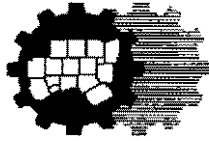


N 2004 NCTOG Metro Transportation Plan - *7. PLAN*
2025 *2025*



North Central Texas Council Of Governments

March 3, 2005

Mr. Ron Whitehead
City Manager
Town of Addison
P.O. Box 9010
Addison, TX 75001-9010

Dear Mr. Whitehead:

The North Central Texas Council of Governments (NCTCOG) serves as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth Metropolitan Area. One of the primary functions of an MPO is to review the transportation and transportation-related air quality needs of the Metropolitan Planning Area and develop a work plan for utilizing federal transportation planning funds to address these needs. The Metropolitan Planning Area for North Central Texas consists of Collin, Dallas, Denton, Rockwall, and Tarrant Counties and portions of Ellis, Johnson, Kaufman, and Parker Counties. As the MPO for the North Central Texas area, NCTCOG has been responsible for the annual development and implementation of the Unified Planning Work Program for Regional Transportation Planning (UPWP). The UPWP documents the metropolitan transportation planning process and planning tasks to be conducted over the course of the fiscal year that utilize federal and other transportation planning funds. NCTCOG staff, in consultation with local governments and transportation agencies, conducts the selected projects. In the event that a planning study requires an area of expertise that NCTCOG staff is unable to address, consultant services may be pursued to assist with the work. In this case, the participating local government or agency may be asked to provide financial support for the project.

The Regional Transportation Council (RTC), as the transportation policy body for the MPO, approves the UPWP for submission to the Texas Department of Transportation (TxDOT), the state agency responsible for managing the metropolitan planning process. A draft UPWP must be submitted to TxDOT by June 1. The Regional Transportation Council will be asked to approve a final UPWP in July. Metropolitan Planning Organizations are permitted to develop two-year Work Programs, and some MPOs across the State have had success in this approach. Pending Regional Transportation Council approval on March 10, NCTCOG plans to submit a two-year Work Program for FY2005-2007.

cc: Glade

Ron :

Chris :

I don't see where this is applicable to us unless we wanted to apply for a bicycle/pedestrian master Plan for the Town. Deadline is April 1st Jim

Emphasis areas within the UPWP include preparation of the Transportation Improvement Program, air quality planning, development and monitoring of the metropolitan transportation plan, and congestion management, all of which are necessary to meet federal MPO planning requirements. In addition, NCTCOG staff will continue its active involvement in a number of transportation and air quality planning areas including: technical support for major corridor investment studies, bicycle and pedestrian planning, intermodal/freight planning, safety, alternative fuels programs, information systems, public outreach and education, travel forecasting model development, and sustainable development initiatives. The emphasis of the UPWP is on planning activities. Projects that require preliminary engineering or design services are not eligible for UPWP funding. Listed below are the NCTCOG Transportation Department Senior Program Managers and their respective areas of responsibility with regard to our planning activities identified in the Unified Planning Work Program:

Dan Lamers, Transportation Planning, 817/695-9263
Ken Cervenka, Information Systems and Model Development, 817/695-9266
Chris Klaus, Air Quality Planning and Operations, 817/695-9286
Mike Sims, Public Outreach and Program Development, 817/695-9226
Ken Kirkpatrick, Fiscal Management and Transit Operations, 817/695-9278

As part of the UPWP development process, local governments and transportation agencies within the Metropolitan Planning Area are asked to review their transportation planning needs and submit projects for potential inclusion in the UPWP. Often, local communities will submit similar project needs, and this allows projects to be combined into larger regional initiatives. Enclosed is a Project Submittal Form to be used by local governments and transportation agencies to request consideration of proposed projects. This form is also provided online at http://www.nctcog.org/trans/work_program/. Local governments and agencies are encouraged to submit proposed planning studies for a 2005-2007 UPWP. The time period covered by this Work Program is October 1, 2005 through September 30, 2007. Since this may be a two-year Work Program, please indicate on the form your anticipated timeframe for project initiation. The 20 percent funding match required for use of federal transportation planning funds will be provided by the Texas Department of Transportation in the form of in-kind staff support to the metropolitan planning process.

An additional federal requirement for the UPWP is that this document includes an inventory of transportation and air quality planning activities taking place throughout the Metropolitan Area, regardless of the agency conducting the work or the funding source. The enclosed form titled, "Planning Studies Inventory," (also provided online at same address as above) should be used to provide information about planning studies of regional significance in which your organization will be involved over the next two years. These studies will be inventoried and included in the 2005-2007 UPWP. We appreciate your cooperation in providing this information.

Submittal forms documenting proposed planning projects and planning studies to be inventoried should be submitted to NCTCOG by Friday, April 1, 2005, in order to be considered for inclusion in the 2005-2007 UPWP.

March 3, 2005

If you have any questions regarding the Unified Planning Work Program, please contact Vickie Alexander, Administrative Program Supervisor, at 817/695-9242. You may also contact the Senior Program Managers named above if you have questions regarding a potential project in a particular area. We appreciate your assistance in the development of this planning document as we continue to address our transportation issues from a regional perspective as emphasized in the Transportation Equity Act for the 21st Century, our guiding legislation.

Sincerely,



Dan Kessler
Assistant Director of Transportation

VA:ac
Enclosures

cc: R. Scott Wheeler, Mayor, Town of Addison
Jim Pierce, Interim Director of Public Works, Town of Addison

Regional Thoroughfare Plan Meeting

Northwest Dallas County

North Central Texas Council of Governments
Transportation Department

Friday, June 20, 2003
9:00 a.m.

Carrollton City Hall
Carrollton, Texas

AGENDA

1. Welcome
2. Introductions
3. Regional Thoroughfare Plan Scope and Purpose
4. Regional Thoroughfare Plan Schedule
5. Thoroughfare Plan Conflict Resolution
6. Question and Answers
7. Adjourn

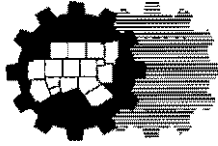
Contact Information

Jeff Neal
Senior Transportation Planner
(817) 608-2345
jneal@nctcog.org

Tim Young
Urban Planner II
(817) 695-9288
tyoung@nctcog.org



North Central Texas Council of Governments
616 Six Flags Drive, Suite 200, Centerpoint Two
Arlington, Texas 76005-5888
<http://www.nctcog.org>



North Central Texas Council Of Governments

June 3, 2003

*Comment on
of lanes
and divided
vs undivided*

Mr. Jim Pierce
Town of Addison
P.O. Box 9010
Addison, TX 75001-9010

Dear Mr. Pierce:

The North Central Texas Council of Governments (NCTCOG) is in the process of creating a 2003 Regional Thoroughfare Plan (RTP) to help ensure regional consistency and cohesiveness among the various local government planning processes. Over the past couple of months, we have collected local government thoroughfare planning documents throughout the region and have begun to update our information systems to reflect this new long-range picture. NCTCOG has identified several potential inconsistencies between municipal and county thoroughfare plans. The time has now come for NCTCOG to meet with the various county and municipal governments regarding the next steps in this process.

We will be conducting a meeting on **Friday, June 20, 2003**, in the Council Briefing Room at the Carrollton City Hall located at 1945 East Jackson Road in Carrollton, Texas. This meeting will cover all of the local governments in the northwest Dallas County area. This meeting will begin at **9 a.m.**, and should conclude by 10:30 a.m.

It is imperative that each city and county has a representative attend this meeting so that the areas you represent will be accurately reflected and included in the regional planning process. Please make every effort to attend. If for any reason your municipality cannot be represented, please contact Tim Young so that other methods of meeting with our staff can be discussed.

If you have any questions or concerns, please feel free to contact Tim Young at (817) 695-9288 or tyoung@nctcog.org.

Jeff Neal
Senior Transportation Planner

Sincerely,

Tim Young
Urban Planner II

TY:cd

cc: 2002-2003 UPWP Element 5.02 Project File
Dan Lamers, NCTCOG
Michael Burbank, NCTCOG
Greg Royster, NCTCOG
Berrien Barks, NCTCOG

**NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS
REGIONAL TRANSPORTATION COUNCIL
PUBLIC MEETINGS**

AGENDA

**Monday, March 31, 2003, 6:30 p.m., Dallas Bachman Recreation Center
Tuesday, April 1, 2003, 4:30 p.m., Fort Worth Intermodal Transportation Center
Wednesday, April 2, 2003, 7:00 p.m., Carrollton City Hall**

1. Welcome/Introductions - Michael Morris
 - Recognition of Kaiden Collier for "Cell Phone Sally" Campaign (April 2 only)
 - Strategic Plan 2003-2007
 - NCTCOG Open House, April 11, 2003

2. Amendments to the 2002-2003 Unified Planning Work Program and Development of the 2003-2004 Unified Planning Work Program - Dan Kessler *Comments 2 weeks*

3. Blueprint for the Future: An Overview of Mobility 2030: The Metropolitan Transportation Plan - Dan Lamers

4. Transportation Funding - Short-Term Projects
 - 2004-2006 Transportation Improvement Program - Dan Rocha *Comments may 1st*
 - Regional Railroad Crossing Reliability Partnership Program - Rachel Harshman/Mike Sims
 - Fort Worth Transportation Authority "the T" FY 2003 Program of Projects - Frank Davis

5. Transportation Partnership Programs - Michael Morris —

6. Opportunity for Public Comment *Comments may 1st*

7. Adjournment

#5 TXDOT/NTTA/Private Sector



North Central Texas Council of Governments

Public Meetings

Monday, March 31, 2003, 6:30 p.m.
Bachman Recreation Center
2750 Bachman Drive
Dallas, Texas 7522

Tuesday, April 1, 2003, 4:30 p.m.
Intermodal Transportation Center
1001 Jones Street
Fort Worth, Texas 76102

Wednesday, April 2, 2003, 7:00 p.m.
Carrollton City Hall
1945 East Jackson Road
Carrollton, Texas 75006

PUBLIC MEETING COMMENT SHEET

I wish to make an oral comment at the public meeting (Please return to Registrar)*

Name _____

Organization _____

Topic _____

***Oral comments will be encouraged throughout the public meeting. Please submit this form if you have a topic-specific oral comment for the record and plan to leave the meeting early.**

I wish to submit a written comment

To submit comments or questions by mail, fax, or e-mail, please return to:
North Central Texas Council of Governments—Transportation Department
P.O. Box 5888, Arlington, TX 76005-5888
Phone: (817) 695-9240
Fax: (817) 640-3028
E-mail: jwalker@nctcog.org
Web-site: <http://www.nctcog.org>

**2002-
2004**

**Transportation
Improvement
Program**

for the Dallas-Fort Worth
Metropolitan Area

North Central Texas
Council of Governments

Introduction: The Transportation Improvement Program (TIP) is a listing of surface transportation projects funded with federal, State, and local funds within the Dallas-Fort Worth Metropolitan Area. The TIP is developed through a cooperative effort of the North Central Texas Council of Governments' Regional Transportation Council, the Texas Department of Transportation, local governments, transit authorities, and other transportation agencies. The TIP contains projects with committed funds over a multi-year period. Project listings are balanced to available resources.

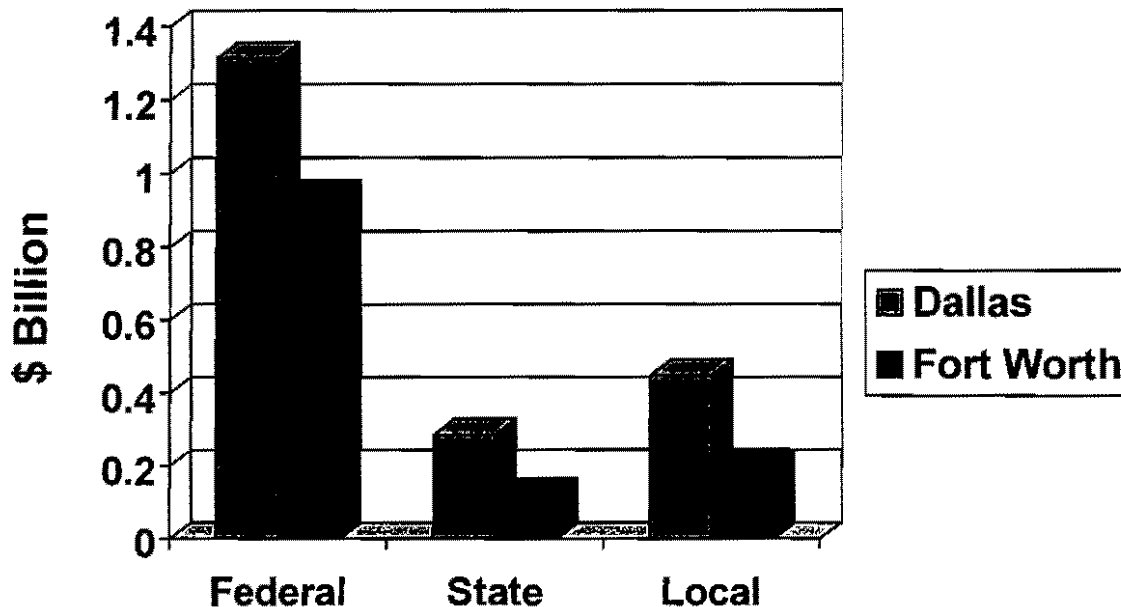
Geographic Area: The TIP is divided into the Eastern Subregion (Collin, Dallas, Denton and Rockwall Counties, northern Ellis County and western Kaufman County) and the Western Subregion (Tarrant County, northern Johnson County and eastern Parker County).

TIP Budget: The Transportation Improvement Program contains project listings totaling \$3.3 billion (highway and transit) in fiscal years 2002-2004. Exhibit A shows the amount of funds in the federal, state and local funding programs in the 2002-2004 TIP.

Key Contacts: Dan Rocha, Principal Transportation Planner
Christie Jestis, Transportation Planner
LaDonna Smith, Transportation Planner
Omar Barrios, Transportation Planner

616 Six Flags Drive, Suite 200, Centerpoint Two
P.O. Box 5888, Arlington, Texas 76005-5888
Phone: (817) 695-9240; fax: (817) 640-3028
<http://www.nctcog.org/trans>

**EXHIBIT A: 2002-2004 Transportation Improvement Program Funding in Federal, State
and Local Funding Programs**



Project Selection Responsibility

MPO-Selected Projects

As the Metropolitan Planning Organization (MPO) for the region, NCTCOG's Regional Transportation Council has responsibility for selecting projects in the following funding categories:

- Surface Transportation Program—Metropolitan Mobility (STP-MM)
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Urbanized Area Formula Program (UAFP)
- Urban Street Program

Texas Department of Transportation-Selected Projects

Except for demonstration projects and the Transit Capital Program, the Texas Department of Transportation (TxDOT) is responsible for selecting projects for all other funding programs. The two local TxDOT districts (Dallas and Fort Worth) in the region have responsibility for selecting projects for various funding sources at the district level, while the Texas Transportation Commission selects projects on a statewide competitive basis. Local governments may submit projects directly for consideration by TxDOT.

Call for Projects / Project Nomination

As funds are available, the Regional Transportation Council, the transportation policy-making body for the Dallas-Fort Worth Metropolitan Area, issues a Call for Projects for selected funding programs to local governments and transportation agencies. Since the passage of the Intermodal Surface Transportation Efficiency Act of 1991, the RTC has issued several calls for projects. After issuing a Call for Projects, the period for receiving candidate project applications

is usually 90-120 days. Projects are screened to ensure that they are appropriate for available funding categories.

Project Evaluation, Prioritization and Ranking

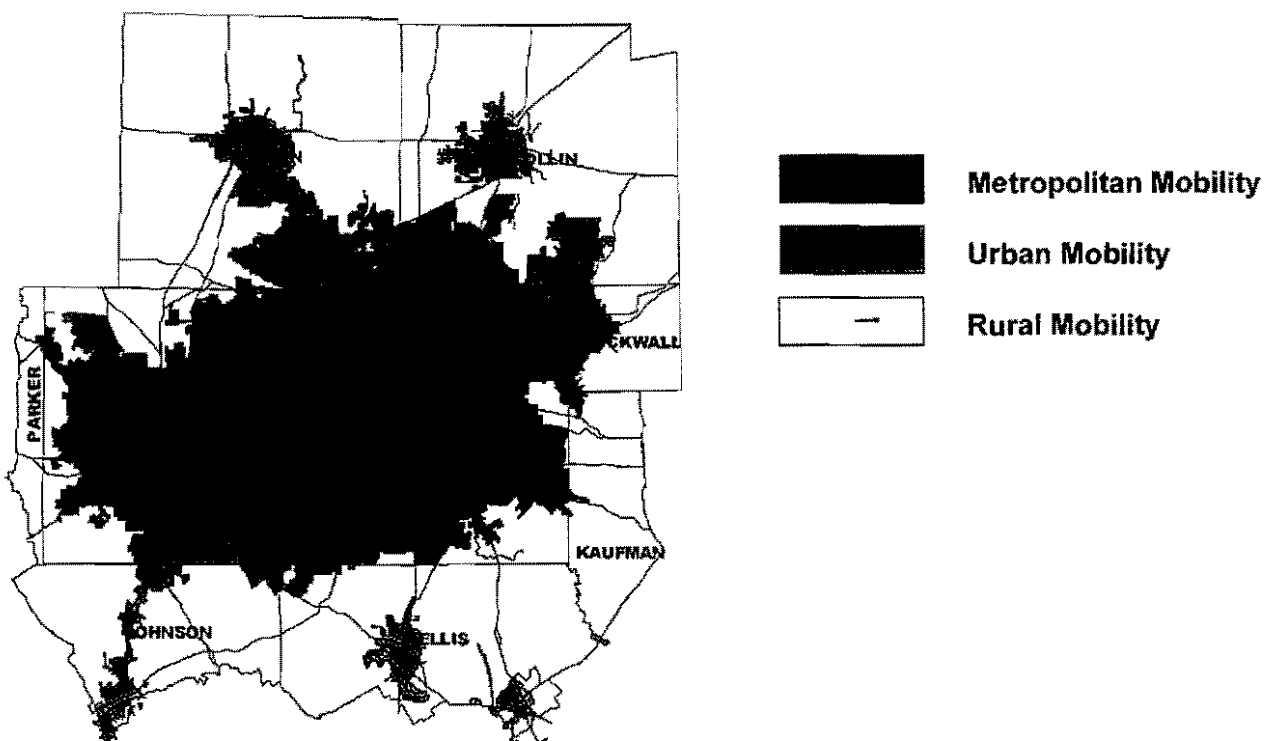
MPO-Selected Projects

NCTCOG first developed project selection and evaluation criteria for the 1993 Transportation Improvement Program. The selection of the criteria was based on surveys of local transportation professionals and elected officials. Twenty-one criteria were included in the survey. Final selection criteria were cost-effectiveness (current and future), air quality/energy conservation, local cost participation, and intermodal/multimodal/social mobility. Specific criteria and weighting values apply to each funding program, as shown in Exhibits C through E. These criteria are updated periodically.

Surface Transportation Program—Metropolitan Mobility (STP-MM)

Within the Dallas-Fort Worth Metropolitan Area, STP funding is provided in three principal categories: the Surface Transportation Program—Metropolitan Mobility (STP-MM) in which funding is allocated to the Dallas-Fort Worth urbanized area, Surface Transportation Program—Urban Mobility (STP-UM) which provides funds for those areas outside the urbanized area but with a population greater than 5,000; and the Surface Transportation Program—Rural Mobility (STP-RM), which includes funding for areas with a population less than 5,000. These funding areas are shown in Exhibit B.

EXHIBIT B: Surface Transportation Program Funding Areas



Projects inside the Metropolitan Area with STP-UM or STP-RM funding are selected by TxDOT in consultation with the MPO. Projects funded under the STP-MM category are the

**2002-2004 Transportation Improvement Program
for the Dallas-Fort Worth Metropolitan Area**

programming responsibility of the MPO in consultation with TxDOT. The majority of improvements funded with the STP-MM program include new roadway construction, roadway widenings and intersection improvements on farm-to-market roads and major arterials.

Calls for Projects in the STP-MM funding program were issued in 1992 and 1999. The next Call for Projects will be issued in 2002, following the redefinition of the Urbanized Area Boundary by the U.S. Census Bureau. The current STP-MM project selection criteria are shown in Exhibit C.

EXHIBIT C: STP-MM Project Selection Criteria

CRITERIA	POINTS
Current cost-effectiveness (1995)	24
Future cost-effectiveness (2020)	18
Air quality/energy conservation (1995)	18
Local cost participation	24
Intermodal/multimodal/social mobility	<u>16</u>
Total	100

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The Congestion Mitigation and Air Quality Improvement Program (CMAQ) provides funds for transportation projects designated by the federal Clean Air Act as being in nonattainment of clean air standards. These projects must contribute to the attainment of National Ambient Air Quality Standards. CMAQ funds are apportioned to the states based on nonattainment area populations and the severity of air quality problems.

Annually, the Dallas-Fort Worth area receives CMAQ funding that must be spent in the four-county ozone nonattainment area consisting of: Collin, Denton, Dallas, and Tarrant Counties. Examples of projects programmed in the 2002-2004 TIP with CMAQ funding include intersection improvements, signal system improvements, park-and-ride lots, high occupancy vehicle lanes, vanpool and rideshare programs, incident detection and response programs, bicycle and pedestrian facilities, conversion of transit buses and other public vehicles to alternative fuels, and transit system improvements. As these projects help to reduce vehicle emissions, many of them are included in the State Implementation Plan.

Calls for Projects in the CMAQ funding program were issued in 1992, 1994 and 1999. The next project call is anticipated to be in 2002, in conjunction with the STP-MM Call for Projects. The current CMAQ project selection criteria are shown in Exhibit D.

EXHIBIT D: CMAQ Project Selection Criteria

CRITERIA	POINTS
Current cost-effectiveness (1995)	20
Air quality/energy conservation (1995)	20
Local cost participation	20
Intermodal/multimodal/social mobility	20
Congestion Management System strategy / Transportation Control Measure	<u>20</u>
Total	100

Urbanized Area Formula Program

Consistent with previous legislation, the Dallas-Fort Worth Metropolitan Area continues to receive Urbanized Area Formula Program (UAFP) funding for transit projects. In addition to UAFP funding for the Dallas-Fort Worth Urbanized Area, the TIP also includes funds for both the Denton and Lewisville Urbanized Areas. Total Urbanized Area Formula Program transit funding for the Dallas-Fort Worth, Denton, and Lewisville Urbanized Areas is dependent upon on Congressional allocations and is about \$40 million annually. Examples of transit projects funded under this program in the 2002-2004 TIP include: bus replacement, vehicle acquisition, park-and-ride facilities, and transit stations.

A Call for Projects in the Urbanized Area Formula Program was issued in 1992. Since that time, project identification and selection have been carried out cooperatively with local transit providers.

Urban Street Program

The Urban Street Program is a TxDOT program providing local entities the opportunity to submit projects for funding consideration. Specifically, the Urban Street Program was established for urbanized areas with populations over 50,000 to reconstruct urban arterial streets that support the state highway system. The types of roadway improvements eligible for funding include arterial street reconstruction and rehabilitation projects. The state has assigned project selection authority for this program to the Regional Transportation Council.

Calls for Projects in the Urban Street Program were issued in 1995 and 1998. Project selection criteria used in those calls are shown in Exhibit E. No further Calls for Projects under the Urban Street Program are anticipated as available funding is fully programmed.

EXHIBIT E: Urban Street Program Project Selection Criteria

CRITERIA	POINTS
Mobility (total dollars per person-mile)	35
Pavement condition index	— 35
Local government objectives:	
Economic Development; Safety; Goods movement; Urban revitalization; Enhanced accessibility; Interjurisdictional project	30
Total	100

TxDOT-Selected Projects

The Unified Transportation Plan (UTP) is used to prioritize projects selected by the Texas Transportation Commission, for inclusion in the TIP. The UTP is a 10-year project listing that guides project planning and development. TxDOT uses various cost-effectiveness indices for a project to determine how it progresses through various stages of project development. According to State law, TxDOT may over-program the UTP by as much as 30 percent. Hence, the UTP may contain additional projects beyond those included in the TIP. Other programs, generally rehabilitation and safety, are selected by the local TxDOT District offices. In order for any of these additional projects to move

forward into the programming and construction stages, they must be included in the Transportation Improvement Program. TxDOT's UTP programming process is currently under review, and changes to the number and type of funding programs are expected.

Air Quality Conformity

The Dallas-Fort Worth Region has been designated as nonattainment for exceeding the pollutant ozone and is labeled "serious" on a scale of marginal to extreme. Many transportation-related control measures in the State Implementation Plan (SIP) are contained in the TIP. As required by the conformity rule, the conformity analysis is based on the most recent planning assumptions at the time and uses the Environmental Protection Agency's mobile source emission factor model MOBILE5 for conformity analysis.

Financial Constraint

As required by the Transportation Equity Act for the 21st Century (TEA-21), the TIP must not exceed available resources. For MPO-selected funding programs, candidate projects compete for funding on the basis of their ranking as determined by the evaluation criteria. Project listings must be balanced to available resources, so only the highest ranked projects are included in the Transportation Improvement Program.

TxDOT selects from projects that have construction authority for inclusion in the TIP, although the project listings are balanced to available funding so that only the most cost-effective projects are selected for the TIP. All TxDOT projects included in the Metropolitan TIP are also included in the Statewide TIP (STIP). TxDOT's UTP programming process is currently under review, and changes to the number and type of funding programs are expected.

Public Participation

NCTCOG and TxDOT hold joint public meetings during TIP development. Numerous other meetings are held during major project selection efforts. The RTC adopted procedures requiring that a public meeting be held 30 days prior to RTC approval of the document with a 10-day written comment period. NCTCOG also relies on the Major Investment Study (MIS) process to accomplish public involvement goals.

Cooperative Decision-Making


Both the Dallas and Fort Worth TxDOT District Engineers are members of the RTC and have representatives on the Surface Transportation Technical Committee. Projects in the TIP that are selected by the RTC are done so in consultation with TxDOT, local governments, and local transportation authorities. Likewise, TxDOT selects projects in cooperation with the MPO. Dallas Area Rapid Transit (DART) and the Fort Worth Transportation Authority (the T) have representatives at all levels in the policy and technical committee hierarchy, and are included in the decision-making process.

Additional Information


Key contact individuals are listed on the first page of this document. The TIP is available in the following formats:


- Printed documents (3-ring binder) and CD-ROMs are available from the Regional Information Center (817-695-9140).
- An electronic document is also available at NCTCOG's Internet site at <http://www.nctcog.org/trans/tip/index.html>.
- The *TIPINS* interactive website is now available, which will allow users to obtain detailed information about funded transportation projects, including the location, the amount of committed funding and the responsible agency. *TIPINS* can be accessed at NCTCOG's transportation library computers, or at <http://www.nctcog.org/trans/tipins/index.html>.

EXHIBIT F: TIPINS Web Site



**Transportation Improvement
Program Information System:
Home Page**







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Welcome to **TIPINS**, NCTCOG's Transportation Improvement Program Information System! These pages are designed to provide information about the Transportation Improvement Program (TIP) projects in the Dallas-Fort Worth metropolitan planning area. Currently, the system includes projects selected or programmed by the Regional Transportation Council; information on TxDOT-selected projects will be available at a later date. [What is the TIP?](#)

Please select one of the following methods to begin your TIP search:



Query using parameters that you input (such as city and project type)



Use **interactive map** to identify projects in your area of interest

STRATEGIC INVESTMENT OPPORTUNITIES



Partnership

The Ninth Annual Presentation
from the Dallas-Fort Worth Metropolitan Area to the
Texas Transportation Commission

March 27, 2003

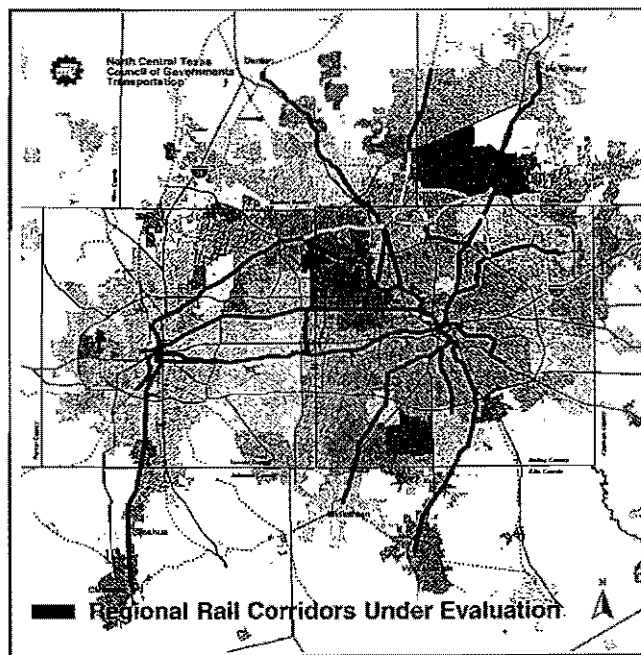
Faced with limited resources and a growing demand for increased transportation system capacity, "strategic investment opportunities" that leverage federal, State, and local transportation dollars should be pursued. This year's presentation by the Dallas-Fort Worth Area Partners In Mobility focuses on what is being planned and financial opportunities for addressing the mobility needs of North Central Texas. It includes critical elements of the region's Metropolitan Transportation Plan, performance of the transportation system, and enhancing partnership funding programs with the Texas Transportation Commission.

Regional Rail System

Mobility 2025 Update: The Metropolitan Transportation Plan calls for the construction of \$49 billion in transportation improvements. The regional rail system is a major component of the region's multimodal transportation system. Dallas Area Rapid Transit's (DART) recent opening of the Northeast Line to Garland and the extension of the Dallas North Central Line into Richardson and Plano, completes 44 miles of the planned 66 mile light rail system, which now serves over 55,000 daily commuters. Efforts are underway to begin construction on two additional radial corridors of the DART system. Future light rail construction is not limited to only the Dallas area, as plans call for the construction of a light rail system in Fort Worth, with the initial construction to serve the central business and hospital districts. The Trinity Railway Express (TRE) commuter rail line connects downtown Fort Worth, Dallas/Fort Worth International Airport, and downtown Dallas. The TRE continues to grow in ridership, with more than 7,500 riders daily. The TRE Line serves as a model for expanding commuter rail, as plans call for 150 miles of additional service.

The Regional Transportation Council,
Metropolitan Planning Organization (MPO)

staff, and the transportation authorities have embarked on an extensive regional rail corridor study to evaluate the feasibility of expanding rail service outside current transportation authority service areas. Ten corridors have been identified for system expansion. Regional policy leaders have also begun a dialogue on future institutional structures to facilitate the construction and operation of additional public transportation services.

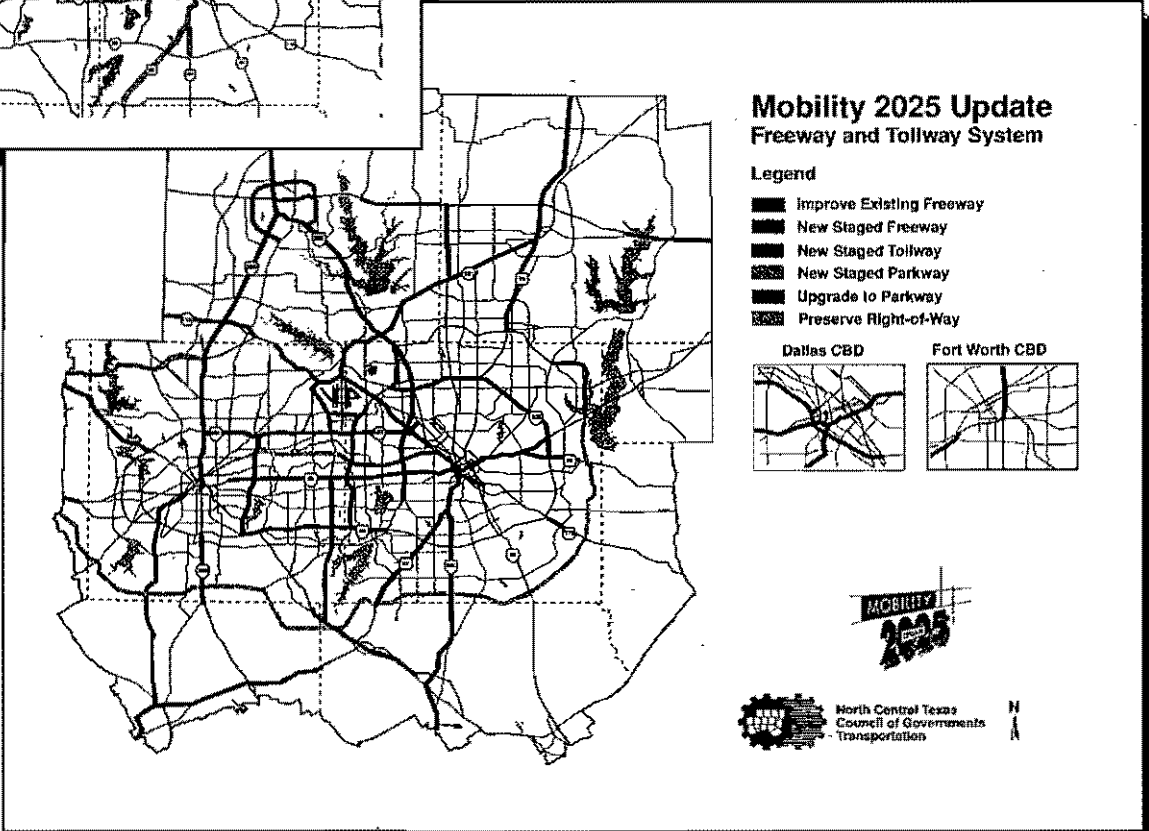
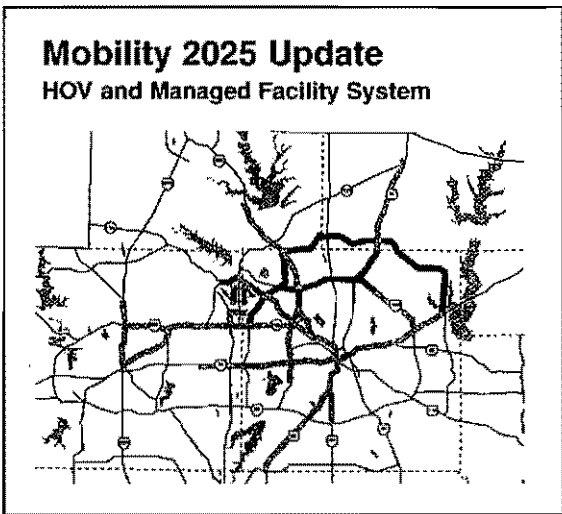


Freeways and High Occupancy Vehicle Lanes

Dallas-Fort Worth residents travel more than 120 million vehicle miles (VMT) per day. Over half of this travel occurs on the freeway network that serves as the backbone of the region's transportation system. By the year 2025, daily VMT is projected to exceed 200 million miles daily. To accommodate this growth in travel demand, the *Mobility 2025 Update* calls for the construction of 2,500 additional freeway miles at an estimated cost of \$11.5 billion. To meet demand in the most heavily traveled corridors, the Plan also calls for the construction of 266 miles of High Occupancy Vehicle lanes. The feasibility of

using value pricing strategies as a mechanism for integrating toll, express, and HOV lanes into a "managed lane" program is currently being evaluated. Collaboration between the Texas Department of Transportation (TxDOT), North Texas Tollway Authority (NTTA), transportation authorities, local governments, and the MPO will continue to be vital in the funding, design, construction, and operation of this system.

More than \$8 billion of major freeway corridor improvements have successfully completed the region's planning refinement process and are now approaching environmental and preliminary engineering approval. Funding partnerships to move these projects forward, and legislative initiatives to generate additional revenues, will be needed in order to facilitate the construction of this system.



Regional Tollway System

Since the Dallas-Fort Worth Area Partners In Mobility first appeared before the Texas Transportation Commission in 1995, 137 new tollway lane miles have been constructed at a cost of \$700 million. Today, daily toll road transactions in North Texas are approaching 780,000 with more than 668,000 toll tag users. Currently, the North Texas Tollway Authority is pursuing the construction of more than \$2 billion of additional tollway construction throughout the Dallas-Fort Worth area. Projects include the 121-T Southwest Parkway, the Trinity Parkway, the extension of the Dallas North Tollway, and construction of the eastern expansion of the President George Bush

Turnpike from S.H. 78 to I.H. 30 and Segment IV from I.H. 35E to I.H. 635. Completion of each of these projects will require close collaboration between TxDOT and NTTA in the design, funding and construction phases.

As the amount of funding available for new freeway construction fails to keep pace with growing travel demand, five principles guide the construction and operation of tollways in North Texas.

All new freeways should be evaluated for tollway feasibility.

Value pricing strategies should be considered to optimize tollway capacity.

Existing free road corridors may ultimately have to become tolled corridors.

Revenues generated from existing facilities are needed to operate and expand the regional tollway system.

North Texas' tollway revenue cannot subsidize statewide roadway construction.

NTTA PLANNED AND PENDING PROJECT COSTS

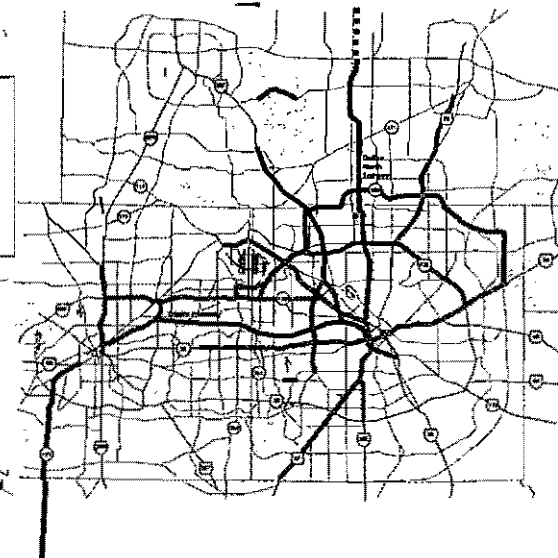
PROJECT (As of March 2003)	ANTICIPATED CONSTRUCTION COST
Dallas North Tollway (S.H. 121 to U.S. 380)	\$160,000,000
President George Bush Turnpike (Segment IV - I.H. 35E - I.H. 635) (Eastern Extension - S.H. 78 - I.H. 30)	\$659,000,000
Lewisville Lake Toll Bridge	\$35,000,000
Trinity Parkway (S.H. 183/I.H. 35E to U.S. 175)	\$670,000,000 to \$1,200,000,000
121-T Southwest Parkway (I.H. 30 to Alta Mesa)	\$239,000,000
2003 Capital Improvement Projects	29,000,000
TOTAL	\$1,992,000,000 to \$2,522,000,000



Dallas-Fort Worth Tollway Status

STATUS
Existing Tollways
Under Construction
Priority Corridors Under Study
Corridors Pending Study
2003 Candidate
HOV/Managed Facilities

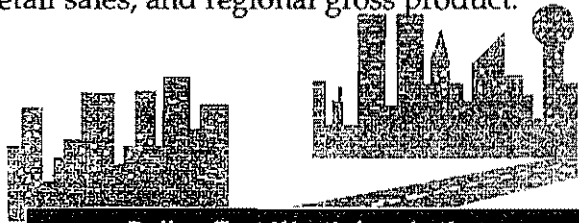
New facility locations indicate transportation needs and do not represent specific alignments.



North Central Texas
Council of Governments
Transportation

Regional Growth and Transportation System Performance

North Texas continues to experience dramatic growth as the area's population now exceeds 5.7 million people. Despite a slowing economy, the year 2002 represented the seventh straight year in which the region's population grew by more than 100,000 persons. Forecasts by the Texas State Data Center project that this growth trend will continue as the North Texas region is expected to reach nearly nine million persons by the year 2030. The Dallas-Fort Worth area continues to lead the State in economic measures including the creation of new jobs, retail sales, and regional gross product.

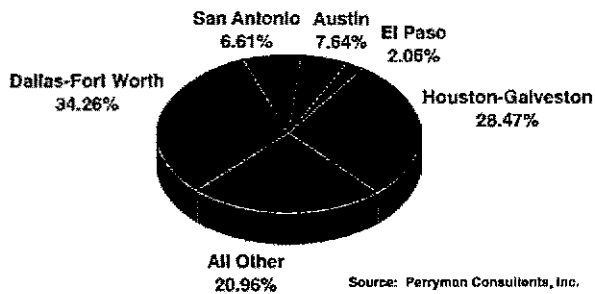


Dallas-Fort Worth Leads the State's Economy with:

- 25%** Texas' Population
- 31%** Texas' Population Growth
- 29%** Texas' Employment
- 34%** Texas' Employment Growth
- 30%** Texas' Personal Income
- 25%** Texas' Retail Sales

Source: Texas State Comptroller's Office
Compiled by: North Texas Commission

2003 Projected Texas Regional Gross Product

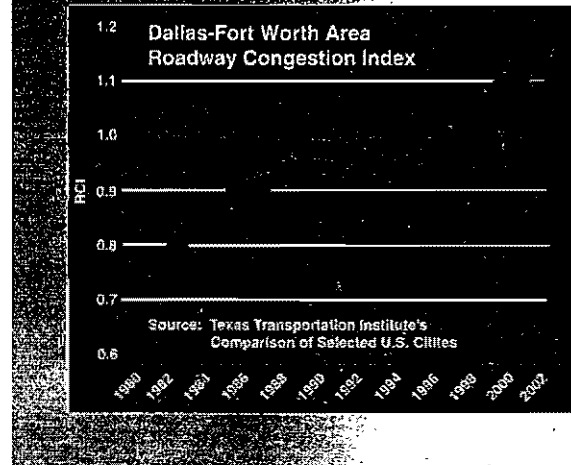


Source: Perryman Consultants, Inc.

Dallas-Fort Worth's National Congestion Rankings

- 3rd** Annual Delay Per Person
- 5th** Annual Total Cost of Congestion
- 9th** Travel Time Deterioration

Source: Texas Transportation Institute's Comparison of Selected U.S. Cities



Source: Texas Transportation Institute's Comparison of Selected U.S. Cities

Monitoring the performance of the transportation system is vital to ensure that the limited funds available for transportation system improvements are used to build, operate, and maintain a safe and efficient transportation system. Securing additional funding for needed transportation improvements is contingent upon providing meaningful performance standards to policy makers who are faced with the difficult challenge of allocating limited resources.

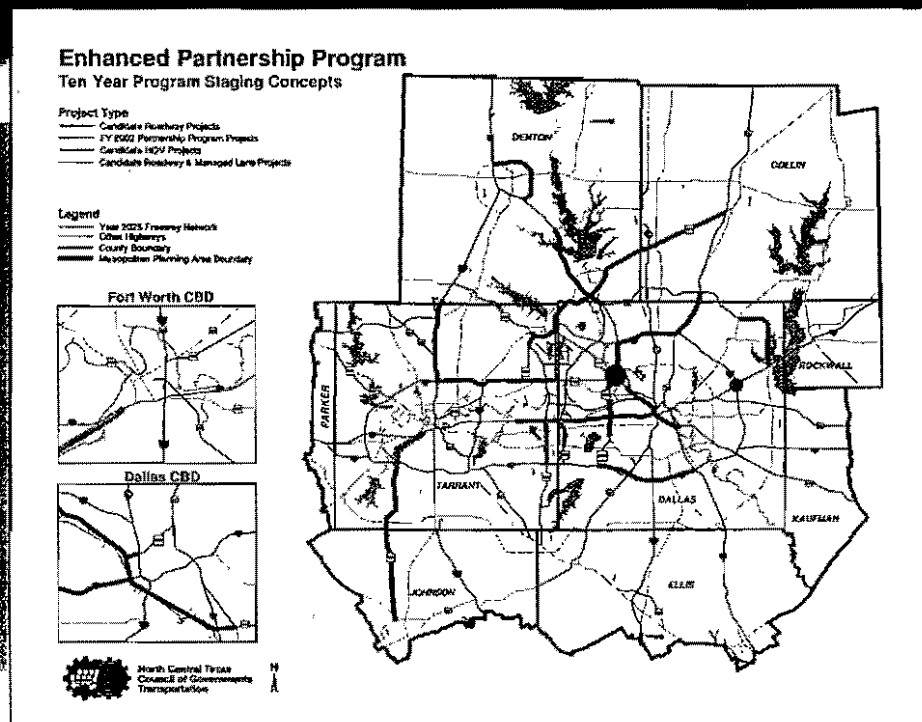
The Texas Transportation Institute's (TTI) Urban Mobility Study annually reports the levels of congestion in major cities across the U.S. Latest study findings support local observations that traffic congestion in the Dallas-Fort Worth area continues to worsen. When compared to other U.S. metropolitan areas, the deterioration of travel time for motorists is alarming and points to the need for expediting construction and expanding traffic management programs across the region.

Enhanced Texas Transportation Commission/ Regional Transportation Council Partnership Program

Since 1995, the partnership between the Texas Transportation Commission and the Regional Transportation Council has been instrumental in funding transportation improvements that otherwise would have been delayed or remained unfunded. However, the dramatic and sustained growth of the Dallas-Fort Worth area, coupled with limited funding, is resulting in higher levels of traffic congestion and a continued deterioration of our air quality. Therefore, an enhanced partnership program that focuses on strategic investment opportunities with major regional mobility benefits is needed.

Major components of this proposed \$3.2 billion Texas Transportation Commission/ Regional Transportation Council Enhanced Partnership Program include:

- ✓ 1. Using "performance based programming" in the TxDOT Unified Transportation Program (UTP) for the geographic allocation of Category Two funds, to determine the appropriate level of funding to the TxDOT Dallas and TxDOT Fort Worth Districts relative to other metropolitan area TxDOT districts across the State
- ✓ 2. Reprioritizing selected TxDOT UTP Priority Two projects to expedite additional or under-funded regional transportation projects
- ✓ 3. Leveraging tollway bond funds to advance collaborative funding between the Texas Tollway Authority and NTTA in constructing regional tollway/managed lane projects in North Texas
- ✓ 4. Allocating \$100 million per year of the Texas Transportation Commission's Strategic Priority funds to the TxDOT Dallas and TxDOT Fort Worth Districts to construct freeway/tollway system improvements
- ✓ 5. Using over \$300 million of federal Surface Transportation Program--Metropolitan Mobility (STP-MM) funds allocated by the Regional Transportation Council in partnership with TxDOT to move forward on the construction of major freeway system improvements



Actions for Commission Consideration

Streamlining and Funding Freeway Construction

Significant progress has been made during the past decade on the detailed refinement of freeway corridor recommendations. The Commission is urged to support TxDOT's initiatives expediting the environmental review, engineering, and design process, thus moving major freeway projects forward to construction.

High Occupancy Vehicle Lanes

More than 260 miles of permanent High Occupancy Vehicle lanes are planned for Dallas-Fort Worth's roadways during the next twenty years. The Commission is urged to fully participate in the design, construction, and operation of these important projects and their potential transition into managed lane facilities.

Regional Rail System/Trans Texas Corridor Integration

Regional rail system expansion is being planned to augment the successful DART light rail and TRE commuter rail systems. The Commission is urged to support TxDOT's participation in evaluating opportunities for integrating the proposed Trans Texas Corridor with passenger and freight rail system in the Dallas-Fort Worth region.

Tollway Participation

NTTA is focused on funding and constructing \$2 billion of additional tollways in North Texas. The Commission is urged to continue the collaborative funding between NTTA and TxDOT in the construction of these facilities, which are vital to improving mobility.

Transportation System Performance

Transportation performance measures are becoming increasingly important in monitoring congestion levels, measuring the benefits of system improvements and guiding future allocations of limited transportation dollars. The Transportation Commission is urged to support the use of performance measures as part of ongoing initiatives to refine TxDOT's Unified Transportation Program.

The TTC/RTC Partnership Program

The Regional Transportation Council is dedicating over \$300 million of Surface Transportation Program-Metropolitan Mobility funds to the Texas Transportation Commission/Regional Transportation Council Partnership Program which will assist TxDOT with the construction of critical mobility projects in the Dallas-Fort Worth area. The Commission is urged to support this highly successful partnership program through allocation of Commission Strategic Priority funding to expedite construction of these projects.

Dallas-Fort Worth Area Partners In Mobility

The Dallas-Fort Worth Area Partners In Mobility is pleased to appear before the Texas Transportation Commission. The Partners In Mobility is a coalition of public and private sector organizations that recognize an increased investment in the surface transportation system is vital to sustaining economic development of the area and preserving the quality of life for North Texans. The delegation's appearance before the Commission on March 27, 2003 marks the ninth consecutive year of the region's presentation to the Commission.

Strong partnerships between the Dallas-Fort Worth area and the State of Texas must be maintained that include visionary plans for the future, strategies for ensuring adequate funding levels to meet our needs, and the implementation of projects and programs that reduce traffic congestion and improve air quality.

Formed in 1995, the Partners In Mobility is a broad-based public-private sector coalition of the North Texas Commission, the Greater Dallas Chamber, the Fort Worth Chamber of Commerce, the Dallas Regional Mobility Coalition, the Western Metroplex Mobility Coalition, and the North Central Texas Council of Governments/Regional Transportation Council. The Partners In Mobility strives to improve regional mobility through effective advocacy, focusing on education, collaboration, coordination, and unity as cornerstones for building regional consensus.

Partners In Mobility Steering Committee

Wendy Davis
Council Member, City of Fort Worth
Western Metroplex Mobility Coalition

Sandy Green
Council Member, City of Dallas
North Central Texas Regional Mobility Coalition

Don Harris
Judge, Collin County
Chair, Dallas Regional Mobility Coalition

Robert Harcourt
President & CEO, Freese & Nichols
Fort Worth Chamber of Commerce

Allan Howeth
Managing Partner, Cantley & Hanger, LLP
Fort Worth Chamber of Commerce

John Murphy
Mayor Pro-Tem, City of Richardson
Co-Chair, Regional Transportation Council
Vice

Joel Novos, P.E.
Hall of Associates
Greater Dallas Chamber

James O'Neal
Mayor Pro-Tem, City of Lancaster
President, NCTCOG Executive Board

Dan Perry
President, North Texas Commission

Paul Wageman
Shareholder, Winstead, Sechrest & Marick, P.C.
Board Member, North Texas Commission

B. Glen Whitley
Commissioner, Tarrant County
Western Metroplex Mobility Coalition

Transportation Providers

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Jeff Egan
Executive Director
Dallas-Fort Worth International Airport

Jerry Hubert
Executive Director
North Texas Tollway Authority

Jay Nelson, P.E.
District Engineer, TxDOT - Dallas District

Dick Ruddle
President/Executive Director
Fort Worth Transportation Authority

Gary Thomas, P.E.
President/Executive Director
Dallas Area Rapid Transit

Partners In Mobility Presenters*

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Mayor, City of Fort Worth

Margaret Kellrel
Judge, Dallas County

Laura Miller
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Consultant, North Texas Commission

Spring 2004



TRANSPORTATION

State of the Region

North Central Texas Council of Governments
Transportation Department

System Performance



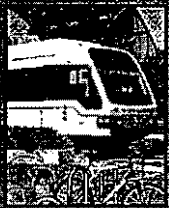
This State of the Region summary provides a report on the performance of the region's transportation system in order to ensure that the limited funding available continues to be invested in projects that contribute the most to moving people and goods efficiently. Identifying the right tools to improve mobility is critical as population and congestion continue to grow. Traditional

freeways offer increased capacity through additional lanes and bottleneck improvements. The region's high-occupancy vehicle (HOV) lanes utilize design and operational improvements to impact travel behavior and increase efficiency. Passenger rail offers an alternative that adds capacity by reducing the number of vehicles on the roadways. Other tools such as Intelligent Transportation Systems

(ITS), Sustainable Development and Congestion Management also contribute to improving the performance of the transportation system. This report summarizes regional progress on implementing a variety of these strategies as well as the impacts on key air quality, safety, economic development and reliability measures.

Transportation Solutions

People Moved During Peak Hours in the Peak Direction



Rail Line **7,374**

A DART light rail transit line is equivalent to a 4-6 lane freeway during the peak period.



HOV Lane **2,362**

HOV lanes carry more people than a traditional freeway lane, move at a faster average speed, and create a faster average speed in adjacent freeway lanes.



Freeway Lane **2,300**

Freeway lanes may be limited by right-of-way availability funding and public acceptance.

On the Cover: The High Five Interchange at Central Expressway and LBJ Freeway in Dallas is one of several major construction projects underway in the region. When complete, this five-level interchange will improve traffic flow through bottleneck removal, HOV travel lanes, additional capacity, improved frontage road connections and a bicycle and pedestrian underpass.



Traffic congestion is one of the greatest challenges facing the Dallas-Fort Worth area. It results in motorist frustration, increased commuting times, loss of productivity, higher automobile insurance rates, increased costs for transporting goods and a deterioration of air quality.

One component of congestion is an increase in daily vehicle miles traveled (VMT) in the Dallas-Fort Worth area. Vehicle miles traveled have increased by over 100 percent since 1980. Population growth, higher employment levels, increases in automobile ownership, and greater suburbanization all contribute to this increase.

Along with increased traffic congestion comes a decline in the performance of the transportation system. Level of Service (LOS) is a standard measure of system performance, determined by measuring the volume of traffic on a roadway and comparing it with the roadway capacity, or amount of traffic the roadway is designed to accommodate. Level of Service is measured on a scale from A to F. LOS A, B, C and D are characterized by slight delays.

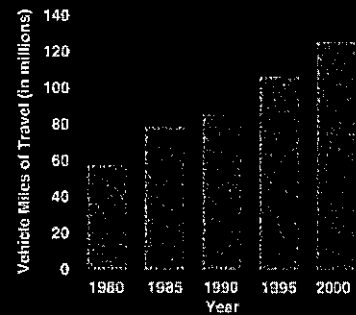
There is cause for concern when roadway conditions approach LOS E and F, which indicate slower moving traffic and, at times, bumper-to-bumper traffic. Low levels of service translate into high levels of congestion. Congestion in the Dallas-Fort Worth area has grown substantially during peak traffic periods. The adjacent chart illustrates the increase in highly congested roadways.

To help alleviate congestion in the Dallas-Fort Worth area, several categories of Congestion Management System projects are being implemented. Such projects include traffic signal and intersection improvements, bottleneck removals and high-occupancy vehicle (HOV) lanes.

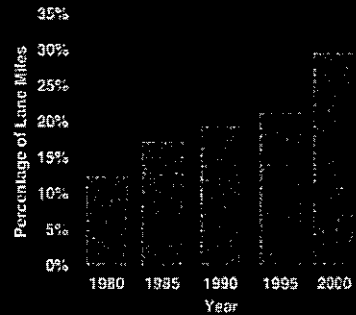
Dallas Area Rapid Transit and the Fort Worth Transportation Authority provide vanpool service to area employers and employees. Almost 200 vanpools operate in the region and reduce vehicle miles traveled by 133,799 each workday. The region has a variety of initiatives geared to increase average auto occupancy and improve congestion.

New funding partnerships are being developed to increase investment in transportation facilities.

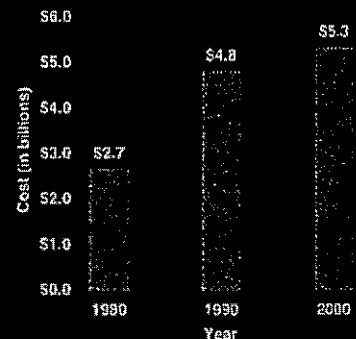
Daily Vehicle Miles Traveled



Percent of Lane Miles Highly Congested



Annual Cost of Congestion



In 2000, the City of Dallas led the nation in percentage of carpoolers with 18 percent of commuters sharing a ride to work.

Source: U.S. Census Bureau, 2000 Census; Dallas Morning News



Fastest Growing Cities in the North Central Texas Region January 2002 - January 2003

By Population Increase

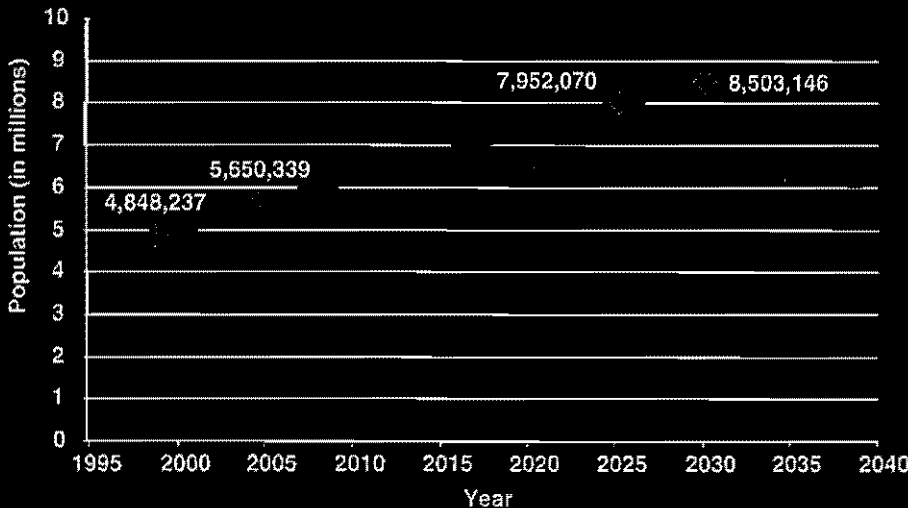
1. Fort Worth	19,750
2. McKinney	8,650
3. Arlington	8,400
4. Dallas	7,950
5. Frisco	5,300
6. Denton	4,400
7. Allen	4,350
8. Plano	3,850
9. Little Elm	3,750
10. Mansfield	3,750

According to the year 2000 Census, the DFW area continued to experience high levels of growth between 1990 and 2000. Collin County experienced the greatest percentage of growth in Texas during that period with an increase of 86 percent. Similarly, Denton County ranked seventh statewide in percentage increase of growth and the former urbanized areas of Denton and Lewisville were combined into a single urbanized area of greater than 200,000 in population. 2003 population estimates show that the four urban counties of Dallas, Tarrant, Denton and Collin have a combined population of 5,069,890. More than 30 percent of the region's growth in 2001 took

place in six cities - Fort Worth, Dallas, Frisco, McKinney, Arlington and Plano.

In recent years, Dallas and Fort Worth have encouraged redevelopment projects in their in-town neighborhoods and the investments are beginning to pay off. The adjacent table shows the fastest growing cities between January 2002 and January 2003. These growth patterns have serious implications for transportation planning and service delivery in the Dallas-Fort Worth area.

Total Population within the Dallas - Fort Worth Metropolitan Planning Area Boundary *
(November 15 Data Shown for Each Year)



Year	Number of Additional Persons
1996	112,175
1997	121,050
1998	136,847
1999	160,750
2000	141,500
2001	152,750
2002	140,000

Regional Population Growth

Sustainable Development



Sustainable development leverages the land use/transportation relationship to improve mobility, enhance air quality, support economic growth, and ensure the financial stability of the transportation system. By focusing on a variety of transportation and growth options, sustainable development offers a wide range of development opportunities for local governments. The Regional Transportation Council recognizes four categories of sustainable development: Strategic Urban Development, Integrated Land Use Planning/Urban Design, Transit-Oriented Development and Access Management.

Some local sustainable development projects include: Addison Circle, Galatyn Park, Cedars Station, Mockingbird Station, and the Plano Transit Center. Each of these projects exhibits elements of planning and development that support multi-modal transportation opportunities such as rail, automobile, bicycle and/or

pedestrian travel. These projects therefore support the air quality and congestion mitigation goals of the region.

In October 2001, the Regional Transportation Council committed \$40 million in federal funds to 19 "Joint Venture" sustainable development projects, nine rail corridor studies, and an outreach program that encourages local governments to participate in sustainable development activities.

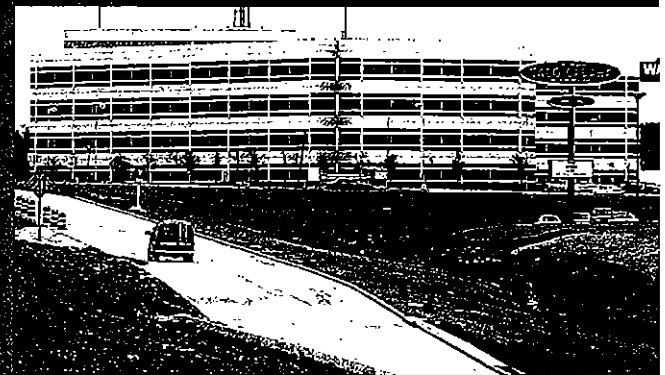
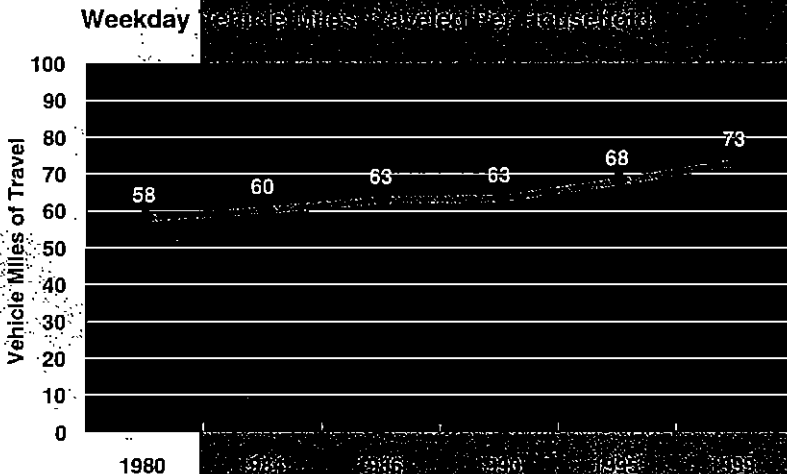
NCTCOG created the Center of Development Excellence in 2002 to support the sustainable development initiative, a comprehensive effort to bring together public and private-sector experts in the environmental, transportation, development, and information analysis fields to address the regional issues and infrastructure concerns of the future.

Staff has worked closely with TxDOT and developer interests to advance innovative access management strategies.



The Downtown Plano Transit Center has revived the heart of Plano through revitalization efforts netting \$34 million in new private investment, including 234 living units and neighborhood retail at the station platform.

RTC funded and TxDOT recently constructed the Cockrell Hill Interchange to spur growth in West Dallas. The previously vacant land was economically depressed and suffered from poor freeway access. Since then, the development community has responded with infill development, including a four-story office building, major distribution facilities, a Lowe's Home Center, a Wal-Mart Super Center, restaurants, and additional office and retail space.



Reliability



Transportation system reliability is affected by the information available to transportation professionals to identify, respond to and mitigate nonrecurring congestion. Accidents, stalled cars, flat tires, and debris in the road are the primary reasons for nonrecurring congestion. These primary reasons are referred to as incidents. Weather and special events such as sporting events and short-term construction can also cause nonrecurring congestion. The Texas Transportation Institute Urban Mobility Study indicates that 52 to 58 percent of delay experienced by motorists in all urban areas is caused by incidents. Components of Intelligent Transportation Systems (ITS) can help minimize delay, in turn making the transportation system more reliable for travelers.

Traffic monitoring and incident detection and response systems are applications of ITS that are operating on portions of the transportation system in the Dallas-Fort Worth area. This work takes place at traffic management centers. The Texas Department of Transportation operated Mobility Assistance Patrols are dispatched for minor incidents such as flat tires or debris. They provide assistance to stranded motorists and remove debris from the roadway before the incident becomes a major traffic distraction. During 2002, the Mobility Assistance Patrols in the Dallas-Fort Worth area assisted more than 51,000 motorists.

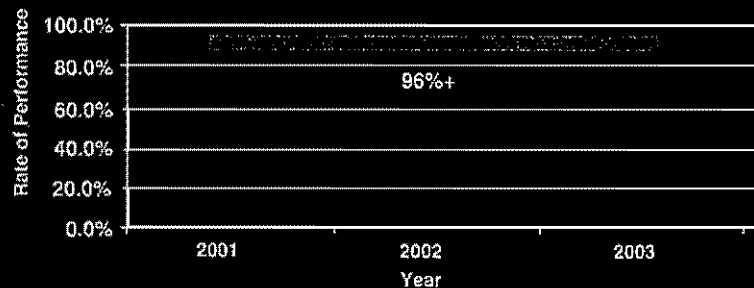
to clear the scene of an incident as quickly as possible, while protecting the safety of the victims and the responders. During 2002, NCTCOG began working on a curriculum for incident responders to be trained on the roles and responsibilities at the scene of an incident. The Dallas-Fort Worth area has invested approximately \$125 million in ITS projects, covering about 350 centerline miles to help improve transportation system reliability in the region. The construction of light rail and regional rail on dedicated rights-of-way increase reliability for the user because of the commitment to on-time performance.

When major incidents occur, many agencies respond to the scene to clear the roadway. The objective is

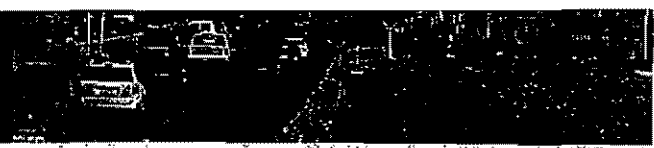


Within the TDM center, there are the Texas Department of Transportation traffic management centers, several city traffic management centers and the Dallas Traffic Management Center. These facilities monitor the traffic management centers regularly to identify incidents and quickly dispatch the appropriate resources and equipment to clear the incident.

Trinity Railway Express (TRE) On-Time Performance



Choices



During 2002 and 2003, many significant transportation improvements came on-line providing citizens with additional options in planning their day-to-day travel, and expanding capacity on some of the region's most important routes.

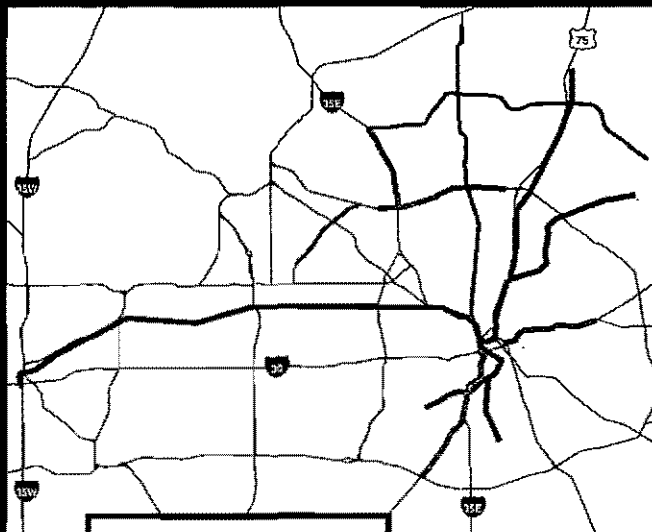
The Regional Transportation Council places a high priority on project implementation, often leveraging the last missing funds or assisting in the final planning steps necessary to move a project forward. While the region's expenditures on new freeway and




other roadway capacity varies from year to year, major Regional Transportation Council partnerships have enabled the region to see a steadily increasing trend in transportation funding.

Also key to expediting projects is environmental streamlining. Transportation and environmental professionals work together with cultural, archeological, historic, and community organizations to review local transportation projects early in the planning process. This allows the region to successfully meet key environmental goals in a timely manner and build a better transportation system.

Tollway, rail and HOV facilities developed through January 2004 demonstrate the hard work and commitment of the Regional Transportation Council to increasing the number of mobility choices, enhancing transportation reliability and improving air quality. Seamless service delivery to all users in an environmentally friendly manner with significant opportunity for flexible urban design amenities brings choice to project implementation.

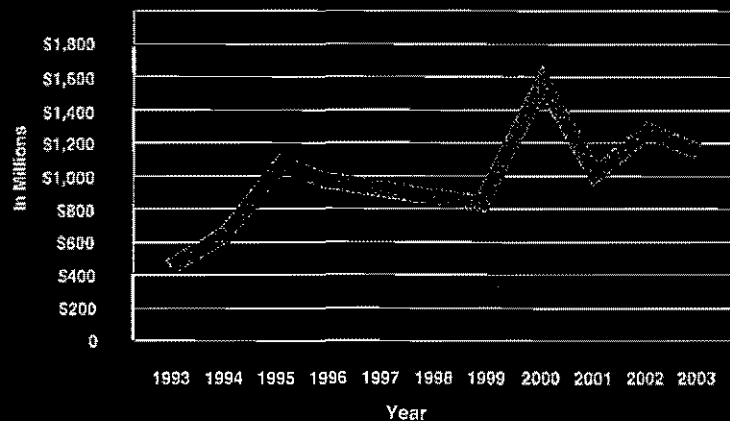
Transportation Choices (January 2004)



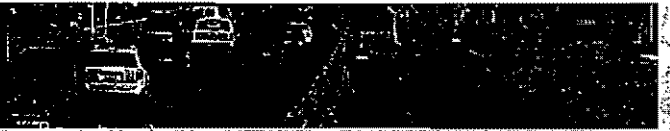
-  Tollways
-  Rail Lines
-  HOV Lanes

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Dallas-Fort Worth Area Transportation Funding



Community Outreach



NCTCOG recently conducted a survey to assess public opinions about a variety of transportation issues. The graphs illustrate nearly 1,300 citizen responses.

Would you support an increase in transportation funding to combat congestion?

Yes	73%
No	11%
Don't Know	14%
No Answer	2%

Do you think greater emphasis should be placed on public transit?

Yes	82%
No	12%
Don't Know	5%
No Answer	1%

Do you support a Regional Transit Authority (RTA) for the region?

Yes	72%
No	14%
Don't Know	12%
No Answer	2%

The Metropolitan Planning Organization functions under a series of federal guidelines established to ensure diverse viewpoints are included in the planning, programming and project development of the region's transportation system.

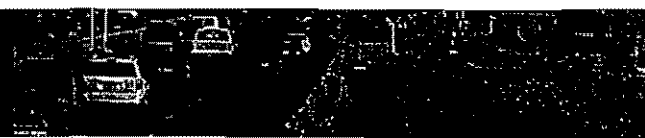
NCTCOG outreach efforts are designed to foster dialogue so the needs of those who are impacted by the system are considered and addressed by policy officials. Outreach activities include:

- Holding quarterly public meetings in geographically diverse locations
- Utilizing a comprehensive mailing list of almost 7,000 individuals and organizations interested in transportation issues
- Publishing a variety of newsletters, reports, planning summaries and other documents
- Conducting surveys to gauge public opinion about transportation issues
- Maintaining the website at www.nctcog.org/trans

of Public Meetings Held by NCTCOG

2000	13
2001	18
2002	12

Public Transportation



Nineteen cities currently pay a sales tax increment to three public transportation authorities: Dallas Area Rapid Transit (DART), Denton County Transportation Authority (DCTA) and the Fort Worth Transportation Authority (The T). Services provided include rail, bus and paratransit, high occupancy vehicle lanes and rideshare services. DART and The T totaled approximately 51.1 million bus boardings during 2002. The first phase of DART's 20-mile light rail starter system opened in 1996. Boardings on light rail were 11.4 million in 2000. The first phase of the 34-mile Trinity Railway Express (TRE) opened in 1996. It was not until 2001 that the downtowns of Dallas and Fort Worth were linked by the TRE. Annual boardings on the TRE were approximately 700,000 in 2000.

In addition to DART and The T, over 75 organizations provide

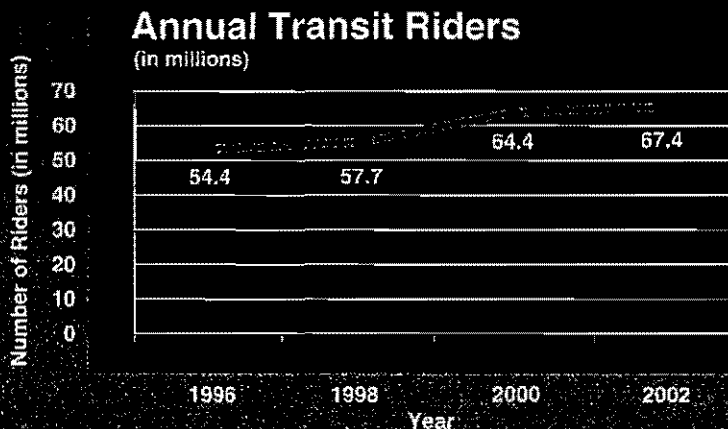
transportation services to the region. Access to the transportation system includes the ability of all populations to travel where they wish to go within the region. This includes access for special populations such as the elderly, low-income and persons with disabilities.

Sixteen transportation providers received federal funding in 2002 of \$760,000, compared to \$676,000 the year before, to subsidize the cost of these customized services. Additionally, services in Johnson County were expanded, partially through a \$500,000 grant awarded through the Texas Transportation Commission.

In Tarrant County, TXDOT has a \$200,000 contract with The T to provide special services for residents of cities that are not members of The T. Almost four hundred people have

registered for this service and the subcontractor, WHEELS, is able to provide 97% of the requested trips. Prior to this partnership, transportation in these cities was available for medical trips only.

NCTCOG, DART, The T and DCTA are currently working on a comprehensive Regional Rail Corridor Study. The study will provide sound data and recommendations to policy officials on how they can best implement passenger rail services throughout the Dallas-Fort Worth region. Study results will refine recommendations for the metropolitan transportation plan, guide future decisions regarding regional rail staging and implementation and outline financial and institutional structures.



Transit rider statistics are based on annual boardings on light rail, regional rail, bus and demand response services for Dallas Area Rapid Transit and The Fort Worth Transportation Authority.

Source: National Transit Database

Safety



Highway safety improvements, which reduce highway fatalities and injuries, include a diverse set of activities implemented by a variety of transportation professionals. Safety improvements are traditionally categorized by the "3 E's" – engineering, education, and enforcement, but other activities, such as emergency medical services and maintenance are also relevant.

NCTCOG has started a program to evaluate the state of the region with regard to highway crashes. In 1999, about 42,000 people were killed in motor vehicle traffic crashes in the United States;

3,500 of these happened in Texas of which 557 occurred in our area. The DFW region has one fatality for every 8,800 residents comparable to the national average of one to 6,600.

In 1999, our regional number of fatalities per 100 million vehicle miles traveled (VMT) was 1.07 and it seems to be continuing to decrease. This means a 13% improvement in the fatality rate and a 7.6% decrease in the number of fatalities compared to the previous year. This is a significant improvement because VMT have increased about 6% in the same time period.

However, the *National Mean Streets 2002* report, which covered traffic incident, demographic and funding data, rated the Dallas-Fort Worth Metropolitan Area as ninth in the top ten most dangerous places for pedestrians in the country.

Overall, the region's collective effort to provide a safer transportation system is a challenging and continuous one. NCTCOG is committed to monitoring a variety of safety factors in order to improve safety throughout the transportation system.

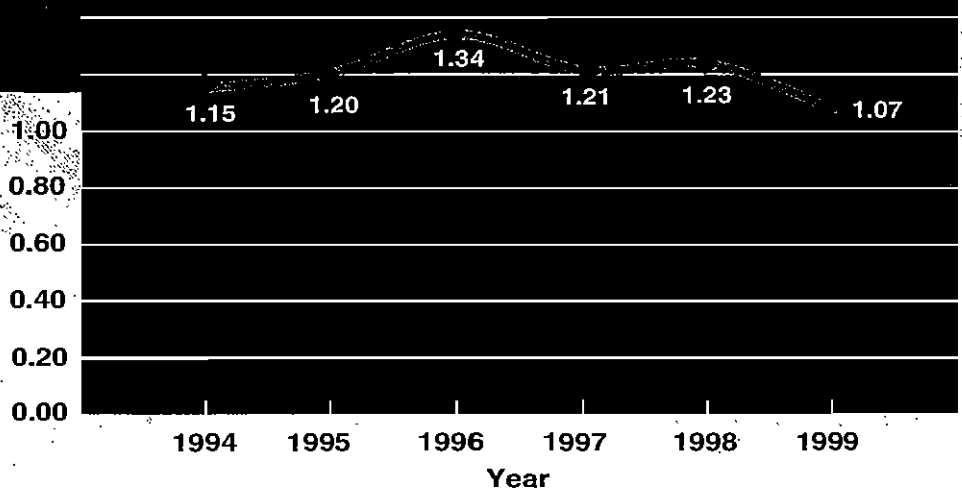
In addition, NCTCOG staff is engaged in the Railroad Crossing Reliability Partnership Program, which will fund nearly \$10 million in rail crossing improvements throughout the region. Eligible projects include the addition of new gates and lights to existing crossings, as well as the closure of crossings that may merit such consideration.



The Bicycle and Pedestrian Transportation Task Force supports a variety of planning and educational initiatives to improve bicycle and pedestrian safety.

Fatality Rate for Roads

Fatalities per 100 Mill



Air Quality



The Regional Transportation Council's aggressive initiatives to fund and support transportation related air quality projects is improving air quality in the region. As the chart below shows, Nitrogen Oxide (NOx) emissions have dropped substantially in the last few years. RTC initiatives account for over 16 tons per day of NOx reductions in the latest analysis provided to the EPA. Overall, the NOx emissions from the region's transportation system have dropped from 318 tons per day in 1996 to 251 tons per day in 2003.

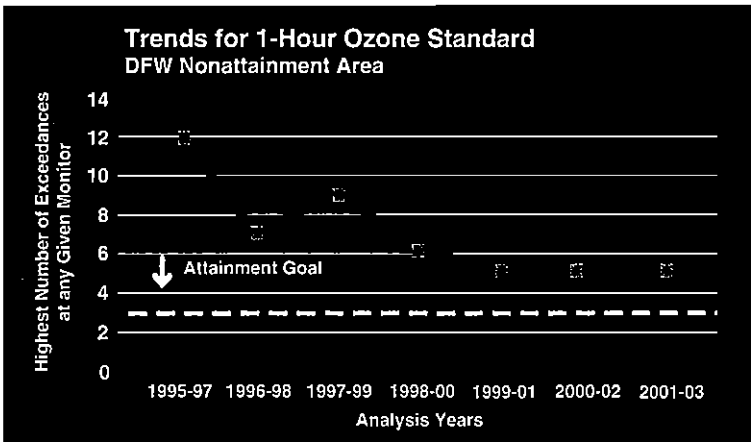
While the Dallas-Fort Worth area is improving, the region still does not meet federal air quality standards for the pollutant ozone. This is a critical issue for the region because high levels of ozone concentrations are damaging to our health and the

environment. High-risk groups include children, elderly, individuals with respiratory problems, and adults who participate in outdoor activities. The financial impact goes beyond health care to include the loss of business and economic opportunities for the region.

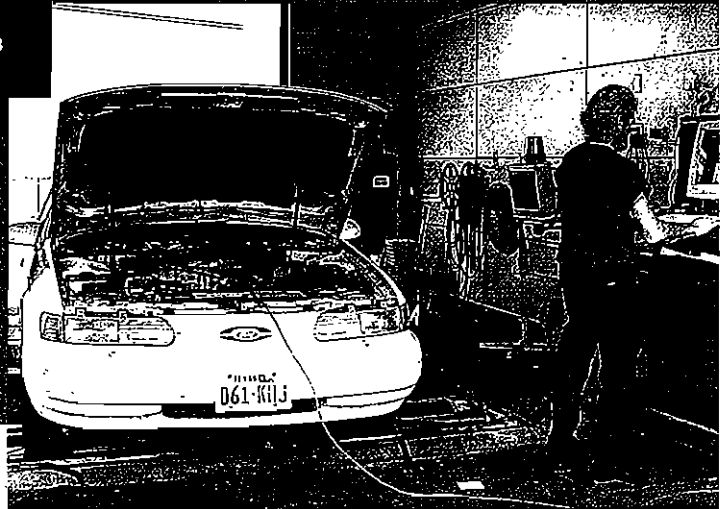
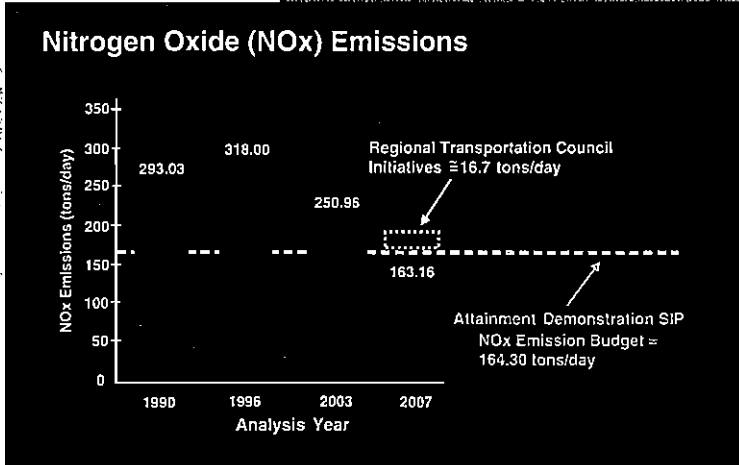
According to the National Ambient Air Quality Standards, attainment under the 1-hour standard is reached when there are no more than three exceedances per monitor within a consecutive three-year period. The chart below depicts the historical trend towards reaching attainment under the 1-hour standard in the region.

Even with the region's growth in population, positive progress has been made toward reaching attainment through the many

RTC-led projects, programs, and policies geared towards air quality improvement. One of the region's most significant initiatives is the expanded Inspection and Maintenance Program in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties. Low-income persons, whose vehicles fail to meet the requirements of the new tests, may be eligible for the newly created AirCheck Texas Repair and Replacement Assistance Program. Additional efforts will focus on diesel engines, high-emitting vehicles, low vehicle speeds, high vehicle speeds, hard accelerations, cold starts and excessive idling.



AirCheckTexas
 Nov. 2002 – Oct. 2003
 3,137 Repairs
 140 Replacements



Aviation



While most U.S. metropolitan areas have water ports that allow domestic and international trade to grow, the Dallas-Fort Worth region has air cargo facilities that must fulfill that role. These facilities provide North Central Texas access to world markets in order to compete for global trade opportunities. The region is home to 16 commercial, general aviation and reliever airports¹, including the nation's third busiest airport (Dallas/Fort Worth International

Airport) and the nation's first major industrial airport (Fort Worth Alliance Airport). In 2001, the Dallas/Fort Worth International Airport Rail Planning and Implementation Study was conducted with the goal of providing "a seamless, customer sensitive, affordable, clearly achievable rail interface between the regional rail system and the DFW International Airport Central Terminal Area." The resulting preferred alternative will provide

regional connections to DFW Airport via commuter rail service on the Cotton Belt line², extended light rail transit service from Dallas and bus connections to the TRE by 2025.³

¹ North Texas Commission. *Dallas/Fort Worth Metroplex: Logistics Center of the Americas*. November 1999.

² DART is studying the extension of the north connection route to the east.

³ *Dallas/Fort Worth International Airport Rail Planning and Implementation Study, Executive Summary*

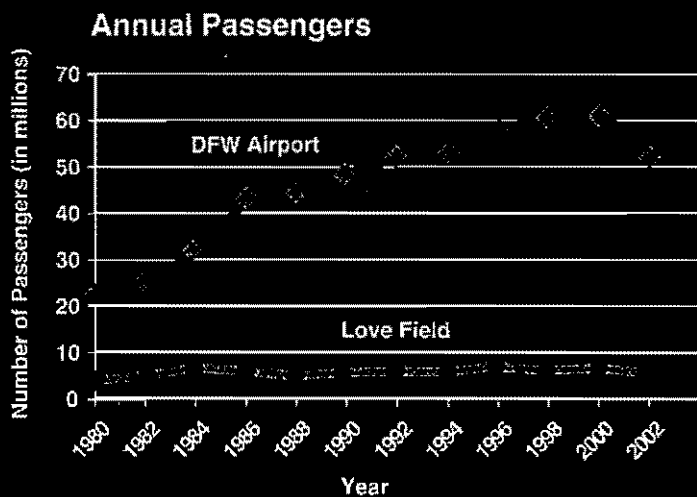
In 2002, Dallas/Fort Worth International Airport averaged 2,300 flights per day. In poor weather conditions, capacity at Dallas/Fort Worth International Airport is approximately 4,400 flights per day.

Top U.S. Passenger Airports - 2002

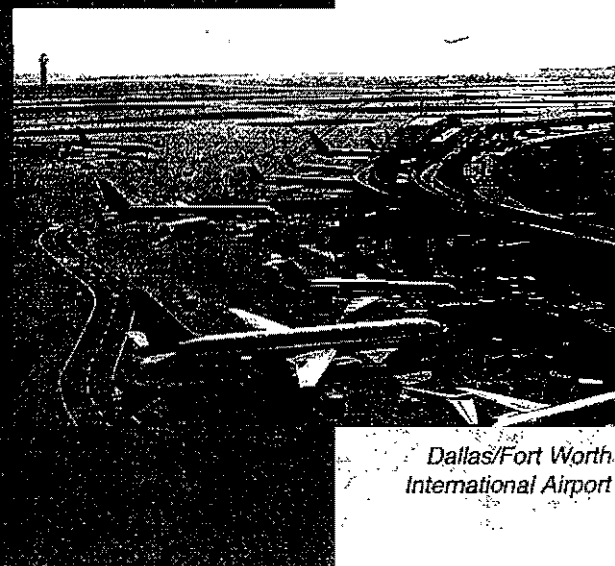
Rank	Airport	Total Boardings
1	Atlanta - Hartsfield	37,070,000
2	Chicago - O'Hare	28,356,000
3	Dallas/Fort Worth	24,072,000
4	Los Angeles	20,320,000
5	Denver	16,054,000

Source: Airport Service Company/Aviation Statistics Group

The Dallas/Fort Worth International Airport is a major hub for American Airlines, Delta Air Lines, and Southwest Airlines. The airport is also a major hub for United Airlines and Spirit Airlines. The airport is the largest in the world by total passenger volume.

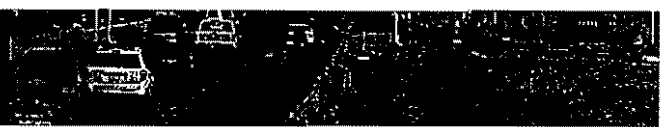


Annual passengers includes boardings, transfers and landings



Dallas/Fort Worth International Airport

Goods Movement



NCTCOG's freight planning addresses the impact of truck traffic, rail freight, and other goods movements in and throughout the Dallas-Fort Worth region. Our region is the largest non-border international port in the nation, where freight is moved, transferred, and distributed to destinations across the State of Texas and around the world. The region's transportation network supports more than 600 motor/trucking carriers and almost 100 freight forwarders' and is considered by most economic and logistics experts as the primary trucking/rail/air cargo center in the Southwest.

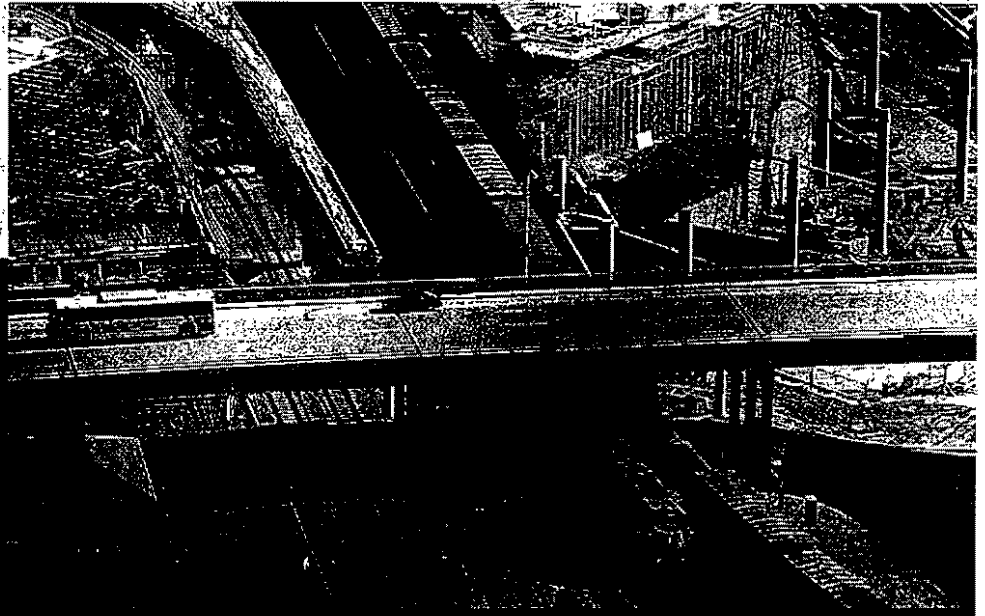
NCTCOG staff has recently undertaken a regionwide Freight Bottleneck Study on behalf of the Regional Transportation Council. This \$500,000 study will investigate both truck and rail bottlenecks in the Dallas-Fort Worth region, as well as provide valuable feedback to the ongoing Regional Rail Corridor Study. Staff will also investigate the improvement of commodity flow modeling and monitor the impact of the North American Free Trade Agreement (NAFTA) and other policies and economic actions. Accessibility to intermodal freight centers will also be included in this planning effort.

In addition, staff from TXDOT and NCTCOG have been coordinating to begin a regional study of the feasibility, applicability, impacts, and effectiveness of various truck management strategies on the region's freeway system. Strategies include idle reduction opportunities, dedicated truck lanes and truck operation guidelines.

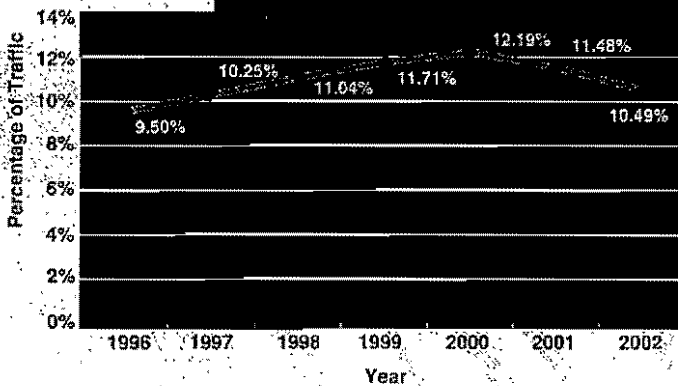
North Texas Commission, Dallas/Fort Worth Metroplex: Logistics Center of the Americas. November 1999

Foreign Trade Zones

- Dallas/Fort Worth International Airport
- Fort Worth Alliance Airport
- Midlothian Trade Zone Corporation



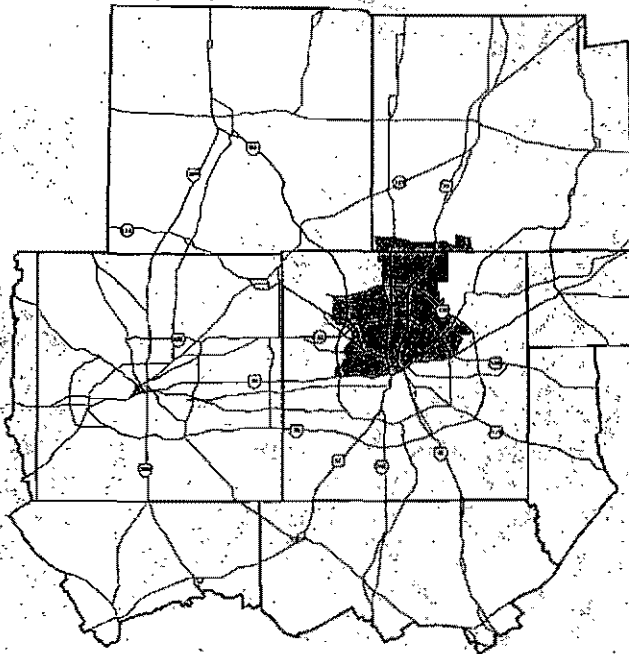
Truck Traffic



Goods movement bottlenecks can sometimes be multimodal in nature. Here, two box-car trains pass a coal train under the Houston Street viaduct on their way to downtown Dallas. At Dallas' Union Station they will meet up with Amtrak, DART Light Rail, and Trinity Railway Express trains at one of the region's multimodal centers.

Source: NCTCOG

*Percentage of traffic on the region's highways which is trucks



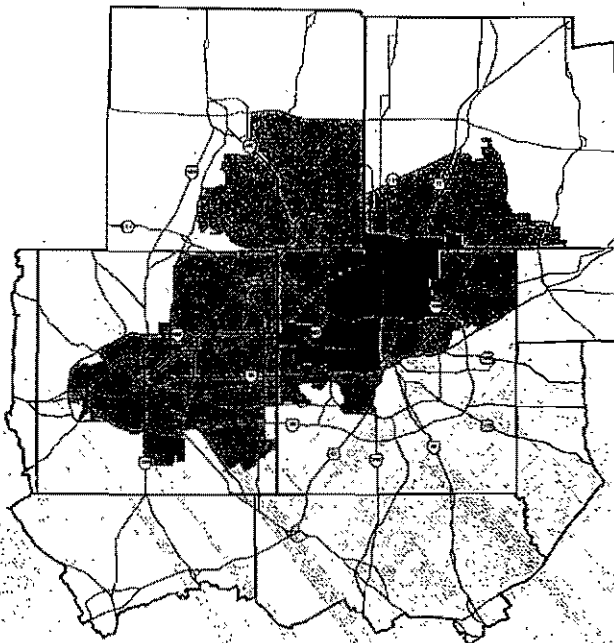
1980 Congestion Levels

Areas of Moderate Peak-Period Congestion

Annual Cost of Congestion = \$2.7 Billion

1980

Understanding the location and nature of traffic congestion is critical in assessing future transportation needs. As illustrated in this graphic, in 1980, traffic congestion in the Dallas-Fort Worth area was limited primarily to central and northern Dallas County. The annual cost of congestion to Dallas-Fort Worth commuters was estimated as \$2.7 billion in lost travel time and productivity.



2000 Congestion Levels

Areas of Moderate Peak-Period Congestion

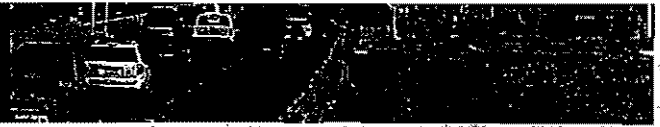
Areas of Severe Peak-Period Congestion

Annual Cost of Congestion = \$5.3 Billion

2000

By the year 2000, traffic congestion in the Dallas-Fort Worth area had changed dramatically. Congestion along U.S. 75, I.H. 635-LBJ Freeway, I.H. 35E-Stemmons Freeway and S.H. 183 in Dallas County had greatly increased. Substantial growth in portions of Collin, Dallas, Denton and Tarrant Counties resulted in traffic levels that had once been confined to North Dallas. The estimated cost of congestion to motorists exceeded \$5.3 billion annually.

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 5.5 million and an area of approximately 12,800 square miles. NCTCOG has 231 member governments, including all 16 counties, 164 cities, 23 independent school districts, and 28 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 40 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.

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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.

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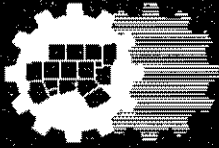
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North Central Texas Council of Governments



The Metropolitan Transportation Plan

Executive Summary

Introduction

Mobility 2025 Update Goals

Transportation

- o Accommodate Expected Demographic Growth
- o Reduce Traffic Congestion
- o Provide Multimodal Options
- o Improve Travel Efficiency

Quality of Life

- o Provide for Continued Economic Development
- o Provide Increased Transportation Accessibility
- o Reduce Environmental and Community Impacts

Financial

- o Pursue Stable, Long-Term Revenue Options
- o Reduce Transportation System Costs

Mobility 2025 Update: The Metropolitan Transportation Plan is a comprehensive, multimodal blueprint for transportation systems and services aimed at meeting the mobility needs of the Dallas-Fort Worth (DFW) Metropolitan Area. It serves to guide the expenditure of the more than \$49 billion of federal, State, and local funds expected to be available for transportation improvements through the year 2025. More than that, it recognizes the heightened awareness of the growing concerns for improved air quality, public acceptance of major transportation facilities, and the need for adequate financial resources for Plan implementation.

Mobility 2025 Update is the product of the comprehensive, cooperative, and continuous transportation planning efforts among local governments, Dallas Area Rapid Transit (DART), Fort Worth Transportation Authority (The T), Texas Department of Transportation (TxDOT), North Texas Tollway Authority (NTTA), Texas Natural Resource Conservation Commission (TNRCC), and the Dallas/Fort Worth International Airport. The Plan Update was adopted in May 2001 by the Regional Transportation Council (RTC) and the Executive Board of the North Central Texas Council of Governments (NCTCOG), together serving as the Metropolitan Planning Organization (MPO) for the DFW Metropolitan Area.

Mobility 2025 is the blueprint for Transportation planning through the year 2025.

The development of *Mobility 2025 Update* was guided by the principles set forth in the Transportation Equity Act for the 21st Century (TEA-21) and the requirements of the Clean Air Act Amendments of 1990. TEA-21 was passed by federal legislators in June 1998 and continues the philosophy set out in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), which strengthened the role of the planning process by making it a central decision-making mechanism for development and funding of the metropolitan transportation system. Because the DFW Metropolitan Area is a designated nonattainment area for the pollutant ozone, the Plan Update must be updated every three years and must demonstrate that its plans, projects, programs, and policies are consistent with State and regional air quality improvement goals.

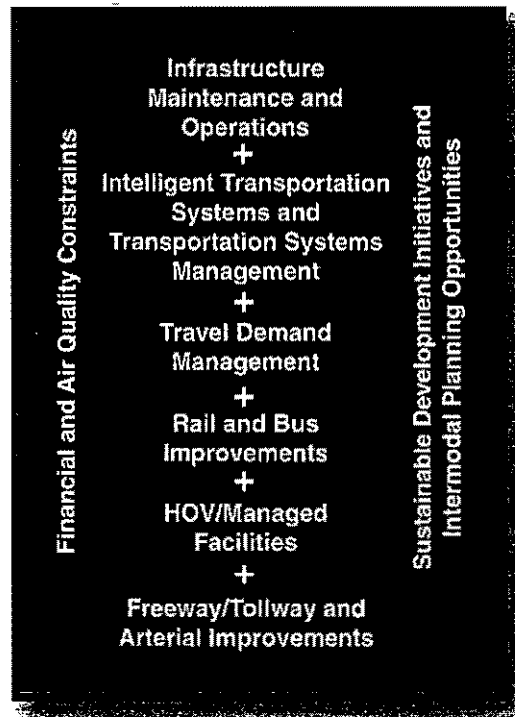
Plan Development Process

Growing concerns regarding the region's air quality and the anticipated lack of funding for future needed transportation improvements, mandated that Mobility 2025 Update be developed in a way that focuses on lower-cost, highly cost-effective strategies before considering more traditional large-scale capacity improvements. Through this process, recommendations were developed which aggressively target traffic congestion and improve air quality for the region.

The Plan Update development process, as adopted by the RTC, began with the allocation of resources for the maintenance and operation of the current transportation system. Then, transportation system management strategies such as freeway bottleneck improvements, intelligent transportation system applications, intersection improvements, and traffic signal coordination were identified to maximize the efficiency of the current transportation system. An aggressive travel demand management program was then developed to encourage strategies such as telecommuting, bicycle, and pedestrian travel in an effort to eliminate as many trips as possible from the transportation system. Additional vehicle trip reductions were targeted through the development of public transportation options, such as bus and rail transit, as well as high occupancy facilities in corridors where feasible. Additional capacity for single-occupant vehicles was identified in the

form of freeway/tollway lanes and arterial street lanes where appropriate.

Throughout the development of each of these components, air quality and financial impacts were evaluated to ensure that financial feasibility and air quality conformity requirements could be met. In addition, consideration was given to sustainable development and intermodal opportunities.

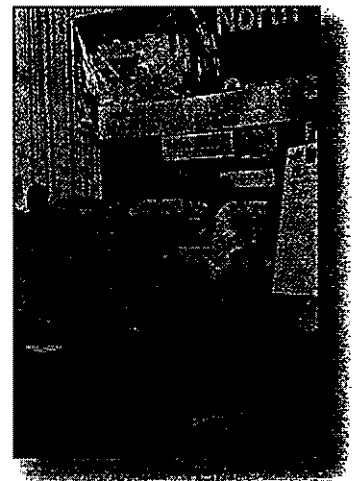


Outreach Efforts

Public involvement was a key component in the development of Mobility 2025 Update. Consistent with the public involvement procedures adopted by the Regional Transportation Council, external public meetings were held on the draft Mobility 2025 Update, and 30 days were allowed for public comment prior to adoption of the Plan Update. There were 10 public meetings held beginning in February 2001 to keep the community aware of the progress and issues associated with the Plan Update development. Three media briefings were provided to inform print and broadcast media of the development of Mobility 2025 Update, encourage attendance and

participation, and to educate the public about Mobility 2025 Update.

Recommendations of the Plan Update were developed under the guidance of the elected officials who comprise the Regional Transportation Council. Technical guidance and support was provided by NCTCOG's Surface Transportation Technical Committee, the Travel Demand Management/Congestion Management System Committee, and the Bicycle and Pedestrian Transportation Task Force.



Regional Growth

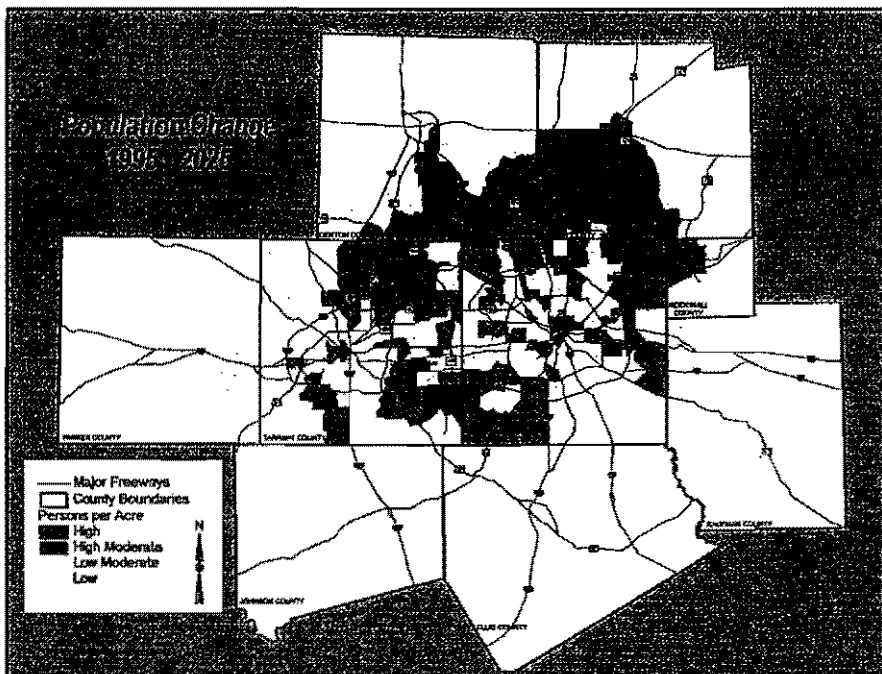
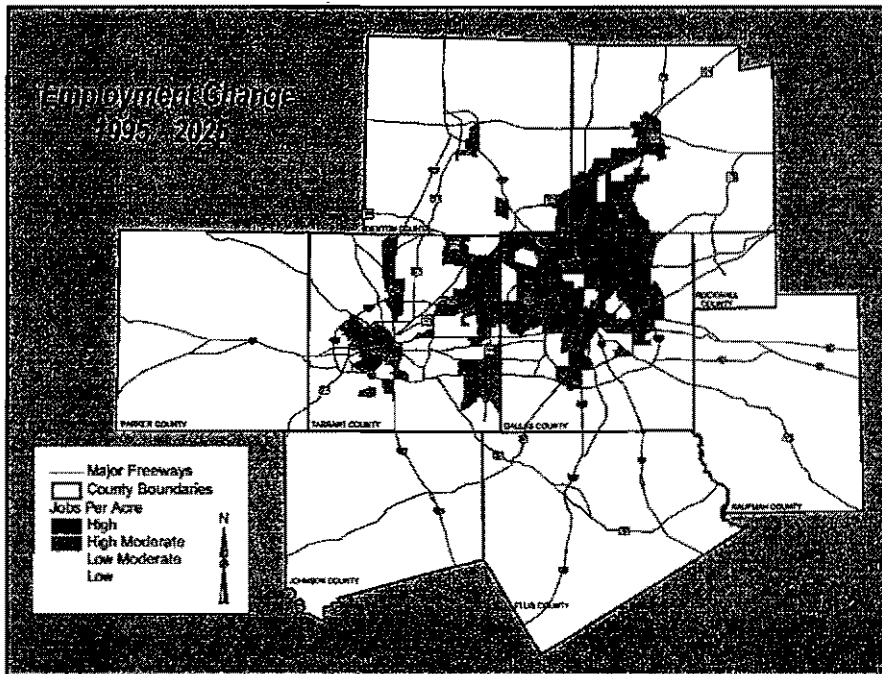
The Dallas-Fort Worth Metropolitan Area was one of the most rapidly growing areas in the U.S. during the 1980s and 1990s. Year 2000 Census data shows that the DFW Metropolitan Area is the ninth largest metropolitan area in the country with a growth rate

more than twice that of the eight larger areas. Larger today in population than 27 states and as the largest metropolitan area in Texas, the Dallas-Fort Worth area is a major economic and social force. Representing approximately one-third

of the State's gross regional product, the region is a national and statewide leader in job growth and is consistently named among the most attractive U.S. metropolitan areas for corporate expansions and relocations.

This trend of rapid growth is expected to continue through the year 2025. According to projections performed independent of the Plan Update by the NCTCOG Research and Information Services Department, population will grow by 47 percent, from 4.5 million to 6.7 million persons, and employment by 45 percent, from 2.7 million to 3.9 million jobs. On average, the region is expected to add population at a rate of 82,000 persons per year and employment at a rate of 47,000 jobs per year. This is equivalent to adding two cities the size of Dallas or four cities the size of Fort Worth.

The dramatic growth of the region will have significant accessibility, mobility, and economic implications. If current travel trends continue, this translates into more travel resulting in increased traffic congestion and negative air quality impacts. These trends include: increases in automobile ownership, drive alone travel, and suburbanization, resulting in more and longer trips. Unless a way to modify the travel characteristics of the residents of the region is found, an already overburdened transportation system will have to absorb this increase in travel. To this end, Mobility 2025 Update contains plans, programs, policies, and projects aimed at balancing transportation and land-use decisions in a way that accommodates the growth while minimizing any negative transportation, air quality, and community impacts. Mobility 2025 Update balances the goals of the region through a diversified approach of short and long-range modal commitments.



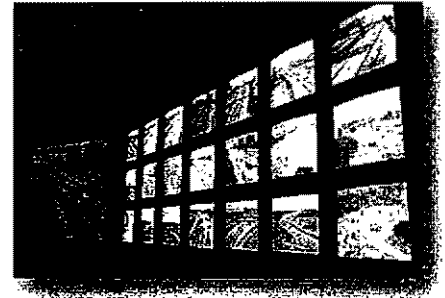
Congestion Management Strategies

The need to operate the current transportation system as efficiently as possible is a top priority, because of the air quality and financial challenges faced by the Dallas-Fort Worth Metropolitan Area. Mobility 2025 Update recommends three types of management approaches proven to be cost-effective tools in addressing these challenges. Travel Demand Management, Transportation System Management, and Intelligent Transportation Systems are very cost-effective, quick-implementation projects, policies, and programs that encourage the use of alternate travel modes and improve the efficiency of the transportation system.

Travel Demand Management (TDM) strategies address the demand side of travel behavior by reducing the number of vehicles that travel on roadways through the promotion of alternatives to driving alone. TDM strategies adopted as part of the Mobility 2025 Update include employer trip reduction programs, vanpool programs, park-and-ride facility development, and transportation management association creation. The employer trip reduction program is a cooperative effort between the public and private sectors that targets commute vehicle trips of employees that work for large employers. Alternatives to driving alone, such as ridesharing, telecommuting, flexible work hour programs, transit pass subsidies, and pedestrian/bicycle facilities are encouraged through the employer trip reduction program. The vanpool program promotes ridesharing alternatives to commuters traveling long distances to work and to those with little or no transit available. This strategy aims at increasing average vehicle occupancy during peak travel periods, thereby decreasing drive-alone travel. Park-and-ride facilities can also be effective in reducing vehicle trips by increasing vehicle occupancy. These facilities serve as collection areas for persons using ridesharing alternatives, the recommended bus/rail system, and

High Occupancy Vehicle/Managed Facilities. Transportation Management Associations are public/private organizations that implement congestion management strategies and other local transportation projects in small, geographically defined areas. Many transportation management associations are incorporated, non-profit organizations made up of employers, developers, building owners, and local government representatives and are located in dense employment areas.

The Transportation System Management (TSM) approach to congestion mitigation seeks to identify improvements to new and existing facilities of an operational nature. These techniques are designed to improve traffic flow and safety through better management and operation of existing transportation facilities. TSM strategies that are adopted in Mobility 2025 Update include intersection improvements, traffic signal enhancements, and removal of freeway and arterial bottlenecks. Intersection improvements, such as turning lanes, grade separations, pavement striping, signage and lighting, bus turnouts, and channelization of traffic, can greatly improve traffic flow operation on arterials and at intersections. Traffic signal enhancements include signal timing optimization, signal equipment upgrades, and system interconnection. Freeway and arterial bottleneck removal consists of improving insufficient acceleration and deceleration lanes and ramps, sharp horizontal and vertical curves, narrow lanes and shoulders,



inadequate signage and pavement striping, and other geometric characteristics.

The planning, programming, and implementation of Intelligent Transportation System (ITS) programs and projects is another tool that is recommended for this region. ITS utilizes closed circuit television, lane control signals, dynamic message signs, ramp meters, mobility assistance patrols, and traffic flow detectors to identify and manage the conditions of the transportation system. The region is developing integrated arterial and freeway/tollway systems along strategic corridors in the DFW Metropolitan Area. The transit authorities in the region, DART and The T, are developing vehicle business systems including computer automated dispatch and automated vehicle locator systems. The roadway and transit ITS systems are being designed to provide operators and travelers with real-time information on system performance, in an effort to make systems safer, more reliable, and to provide greater choices to travelers (trip mode and trip timing).

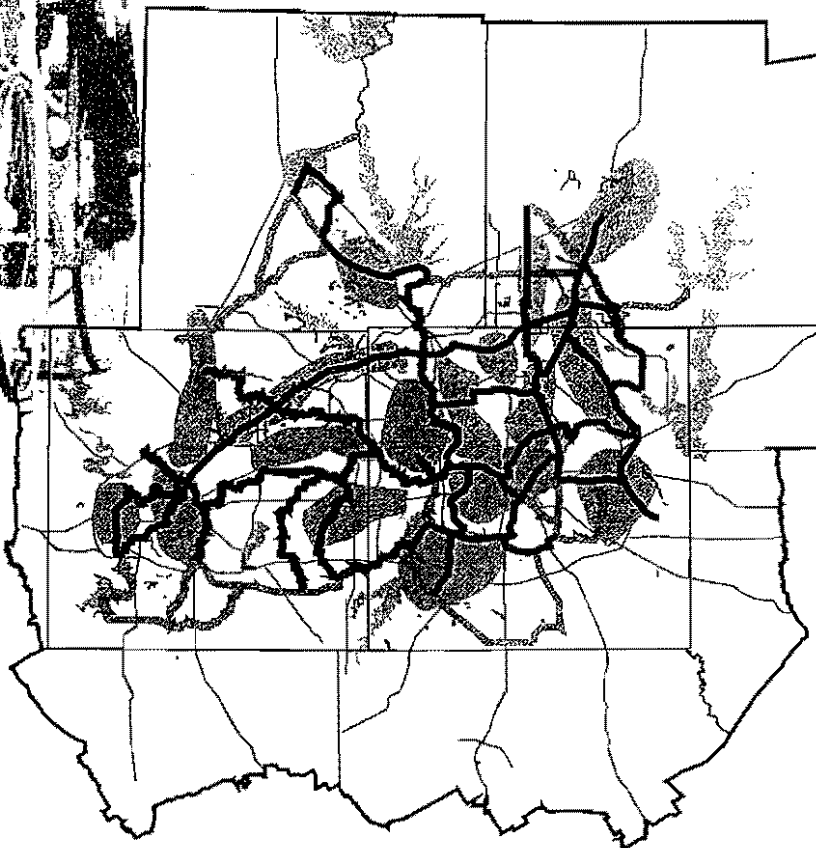


Pedestrian and Bicycle Facilities

One of the goals of the pedestrian and bicycle aspect of the Plan has been to advance these travel modes into more detailed planning, programming, and construction. This portion of Mobility 2025 Update identifies strategies to improve pedestrian and bicycle safety and mobility, as well as increase the service area of bicycle and pedestrian facilities within the region. The recommended facilities were developed to serve short trips, generally less than five miles, particularly in high density areas, mixed-use areas, and along congested travel corridors. The Plan Update calls for \$754 million of improvements including the regional Veloweb system, an on-street bicycle improvement program, pedestrian and bicycle transportation districts, and support for local pedestrian and bicycle initiatives.

The regional Veloweb is a 306-mile system of interconnected, off-street bicycle facilities with grade-separated crossings and pavement

markings designed to serve bicycle commuter traffic. The Plan Update encourages the use of wide outside lanes to increase safety for bicyclists. The Plan Update also endorses the signed on-street route systems of several local governments which identify the network of streets that are preferable for bicycle traffic in their cities. Pedestrian and bicycle districts are areas with activity densities and land-use characteristics conducive to pedestrian and bicycle usage. Funds will be used to improve and enhance the pedestrian and bicycle facilities to accommodate and encourage their use including the construction of on and off-street bicycle facilities, sidewalks, crosswalks, landscaping, and the provision of support facilities such as bicycle racks and shower/changing facilities. In addition, technical support will be provided to local governments for the identification, planning, and implementation of safe, effective pedestrian and bicycle facilities.



Mobility 2025 Update Bicycle Facilities

Legend

- Bicycle Transportation Districts
- Recommended Veloweb Routes
- Candidate Veloweb Routes
- Existing Off-Street Hard Surface Trail (Improved)
- Programmed Off-Street Bicycle/Pedestrian Facilities

New facility locations indicate transportation needs and do not represent specific alignments.

All existing railroad rights-of-way should be monitored for potential future transportation corridors.

All veloweb routes should be targeted for right-of-way preservation.



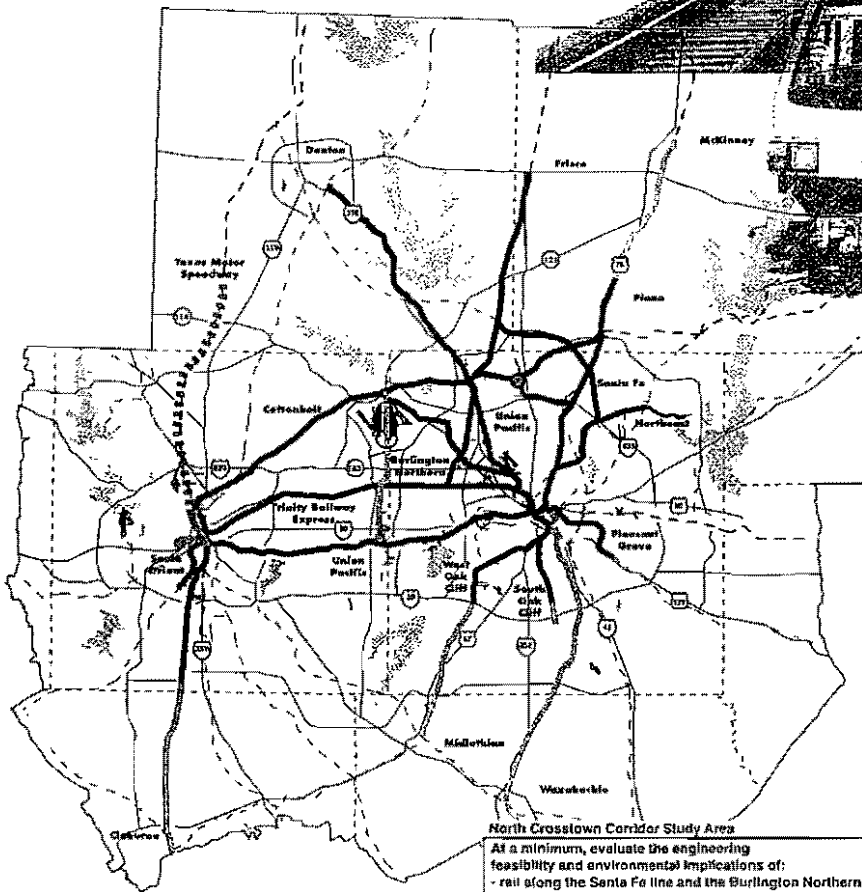
North Central Texas
Council of Governments
Transportation



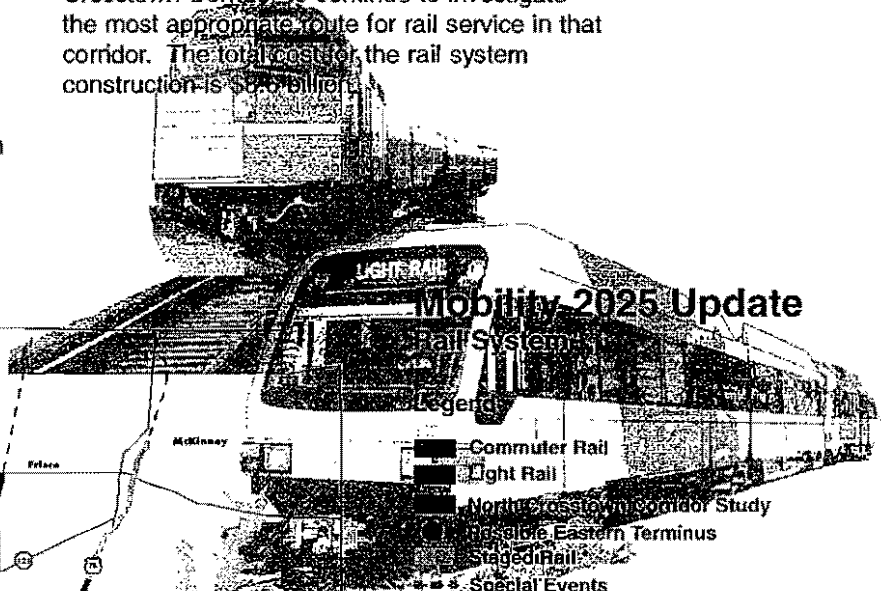
Regional Rail and Bus Transit Systems

The transit component of the Plan includes local bus, express bus, commuter rail, light rail, and rail technologies yet to be determined. Currently, each one of these technologies exists in various parts of the region. The Fort Worth Transportation Authority and Dallas Area Rapid Transit currently provide traditional fixed-route transit service in their respective service areas. The City of Denton also operates limited fixed-route transit service. Currently, 34 miles of light rail service is available in the DART service area in the North Central Expressway corridor, the South and West Oak Cliff corridors, and in downtown Dallas. DART and The T jointly operate 25 miles of commuter rail service on the Trinity Railway Express. Analysis of the rail and bus transit systems for the Plan focused on the extension and expansion of each of these modes as appropriate.

A series of rail alternatives was developed and evaluated to arrive at the final recommendations which include 77 additional miles of light rail, 152 additional miles of commuter rail, and 141 miles of rail where the technology or institutional structure to implement and operate the service is undefined pending additional study. Also included is a recommendation for 25 miles of special events service to the Texas Motor Speedway from Fort Worth. In addition, a recommendation is made in the North Crosstown Corridor to continue to investigate the most appropriate route for rail service in that corridor. The total cost for the rail system construction is \$3.6 billion.



North Crosstown Corridor Study Area
 At a minimum, evaluate the engineering feasibility and environmental implications of:
 - rail along the Santa Fe line and the Burlington Northern line, including the feasibility of an alternative connection along S.H. 190;
 - rail along the full Cottonbelt Corridor, from Parker Road to DFW Airport; and
 - rail along the Cottonbelt Corridor from DFW Airport with an eastern transition to light rail along LBJ Freeway at an Addison Intermodal Center.



Mobility 2025 Update Rail System

- Legend**
- Commuter Rail
 - Light Rail
 - North Crosstown Corridor Study
 - Possible Eastern Terminus
 - Staged Rail
 - Special Events
 - Intercity Rail Corridor
 - Freeways/Parkways
 - Existing Rail Corridors

All existing railroad rights-of-way should be monitored for potential future transportation corridors.

New facility locations indicate transportation needs and do not represent specific alignments.

- * **STAGED RAIL**
 (Must meet two of the following)
 Refined rail forecasts are necessary to determine technology and alignment
 Extension into Olympic Village Site (South Oak Cliff LRT)
 Institutional structure for implementation to be determined
 - DART and FWTA expansion (preferred) or New transit authorities will be created
 - Other sources of funding to be pursued



North Central Texas Council of Governments Transportation

HOV and Managed Facilities

High Occupancy Vehicle (HOV) lanes are becoming a common solution toward reducing freeway congestion across the country, including the Dallas-Fort Worth Metropolitan Area. The key to a successful HOV facility is to manage the demand so that it never exceeds the capacity, thereby maintaining a high level-of-service. The HOV concept is to move the same, or more, people in fewer vehicles faster and more reliably than a typical congested freeway lane. However, one common criticism regarding HOV lanes is the perception that they do not carry as many vehicles as a mixed-flow lane and are often underutilized in the off-peak periods. In response to this issue, Mobility 2025 Update extends this managed concept to efficiently utilize the capacity in the off-peak periods by treating them as express lanes for non-HOV users, but still managing the demand by charging a user fee or toll.

Two types of HOV/Managed Facilities are identified in Mobility 2025 Update: Reversible and Two-Way. Reversible facilities are recommended in corridors

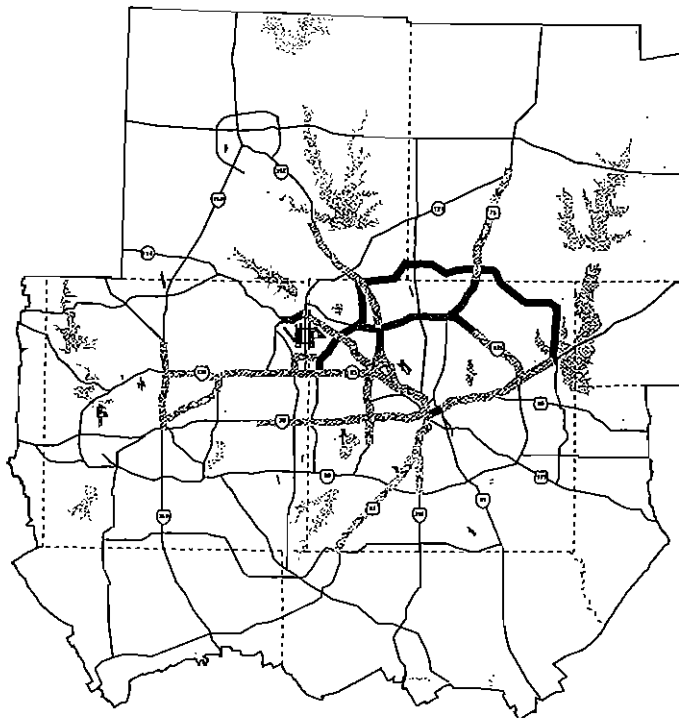
where the HOV demand is directional; heavy in one direction during the morning peak period and the opposite direction in the evening peak period. On these facilities the number of lanes required to accommodate the peak-period demand in the peak direction are constructed. They offer ramps and gates that only allow traffic to enter and exit in the proper direction during the appropriate time period. At some point during the day, the lanes are closed to allow those access points to close and those necessary to accommodate the traffic in the reverse direction to open. Two-Way facilities are recommended where the HOV demand warrants providing the capacity in both directions during the morning and evening peak periods. These facilities are available in both directions for the entire day.

The managed concept can also be applied to existing or proposed tollways through differential tolls charged by auto occupancy. In this scenario, a higher toll could be charged to non-HOV users, a lower or no toll could be charged to HOV users, and a toll plaza bypass lane could be offered

for qualified vehicles to avoid the delay at toll booths. This type of facility is identified in Mobility 2025 Update as a Managed HOV/Integrated Tollway.

This Managed Facility concept is proposed because a properly operated facility would provide relatively congestion-free travel through an auto occupancy and toll management approach. HOV facilities can be built which provide travel time advantages to those willing to carpool, vanpool, or take public transportation, while providing a revenue source to offset construction and operating costs. In addition, tollways can be built which generate revenue, and vehicle occupancies are increased through toll management strategies designed to encourage carpools and vanpools.

Mobility 2025 Update contains recommendations for an extensive HOV and Managed Facility system. The Plan Update calls for constructing the equivalent of over 600 lane miles of HOV/Managed Facilities at a cost of \$2.1 billion.



Mobility 2025 Update HOV and Managed Facility System

Legend

- Reversible
- Managed HOV/Integrated Tollway
- Two-Way
- Freeways/Parkways

Arrows represent the direction of travel during the morning peak period. Direction of travel is reversed during the afternoon peak period on these HOV facilities.

Right-of-Way preservation should be encouraged in all freeway corridors to accommodate potential future HOV facilities.

New facility locations indicate transportation needs and do not represent specific alignments.

All HOV facilities will be managed for mobility efficiency.



Freeway/Tollway System

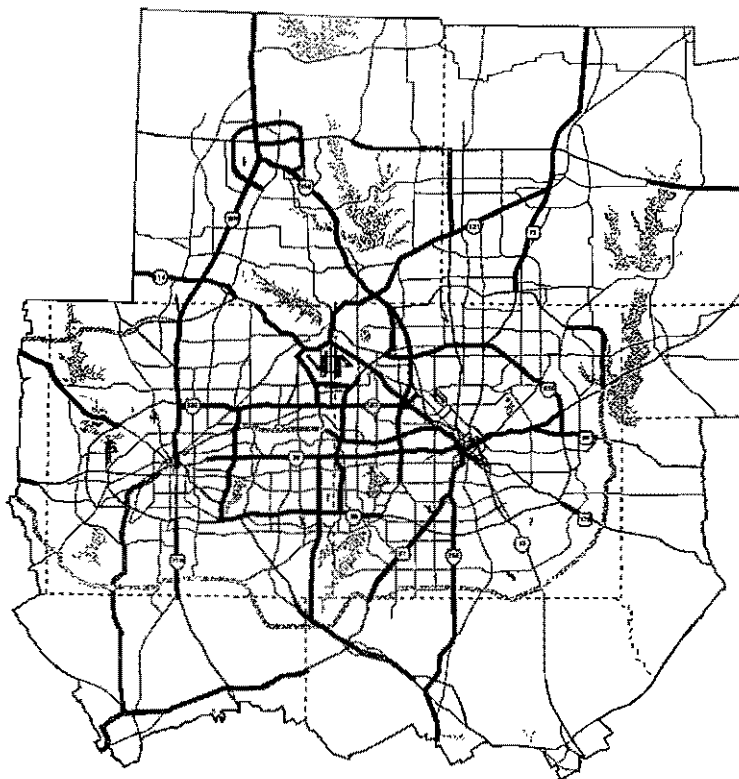
A major component of the Dallas-Fort Worth Metropolitan Transportation System is the regional freeway and tollway system. The system continues to carry nearly half of all vehicular travel in the area. Even considering the availability of other multimodal options and advanced traffic management strategies, there will still be significant demand placed on the region's roadway system. Mobility 2025 Update calls for the addition of 2,479 lane miles of new freeway/tollway capacity at a cost of \$11.5 billion and \$1.3 billion is expected to come from tolls and user fees. Mobility 2025 Update faces the challenge of balancing a huge demand on an already over-used system, with constrained funding resources from traditional fuel tax and vehicle registration fee revenues. Over the past few years, the idea of user-fee based roadways has been growing in popularity and acceptance. To that end, it is the Regional Transportation Council's policy to evaluate toll or congestion pricing feasibility for new

freeway capacity. The RTC is not considering conversion of existing free roadways to tollways.

There are six categories of improvements identified for the freeway and tollway system outlined in Mobility 2025 Update. Improving Existing Freeways includes the widening of existing freeways by adding two or more lanes or the reconstruction of existing freeways to add additional capacity through bottleneck improvements as well as accommodating other improvements. New Staged Freeways are in corridors where there is currently no freeway, but one is warranted by 2025 and could be constructed in stages as the demand warrants. The New Staged Tollway category identifies corridors where revenue estimates support for the construction of new tollway capacity by 2025. New Staged Parkways are facilities that have sufficient demand for a major transportation facility, but not a full freeway or tollway.

Service roads, interchanges, or grade separations could be constructed initially. In addition, these could be planned and designed in such a way to convert them to a freeway or tollway at some time after 2025. The Upgrade to Parkway category identifies corridors where an arterial roadway exists today, but demand by 2025 is sufficient to require the additional capacity offered by a regional facility. The final category is Preserve Right-of-Way, where demand is not expected to be strong enough to warrant the construction of a transportation facility, but the corridor should be preserved for future system capacity.

The development of the projects in these corridors will move forward toward implementation and will be refined as the corridors proceed through the advanced planning, design, and engineering phases.



Mobility 2025 Update Freeway and Tollway System

Legend

- Improve Existing Freeway
- New Staged Freeway
- New Staged Tollway
- New Staged Parkway
- Upgrade to Parkway
- Preserve Right-of-Way

Dallas CBD



Fort Worth CBD



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

New facility locations indicate transportation needs and do not represent specific alignments.

The need for additional east-west capacity is identified in the corridor between Northwest Highway and Mockingbird Lane from US 75 to SH 183/35E. Further study is needed to refine alignment and operational characteristics.



North Central Texas
Council of Governments
Transportation



Regional Arterial System

The Regional Arterial System is a subcomponent of a broader regional thoroughfare system. The NCTCOG Regional Thoroughfare Plan (RTP) recognizes the network of arterial facilities having regional travel significance upon which the Regional Arterial System is based. The RTP includes all roadways classified as principal arterials through the TEA-21 functional classification effort, as well as the National Highway System (NHS). In addition to the basic framework of federally designated facilities, complementary local government principal arterials are incorporated to complete the 1,731 miles of regional arterials. The only changes incorporated since the January 2000 adoption of the regional arterials were those identified through the Mobility 2025 Update public meetings in spring 2001 where one modification was made to the Regional Arterial System at the request of a local government. Another six regional arterials incorporated minor changes to the proposed number of lanes that

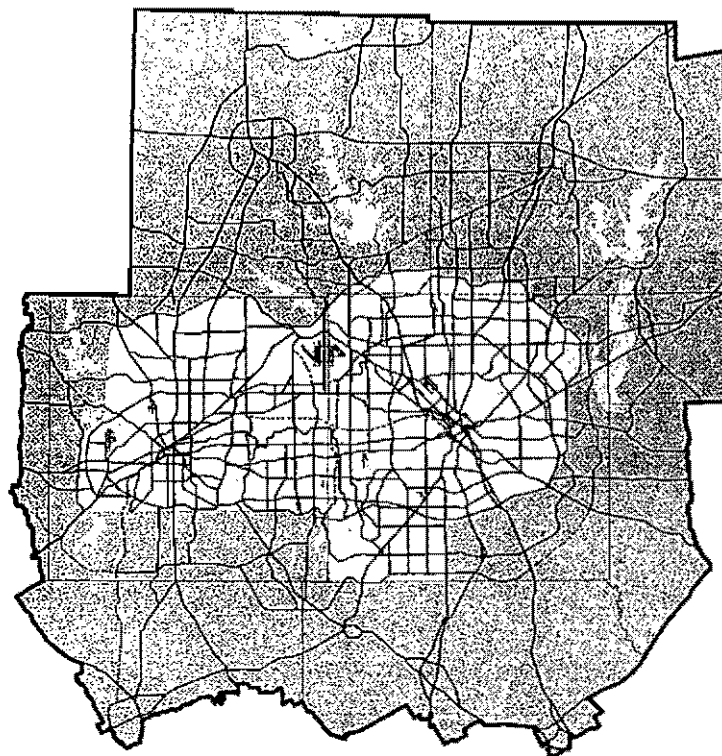
have been included in the amendment of the Regional Thoroughfare Plan arterial network.

The Regional Arterial System is a critical component of the Plan Update in providing transportation support and access. The importance of regional arterials to the overall Plan Update becomes increasingly essential as reliever facilities to parallel freeways and tollways, as well as, supporting accessibility to other regional facilities to and from local land uses. Travel on regional arterials is expected to rise almost 48 percent over current levels by the year 2025.

The Regional Arterial System has evolved as a tool to quantify the amount of future arterial capacity needed to support the Metropolitan Transportation System (MTS). Based on the importance of providing user mobility and access throughout the region, a total of \$5.7 billion in arterial capacity funds is expected to be available to maintain existing regional

arterials and build new components. The Plan Update identifies \$3.1 billion committed to the 1,731 mile designated Regional Arterial System and \$2.6 billion of additional local funds for other arterial improvements through the year 2025, as reflected in the Financial Plan.

The updated Regional Arterial System map shows a shaded area surrounding the urban core in recognizing that the regional arterial network must be expanded in the future to support long-term growth. At present, the future arterial needs have not been fully studied for all of the shaded area shown on the map. The main purpose for showing the shading is to identify the need for a more comprehensive regional arterial network in the outlying areas to support the growth that is being forecast in those areas. Additional studies will be needed to substantiate the magnitude and extent of improvements that may be warranted beyond 2025.



Mobility 2025 Update Regional Arterial System

Legend

- Regional Arterials
- Existing Freeways and Tollways
- Proposed Freeways and Tollways
- Preserve Right-of-Way
- Local government thoroughfare plans vary in these corridors
- Thoroughfare Spacing Review

New facility locations indicate transportation needs and do not represent specific alignments.
Based on NCTCOG's Regional Thoroughfare Plan



North Central Texas
Council of Governments
Transportation



Intermodal/Freight Transportation

The North Central Texas region represents one of the largest "inland ports" in the nation where freight is moved, transferred, and distributed to destinations across the State and around the world. North Central Texas has one of the most extensive surface, air, and rail transportation networks in the world, providing trade opportunities for the more than 600 motor/trucking carriers and almost 100 freight forwarders that operate out of the Dallas-Fort Worth Metropolitan Area. The region is the primary economic engine in Texas, representing about one-third of the State's total economic output. As a measure of the region's strategic geographic position for goods movement, 41 million people in 80 major cities can be reached overnight from the DFW Metropolitan Area by truck or rail. The nation's largest rail lines operate in the region and coordinate with trucking shippers at four intermodal freight centers located on or near significant highway corridors. Overall, the region is considered by most economic and

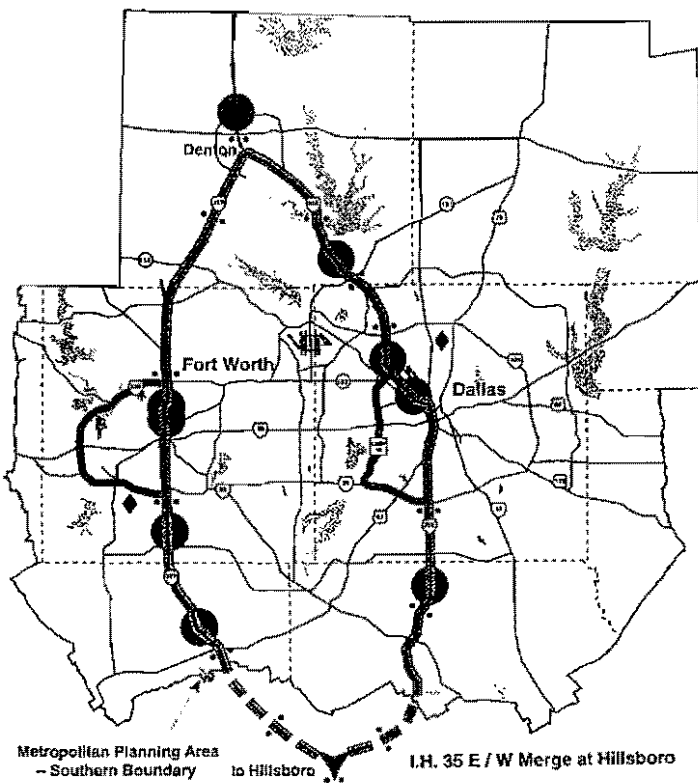
logistics experts as the primary trucking/rail/air cargo center in the Southwest and will grow in importance as a principal international marketplace in the 21st century.

Furthermore, the significance and impact to the regional economy and goods movement of the North American Free Trade Agreement (NAFTA), which was enacted in 1993, cannot be understated. Trade from the DFW Metropolitan Area to Mexico and Canada has more than doubled to \$2.3 billion. Interstate Highway 35 has grown in importance, as it extends from the Texas-Mexico border to northern Minnesota. Referred to as the NAFTA Superhighway, this major north-south route also serves both the Fort Worth Central Business District and the Dallas Central Business District.

Two critical goals of the Intermodal/Freight Transportation Planning process in the region is increased mobility and improved safety. By working with local governments and

private-sector partners, strategic projects that address these goals can be identified, and consequently, funding opportunities for these improvements can be sought. The Strategic Routing System, for instance, identifies the NAFTA corridor and other major freight corridors as roadways that should be targeted for improvements. The Hazardous Materials Truck Route is another important element of the freight route system. In addition, a program that identifies and prioritizes at-grade highway-railroad crossings will assist in guiding improvement funds.

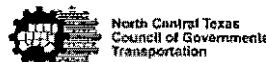
Mobility 2025 Update recognizes the importance of goods movement in this region. As transportation funds are made available, careful consideration will be given to projects that impact the mobility and safety of the transportation system, particularly in the context of freight transportation and intermodal accessibility.



Mobility 2025 Update Interstate Highway 35 NAFTA Corridor Technology Deployment

I.H. 35 Intelligent Transportation System Components

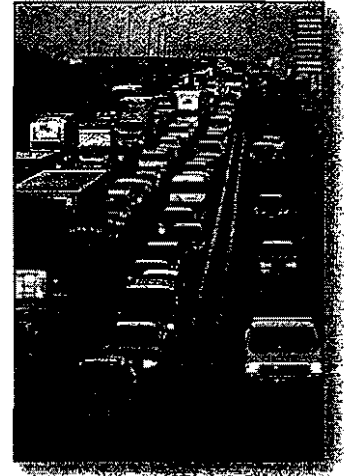
- • Dynamic Message Signs (Potential/Existing Sites)
- ▬ Speed Detection
- ▬ Incident Bypass Routes
- ▬ Freeways/Parlkways
- Truck Stop/NAFTA Kiosk (Potential Sites)
- ◆ TxDOT Transportation Management Center



System Performance

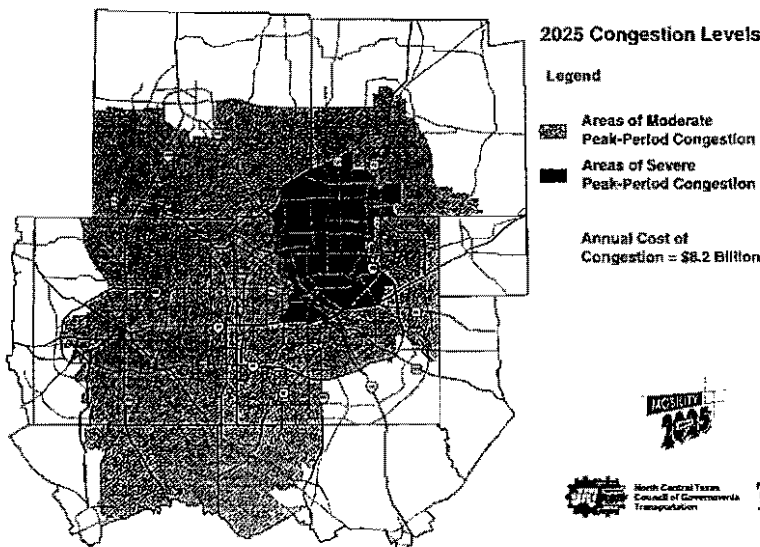
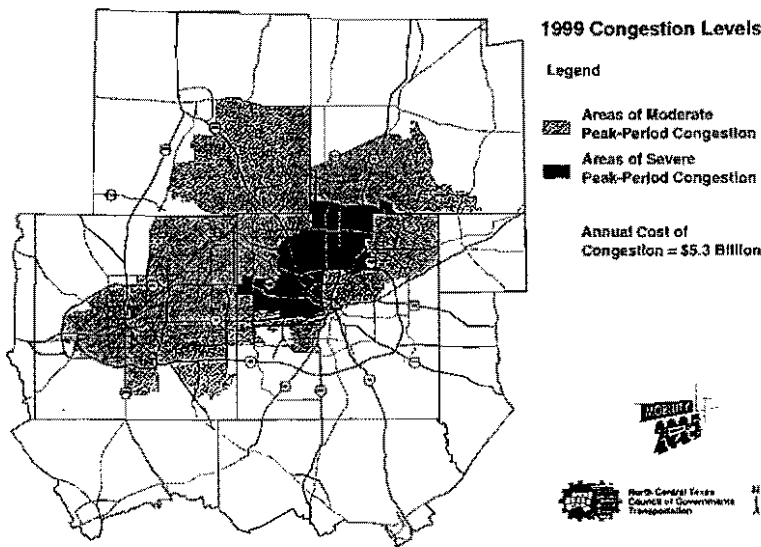
A transportation system's performance can be measured in many ways, especially when talking about a multimodal transportation system. It is often measured in terms of how successful the system is in reducing roadway traffic congestion. If multimodal options, trip reduction programs, system management projects, and other travel policies are effective, the result will be reflected through reduced congestion on the roadway system. However, demographic growth may increase faster than transportation system capacity can be provided, either due to implementation issues or financial constraint.

In 1999, the daily vehicle miles of travel was 125 million in the region. Regionwide, 38 percent of all roadways were congested during the peak hour, resulting in \$5.3 billion in lost productivity due to traffic congestion annually. Travel and congestion is not uniform throughout the region. In 1999, the most severe congestion was in the north Dallas County/south Collin County area around I.H. 635 (LBJ), I.H. 35E (Stemmons), and the Dallas North Tollway. If the expected demographic growth were to occur, and there were no major transportation improvements through the year 2025, there would be over



200 million vehicle miles of travel in the region with 65 percent of the roadways congested in the peak hour, resulting in \$15.6 billion in congestion costs. This, of course, is an unrealistic scenario since some transportation improvements will certainly occur, and if they did not, the region would not attract the expected demographic growth. However, it is a good indication of how much impact the population and economic growth will have if we do not provide significant transportation system capacity to accommodate it.

If the projects, programs, and policies contained in Mobility 2025 Update are implemented, 45 percent of the roadways will be congested with an annual congestion cost of \$8.2 billion – over 50 percent more than the cost in 1999. Severe congestion will spread to include southeast Denton County and additional portions of north Dallas and south Collin Counties. Financial, environmental, and social constraints will make it very difficult to accommodate the increased demand for travel resulting from the regional growth. If we are to meaningfully reduce congestion levels, we must continue to aggressively pursue additional congestion mitigation strategies aimed at reducing vehicular travel and making the transportation system more efficient, as well as additional revenue to implement those strategies.



The Role of Major Investment Studies

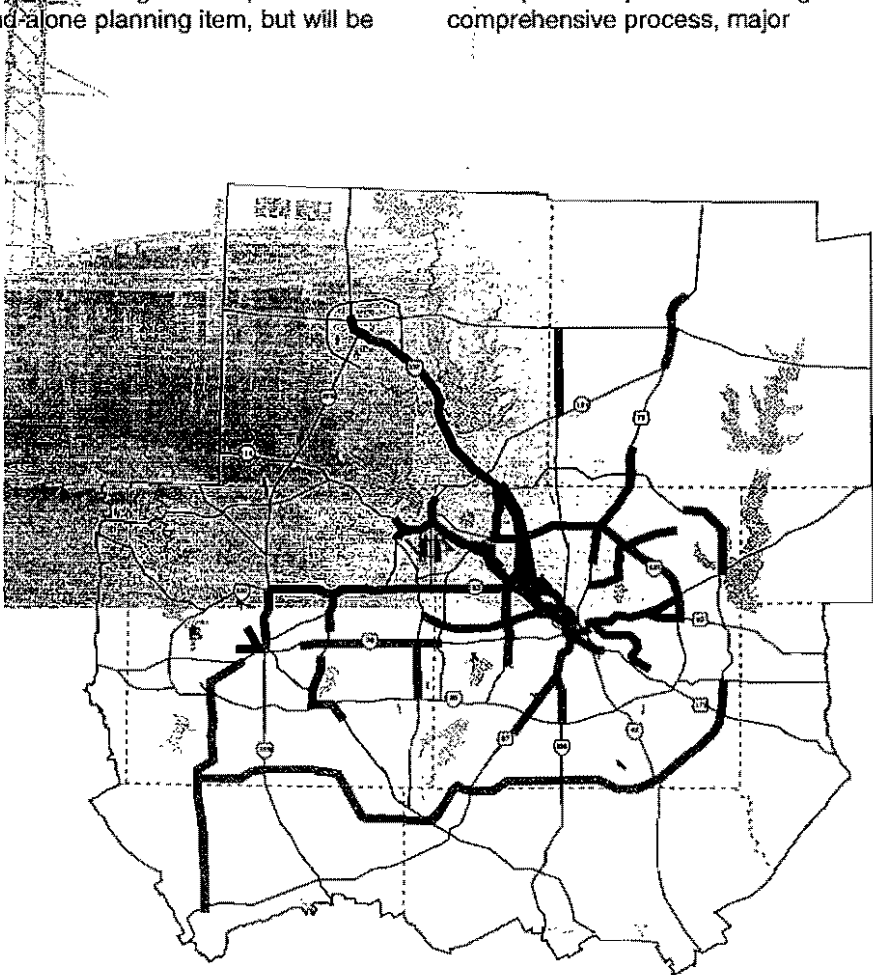
As part of the development of Mobility 2025 Update, corridors are evaluated from a regional, system-level perspective for major transportation improvements such as freeways, tollways, high occupancy vehicle lanes, and rail facilities. The Plan Update makes general recommendations in each corridor to meet the increasing demand on the roadway and transit systems. For each specific corridor recommended for improvement in the Plan Update, federal regulations developed under the Intermodal Surface Transportation Efficiency Act of 1991, and proposed under the Transportation Equity Act for the 21st Century, require that a comprehensive and detailed analysis be conducted. Under ISTEA, these analyses were called major investment studies. Under TEA-21, a major investment study will no longer be required as a stand-alone planning item, but will be

integrated into the metropolitan transportation planning process as a corridor refinement study. These corridor refinement studies serve as a bridge between the regional planning process and the more detailed environmental analysis and project design and engineering phases.

The goal of these studies is to achieve local consensus on a preferred alternative and investment strategy. This is accomplished through a comprehensive and aggressive agency and public involvement process. These studies include more than simply solving the mobility needs in the corridor, they also achieve additional goals by integrating local government land-use policies, neighborhood and community goals, environmental issues, and economic development objectives. Through this comprehensive process, major

transportation facilities can enhance a community's quality of life rather than detracting from it.

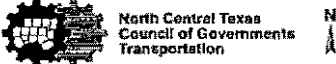
Several major investment studies have been completed under the ISTEA regulations. The recommendations from these studies are reflected in Mobility 2025 Update. There are also major investment studies which were underway at the time Mobility 2025 Update was developed. For those studies, the recommendations in the Plan Update reflect the latest information available for each corridor at the time the Plan Update was developed. As each study is completed, specific recommendations within each corridor may change. If this occurs, the new recommendations will be incorporated into Mobility 2025 Update or in the development of subsequent Plans, as appropriate.



Preferred Major Investment Studies Alternatives

- Legend**
- Mobility 2025 Update Freeways/Parkways
 - Rail
 - Roadway

The major investment studies on this map represent general corridor improvements as identified in Mobility 2025 Update. Recommendations for specific facility improvements are pending completion of each MIS.



Sustainable Development

Mobility 2025 Update establishes sustainable development as a strategic approach to transportation planning, programming, and construction. Sustainable development leverages the land-use/transportation relationship to improve mobility, enhance air quality, and support economic growth in ways that utilize the existing and planned transportation system in an efficient manner.

By providing planning support for a diverse range of mobility options such as rail, automobiles, bicycling, transit, and walking, the Plan Update helps local governments present a range of development opportunities to the private sector. The Plan Update recognizes four categories of

sustainable development: the utilization of existing system capacity, the mixing/integration of land uses, increased rail mobility, and improved access management.

Overall, the objectives of these practices are to: respond to local initiatives for town centers, mixed-use growth centers, transit oriented developments, infill/brownfield



Sustainable Development Categories

Sample Activities

Strategic Urban Development

- Provide incentives to attract and/or reinvigorate areas with underdeveloped land
- Encourage adaptive reuse of existing structures in neighborhoods through increased density and uses supported by adequate mix of compatible activities
- Establish incentives to promote infill and brownfield development
- Encourage development in the urban and suburban core

Integrated Land Use Planning (Urban Core)

- Track and/or streamline ways to reduce and improve distribution of land use and transportation demand (including transit-oriented development)
- Provide incentives to encourage people to use and expand service areas

Transit Oriented Development

- Increase local transit and mobility options and transit station
- Establish incentives to encourage transit-oriented development
- Increase the number of transit-oriented development areas and transit-oriented development

Access Management

- Reduce travel time as drivers and shared parking to new developments, extensions or redevelopments
- Provide incentives to encourage transit-oriented development
- Provide incentives to encourage transit-oriented development
- Provide incentives to encourage transit-oriented development
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developments, and pedestrian oriented projects; complement rail investments with coordinated investments in park-and-ride facilities and pedestrian and bicycle facilities; and promote economic development appropriately throughout the region while improving air quality and traffic congestion by reducing vehicle miles traveled per person.

Private developers and local governments are leading the way with a collection of existing sustainable development projects including: Addison Circle, Downtown Fort Worth, and the DART Light Rail Stations. In one example, current construction at the Mockingbird light rail station features developer sponsored pedestrian linkages to the adjacent station and retail office and multifamily areas. Mobility 2025 Update builds on these successes by recommending strategies to meet financial constraints, diversify mobility, and improve air quality regionwide.

Ultra Low-Emitting Vehicles

The use of alternative fuels and ultra low-emitting vehicles are important to the United States and the Dallas-Fort Worth Metropolitan Area. It can lessen dependence on foreign products, create domestic jobs, and have a positive impact on air quality. Currently, there are 7,000 publicly and privately owned alternative fuel vehicles (AFVs) operating on the roadways of North Central Texas, which are powered by propane, natural gas, and electricity.

In the DFW Metropolitan Area, federal and State financial incentives have been available for several years to encourage fleets to adopt ultra low-emitting vehicle technologies. Transit agencies and public-sector fleets have benefited greatly from these incentives.

The recommendations outlined in Mobility 2025 are flexible and targeted toward taking advantage of available incentives, both current and future, to encourage the continued



advancement of vehicle technologies and equipment availability to fleets and for private use.

Between 1994 and 2001, more than \$5 million was used to pay a portion of the incremental cost of alternative fuel vehicles for public fleets, resulting in more than 3,000 light-duty AFVs being placed into public fleets during this time period. Area transit agencies also received financial assistance in building a total fleet of 300 alternative fuel buses in the region.

The DFW Metropolitan Area participates in the U.S. Department of Energy's Clean Cities Program. Since 1995, Dallas-Fort Worth Clean

Cities has been promoting the use of alternative fuels in the area. The organization hosts events, demonstrations of alternative fuel and advanced technology vehicles, and regularly scheduled informative meetings. Clean Cities members also work with national and Statewide coalitions to coordinate vehicle purchases, education and training, and infrastructure needs in order to support the growing industry.

The Ultra Low-Emitting Vehicles Program will continue to play an important role in the mobility and air quality considerations of the region. As existing technologies change and new technologies evolve, policies to capitalize on their benefits should be put in place.

Recommendations

- Encourage fast refueling of paratransit vehicles
- Facilitate the availability of alternative fueling stations in areas with high concentrations of low-income households
- Consider feasibility of using alternative fuels in conjunction with transit facilities
- Facilitate the adoption of emerging advanced technologies
- Continue to improve the availability of alternative fuel vehicles
- Expand funding opportunities for private fleets
- Begin to address the demand for public alternative fuel vehicles
- Continue to assist financial and technical assistance needs, such as programs to address the issue of fuel by providing vehicle



Elderly and Persons with Disabilities

The goal of the Elderly and Persons with Disabilities Program is to provide efficient, reliable, comprehensive, and coordinated transportation services to meet the special transportation needs of the elderly and persons with disabilities. Funding for the Program is available for metropolitan, small urban, and rural areas through federal, State, and local sources. This funding can be used for the purchase of replacement vehicles, new vehicles for service expansion, and auxiliary equipment to transport the elderly and persons with disabilities.

The Mobility 2025 Update financial plan includes \$80 million in funding for currently programmed or future Elderly and Persons with Disabilities projects. In accordance with State rules,

projects are selected annually by the TxDOT Dallas and Fort Worth District Offices. As the MPO for the Dallas-Fort Worth Metropolitan Area, the North Central Texas Council of Governments provides input as appropriate for the inclusion of projects in the Transportation Improvement Program (TIP).

Existing rural and urban transit districts and metropolitan transit authorities are the primary recipients of funds, for their respective service areas, under this Program. For those areas not currently served by transit providers, or in cases where the existing provider is unable to provide the service, TxDOT may choose an alternative primary recipient. Private, nonprofit organizations and associations are eligible to receive funds as secondary recipients. In addition, local public agencies approved by the State to coordinate transportation services, and any public agency that certifies that nonprofit organizations in the area are not readily available to carry out the services, may also receive funds as secondary recipients. Issues continue to be raised regarding the lack of transportation services for elderly and persons with disabilities. NCTCOG has assumed a leadership role in the efforts to improve and coordinate transportation services for the region's elderly and persons with disabilities. This should be accomplished through the program recommendations shown at left.

Recommendations

- Increased access should be provided to existing elderly and persons with disabilities services, where feasible.
- New services and service expansions should be reviewed to identify and eliminate the duplication of services, wherever possible.
- All services should comply with the Americans with Disabilities Act and other federal guidelines.
- New and existing services should be coordinated with access to other initiatives, where feasible.
- Regular needs assessments are recommended in order to identify opportunities to guide the establishment of additional services and the provision of needed service equipment.
- Additional funding sources for operational expenses and capital equipment should be identified.



Financial Plan

One of the most important aspects of Mobility 2025 Update is the identification and analysis of the financial resources available to implement its recommendations. Not only is this financial analysis a sound planning practice, it is also required by federal law. TEA-21 requires that the Plan Update be constrained to available financial resources. The cost of Mobility 2025 Update is estimated at \$49 billion over the 24-year life of the Plan Update. Thirty seven percent, \$18.1 billion, of the Plan's financial resources is directed toward operation and maintenance of the system while \$30.9 billion is allocated across the various multimodal transportation system improvements based on need and eligible funding programs.

As part of the development of Mobility 2025 Update, the mobility needs for each program area based on the adopted goals and objectives were identified; then the costs were estimated and summed. An in-depth analysis of the historical and current transportation funding was carried out including investigation of the sources of funds, funding formulas, and the administrative processes that result in taxes and fees being collected and expanded for specific transportation improvements.

The primary sources of revenue for transportation maintenance, operation, and capital improvements include federal and State motor fuel taxes, State vehicle registration fees, dedicated transportation authority sales taxes, tollway revenue, and local government bond programs. The analysis revealed that if the rates associated with these revenues remain at their current levels, or status quo, there would not be sufficient funding to construct the recommendations of this Plan Update. This is particularly critical in the area of freeway and

thoroughfare construction, as the primary source of revenue for these improvements is motor fuel taxes. This source of revenue continues to be eroded by the diversion of funds to non-transportation purposes. The impacts of inflation, and improved vehicle efficiency resulting in less available revenue per mile driven by commuters also reduce this revenue. At risk is an estimated \$3.3 billion of needed funds if status quo conditions remain. While the Regional Transportation Council and other transportation partners have made significant strides in reducing the projected shortfall in recent years, additional efforts are needed to reduce the deficit even more.

Since the Plan Update is not tied to any specific revenue generation strategy such as gas tax increases or percentage of gas tax revenue returned to the State, it puts an increasing burden on the RTC to monitor the financial situation of the Plan Update on a regular basis and make adjustments accordingly. Because implementation is contingent upon the need for additional revenue, the RTC will continue to monitor State and federal legislative initiatives to ensure that funding is available to implement Mobility 2025 Update.

Metropolitan Transportation System Components	Cost (Millions/2001\$)
Operation and Maintenance	\$18,078
Congestion Mitigation Strategies	\$ 2,014
Bicycle and Pedestrian Facilities	\$ 960
Rail and Bus Transit System	\$ 8,653
HOV and Managed Facilities	\$ 2,115
Freeway and Tollway System	\$11,528
Regional Arterial and Local Thoroughfare System	\$ 5,677
Total	\$49,025

Dedicated local sales tax revenue combined with federal formula and discretionary funding and passenger fares are used to build and operate public transportation systems. The transit agencies prepare operating and financial plans to ensure continued system operation and expansion. These plans which assume continued growth in transit ridership, transit fares, and sales tax revenue, were integrated into this effort.

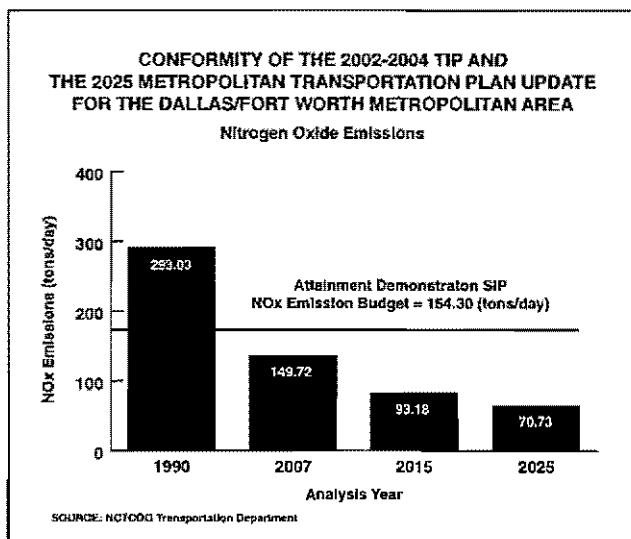
Cost-Saving Strategies

- Optimize Tollway Construction Financing and Leasing Practices
- Reduce Planning, Maintenance, and Capital Assets Inventory
- Reduce Project Costs (Paving) Value Engineering
- Share Construction Materials Transportation Practices
- Streamline Project Development Process
- Improve System Capacity Through Bandwidth Removal Program
- Pursue Innovative Cost-Sharing Arrangements



Air Quality Conformity

Conformity is the mechanism in the Clean Air Act (CAA) that requires the Plan Update to be consistent with State and local air quality objectives and goals. Conformity also mandates that the Plan Update meet federal clean air standards through implementation strategies contained in the State Implementation Plan (SIP). To meet the requirements of the CAA and SIP, the Plan Update shall be consistent with established mobile emission budgets, contribute to mobile source emission reductions, and provide for the timely implementation of transportation control measures.



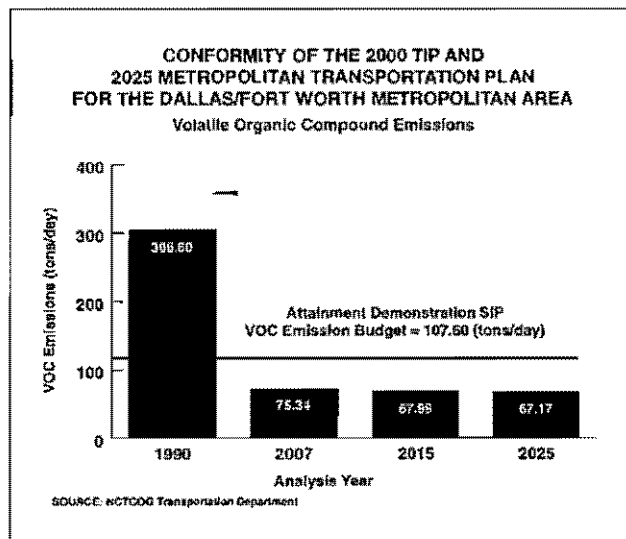
Transportation Control Measures (TCMs) are projects and programs specifically designed to reduce the region's congestion and improve air quality. Typical TCMs include intersection and signal improvements, freeway corridor management projects, HOV lanes, and travel demand reduction strategies, all of which are components of the Plan Update and inventoried in the Transportation Improvement Program.

Transportation strategies included in the Plan Update shall be subjected to an intensive air quality conformity review due to the serious ozone nonattainment status of the Dallas-Fort Worth Metropolitan Area. The air quality conformity analysis focuses on the principle ozone-causing pollutants of Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx). Two specific emission tests are conducted in the conformity analysis. First, future year VOC and NOx

emissions must be below the established budgets identified in the SIP, and second, they must be below the base year 1990.

The result of the air quality conformity analysis conducted on the Plan Update indicates that the Plan Update is consistent with both the VOC and NOx emission budgets in the attainment demonstration SIP and contributes to emission reductions when comparing the analysis years 2007, 2015, and 2025 to 1990 emission estimates. This allows projects, programs, and policies contained in the Plan Update to move forward to advance planning and implementation within the region.

In order for the region to continue to thrive economically, efforts must be focused on the commitments to implement transportation improvements with positive air quality benefits. Failure to do so will jeopardize the region's quality of life, public health, environment, and the ability to implement the projects and programs in the Plan Update.



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 232 member governments, including all 16 counties, 163 cities, 26 independent school districts, and 27 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.

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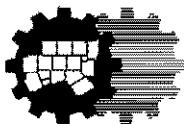
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North Central Texas Council of Governments
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REGIONAL THOROUGHFARE PLAN

North Central Texas Council of Governments

December 2001

PURPOSE
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NCTCOG EXECUTIVE BOARD
REGIONAL TRANSPORTATION COUNCIL
WHAT IS NCTCOG?

PURPOSE

To establish a regional thoroughfare network that:

- Incorporates the primary features of each city's thoroughfare plan,
- Promotes regionwide consistency and continuity by identifying variations in arterial alignments and classification between jurisdictions, and
- Influences local decisions by providing essential information on how each city's thoroughfares are connected to the greater regional system and thereby impact transportation decisions beyond their own jurisdictional boundaries.

GOALS

To expand and improve a continuing, cooperative, and comprehensive transportation planning effort and make a single source available for a higher level of coordination among the various jurisdictions that share the responsibility for creating and maintaining an effective transportation system in the North Central Texas region.

To increase local governmental and public involvement in the planning and construction of both regional and local thoroughfares, allowing for greater coordination of thoroughfare plans and standards.

THOROUGHFARE PLAN HISTORY

In 1974, the Governor of Texas designated the North Central Texas Council of Governments (NCTCOG) as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth area. Federal laws define the responsibilities of MPOs with regional transportation planning as a major element. In accordance with federal law, an MPO offers leadership and technical expertise to address transportation issues from a regional perspective.

The Transportation Equity Act for the 21st Century (TEA-21) reinforces the importance of regional transportation planning through voluntary cooperation and coordination among all entities in the region. Regional planning includes the public, all of the various local governments, transportation authorities, North Texas Tollway Authority (NTTA), the Texas Department of Transportation (TxDOT), and the Council of Governments as the MPO.

In 1977, local governments in this region cooperated with NCTCOG to establish the area's first Thoroughfare Plan for North Central Texas.

NCTCOG completed major updates to the Plan in 1994 and 2000. The *Regional Thoroughfare Plan* incorporates many of the elements and concepts developed in the original Plan as well as both updates. In 2001, the Plan was amended to reflect recent changes by local agencies.

The *Regional Thoroughfare Plan* is designed to be a guide for local and regional planning efforts, and places emphasis on being sensitive to local needs. The Plan seeks to provide for local mobility and adequate local property access as well as to support and enhance the freeway system. The *Regional Thoroughfare Plan* strives to meet those objectives in combination with the input of local ideas and values to create an effective, concise document that will promote consensus regarding the regional thoroughfare system.

DEMOGRAPHICS

Population

The NCTCOG nine-county urban area is not only one of the fastest growing areas in the State, the Dallas-Fort Worth area leads the State in terms of population growth according to the U.S. Census. When NCTCOG's first *Regional Thoroughfare Plan* was developed in 1977, 2.7 million people lived in the region. In the past 23 years, more than two million people moved into the nine-county urban area to reach a 2000 population of 4.8 million persons. In just the decade of the 90s, the region's population grew by over one million people, which represents a growth rate of 21 percent. In 1999 alone, over 160,000 persons moved into the nine-county urban area to set a one-year growth record.

Approximately one-fourth of all Texans live in the North Central Texas region. Continued high growth rates are forecast for the future. The population is projected to swell by 47 percent resulting in the population exceeding seven million by 2025.

Employment

The NCTCOG nine-county urban area also affords considerable employment opportunities. There were 1.3 million jobs in 1977 that more than doubled to nearly 2.7 million by 2000. The year 2025 employment forecast is projected to exceed 3.9 million jobs. The population-to-employment ratio has shown a steady decline from 1.85 persons per job in 1977 to 1.82 in 2000 and is predicted to continue to decline to 1.79 in 2025. This trend follows the movements in declining family size, increasing two-worker households, and workers holding multiple jobs. Unemployment figures in this region are relatively low and normally well below the

national average. This is due in part to a diverse economy. The Dallas-Fort Worth area attracts employment in three key market areas: corporate headquarters, national defense industry, and high-technology industry. Factors contributing to this area's success in attracting employers include being centrally located in the United States with convenient airport access, a large tourism economy, and availability to several major universities in the region.

Metropolitan Area

In addition to steady population and employment growth, the urbanized area also is spreading outward. In 1977, NCTCOG's "Intensive Study Area" (ISA) for regional planning encompassed 2,573 square miles, and transportation planning activities were focused within this area. Due to the population growth shown in the 1980 Census, the geography was expanded to include 3,212 square miles and was renamed the "Transportation Study Area" (TSA).

As a result of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), the region was redefined based on the 1990 Census and to oblige the U.S. Environmental Protection Agency (EPA) for planning within an air quality "ozone nonattainment area," and was renamed the "Metropolitan Planning Area" (MPA). The MPA designation has since been shortened to the "Metropolitan Area" (MA). The MA is centered on the four urban counties in the nonattainment area: Collin, Dallas, Denton, and Tarrant. Also included in the MA are portions of the five bordering counties (Ellis, Johnson, Kaufman, Parker, and Rockwall). The MA, therefore, takes in 69 percent or 4,980 square miles of the 7,202 square miles contained in the NCTCOG nine-county urban area.

PHYSICAL FEATURERS

The generally flat topography of the Dallas-Fort Worth area is between 600 to 700 feet above sea level. Numerous man-made lakes provide valuable water resources, as well as the opportunity to enjoy outdoor recreation. Traversing the region from west to east is the Trinity River. Acting as a natural barrier, the Trinity and its adjacent flood plain distinctly impedes north-south travel. This major waterway is an asset to the area, but also creates many challenges. The added expense involved in crossing the Trinity River poses severe limitations on transportation planning alternatives. In the past ten years, the area has seen flooding in the Trinity River corridor of 100-year magnitude that reinforces the need for robust transportation planning solutions that address the area's physical features.

THOROUGHFARE SELECTION CRITERIA

The following seven criteria were applied to arterials within the Dallas-Fort Worth Metropolitan Area.

- TEA-21 Functional Classification
- National Highway System
- City and County Thoroughfare Plans
- Mobility 2025 Plan Update – Regional Arterial System
- Thoroughfare Spacing
- Completing Gaps
- Continuous Regional Routes

TEA-21 Functional Classification

The *Transportation Equity Act for the 21st Century* requires all urban areas to functionally classify public roadways in order to prioritize funding. Within the Dallas-Fort Worth urbanized area, TxDOT and NCTCOG joined together in taking responsibility for the classification effort. Originally undertaken in 1992 as part of ISTEA, the functional classification network was updated in 1997 as part of the implementation of TEA-21. Outside the Dallas-Fort Worth urbanized area, TxDOT assumed primary responsibility for defining the functional classes in the small urbanized areas and the rural areas.

The Dallas-Fort Worth functional classification effort grouped all public roadways into four categories: Principal Arterials, Minor Arterials, Collectors, and Local Streets with the primary focus being concentrated on the first three categories. If a roadway project is to be eligible for federal funds, the roadway must be functionally classified as a Collector or above within an urban area or as a Major Collector or above in the rural areas.

National Highway System

The National Highway System (NHS) represents a 163,000 mile system of transportation routes of national importance. The NHS covers a network of interconnected principal arterial routes that serve major population centers, border crossings, ports, airports, public transportation facilities, and other intermodal transportation facilities. The NHS system includes all Interstate System segments, all strategic highways and their connectors, and any other urban or rural "Principal Arterials" meeting the goals of the NHS. By providing these essential linkages between different modes of transportation, NHS creates a seamless network for the rapid movement of people and products.

City and County Thoroughfare Plans

The *Regional Thoroughfare Plan* assists in the coordination of local plans by representing the single source of information that identifies the thoroughfare planning efforts in the region. Intended as more than just a composite of local thoroughfare plans, the *Regional Thoroughfare Plan* shows the primary traffic arteries when land uses reach capacity under a "build-out" scenario. In other words, this Plan identifies the ultimate system of arterials when the region is completely developed. City and county plans were incorporated where appropriate to indicate the future proposed thoroughfares that will carry traffic across multiple jurisdictions.

The *Regional Thoroughfare Plan* provides a basis upon which local governments, transit authorities, NTTA, TxDOT, NCTCOG, and the public can work together to resolve regional transportation planning issues across jurisdictional boundaries. The Plan does not constrain individual city or county goals in any way. Nor does the Plan imply or grant approval of an implementation strategy. Local governments are encouraged to monitor and implement their various individual components that define the Plan.

Mobility 2025 Plan Update – Regional Arterial System

A system of arterial thoroughfares is needed to provide local access and effectively support the backbone of any vehicular transportation system – the freeway system. The *Regional Thoroughfare Plan* supports accessibility to the freeway system through the regional thoroughfare network. The "Regional Arterials" that are identified in the *Regional Thoroughfare Plan* have been used to construct the Regional Arterial System component of *Mobility 2025 Update: The Metropolitan Transportation Plan*. The Regional Arterial System quantifies the amount of future arterial capacity needed to complement and enhance the freeway and transit systems with the necessary access to and from local land uses to support the overall Metropolitan Transportation System.

Thoroughfare Spacing

Desirable thoroughfare spacing is a function of the capacity of the system, transit facilities, and the effect on the freeway system. Spacing was reviewed to ensure logical roadway layout consistent with standard transportation planning practices. Specific ranges for spacing benchmarks are presented later in an exhibit on thoroughfare classification guidelines. In general, the ideal standard for sufficient coverage of "Regional Arterials" is a network grid spaced from one to five miles apart.

Completing Gaps

Identifying gaps in otherwise continuous roadway segments assists in determining potential restrictions to traffic flow that create an operational strain on the surrounding arterial network. The completion of a small roadway segment between two existing facilities can significantly reduce circuitry. The *Regional Thoroughfare Plan* gives neighboring communities an opportunity to see how individual roadway systems affect areas larger than just one city.

Continuous Regional Routes

Providing for long trips over continuous routes that link multiple city or county population and employment centers is important for mobility and orderly development. Identifying the corridors where anticipated traffic demand exceeds the operational capacity of the freeway and transit networks is essential for financially responsible planning and programming of transportation improvement funds. "Regional Arterials" will play an increasingly important part serving as alternate routes to relieve congested freeway corridors.

THOROUGHFARE DESIGNATIONS

The roadway designations used in the *Regional Thoroughfare Plan* are intended to provide regional consistency, yet be broad enough to allow for local flexibility. The Plan intends to standardize, from a regional perspective, how roadways are classified due to the wide variation in how roadways are characterized at the federal, state, and local levels.

Exhibit I presents a summary of typical thoroughfare classification guidelines. These guidelines provide general information that help define the overall function and performance characteristics of a thoroughfare. Exhibit I cross classifies the roadway classification guideline criteria according to three functional classification categories ("Freeways/Tollways," "Regional Arterials," and "Other Arterials"). The functional classification categories are further subdivided into eight roadway classes. The criteria used to classify the thoroughfares include: trip length, traffic volumes, service to activity centers, system continuity, facility spacing, land-use interaction, access management, intersection treatment, median treatment, design speeds, and transit service. These criteria are used to classify the thoroughfares and provide a guide to encourage uniformity in facilities to serve regional traffic and help cities be aware of the factors that form the basis for good design practice.

Exhibit II describes the eight overlapping roadway classes that define the three functional classification categories: two classes for "Freeways/Tollways," three for "Regional Arterials," and three for "Other Arterials." While the terminology shown in Exhibit II is unique to this area, the meanings are consistent nationally so that all urban areas across the country can be compared. The definitions for these eight roadway classes intentionally overlap. "Regional Arterials" can range from Urban Expressways to Principal Arterials while "Other Arterials" may range from Enhanced Principal Arterials down to Minor Arterials. The relative service characteristics of any roadway will vary based on a number of factors that include, but are not limited to: speed, traffic volume, number of lanes, geometrics, level of service, traffic patterns, and time-of-day. "Collector Streets" and "Local Streets" are not included in the Plan. These facilities, by definition, are for local access only and therefore are not of regional significance.

The "Freeways/Tollways" identified through the needs-based planning process in the Mobility 2025 Plan Update are shown on the map for reference purposes only. The basic framework of "Regional Arterials" includes those arterials functionally classified under TEA-21 as well as the arterials identified through the NHS. The principal arterials identified in the city and county thoroughfare plans fill out the complete inventory of "Regional Arterials." The "Other Arterials" are composed of the minor thoroughfares that support and enhance the "Freeways/Tollways" and "Regional Arterials" by providing the interconnections between the higher and lower roadway classifications to facilitate land access.

REVIEW & REFINEMENT PROCESS

Every effort was made in the review and refinement process to include the technical and political leadership of the Dallas-Fort Worth region as well as the public in order to update the *Regional Thoroughfare Plan*. All local government agencies were contacted to gather recent thoroughfare plan modifications. For example, in the 2000 update, NCTCOG staff contacted 128 local governmental agencies of which 63 agencies, or almost 50 percent, were found to have revised their thoroughfare plans. Through this process, potential concerns can be resolved.

The outreach process includes presentations and progress reports to keep everyone informed throughout the project. Public meetings are held around the region to allow for comment from the general public. Regional workshops make it

Exhibit I

THOROUGHFARE CLASSIFICATION GUIDELINES

Criteria	FREEWAYS/TOLLWAYS		REGIONAL ARTERIALS			OTHER ARTERIALS		
	Interstate Freeway, Urban Freeway, and Tollway	Urban Expressway	Strategic Regional Arterial	Enhanced Regional Arterial	Regional Arterial	Enhanced Principal Arterial	Principal Arterial	Minor Arterial
Trip Length	very long	long to very long	long	long	moderate to long	moderate to long	moderate to long	moderate
Traffic Volume	very high	high to very high	high	high	high	moderate to high	moderate to high	moderate
Service to Activity Center	regional and major generators	regional and major generators and specialized land uses	regional and major generators and specialized land uses	regional and major generators and specialized land uses	regional major and minor generators and specialized land uses	regional major and minor generators and specialized land uses	regional major and minor generators and specialized land uses	minor generators and individual communities
System Continuity	connects to other freeways, urban expressways, regional, principal, and minor arterials	connects to freeways, other urban expressways, regional, principal, and minor arterials	connects to freeways, urban expressways, regional, principal, and minor arterials	connects to freeways, urban expressways, regional, principal, and minor arterials	connects to freeways, urban expressways, regional, principal, minor arterials, and collectors	connects to freeways, urban expressways, regional, principal, minor arterials, and collectors	connects to freeways, urban expressways, regional, principal, minor arterials, and collectors	community continuity, connects with principal arterial and freeway systems, usually does not cross community boundaries
Facility Spacing	5 - 20 miles	3 - 10 miles	3 - 5 miles	2 - 5 miles	1 - 5 miles	1 - 3 miles	1 - 3 miles	1/2 - 2 miles
Land-Use Interaction	should not penetrate neighborhoods	should not penetrate neighborhoods	should not penetrate neighborhoods	should not penetrate neighborhoods	should not penetrate neighborhoods	should not penetrate neighborhoods	should not penetrate neighborhoods	should not penetrate neighborhoods
Access Management	fully controlled	fully controlled, no median access, specialized design controls limiting curb access are used to facilitate traffic flow and ensure safety	partially controlled, specialized design controls limiting curb access are used to facilitate traffic flow and ensure safety	partially controlled, specialized design controls are used to provide median and curb access and ensure safety	partially controlled, spacing and design controls are used to facilitate traffic flow and ensure safety	partially controlled, spacing and design controls are used to facilitate traffic flow and ensure safety	partially controlled, spacing and design controls are used to facilitate traffic flow and ensure safety	control is limited design controls are used to ensure safety
Intersection Treatment	fully grade separated	grade separated at all intersections	grade separated at isolated intersections	grade separated at isolated intersections	grade separated at isolated intersections	at-grade	at-grade	at-grade
Median Treatment	barrier	barrier	barrier or restricted left-turn bays	left-turn lanes or bays	left-turn lanes or bays	left-turn lanes or bays	left-turn lanes or bays	none
Design Speeds	55 - 65 mph	50 - 55 mph	45 - 50 mph	40 - 45 mph	40 - 45 mph	40 - 45 mph	40 - 45 mph	40 mph
Transit Service	express	express	express and local	express and local	express and local	express and local	express and local	local

Exhibit II

THOROUGHFARE DESIGNATIONS

FREEWAYS/TOLLWAYS

Freeway/Tollway

A fully controlled access facility on expansive right-of-way serving traffic within an urban area and linking urban areas. Freeway/Tollways include interstates, urban freeways, and tollways.

Urban Expressway

A full to partially controlled access facility designed to accommodate continuous regional traffic flow in limited right-of-way corridors.

REGIONAL ARTERIALS

Strategic Regional Arterial

A partially controlled access arterial serving multiple jurisdictions with design emphasis toward continuous regional traffic flow using grade separations at major intersections, curb and median access controls, and signal progression.

Enhanced Regional Arterial

A major arterial roadway linking multiple jurisdictions designed to serve the movement of traffic allowing for grade separations at isolated intersections, curb and median access controls, and signal progression.

Regional Arterial

A major arterial roadway designed to serve the movement of traffic with improved intersections and signal progression including rural application.

OTHER ARTERIALS

Enhanced Principal Arterial

A major arterial roadway which serves to interconnect regional roadways and link identifiable neighborhood areas with major activity centers improved to accommodate high-volume locations allowing for grade separations, curb and median access controls, and signal progression.

Principal Arterial

A major arterial roadway which serves to interconnect regional roadways and link identifiable neighborhood areas with major centers of activity.

Minor Arterial

Roadways which augment principal arterials with emphasis on the distribution of vehicles to higher and lower roadway classes and land access.

possible for the participation of the local government technical staff to participate in the review process. Separate meetings are held to help clarify the Plan's components. Also, additional discussions are conducted by telephone that contribute valuable information by providing insight as to how the region's local governments use and depend on the *Regional Thoroughfare Plan*. One thoroughfare alignment issue remains unresolved and has been noted on the Regional Thoroughfare Plan map for future resolution.

NCTCOG's Surface Transportation Technical Committee (STTC) and Regional Transportation Council (RTC) monitored the Plan's review and refinement process. Upon completion of this process, initial approval of the Plan was sought from the professional planners and traffic engineers who are members of STTC. The RTC, which represents the MPO, is primarily composed of elected officials from around the region. In May 2001, the Regional Transportation Council amended the *Regional Thoroughfare Plan* through resolution.

IMPLEMENTATION

Implementation of the *Regional Thoroughfare Plan* is primarily the responsibility of city and county governments, transportation authorities, and TxDOT. Funding and programming of these improvements is carried out through NCTCOG's *Transportation Improvement Program (TIP)* prepared biannually by the North Central Texas Council of Governments in cooperation with these agencies. Other funding sources may include local bond programs or developer participation.

The Thoroughfare Plan represents a build-out of the ultimate regional thoroughfare system and does not attempt to represent the need for or the timing of specific construction projects. This is a true long-range plan based on currently existing plans approved by local elected officials but carries no recommendation for any roadway improvements. However, constant input from the local government planning process is necessary to maintain a current inventory of thoroughfare plans. This Plan provides a logical scenario of arterial development based on current trends as well as expectations of the future.

This Plan should be used as a guide for local planning to support and promote orderly and planned growth. It should also be a starting point for needs-based arterial studies. This Plan may be used as a basis for city or county bond programs, regional land-use plans, economic development initiatives, and regional transportation plans.

PLAN UPDATE PROCEDURE

The Plan is designed to be flexible to meet the goals of individual cities or counties as they change over time and provide the framework from which local decisions may be based. The Plan is intended to foster discussion and negotiation between neighboring interests. It is reasonable to assume that, through this process, changes to the *Regional Thoroughfare Plan* will emerge over time.

As local plans are amended and updated to reflect changing economic conditions, local opinion, technological advances, social conditions, or simply a shift of priorities, the *Regional Thoroughfare Plan* should be modified to reflect those changes. Consideration of the Plan's role is essential to development of the overall Metropolitan Transportation Plan and the Transportation Improvement Program. A review and update study will be scheduled every three years to coincide with the review cycle of the Metropolitan Transportation Plan.

It has been determined that more frequent updating is necessary in order to keep abreast of thoroughfare plan changes being issued by local government agencies in the Dallas-Fort Worth region. In recognition that local governments' thoroughfare plans are continually under revision, an additional study at the approximate mid-point in the three-year cycle will also be initiated. With a study every 18 months, this schedule will result in an almost continuous ongoing review and refinement process.

SUMMARY

Local and regional planning efforts can greatly benefit from a comprehensive regional thoroughfare plan that identifies the most current information available. NCTCOG's *Regional Thoroughfare Plan* provides a single source of information for the review of the key arterial infrastructure currently existing or being planned in the future. Local governmental agencies are encouraged to use this information and the accompanying documentation contained in NCTCOG's *Thoroughfare Planning and Design Guidelines*, June 1995, to help in the development, modification, and implementation of their local plans. In summary, the *Regional Thoroughfare Plan* is intended to represent the intentions and expectations of individual cities and counties in developing an ultimate thoroughfare system while maintaining a regional perspective.

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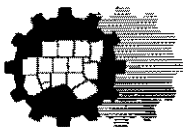
WHAT IS NCTCOG?

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 232 member governments, including all 16 counties, 163 cities, 26 independent school districts, and 27 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.

Prepared in cooperation with the Texas Department of Transportation and the U.S. Department of Transportation, Federal Highway Administration, and Federal Transit Administration.

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.



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REGIONAL THOROUGHFARE PLAN



North Central Texas
Council of Governments
Transportation



0 5 10 15 Miles

New facility locations indicate transportation needs and do not represent specific alignments.

LEGEND

- Regional Arterials
- Other Arterials
- Existing Freeways and Tollways
- - - Proposed Freeways and Tollways
- Preserve Right-of-Way
- County Boundary
- Metropolitan Area Boundary
- Local government thoroughfare plans vary in these corridors.

Dallas CBD



Fort Worth CBD

