involve one or more of the target audiences to ensure that all interested parties have an opportunity to be involved.

- **Executive Work Group:** Elected officials and senior staff from implementing agencies will provide oversight, work toward consensus, select Community Work Group members, and coordinate within their respective entities.
- **Community Work Group:** Individuals representing organized interest groups will provide broad-based community representation.
- **Staff Work Group:** Technical staff from agencies and organizations will assist in development and evaluation of alternatives, review technical findings, and coordinate supporting technical activities within their respective agencies.

## Project Work Groups

- Executive Work Group
- Community Work Group
- Staff Work Group



## Transportation Alternatives for Consideration

The Loop 12/Interstate Highway 35E Major Investment Study will consider a variety of travel modes such as rail and bus transit, high occupancy vehicle lanes, express lanes, toll facilities, and bicycle and pedestrian paths. Travel demand management, transportation systems management, and intelligent transportation systems will also be considered. Additionally, other viable alternatives also will be evaluated during the study.

The Project Coordination Work Group consists of agency representatives and local officials that have responsibilities in funding, permitting, and implementing projects in the corridor. The Work Group will be called upon throughout the study process to provide both policy and technical level oversight for the study. Recommendations from this study will be coordinated with the ongoing Interstate Highway 35E Major Investment Study to the north in Denton County.

## Study Process

A timeframe of 18 months is proposed for this study based on five stages of development. The project will begin with community input and data gathering, leading ultimately to the refinement and selection of a Locally Preferred Alternative.

The general public and the Project Coordination Work Group will provide input throughout the study process.

A series of four public meetings will be held during key milestones of the study. These meetings will be held on various days at various locations to provide better opportunities for the public to comment. Informal meetings and presentations are also planned with various groups such as chambers of commerce, neighborhood associations, places of worship, environmental, recreational interests, and civic groups.

### Project Coordination Work Group

#### Agencies

- DART
- FHWA
- FTA
- NCTCOG
- TTI
- TxDOT
- USACOE

#### Cities

- Cockrell Hill
- Dallas
- Farmers Branch
- Grand Prairie
- Irving



Photo courtesy of DART

---

## State Highway 183/West Fork Major Investment Study

*State Highway 183 (Airport Freeway) is a critical east/west radial corridor that needs improvements in order to accommodate growing travel demand. The area surrounding the West Fork of the Trinity River may also offer opportunities to improve mobility in this rapidly growing area of the region.*



Photo courtesy of Halff Associates, Inc.

The State Highway 183/West Fork Corridor is located in the western portion of Dallas County and is approximately 60 square miles. The limits of the corridor extend from State Highway 360 on the west to the proposed Trinity Parkway on the east. The southern limit is Interstate Highway 30 extending to Northgate Drive in Irving to the north. The corridor includes State Highway 183 through the City of Irving, the Trinity Railway Express along the Rock Island Railroad Line, and the West Fork of the Trinity River that runs between State Highway 183 and Interstate Highway 30.

The State Highway 183/West Fork Corridor is a critical link in the region's transportation system. It serves the heavy east-west travel pattern between Dallas, Fort Worth, and the Mid-Cities. Currently, State Highway 183 in Dallas County carries an average of 150,000 vehicles per day. Stop-and-go traffic and heavy delays characterize the typical morning and evening rush hours.

However, State Highway 183 is not the only roadway in the corridor that is congested. Today, 44 percent of all roadways are congested during the peak hour of travel. This level of traffic congestion results in lost productivity, increased accidents, and increased driver frustration. Between now and the year 2020, population and employment estimates for the corridor are forecasted to grow by 30 and 60 percent, respectively. If nothing is done to address growing congestion in the corridor, commuters can expect up to 66 percent of the roadways to be congested during the peak hour by the year 2020.

The purpose of this major investment study is to develop a Locally Preferred Alternative to address the traffic congestion and transportation needs in the Corridor. ***Mobility 2020: The Metropolitan Transportation Plan***, makes several recommendations to address the needs in the corridor. These include:

- congestion management strategies
- commuter rail
- bus transit improvements
- high occupancy vehicle lanes,
- freeway improvements along State Highway 183
- a new toll road in the West Fork Corridor

These recommendations will serve as a "financial placeholder" in ***Mobility 2020*** until a Locally Preferred Alternative can be developed through the major investment study process. The Texas Department of Transportation will serve as the lead agency for the study with assistance from DART, NCTCOG, local governments, and a diverse consultant team.

## Transportation Alternatives for Consideration

The major investment study focus is to consider a wide range of alternatives that address the transportation needs in the corridor and provide interested parties sufficient detail to evaluate the impacts of various options. The major investment study will evaluate alternatives that aim to reduce the number of vehicle trips and increase the efficiency of the current transportation system. It will consider alternatives that may improve State Highway 183 and the Trinity Railway Express commuter rail line. Alternatives will also be identified based on input from the general public and other interested parties.

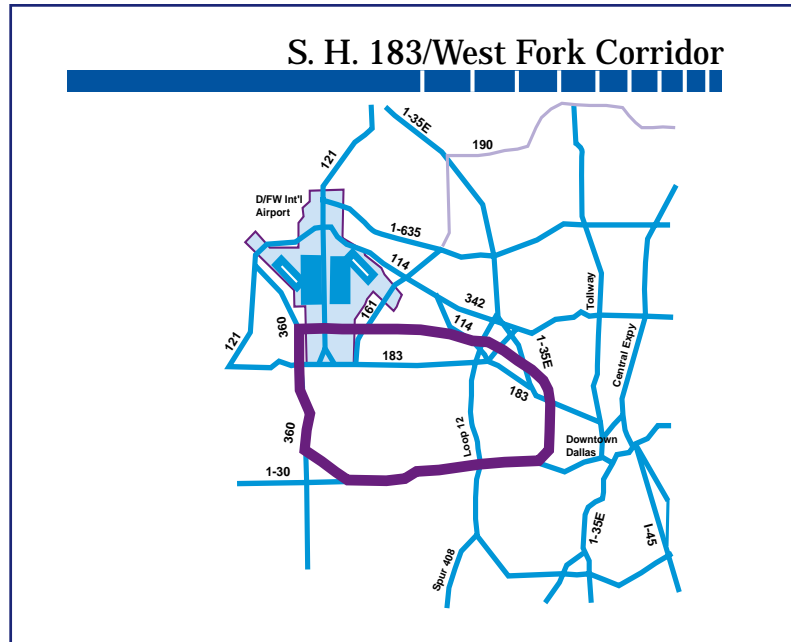
The West Fork area is a broad term that refers to the area surrounding the West Fork of the Trinity River.

**Mobility 2020** identifies a toll road as the “financial placeholder” in the West Fork area that will be refined through the major investment study process. The study will assess the mobility, environmental, and other associated impacts of any potential facility in the West Fork area. Given the proximity and system interconnectivity between State Highway 183 and the West Fork Corridor, these corridors are being studied jointly.

## Study Timeline and Public Involvement

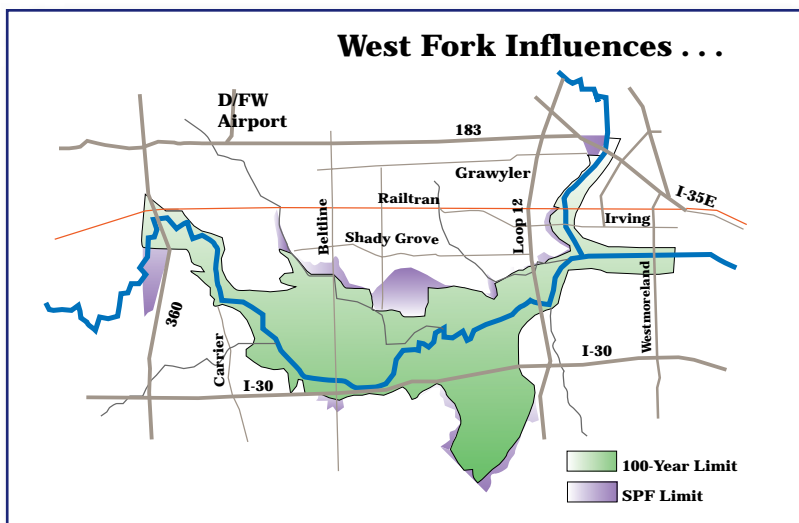
A timeframe of 18 months is proposed for this study. In addition to considering a wide range of alternatives, the major investment

Project Coordination Work Group. Informal meetings and presentations are also planned with interested groups such as chambers of



study process will also focus on creating opportunities for all interested parties to provide input to guide the study process towards the selection of a Locally Preferred Alternative. The structure for public involvement will be through a series of public meetings and forums as well as through the

commerce, neighborhood associations, places of worship, environmental organizations, recreational groups, and others as needed. Interested parties are also welcome to attend Project Coordination Work Group meetings.



- Ecosystems
- Wetlands
- Floodplains
- Levee-Protected Areas
- Threatened/Endangered Species
- Noise and Air Quality Impacts

## Status of Ongoing Major Investment Studies

CORRIDOR/ FACILITY	FROM	TO	COUNTY
<b>Recently Initiated Studies</b>			
Northwest Corridor	Downtown Dallas	Northwest Quadrant of DART Service Area	Dallas
S.H. 183*	S.H. 360	I.H. 35E	Dallas/Tarrant
Trinity Parkway (West Fork)*	S.H. 360	Trinity Parkway East	Dallas/Tarrant
Loop 12/I.H. 35E	Spur 408	I.H. 635	Dallas
I.H. 35/I.H. 35E	U.S. 380	S.H. 121 Bypass	Denton
S.H. 114/S.H. 121	Loop 382 (Wall Street/NW Highway)	Dallas County Line	Tarrant
I.H. 30	Oakland Blvd.	Proposed S.H. 161	Tarrant
Loop 9	Proposed S.H. 121 (Southwest Freeway)	I.H. 20 (Dallas County)	Dallas/Ellis/Johnson/Tarrant
S.H. 190 Tollroad-East	S.H. 78 (Garland Rd.)	I.H. 30	Dallas
<b>Concurrent MIS/ Environmental Reviews</b>			
S.H. 190 Tollroad (Super Connector)	I. H. 35E	I. H. 635 (LBJ Freeway)	Dallas
S. H. 199	Metropolitan Area Boundary	Proposed S. H. 121 (SW Freeway)	Tarrant/Parker
S.H. 121 (SW Freeway)	I.H. 35W	U.S. 67	Tarrant/Johnson
I.H. 35W	Northside Dr.	I.H. 820	Tarrant
I.H. 820	S.H. 121	Randol Mill	Tarrant
I.H. 820	I.H. 35W	S.H. 26 (Grapevine Highway)	Tarrant
S.H. 121/S.H. 183	I.H. 820	Dallas County Line	Tarrant

\* MIS for these two corridors are being combined into one study

## Upcoming Major Investment Studies

- U.S. 75 from Spur 399/S.H. 5 to S.H. 121 (North of McKinney)
- S.H. 190 from I.H. 30 to I.H. 20
- I.H. 820 from Meadowbrook Dr. to I.H. 20/820
- Pleasant Grove Corridor from Downtown Dallas to Buckner Blvd.
- East R.L. Thornton Corridor from Downtown Dallas to Jim Miller Road
- U. S. 75 (HOV lanes) from I. H. 635 to S.H. 190
- I.H. 35E from I.H. 30 to I.H. 20
- I.H. 45 from I.H. 30 to I.H. 20
- S.H. 170 from I.H. 35W to S.H. 199

## NCTCOG Executive Board 1998-99

President  
**Ron Harmon**  
Commissioner, Johnson County

Director  
**Jim Jackson**  
Commissioner, Dallas County

Director  
**Jerry Dunn**  
Mayor, City of Benbrook

Director  
**Hattie Tennison**  
Councilmember, City of Greenville

Vice President  
**Ron Harris**  
County Judge, Collin County

Director  
**Tom Vandergriff**  
County Judge, Tarrant County

Director  
**Milburn Gravley**  
Mayor, City of Carrollton

General Counsel  
**Jerry Gilmore**  
Attorney at Law, Dallas

Secretary-Treasurer  
**Mary Poss**  
Mayor Pro Tem, City of Dallas

Director  
**Becky Haskin**  
Councilmember, City of Fort Worth

Director  
**Jimmy McKenzie**  
Mayor Pro Tem, Hurst

Executive Director  
**R. Michael Eastland**

Past President  
**Elzie Odom**  
Councilmember, City of Arlington

Director  
**Bob Day**  
Councilmember, City of Garland

Director  
**Richard Rozier**  
Mayor, City of DeSoto

## Regional Transportation Council 1998

Chairman  
**Jack Miller**  
Mayor, City of Denton

**Lowell Hyatt**  
Councilmember, City of Garland

**Mary Poss**  
Mayor Pro Tem, City of Dallas

Vice Chairman  
**Ron Harmon**  
Commissioner, Johnson County

**Lee Jackson**  
County Judge, Dallas County

**Candy Sheehan**  
Mayor, City of Coppell

Secretary  
**John Murphy**  
Mayor Pro Tem, City of Richardson

**Sandy Jacobs**  
Commissioner, Denton County

**Steve Simmons**  
District Engineer  
Texas Department of Transportation,  
Fort Worth District

**Dick Bode**  
Councilmember, City of Plano

**Dottie Lynn**  
Mayor Pro Tem, City of Arlington

**Grady Smithey**  
Councilmember, City of Duncanville  
Cities of Duncanville, DeSoto, Lancaster,  
and Cedar Hill

**Ron Brown**  
Commissioner, Ellis County

**Barbara Mallory Caraway**  
Councilmember, City of Dallas

**Steve Terrell**  
Mayor, City of Allen

**Don Doty**  
Councilmember, City of Grand Prairie

**Kenneth Mayfield**  
Commissioner, Dallas County

**Marti VanRavenswaay**  
Commissioner, Tarrant County

**Jerry Dunn**  
Mayor, City of Benbrook

**James McCarley**  
Acting Executive Director  
North Texas Tollway Authority

**Max Wells**  
Citizen Representative, City of Dallas

**Sandy Greyson**  
Councilmember, City of Dallas

**Bobbie Mitchell**  
Mayor, City of Lewisville

**B. Glen Whitley**  
Commissioner, Tarrant County

**Becky Haskin**  
Councilmember, City of Fort Worth

**Jay Nelson**  
District Engineer  
Texas Department of Transportation,  
Dallas District

**Henry Wilson**  
Councilmember, City of Hurst

**Jack Hatchell**  
Commissioner, Collin County

**Bob Phelps**  
Mayor, City of Farmers Branch

**Jewel Woods**  
Citizen Representative, City of Fort Worth  
City of Fort Worth

**John Heiman, Jr.**  
Councilmember, City of Mesquite

**Don Phifer**  
Councilmember, City of North Richland Hills

**Michael Morris**  
Director of Transportation, NCTCOG

**Alice Holland**  
Fort Worth Transportation Authority

**Robert Pope**  
Board Member, Dallas Area Rapid Transit

**Air Transportation  
Technical Advisory Committee**  
Robert Porter  
Chairman

**Surface Transportation  
Technical Committee**  
Wallace Ewell  
Chairman

**Travel Demand  
Management Committee**  
Cliff Franklin  
Chairman

## Contributing Staff

**Michael Morris, P.E.**  
Director of Transportation, NCTCOG

**Mike Morgan**  
Planning Project Manager  
Dallas Area Rapid Transit

**Jacqueline Bell**  
Administrative Assistant II, NCTCOG

**Dan Kessler**  
Assistant Director of Transportation, NCTCOG

**John Debner**  
Planning Engineer  
Texas Department of Transportation

**Vickie Alexander**  
Administrative Coordinator, NCTCOG

**Julie Dunbar, P.E.**  
Principal Transportation Engineer, NCTCOG

**Nassar Askari, P.E.**  
Design Engineer  
Texas Department of Transportation

**Kristy Libotte Keener**  
Graphic Designer, Public Affairs, NCTCOG

**Ken Kirkpatrick**  
Principal Transportation Planner, NCTCOG

**Bharath Vellanki**  
Senior Transportation Planner, NCTCOG

**Randy Renfrow**  
Graphic Specialist, Public Affairs, NCTCOG

**Dan Lamers, P.E.**  
Principal Transportation Engineer NCTCOG

---

## What Is NCTCOG?

The North Central Texas Council of Governments (NCTCOG) is a voluntary association of local governments within the 16-county North Central Texas region. The agency was established in 1966 to assist local governments in planning for common needs, cooperating for mutual benefit, and coordinating for sound regional development. North Central Texas is a 16-county region with a population of 4.6 million and an area of approximately 12,800 square miles. NCTCOG has 227 member governments, including all 16 counties, 161 cities, 26 independent school districts, and 24 special districts.

Since 1974, NCTCOG has served as the Metropolitan Planning Organization (MPO) for transportation in the Dallas-Fort Worth Metropolitan Area. The Regional Transportation Council is the policy body for the Metropolitan Planning Organization. The Regional Transportation Council consists of 37 members, predominantly local elected officials, overseeing the regional transportation planning process. NCTCOG's Department of Transportation is responsible for support and staff assistance to the Regional Transportation Council and its technical committees, which comprise the MPO policy-making structure.

## We would like your comments. . .

If you have questions or comments regarding the transportation and air quality programs of the North Central Texas Council of Governments and the Regional Transportation Council or need additional information, please contact the NCTCOG Transportation Department at **(817) 695-9240**, by **fax at (817) 640-3028**, or via e-mail: **transinfo@nctcog.dst.tx.us**

## Regional Mobility Initiatives Issues

**Advanced Transportation Management, March 1996**

**Air Quality, July 1996**

**Traffic Congestion, October 1996**

**Multimodal Solutions in the North Central Corridor, July 1997**

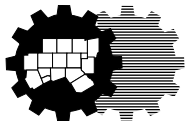
**Toll Roads, February 1998**

**Major Investment Studies, August 1998**

---

*The contents of this report reflect the views of the authors who are responsible for the opinions, findings, and conclusions presented herein. The contents do not necessarily reflect the views or policies of the Federal Highway Administration, the Federal Transit Administration, or the Texas Department of Transportation. This document was prepared in cooperation with the Texas Department of Transportation and the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration.*

---



North Central Texas Council of Governments  
P. O. Box 5888  
Arlington, Texas 76005-5888

---