1986-87
UNIFIED PLANNING WORK PROGRAM
for Regional Transportation Planning

North Central Texas Council of Governments
1986-87 UNIFIED PLANNING WORK PROGRAM

FOR

TRANSPORTATION

North Central Texas Council of Governments
State Department of Highways and Public Transportation
Cities and Counties of the
Dallas-Fort Worth Metropolitan Area

July 1986
The North Central Texas Council of Governments

The North Central Texas Council of Governments is a voluntary association of cities, counties, school districts and special districts within the sixteen-county North Central Texas region - established in January 1966 to assist local governments in planning for common needs, cooperating for mutual benefit, and coordinating for sound regional development.

The Council of Governments is an organization of, by, and for local governments. Its purpose is to strengthen both the individual and collective power of local governments - and to help them recognize regional opportunities, resolve regional problems, eliminate unnecessary duplication, and make joint regional decisions - as well as to develop the means to assist in the implementation of those decisions.

North Central Texas is a sixteen-county metropolitan region centered around Dallas and Fort Worth. It has a population of 3.8 million and an area of 12,627 square miles. NCTCOG currently has 197 member governments. The membership includes 16 counties, 147 municipalities, 19 independent school districts, and 15 special purpose districts.

NCTCOG's Department of Transportation and Energy

Since 1974 NCTCOG has served as the Metropolitan Planning Organization (MPO) for transportation for the Dallas-Fort Worth area. NCTCOG's Department of Transportation and Energy is responsible for the regional planning process for all modes of transportation. The Department provides technical support and staff assistance to the Regional Transportation Council and its technical committees, which compose the MPO policy-making structure. In addition the Department provides technical assistance to the local governments of North Central Texas in planning, coordinating, and implementing transportation decisions.

William J. Pitsick
Executive Director
North Central Texas Council of Governments
P. O. Drawer COG
Arlington, Texas 76005-5888
(817) 640-3300

Gordon A. Shunk
Director of Transportation and Energy

The NCTCOG offices are located in Arlington in the Centerpoint Two Office Building, 616 Six Flags Drive. Take Hwy. 360 exit off I-30 (turnpike) and proceed .5 mile southwest on Six Flags Drive.

The preparation of this document was financed through grants from the Urban Mass Transportation Administration and the Federal Highway Administration.

July 1986
TABLE OF CONTENTS

I. INTRODUCTION

North Central Texas Region ........................................ I-1
Development of Unified Planning Work Program ................. I-2
Organization of This Document ................................. I-2

II. POLICY ORGANIZATION

Metropolitan Planning Organization .......................... II-1
Regional Transportation Council ............................. II-3
Technical Committees ........................................... II-6
Community Involvement ......................................... II-7
Private Sector Involvement .................................... II-8

III. REGIONAL TRANSPORTATION ISSUES AND EMPHASES

Project Implementation ......................................... III-2
Short-Range Planning ............................................ III-3
Service to Member Governments ................................ III-4
Model System Review ............................................. III-4

IV. OVERVIEW OF THE 1986-87 WORK PROGRAM

Program Description .............................................. IV-1
1. Regional Transportation Planning ....................... IV-2
2. Transportation Planning Assistance .................... IV-3
3. Special Studies ............................................. IV-3
4. Program Administration .................................. IV-4
Disadvantaged Business Enterprises ....................... IV-4
Proposed Budget ................................................ IV-5
Activity Schedule .............................................. IV-7

Appendix A - Detailed Description of Work Program Elements

Appendix B - Description of Accomplishments in 1985-86 Unified Planning Work Program

Appendix C - Technical Committee Membership
I. INTRODUCTION

The Unified Planning Work Program is the instrument for coordinating transportation and comprehensive planning in the North Central Texas region. This Work Program also is the description of proposed work submitted to federal agencies that are the financial sponsors of the program, and it serves as a management tool for the participating entities. This Unified Planning Work Program describes the transportation and comprehensive planning efforts in the North Central Texas Region for the period from October 1, 1986 to September 30, 1987 and defines the functional and financial responsibilities of participating agencies.

NORTH CENTRAL TEXAS REGION

The North Central Texas Region is the 16-county area within which the North Central Texas Council of Governments is responsible for coordinating regional planning. This area consists of the Counties of Collin, Dallas, Denton, Ellis, Erath, Hood, Hunt, Johnson, Kaufman, Navarro, Palo Pinto, Parker, Rockwall, Somervell, Tarrant, and Wise. The region was designated as the North Central Texas State Planning Region by Executive Order of the Governor on August 28, 1973.

Comprehensive transportation planning in North Central Texas was initiated by the Texas Highway Department in the early 1960s in the Dallas-Fort Worth Regional Transportation Study.¹ That study set the foundation for subsequent

¹ Dallas-Fort Worth Regional Transportation Study, Texas Highway Department, July 1967.
transportation planning in the region and defined the area of primary interest for such work.

The Transportation Study Area (TSA) consists of all of Dallas and Tarrant and parts of Denton, Collin, Rockwall, Kaufman, Ellis, Johnson, and Parker Counties, a total area of approximately 3,200 square miles. Expanded for planning purposes in May 1983 and for programming purposes in June 1986, the new TSA incorporates the area which is expected to be urbanized by the year 2000. The North Central Texas Region, the Dallas-Fort Worth CMSA, and the TSA are all shown in Figure I-1.

DEVELOPMENT OF UNIFIED PLANNING WORK PROGRAM

The Unified Planning Work Program is prepared annually by the North Central Texas Council of Governments in cooperation with the State Department of Highways and Public Transportation, Dallas County, Tarrant County, and the Cities of Arlington, Carrollton, Dallas, Fort Worth, Garland, Grand Prairie, Irving, Mesquite, Richardson, and Plano.

The Unified Planning Work Program document is reviewed by the technical committees described in Chapter II and recommended for approval by the Regional Transportation Council. The Unified Planning Work Program is approved by the Regional Transportation Council and the NCTCOG Executive Board.

ORGANIZATION OF THIS DOCUMENT

Chapter II, Policy Organization, describes the policy structure for transportation planning in the North Central Texas Transportation Study Area. Activities described in this Work Program support the development of transportation policy within this structure.
FIGURE I-1

16-COUNTY NORTH CENTRAL TEXAS STATE PLANNING REGION

- Wise
- Denton
- Collin
- Hunt
- Palo Pinto
- Parker
- Tarrant
- Dallas
- Hood
- Somervell
- Erath
- Johnson
- Ellis
- Navarro

Legend:
- Transportation Study Area
- Remainder of Dallas-Fort Worth CMSA
Chapter III, Regional Transportation Issues and Emphases, describes principal transportation issues of concern and Work Program areas of concentration. Work Program activities will address the identified issues. Chapter IV, Overview of the 1986-87 Program, briefly describes the nature of the work in the four areas of activity of this Work Program. The sources and distribution of funding for the regional transportation planning activities are also summarized in this chapter.

Appendix A provides the detailed descriptions of each element of this Work Program. Appendix B describes the work accomplished in each element of the 1985-86 Unified Planning Work Program. Appendix C lists the current members of the technical committees.
II. POLICY ORGANIZATION

Multimodal transportation planning and development require a single policy direction for all modes of travel. In North Central Texas this direction is provided by a committee structure developed jointly by the State Department of Highways and Public Transportation and the local governments of the region. The structure consists of the NCTCOG Executive Board and the Regional Transportation Council, both composed primarily of elected officials, and technical committees of staff familiar with various modes of travel. The organizational structure is shown in Figure II-1.

METROPOLITAN PLANNING ORGANIZATION

The North Central Texas Council of Governments is designated by the Governor of Texas as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth metropolitan area in accordance with federal law (PL 93-87). The Regional Transportation Council is the regional transportation policy body for the MPO. According to federal regulations, the MPO is "... the forum for cooperative decision making by principal elected officials of general purpose local government." The MPO is "... that organization designated responsible, together with the State, for carrying out the provisions of ..." the federal transportation planning requirements.

The contract for the Metropolitan Planning Organization involves the North Central Texas Council of Governments, the Regional Transportation Council, and the State of Texas. The designation of the MPO is by agreement among the units of general purpose local government and the Governor. The initial designation by the Governor was on July 2, 1974. The latest designation (which was approved by NCTCOG's Executive Board on June 28, 1984 and by the Regional
FIGURE II-1
ORGANIZATIONAL STRUCTURE

NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS
EXECUTIVE BOARD

Gary Skaggs, President
Councilmember; Richardson

Joe Regian, Vice President
Councilmember; Garland

Everett B. Gladding, Secretary-Treasurer
Councilmember; Greenville

Gary Bennett, Past President
County Judge; Navarro County

John Evans
Councilmember; Dallas

Bert C. Williams
Mayor Pro Tem; Fort Worth

Marie Hinkle
Councilmember; North Richland Hills

B. J. Hampton
Commissioner; Tarrant County

Marti VanRavenswaay
Councilmember; Arlington

David R. Braden
Citizen Representative

Roy Eaton
Citizen Representative

REGIONAL TRANSPORTATION COUNCIL

Dallas County (2)
Jim Jackson, Commissioner
Nancy Judy, Commissioner

Tarrant County (2)
Bob Hampton, Commissioner
Randy Kildow

Collin County (1)
Vacant

Denton County (1)
Vacant

City of Dallas (4)
Jim Reid, Assistant City Manager
Jim Richards, Councilmember
Jerry Rucker, Councilmember
Dean Vanderbilt, Councilmember

City of Fort Worth (2)
William Garrison, Councilmember
Kathy Wetherby, Councilmember
Vice Chairman

City of Arlington (1)
Marti VanRavenswaay, Councilmember

City of Carrollton (1)
Jim Jenne, Councilmember

City of Denton (1)
Vacant

City of Garland (1)
Richard Dickson, Councilmember

City of Grand Prairie (1)
Ed Galligan, Councilmember

City of Irving (1)
Norma Stanton

City of Mesquite (1)
Brunhilde Nystrom, Mayor

City of Plano (1)
Ron Harris, Councilmember

City of Richardson (1)
Gary Skaggs, Councilmember

State Department of Highways
and Public Transportation (2)
J. R. Stone, District 2
Robert Yielding, District 18

Dallas Area Rapid Transit (1)
Dan Matkin

Fort Worth
Transportation Authority (1)
William H. Quillin

Public Transportation Technical Committee
Jim Wiesehuegel
Chairman

Air Transportation Technical Committee
Jack Downey
Chairman

Highway Technical Committee
Donald H. Walden
Chairman

II-2
The Regional Transportation Council (RTC) has 25 members and is the single policy group for regional transportation decisions. The primary functions of the RTC are to provide guidance for the multimodal transportation planning and to assure coordination among transportation modes, local government entities, and planning activities. The Regional Transportation Council is responsible for direction and approval of the Regional Transportation Plan, the Transportation Improvement Program, and the Unified Planning Work Program, and for satisfying and implementing federal and State law and regulations. The current membership of the Regional Transportation Council is shown in Table II-1.

The Chairman of the Regional Transportation Council is elected from the membership at the last meeting of each odd-numbered year for a term of two years. The individual local governing bodies select their representatives to the RTC. NCTCOG provides administrative and clerical support to the RTC and the technical committees. The Regional Transportation Council meets at 9 a.m. on the first Tuesday of each month in the Board Room of the North Central Texas Council of Governments.
TABLE II-1
REGIONAL TRANSPORTATION COUNCIL
June 1986

Jim Richards, CHAIRMAN
Councilmember
City of Dallas
1500 Marilla, Room 5FN
Dallas, Texas  75201
(214) 670-4050

Kathy Wetherby, VICE CHAIRMAN
Councilmember
City of Fort Worth
5459 Rutland
Fort Worth, Texas  76133
(817) 292-4215

Bob Hampton, SECRETARY
Commissioner
Tarrant County
645 Grapevine Highway
Hurst, Texas  76053
(817) 485-9331

Richard Dickson
Councilmember
City of Garland
910 E. Celeste
Garland, Texas  75040
(214) 271-5859

Ed Galligan
Councilmember
City of Grand Prairie
1702 Capetown
Grand Prairie, Texas  75050
(214) 266-4693

William Garrison
Councilmember
City of Fort Worth
904 Houston
Fort Worth, Texas  76102
(817) 332-6311

Ron Harris
Councilmember
City of Plano
P. O. Box 358
Plano, Texas  75074
(214) 634-6840

Jim Jackson
Commissioner
Dallas County
2311 Joe Field Road
Dallas, Texas  75229
(214) 247-1735

Jim Jenne
Councilmember
City of Carrollton
1502 E. Belt Line Rd., Suite 201
Carrollton, Texas  75006
(214) 242-5315

Nancy Judy
Commissioner
Dallas County
715 Rowlett Road
Garland, Texas  75043
(214) 271-5471

Randy Kildow
Representative
Tarrant County
P. O. Box 13475
Arlington, Texas  76094
(817) 461-1313

R. Dan Matkin
DART Representative
800 W. Airport Freeway
Suite 1012, Box 6079
Irving, Texas  74062
(214) 579-0755

Brunhilde Nystrom
Mayor
City of Mesquite
P. O. Box 137
Mesquite, Texas  75149
(214) 288-7711

William H. Quillin
Fort Worth Transportation
Authority Representative
3324 West 7th Street
Fort Worth, Texas  76107
(817) 336-4143
NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS
REGIONAL TRANSPORTATION COUNCIL (Cont.)

Jim Reid
Assistant City Manager
City of Dallas
1500 Marilla, Room 4DN
Dallas, Texas  75201
(214) 670-5306

Jerry Rucker
Councilmember
City of Dallas
1500 Marilla, Room 5FN
Dallas, Texas  75201
(214) 670-4050

Gary L. Skaggs
Councilmember
City of Richardson
P. O. Box 830309
Richardson, Texas  75083
(214) 705-3683

Norma Stanton
Representative
City of Irving
500 W. Shady Grove
Irving, Texas  75060
(214) 253-5008

J. R. Stone
District Engineer
State Department of Highways and Public Transportation
P. O. Box 6868
Fort Worth, Texas  76115
(817) 292-6510

Dean Vanderbilt
Councilmember
City of Dallas
1500 Marilla, Room 5FN
Dallas, Texas  75201
(214) 670-4050

Marti VanRavenswaay
Councilmember
City of Arlington
5710 Overridge Court
Arlington, Texas  76017
(817) 572-0136

Robert Yielding
District Engineer
State Department of Highways and Public Transportation
P. O. Box 3067
Dallas, Texas  75221
(214) 320-6100
TECHNICAL COMMITTEES

The technical committees provide technical advice for the Regional Transportation Council and technical guidance for the North Central Texas Council of Governments and the Regional Planning Office of the State Department of Highways and Public Transportation. Representatives on these committees are lead technical personnel from local governments, transportation providers in the region, private sector representatives, and personnel from State and federal agencies. The technical committee members provide information about the concerns and priorities of the individual local entities they represent. They also provide specialized technical expertise and serve as a medium of communication and coordination between the regional planning process and individual local agencies. Staff of NCTCOG and SDHPT provide administrative and clerical support for the committees.

Public Transportation Technical Committee

The Public Transportation Technical Committee reviews, comments on, and prepares recommendations regarding public transportation planning and development in North Central Texas. The Committee and its chairman are appointed by the Executive Board of NCTCOG. Members and the chairman of the Public Transportation Technical Committee serve at the pleasure of their agencies and the Executive Board. The current members of the Public Transportation Technical Committee are listed in Appendix C. The Committee meets at 1:30 p.m. on the third Tuesday of each month in the NCTCOG Board Room.

Highway Technical Committee

The Highway Technical Committee has met continuously since 1965 to provide technical guidance for the regional transportation planning process. Members of the Highway Technical Committee are appointed by agencies represented on the
Regional Transportation Council. The Federal Highway Administration, the Texas State Department of Highways and Public Transportation, the North Central Texas Council of Governments, and suburban cities showing interest may appoint representatives. The membership of the Highway Technical Committee is also shown in Appendix C.

Air Transportation Technical Committee

The Air Transportation Technical Committee provides expertise and guidance in the development and maintenance of the Regional Airport and Heliport System Plans. The members and chairman of this committee are appointed by and serve at the pleasure of the NCTCOG Executive Board. Current membership of the Air Transportation Technical Committee is shown in Appendix C. The Committee meets at 2 p.m. on the fourth Wednesday of the month as called by the chairman.

Community Involvement

Community involvement is actively encouraged in the North Central Texas regional transportation planning program. Increasing the communication among citizens, elected officials, and technical staff(s) permits these entities to work together to achieve desired goals and objectives. All meetings of the Regional Transportation Council are publicized and open to the public, from whom comments are welcomed.

The community involvement process closely follows a program which emphasizes the importance of coordinating community involvement efforts with every aspect of transportation planning. When the community is involved, the direction and content of the planning effort is more likely to address the wide range of issues that impact decision makers. Involving people during the planning phase will help to reduce the time and cost of project implementation. Your Region,
Metroplex Transactions, Mobility 2000, and the "Air Quality Status Report" are examples of the newsletters and journals published by the North Central Texas Council of Governments intended to insure community involvement in all phases of transportation planning.

PRIVATE SECTOR INVOLVEMENT

The private sector is encouraged to the maximum extent feasible, to participate in the development of transportation programs and plans. To accomplish this, private transportation providers are invited to participate in TIP development and the regional plan update process. Grant recipients are required to consult with interested parties, specifically including private transportation providers, while developing their proposed program of projects.

Dallas Area Rapid Transit (DART) has initiated several major services using private enterprise providers. The most prominent are its two operational contracts with Trailways Commuter Transit, Inc. for suburban express and fixed-route bus services. DART also uses private contractors for planning and operating support services. The private sector is continually informed about the opportunities to bid for services through competitive solicitations, advertising and regular notifications to a vendor list.

All services of the Fort Worth Transportation Authority (FWTA), with the exception of a portion of the Rideshare Program and some support services, are operated by private enterprise. The largest single private provider is McDonald Transit Associates, who operates and maintains the fixed-route bus service and Mobility Impaired Transportation Service (MITS). However, Vanpool Services, Inc. (VPSI) acts as a third party contractor and provides a vanpool program.
The 1987 UPWP was developed and reviewed by the technical committees which include personnel from the private sector.
III. REGIONAL TRANSPORTATION ISSUES AND EMPHASES

The 1986-87 Unified Planning Work Program addresses four interrelated transportation issues and areas of concentration that concern local governments. These issues have changed somewhat since last year's Work Program because of work that has been accomplished and changes made or proposed at the national and State levels. At least two concerns are driven by funding shortfalls being faced by Congress and the Texas Legislature. In response to soaring federal deficits, Congress in late 1985 adopted the Gramm-Rudman-Hollings bill, an action which has meant funding cuts in the transportation function. Area local governments and transit operators experienced a mandated 4.3 percent cut in transportation funding for FY 1986 and will face even more reductions as Congress and the Administration negotiate future budgets. Another Administration proposal would make changes to the allocation of funds from the Highway Trust Fund.

These federal actions are occurring at a time when Texas can ill afford to bear them. A slump in oil prices has caused a significant reduction in anticipated state revenues and a statewide increase in unemployment. The proposed cut in federal minimum allocations of funds would place an inordinate burden on "donor" states like Texas, which already receive less Highway Trust Fund revenues--85 percent--than they contribute through the fuel tax and other fees.

In the face of these cutbacks, our area continues to grow and place additional demands on our transportation system. Not only must local governments provide appropriate levels of transportation service, but they must do so with less help from State and federal sources than ever before. The problem above all
demands creative strategies for financing and implementation of transportation improvements.

The four areas of concentration in this Work Program are:

- Project Implementation
- Short-Range Planning
- Service to Member Governments
- Model System Review

**PROJECT IMPLEMENTATION**

The Regional Transportation Council passage of the Regional Transportation Plan in February 1986 was but the first step of the larger task of implementing the recommended improvements. The RTC, recognizing this fact, formed a 6-member Finance and Implementation Committee in February 1986 to identify potential sources of financing for improvements listed in the Plan. The purpose of the committee is to work to maintain current funding levels and develop new funding opportunities. The committee is currently investigating such alternative funding mechanisms as private sector financing, developer participation, transportation corporations, road utility districts, toll roads, and other user fees. Legislation to permit creation of special purpose districts and corporations was passed in 1984 by the Texas Legislature; several areas of the state are already using these methods to assemble right-of-way donations or to tax for the initial costs of roadway improvements. Often the road could not be built without private local participation. Our Transportation Analysis Process helps local governments justify financial participation from developers for transportation improvements serving their developments. The Work Program contains several elements which specifically address project implementation,
including implementation of the Regional Transportation Plan (1M) and private sector participation in roadway and transit projects (1I and 1J).

**SHORT-RANGE PLANNING**

Transportation improvements are needed not only to alleviate anticipated problems, but also to mitigate current levels of congestion. The urgency of these projects, the lack of immediate funding for them, and the growth which continues in this region make it imperative to find a strategy to provide for transportation to serve current and future development. The Plan strongly emphasizes such a strategy, called **growth management**.

Growth management anticipates transportation problems through good planning and provides elected officials with accurate, timely options so they can select the best solutions for their communities. There are five kinds of actions in the growth management strategy:

1. System management, getting the most productivity from the existing system (e.g., traffic engineering improvements, traffic and parking regulations, expediting bus and carpool movement);
2. Demand management, reshaping travel demand (e.g., increased ride sharing, staggered work hours, employer transit subsidies);
3. Coordination with development, requiring developers to help bear the cost of transportation improvements needed to serve new developments (e.g., paying city for work performed, constructing facilities themselves, forming associations to provide transportation services);
4. Providing new or improved facilities where needs are greatest; and
5. Identifying new methods of financing.
The last three actions are discussed under project implementation. Strategies 1 and 2 are ways in which we can achieve the desired result at less cost and in a shorter period of time. Our Work Program contains such elements as Transportation Strategies (IH) and Planning in Construction Corridors (IG), which will help local agencies decide which of these strategies is appropriate.

SERVICE TO MEMBER GOVERNMENTS
NCTCOG serves as an extension of local government staffs, both for short- and long-range planning. Local governments are currently demanding more and more of our technical assistance to deal with critical day-to-day problems, especially related to thoroughfare planning. Specific Work Program elements (2C and 2D) are designated for highway and transit technical assistance. We also provide technical support for subarea studies and transportation authority service planning, as well as maintaining the regional transportation networks and the regional travel forecasting system. Another important role for NCTCOG is providing local government staff training.

MODEL SYSTEM REVIEW
The model integration project (IN) to merge our model system with that of SDHPT will have far-reaching implications for transportation planning in the Dallas-Fort Worth area. The effort, started during FY 1986 and to be completed during FY 1987, will assist SDHPT and the Texas Transportation Institute in developing a uniform multimodal travel forecasting model for our region. Information from the 1984 Regional Travel Survey will be used in the model integration project. The resulting integrated model and database for the Dallas-Fort Worth region will be available to all member local governments and will greatly enhance their planning capabilities. One, cooperatively developed, set of travel forecasts will be conducted for the region.
IV. OVERVIEW OF THE 1986-87 WORK PROGRAM

The work described here will be accomplished during the period October 1, 1986 to September 30, 1987. This work will be a cooperative effort between government agencies at four levels—local, regional, state and federal—and will be funded in some manner by each of the participants. These activities will also involve private sector groups: citizens, individual companies, developers, and various associations of the previous three. This Work Program is prepared with requests, guidance, and cooperation from the principal local agencies in the region to assure that the efforts included meet their needs and are consistent with their interests. The efforts are oriented to address the issues and concerns described in Section III of this Work Program as well as concerns identified by the federal sponsors.

This year's Work Program is somewhat transitional because it includes some tasks which will be continuous from year-to-year. This reflects the transition of our program from meeting long-range planning needs to providing on-call technical guidance and assistance. In a very real sense the transportation planning process has become a collection of resources that can be called upon by local governments to assist and supplement their capabilities whenever necessary to meet needs for solving increasingly more complex transportation problems. Not the least important of these services is monitoring and researching new techniques to provide more efficient and effective solutions to transportation problems.

PROGRAM DESCRIPTION

The 1986-87 Work Program is organized in four major areas of effort. These categories primarily reflect the scope of individual tasks included in each
area. Tasks in Regional Transportation Planning deal with more broadly applicable work than Transportation Planning Assistance, which addresses needs of subareas or individual cities. There is also often some level of interdependence between the work included in any one program area, and thus categorization is not clearly defined; e.g., certain tasks under one element may affect work in another program element. These four categories span the principal areas of responsibility of the Metropolitan Planning Organization.

1. REGIONAL TRANSPORTATION PLANNING

This Work Element includes longer range and regionwide planning activities. A key task this year will be to inventory procedures currently employed inside and outside Texas to reduce congestion during extended freeway construction periods. NCTCOG will also assist SDHPT and the Texas Transportation Institute in the development of a multimodal, fully integrated travel forecasting model system for the Dallas-Fort Worth area. Major emphasis will be placed on evaluation and refinement of projects identified in Mobility 2000: The Regional Transportation Plan for North Central Texas to assist local governments, the Regional Transportation Council and SDHPT in implementing improvements necessary to maintain mobility in the year 2000.

A major emphasis in this year's Work Program is the improvement of private sector participation in transit and highway planning. One project will establish additional opportunities to implement private sector services in the transit area, if deemed cost effective, and identify institutional barriers which may restrict local initiation. Another project will focus on involvement in thoroughfare, tollway, and freeway implementation. Current state policies and requirements will be identified, and an analysis of long-term impacts of increased involvement will be addressed.
2. TRANSPORTATION PLANNING ASSISTANCE

This is probably the most important area of activity in this Work Program; it uses the resources of the regional transportation planning process to answer critical, day-to-day needs for local government decisions. It maintains those resources so they provide state-of-the-art, timely information and technology for the best response to needs and concerns. Two tasks respond to requests by local governments for highway and transit technical assistance. Many times these requests are for information from NCTCOG databases; other requests may require computer processing and associated staff time for analysis and documentation of special conditions. The comprehensive set of computer models called the Transportation Analysis Process (TAP) is used to respond to requests for solutions to thoroughfare and Transportation System Management improvements. Several TAP studies will be performed as part of this Work Program: the Greater Carrollton Area, the Parkway Center in North Dallas, Garland and Collin County. Another important task will be a major subarea study. The results of the Regional Travel Forecast indicate that the North 35E or Stemmons Subarea from the Dallas CBD to the City of Denton should be the next subarea study of the RTC.

3. SPECIAL STUDIES

These are special purpose projects requested by local governments and transit authorities. Usually these projects require specialized services that must be purchased from consultants. Many of these services address management and operational improvements for transit agencies. In particular, the transit technical studies will identify steps to improve the effectiveness and efficiency of transit operator management and operations, including equipment maintenance. These efforts will also include developing plans for short-range
service improvements and longer range service planning and financial forecasting.

A Rail Planning Task Force of representatives of local governments and railroads will address common concerns about speed limits, grade crossings, delay analysis, safety, railroad consolidations, joint usage, and interface terminals.

4. PROGRAM ADMINISTRATION

Within this program category are general coordination, communication, and management tasks essential to maintain the planning process. The preparation and circulation of information relevant to regional transportation policy are major components of this element. Development and maintenance of the annual Transportation Improvement Program by the NCTCOG and SDHPT staffs are included here as well as preparation of the Unified Planning Work Program. Also included is support to the Regional Transportation Council and associated technical committees. Overall direction of planning activities is placed in this element, together with such necessary grant administration tasks as purchasing, contract development, and auditing. Also included is management of computer resources necessary for transportation planning.

DISADVANTAGED BUSINESS ENTERPRISES

Participation by Disadvantaged Business Enterprises to plan and provide supply, technical, and transportation services is encouraged by NCTCOG. In this regard we have set our goals for consultant contracts at 10 percent for DBEs and 3 percent for WBEs. We are continually updating our DBE lists through contacts with the Small Business Administration, Avante, and DBE lists received from other planning and transit agencies. Assurance is also given that, in
accordance with Title VI of the Civil Rights Act of 1964, NCTCOG will not discriminate against any person on the grounds of race, color, sex, or national origin.

PROPOSED BUDGET
This section summarizes the budget for the 1986-87 Unified Planning Work Program. Financial support for the program for Fiscal Year 1987 will be provided from five sources: the Federal Highway Administration, the Urban Mass Transportation Administration, the State Department of Highways and Public Transportation, NCTCOG, and local governments. Funding from each source is allocated to the major activity areas as shown in Table IV-1.

Federal Funds
The U. S. Department of Transportation provides funds through programs of the Federal Highway Administration (FHWA) and the Urban Mass Transportation Administration (UMTA). Both FHWA "Section 112" and UMTA "Section 8" funds are provided annually to Metropolitan Planning Organizations to support urban transportation planning activities. For 1986-87, the FHWA contribution to the Unified Planning Work Program is estimated to be $735,000. The Urban Mass Transportation Administration has advised that Section 8 funding for the planning program will be $1,000,000.

Regional Funds
The cash contribution of NCTCOG to this work program will be $125,000. The source of this funding is $75,000 of planning assistance grants from the State of Texas and $50,000 of dues paid by local government members of NCTCOG. There are also likely to be unexpended funds at the end of FY 1986. Unexpended UMTA funds will be carried over to FY 1987. Unexpended FHWA funds are deobligated IV-5
<table>
<thead>
<tr>
<th>WORK PROGRAM ELEMENT</th>
<th>FHWA</th>
<th>UMTA &amp; SDHPT RPO</th>
<th>NCTCOG</th>
<th>LOCAL IN-KIND</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. REGIONAL TRANSPORTATION PLANNING</td>
<td>235</td>
<td>255</td>
<td>202</td>
<td>25</td>
<td>717</td>
</tr>
<tr>
<td>B. TRANSPORTATION PLANNING ASSISTANCE</td>
<td>345</td>
<td>205</td>
<td>190</td>
<td>15</td>
<td>755</td>
</tr>
<tr>
<td>C. SPECIAL STUDIES</td>
<td>30</td>
<td>555</td>
<td>0</td>
<td>47</td>
<td>632</td>
</tr>
<tr>
<td>D. PROGRAM ADMINISTRATION</td>
<td>125</td>
<td>110</td>
<td>20</td>
<td>6</td>
<td>261</td>
</tr>
<tr>
<td>TOTAL</td>
<td>735</td>
<td>1125</td>
<td>412</td>
<td>93</td>
<td>2365</td>
</tr>
</tbody>
</table>
at the end of each fiscal year. We will request that the funds be reobligated in FY 1987 once the amounts of unexpended funds for various projects are known.

**State and Local Funds**

Regional multimodal transportation planning requires close coordination with the professional staffs of local and state governments. For this reason local support of the Unified Planning Work Program is provided through in-kind services from the professional staffs of study area cities and the urbanized counties. In addition various studies involving transit use the expertise of staff from the Dallas Transit System, Dallas Area Rapid Transit, and the Fort Worth Transportation Authority as local in-kind contributions. The local in-kind contribution for 1986-87 is estimated at $92,500. State funds in the amount of $412,000 are included for the budget of the Regional Planning Office of the State Department of Highways and Public Transportation. The sources of in-kind and cash matching are summarized in Table IV-2.

**ACTIVITY SCHEDULE**

The work in the 1986-87 Unified Planning Work Program is ongoing and continuous through the year. Work Program tasks conducted for or in cooperation with local agencies usually cannot be scheduled in advance because they are initiated when the local agencies need the work or when such tasks are convenient for their particular schedules. This situation makes preparing an activity schedule somewhat difficult. For example, preparing the annual Transportation Improvement Program may realistically be described as a year-round activity, including individual project revisions and their technical and local-impact reviews. In addition the performance of consultant studies
**TABLE IV-2**

LOCAL AND STATE MATCHING CONTRIBUTIONS
OCTOBER 1, 1986 to SEPTEMBER 30, 1987

<table>
<thead>
<tr>
<th>State Department of Highways and Public Transportation*</th>
<th>$412,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Central Texas Council of Governments</td>
<td>$125,000</td>
</tr>
</tbody>
</table>

Local Cash Contribution

Local Government In-Kind Contributions

<table>
<thead>
<tr>
<th>City</th>
<th>Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Dallas</td>
<td>$ 37,000</td>
</tr>
<tr>
<td>City of Fort Worth</td>
<td>20,000</td>
</tr>
<tr>
<td>Dallas Transit System</td>
<td>20,500</td>
</tr>
<tr>
<td>City of Arlington</td>
<td>5,000</td>
</tr>
<tr>
<td>City of Garland</td>
<td>5,000</td>
</tr>
<tr>
<td>City of Plano</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Local Government Total: $ 92,500

Total Matching Contributions: $629,500

*Includes only the budget of the Regional Planning Office
for local transit operators and cities must be timed in accordance with locally determined priorities, which thus precludes setting a rigid advanced schedule.

Consequently no specific schedule for work tasks has been provided in this Work Program. Instead carry-over work not completed from the 1985-86 Work Program will be completed first, and new work will be started as soon as possible in accordance with local agency needs at the time efforts are initiated. Task initiation will also depend on special needs or interests and resources available. Care will be exercised to start tasks of longer duration or those requiring significant lead time or down time as early in the year as possible in order to improve the chances of their being completed by the end of the fiscal year.
APPENDIX A

Detailed Description of Work Program Elements
### 1986-87 Unified Planning Work Program Budget

<table>
<thead>
<tr>
<th>NO. FY66*</th>
<th>TASK DESCRIPTION</th>
<th>FINAL BUDGET</th>
<th>SOURCE</th>
<th>FINAL ALLOCATION</th>
<th>OTHER SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>FHWA</td>
<td>UMTA NCTCOG</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>REGIONAL TRANSPORTATION PLANNING</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A</td>
<td>DEMOGRAPHIC DATA COL/MNT</td>
<td>35</td>
<td>25</td>
<td>10</td>
<td>35</td>
</tr>
<tr>
<td>1B</td>
<td>1966 POP &amp; EMP EST</td>
<td>C/0</td>
<td>C/0</td>
<td>0</td>
<td>C/0</td>
</tr>
<tr>
<td>1C</td>
<td>REG THOROUGHFARE PLAN</td>
<td>C/0</td>
<td>C/0</td>
<td>0</td>
<td>C/0</td>
</tr>
<tr>
<td>1D</td>
<td>TRAVEL PATTERN MONITORING</td>
<td>25</td>
<td>15</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>1E</td>
<td>TRANSPORTATION REPORT/PUB INFO</td>
<td>25</td>
<td>15</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>1F</td>
<td>AIRPORT SYSTEM PLANNING</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1G</td>
<td>CONSTRUCTION PLANNING</td>
<td>30</td>
<td>30</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>1H</td>
<td>TRANSPORTATION STRATEGIES</td>
<td>35</td>
<td>15</td>
<td>15</td>
<td>35</td>
</tr>
<tr>
<td>1I</td>
<td>PRIVATE SECTOR/TRANSIT</td>
<td>80</td>
<td>80</td>
<td>0</td>
<td>80</td>
</tr>
<tr>
<td>1J</td>
<td>PRIVATE SECTOR/ROADWAY</td>
<td>25</td>
<td>25</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>1K</td>
<td>VALIDATION OF MTAP MODEL</td>
<td>40</td>
<td>20</td>
<td>15</td>
<td>40</td>
</tr>
<tr>
<td>1L</td>
<td>YEAR 2010 FORECAST</td>
<td>25</td>
<td>15</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>1M</td>
<td>IMPLEMENTING RTP</td>
<td>40</td>
<td>15</td>
<td>15</td>
<td>40</td>
</tr>
<tr>
<td>1N</td>
<td>NCTCOG/SPAN Model INTEGRATION</td>
<td>30</td>
<td>15</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>1O</td>
<td>CONTINUOUS TRAVEL SURVEY</td>
<td>25</td>
<td>25</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>1P</td>
<td>REG AERIAL PHOTOGRAPHY</td>
<td>25</td>
<td>25</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>1Q</td>
<td>AIR QUALITY PLANNING</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1R</td>
<td>DART - PRIVATE SECTOR</td>
<td>50</td>
<td>0</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

**Category Total:**

|              | 490 | 235 | 215 | 40 | 455 | 35 | 202 | 25 |

---

**2 II TRANSPORTATION PLANNING ASSISTANCE**

| 2A        | MID-CITIES SUBAREAS STUDY | C/0 | C/0 | C/0 | 0 | C/0 | 0 | 5 | 0 |
| 2B        | NORTH TARRANT FREeway | 30  | 30  | 0   | 30 | 5  | 0 | 30 | 0 |
| 2C        | HWY PLNG TECH ASSIST | 50  | 50  | 0   | 50 | 0  | 0 | 30 | 0 |
| 2D        | TRN PLNG TECH ASSIST | 50  | 50  | 0   | 50 | 0  | 0 | 30 | 0 |
| 2E        | NETWORK MAINTENANCE | 35  | 15  | 15  | 35 | 0  | 0 | 30 | 0 |
| 2F        | DATABASE MAINTENANCE | 20  | 10  | 5   | 20 | 0  | 0 | 30 | 0 |
| 2G        | TRAVEL DESIGN MODEL | 25  | 10  | 10  | 25 | 0  | 0 | 30 | 0 |
| 2H        | TRAFFIC/TRANSIT MODELING | 10 | 5   | 5   | 10 | 0  | 0 | 30 | 0 |
| 2I        | PMVT/MTN INVENTORY SY | C/0 | C/0 | C/0 | 0 | C/0 | 0 | 5 | 0 |
| 2J        | TRANSIT PLNG/ISA/NS-ISA | 20 | 5   | 5   | 20 | 0  | 0 | 30 | 0 |
| 2K        | TIS/TAP TRAINING | 20  | 10  | 5   | 20 | 0  | 0 | 30 | 0 |
| 2L        | IMPLEMENT GROWTH MONITOR | 40 | 25  | 10  | 40 | 0  | 0 | 30 | 0 |
| 2M        | HWY SAFETY ANALYSIS | 0   | 0   | 0   | 0 | 0  | 0 | 0 | 0 |
| 2N        | NETWORK SPEED SURVEY | 20  | 20  | 0   | 10 | 10 | 0 | 30 | 0 |
| 2O        | HOV FEASIBILITY STUDY | 30  | 15  | 10  | 30 | 0  | 0 | 30 | 0 |
| 2P        | DATABASE/MODEL INTEGRATION | 30 | 15  | 10  | 30 | 0  | 0 | 30 | 0 |
| 2Q        | TAP STUDIES | 300 | 300 | 0   | 300 | 0  | 0 | 30 | 0 |
| 2R        | FOURTH SUBAREAS STUDY | 65  | 40  | 20  | 65 | 0  | 0 | 30 | 0 |

**Category Total:**

|              | 550 | 345 | 145 | 60 | 530 | 20 | 190 | 15 |

---

**3 III SPECIAL STUDIES**

| 3A        | FW TRANSIT MGMT STUDIES | 120 | 0   | 120 | 5 | 0  | 120 | 0  |
| 3B        | FT WORTH TRN DEP STUDY | C/0 | 0   | 0   | 0 | C/0 | 0  | 0  |
| 3C        | FT WORTH PARKING STUDY | 10  | 10  | 0   | 10 | 0  | 0  | 0  |
| 3D        | DART DEVELOPMENT PROG | C/0 | 0   | 0   | 0 | C/0 | 0  | 0  |
| 3E        | DTS OPERATIONS STUDIES | 345 | 335 | 5   | 345 | 300 | 0  | 15 |
| 3F        | DART IMPACT STUDY | C/0 | C/0 | C/0 | 0 | C/0 | 0  | 0  |
| 3G        | RAILROAD COORDINATION | 40  | 20  | 15  | 40 | 0  | 0  | 0  |
| 3H        | GRAND PRAIRIE P & R | C/0 | C/0 | C/0 | 0 | C/0 | 0  | 0  |
| 3I        | DALLAS RAIL STN PLNG | 70  | 70  | 0   | 70 | 0  | 0  | 17 |
| 3J        | MASTER RAILTRAN PLN | C/0 | C/0 | C/0 | 0 | C/0 | 0  | 0  |

**Category Total:**

|              | 585 | 30  | 540 | 15 | 85  | 500 | 0  | 47 |

---

**4 IV PROGRAM ADMINISTRATION**

| 4A        | RTC/COMMITTEE SUPPORT | 60  | 35  | 20  | 5 | 60  | 0  | 10 | 6 |
| 4B        | UPWP/TIP SUPPORT | 50  | 25  | 20  | 5 | 50  | 0  | 5  | 0 |
| 4C        | MISCELLANEOUS ADMIN | 85  | 45  | 40  | 0 | 85  | 0  | 5  | 0 |
| 4D        | COMPUTER RESOURCE MGMT | 40  | 20  | 20  | 0 | 40  | 0  | 0  | 0 |

**Category Total:**

|              | 235 | 125 | 100 | 10 | 235 | 0  | 20 | 6 |

**Program Total:**

|              | 1860 | 735 | 1000 | 125 | 1305 | 555 | 412 | 93 |

*Numbers in this column refer to carry-over work elements from the 1985-86 UPWP.*
1. * REGIONAL TRANSPORTATION PLANNING

1A Demographic Data Collection and Maintenance

This effort provides demographic data monitoring for transportation planning. Work tasks in this element include updating land use data files, interpreting aerial photographs, model maintenance, and technical demographic planning assistance for transportation studies. Special trip generators (e.g., shopping malls) will be inventoried as part of this project.

1B Ik. 1986 Population and Employment Estimates (Carryover)

Detailed demographic estimates by Traffic Survey Zone for 1986 will be prepared for revalidating traffic forecasting models. The 1986 validation process will be conducted on a joint NCTCOG/SDHPT model system.

1C Id. Regional Thoroughfare Plan (Carryover)

The Regional Thoroughfare Plan is prepared by compiling local thoroughfare plans into a comprehensive plan for the region. The plan will identify existing facilities which are anticipated to be improved as well as new thoroughfares. The new plan will use data from the regional plan update model runs to identify warranted regional thoroughfare facilities. This plan will include geometric standards for the region.

1D Travel Pattern Monitoring

This effort will assemble and collect current information on the region's transportation system. The annual VMT estimate will be prepared and a traffic count map produced using the nearly 6,000 traffic counts obtained for 1986. The SDHPT annual vehicle occupancy survey will also be conducted. This element includes monitoring energy use as part of the energy contingency planning process.

1E Transportation Reporting Process/Public Information

Three principal activities are included in this task:

- The Annual Transportation Data Book will provide a wide range of information describing current transportation and travel in the Intensive Study Area. This includes data summaries for local governments for their use in transportation planning and development analysis efforts.

* Numbers in this column refer to carryover Work Elements from the 1985-86 UPWP A.2
Area information reports provide descriptive summaries of transportation, travel, demographics, and development for small subareas in the region. These reports are intended for use by cities, chambers of commerce and developers in marketing efforts for their particular areas.

Metroplex Transactions, the joint newsletter of SDHPT and NCTCOG, will continue to be published on an annual basis.

Airport System Planning

Specific activities in this work element are: develop commercial aviation forecasts, analyze economic impacts of general aviation, develop noise contour modeling capability, provide technical assistance, support necessary committees, and continue long-range planning for the region's airport needs.

Planning in Construction Corridors

This project would inventory procedures currently employed inside and outside Texas used to reduce congestion during extended freeway construction periods. CBD work-hour modifications, high occupancy vehicle lanes, ridesharing and transit improvements, etc. will be examined and evaluated for use in corridors anticipated to have long construction phases. Communication methods with the traveling public will be examined. Travel simulations will be conducted to evaluate routing options.

Transportation Strategies for Large Suburban Developments

With the completion of the Traffic Impact Manual, an assessment can be performed of cost-effective strategies to minimize the transportation impact of such developments. A wide range of growth management strategies will be developed to minimize congestion effects and optimize value capture through impact fee options. Such actions include limiting parking capacity, requirements for carpool coordinators, constructing transit access, evaluating a citywide "impact fee" by district with incentives for location in uncongested areas and creating planned unit developments with "mix uses."

Greater Private Sector Involvement in Transit Planning

Some transit operations across the region and county have implemented transit service with the assistance of the private sector. The purpose of this project is to first identify local examples of private sector involvement in the transit area and second, determine national examples of private sector involvement including the cost of such services. This project would establish the opportunity to further implement private sector services, if deemed cost effective, and to identify institutional barriers which may restrict local initiation. Analyses of long-term impacts of increased private sector involvement will also be addressed.
Greater Private Sector Involvement in Roadway Planning

This work program element would operate similar to Project II but would focus on private sector involvement in thoroughfare, tollway and freeway implementation. This project will identify current State policies and requirements and will investigate options for greater private sector involvement.

Validation of MTAP Model System for 1986

With the new model parameters from the 1984 travel survey and the nearly 6,000 traffic counts for 1986, revalidation of the model system for 1986 will be conducted. This will move the current model validation from 1980. The SDHPT-RPO will also use 1986 as the validation year and efforts will be made to integrate the model system by this time so one joint model validation is conducted.

Conduct Year 2010 Forecast

Upon completion of the 1986 validation, forecast transit and roadway travel for the year 2010. This forecast will serve as the baseline travel assessment for the development of the 2010 long-range plan.

Implementing the Regional Transportation Plan

Assist local governments, the Regional Transportation Council, and SDHPT to expedite and implement projects identified in Mobility 2000: The Regional Transportation Plan for North Central Texas. This includes work conducted by the Financial Committee of the RTC. Further evaluation and refinement of projects contained in the Plan will be conducted.

NCTCOG/SDHPT Model Integration

Assist SDHPT and Texas Transportation Institute in the development of one multimodal, fully integrated travel forecasting model system for the Dallas-Fort Worth area.

Continuous Travel Survey

Conduct a small travel survey consistent with the methodology developed in 1984 to periodically monitor the travel characteristics in the region. A regionwide odometer survey will be evaluated for the purpose of measuring aggregate travel demand.

1987 Regional Aerial Photography Program

This task provides for services to obtain aerial photographs for the Intensive Study Area. These detailed photographs are used to study and map changes in land use which are important to transportation planning.
1Q  
Air Quality Planning

Assist local governments and perimeter counties in monitoring the current State Implementation Plan for Air Quality and conduct tasks as directed by the RTC and Executive Board.

1R  
DART - Private Sector Partnership

The purpose of this project is to document the use of private sector services by DART. This project is requested by UMTA as a demonstration project in order for other public transportation providers to understand the benefits and potential risks of contracting services to the private sector.

2.  
TRANSPORTATION PLANNING ASSISTANCE

2A  IIa.  Mid-Cities Subarea Study (Carryover)

The Mid-Cities Subarea Study will be completed in the fall of 1986, extending into the 1987 fiscal year. The study includes examination of the nature and timing of public transportation needs and the coordination of rail facilities identified in the Regional Transportation Plan. Also included in this study is the identification of specific thoroughfare improvements consistent with needed freeway facilities. Transportation System Management options will also be addressed in this study.

2B  
North Tarrant Freeway Route Study

The North Tarrant Freeway is contained in the recently approved Mobility 2000 Plan. The purpose of this study is to conduct a detailed evaluation of the corridor in order to determine the route location, interchange locations, and needed thoroughfare support network. NCTCOG planning funds will be used to assist in the refinement of the planning components of the freeway facility. Additional funds should be obtained from the affected local governments, SDHPT and the private sector to conduct preliminary engineering on the proposed project.

2C  
Highway Planning Technical Assistance

This work element provides for NCTCOG and the RPO to respond to various technical analysis requests from local governments and the District offices of SDHPT. Many times these requests are for information from the NCTCOG Thoroughfare Information System or other data bases. Often, however, the requests require some kind of computer processing and associated staff time for analysis and documentation of special conditions. These projects are not as extensive as full modeling studies, but they often follow much the same approach, only with less demand for resources. The projects in this task are primarily related to the planning and design of street and highway facilities. This project includes the evaluation of trip interchange movements in the I.H. 20/S.H. 121, I.H. 30/I.H. 820, and I.H. 35W/I.H. 20 locations. This project also includes assistance to the City of Dallas in the conduct of the Dallas Thoroughfare Plan.

A.5
Transit Planning Technical Assistance

This assistance is similar to the efforts described in Project 2C, except that the technical analysis is entirely of transit system performance and demand. The nature of assistance provided in the past has also been somewhat broader than traffic analysis, including administrative and planning support. The technical procedures used for these analyses also are not necessarily wedded to the conventional MTAP process. This project includes the update of the NCTCOG technical reports on park-and-ride planning and determine its application for the western portion of Tarrant County. This project also supports technical assistance to DART for conducting transit forecasts.

Transportation Network Maintenance

Keeping the roadway and transit network data base current is the principal purpose of this ongoing task. This information is used in travel forecasting and technical assistance requests. This task includes establishing a program of routine monitoring of improvements that will maintain current physical and operating conditions on the region's transportation network. This year's activities will focus on the implementation of the network digitizer and the conversion of all information to the new system.

Transportation Data Base Maintenance

This continuing task provides for updating the non-network transportation and travel data base used by the NCTCOG/SDHPT model system. Forecast year data are the principal focus of this project (e.g., travel costs).

Travel Model Maintenance

The travel model computer programs are continually updated to improve procedures and to remedy problems that are identified during use. Maintenance of the modeling system also incorporates better data structures, program organization, and output presentation. This element will involve modifying the travel forecasting model system and parameters to incorporate results of the regional travel survey analysis. Transit modeling improvements requested by DART and highway modeling improvements consistent with SDHPT and NCTCOG procedures will be included. A thorough review of the transit modeling options will be performed and presented to the transit authority staffs. A major effort will continue on documenting the resulting model system so that local governments can readily use the model system, data, and networks for studies in their respective local areas. The model system will be reviewed to insure a short-range planning capability for use by local governments.
2H Traffic and Transit Operations Modeling Capability

To improve services to local governments and transit agencies, this project will acquire the traffic simulation program TRAFLO and programs to develop trip tables from link volume counts (LKOD software). Testing of the process and performance of a case study will demonstrate the model's capabilities. The project will also investigate acceptable travel demand procedures and existing transportation system management, traffic and transit softwares (e.g., SOAP, NETSIM, TRANSYT-7F). This process will improve the comprehensiveness and capabilities of the NCTCOG modeling staff. Procedures identified will be shared with interested local governments and priorities established.

2I Pavement/Maintenance Inventory System (Carryover)

Coordinate bridge structure and thoroughfare and freeway pavement/maintenance inventory systems and develop where applicable additional inventory methodologies in order to annually report on the quality of the roadway and bridge infrastructure. This information will augment the information contained in the Transportation Improvement Program and the long-range plan and result in a more comprehensive mobility and infrastructure maintenance cost analysis. This process should result in balanced investments between new and existing facilities.

2J Transit Planning (ISA and Non-ISA)

This task provides for transit planning to be conducted at the request of the region's small urban and rural areas. Planning efforts will include demand analyses, service planning, and assistance to communities in grant application preparation and service implementation. SDHPT has requested an evaluation be performed of transit needs in the northeast quadrant of Tarrant County. NCTCOG will work with SDHPT to contact local governments outside the urbanized area to inform them about this program and to identify what manner of participation, if any, they wish to pursue. Efforts outside the Intensive Study Area will be funded by UMTA Section 18 funds, to be requested by NCTCOG if the local governments want to proceed. An inventory of all 16(b)2 receipts will be conducted as part of this task.

2K TIS/TAP Training for Local Governments

The Thoroughfare Information System (TIS) and the Thoroughfare Analysis Process (TAP) are computer-aided analytical tools used in conducting small area traffic studies. TIS and TAP were developed by NCTCOG with the understanding that eventually these capabilities would be made available to the local governments. Because of the need to assure accuracy of local traffic projections, the intent is to transfer TIS and TAP to interested local government computer facilities and train the local staffs in their use. MicroTRIPS training is also included in this project.
Implementation of Growth Monitoring Process

This project entails the implementation of a growth monitoring database collection and maintenance process with city planning and building inspections departments. The element will include the development of an ongoing (i.e., quarterly) collection and geocoding of commercial and multi-family structures, single family subdivisions, major employers, and planned developments. Development of reports and software for use by cities in maintaining these data will be developed. This process would be used to facilitate all future population and employment estimates and forecasts.

Highway Safety Analysis

A regional accident information data base will be developed to be used for improving highway safety. Recent work on truck accidents demonstrated the value of analyzing existing accident information. This data played a key role in determining the location for hazardous materials truck routes. This project will collect and use accident data for all vehicles and assist local and state officials in evaluating potential roadway improvements to reduce accidents and improve safety. Special FHWA funding will be requested for this project.

Network Speed Survey

Review existing travel speed data and implement a small travel speed survey in order to recalibrate the volume delay equations used by NCTCOG and SDHPT. The traffic assignment equations would be calibrated by functional class group and time-of-day with sensitivity to the use of speed limits as reasonable initial travel speeds.

HOV Feasibility Study in the S.H. 121/S.H. 183 Corridor

The Mobility 2000 Plan identified the need for a High Occupancy Vehicle Lane connecting Dallas-Fort Worth Regional Airport and Dallas County to the Fort Worth Central Business District. The purpose of this project is to address park-and-ride opportunities in this corridor and conduct project planning on the recommended HOV route.

Transportation Computer Data Base/Model Integration

This task will continue the effort to link individual local government transportation offices by telecommunication to the NCTCOG computer and data base in order to permit interactive data base maintenance and use. The task will examine the feasibility of cooperative purchase and operation of a mainframe computer to be used by member governments for transportation planning functions.
Transportation Analysis Process (TAP) Studies

During the year NCTCOG receives requests from local governments to provide detailed assistance in various transportation planning activities. A comprehensive set of computer models called the Transportation Analysis Process (TAP) is used in response to these requests. This task provides for six TAP studies to be performed during the year. The studies identified to date are: Greater Carrollton Area, Parkway Center (North Dallas), Garland and Collin County. Solutions addressed will include both thoroughfare and Transportation System Management improvements.

Fourth NCTCOG Subarea Study

In previous years NCTCOG has completed three detailed subarea studies. The first was in the Dallas North Central area, followed by the Southwest Fort Worth and Mid-Cities Subarea Studies. The Regional Transportation Council will identify the next subarea study with a scheduled start-up in October, 1986. The results of the Regional Travel Forecast indicate that the North 35E or Stemmons Subarea Study from the Dallas CBD to the City of Denton should be the next subarea study.

SPECIAL STUDIES

Fort Worth Transit Management Studies

This project includes consultant work to accomplish tasks recommended in the Fort Worth Transportation Authority Service Plan. This will be a technical study to support organization, management and development actions. The specific projects in this element are:

- Evaluation of Recent Fort Worth Transportation Authority Service and Marketing Strategies. This study will survey transit users and non-users for their feedback on service and other modifications made to the transit system in Fort Worth. The study will also quantitatively measure ridership changes due to the modification of transit service and operations.

- Transit Development Plan for MITS. The purpose of this project is to prepare a Transit Development Plan for the Mobility Impaired Transportation Service of Fort Worth. The Plan will guide service modifications and management policies impacting this elderly and handicapped transit service.

Fort Worth Transit Development Program (Carryover)

This work element includes carryover projects from previous work programs that were not initiated before FY 1987. The purpose of this project is to conduct short-range technical planning and operations studies.
3C Fort Worth Parking Study

This is an ongoing project to do parking inventories in the Fort Worth Central Business District, hospital district and other concentrated travel areas.

3D IIId. Dallas Area Rapid Transit Development Program (Carryover)

This work element includes carryover projects from previous work programs that were not initiated before FY 1987. The purpose of this project is to conduct short-range technical planning and operations studies.

3E Dallas Transit System Operations Studies

This work will include several transit technical studies for the Dallas area. The studies include:

- Site Identification and Environmental Assessment of Future Bus Operating Facilities
- Site Identification and Environmental Assessment of Future Park-and-Ride Facilities
- Development of an Integrated Bus Feeder Network and Staged Implementation Plan
- Bus Passenger Shelter Location Study
- Electronic Passenger Schedules Information Network Development
- Development of Overall Bus Vehicle Maintenance Program

3F IIIf. DART Impact Study (Carryover)

The new Dallas Area Rapid Transit (DART) system will have profound effects on transportation and development in Dallas and its suburbs. This project identifies the nature and extent of the most significant impacts. The effort will extend for some time into the future in order to identify effects of DART rail service. This work element will design the program and initiate information gathering activities, especially for impacts whose conditions will be changing as DART plans are implemented. Activity to collect this "perishable" data is necessary soon because it can never be recreated.

3G Railroad Coordination

The Rail Planning Task Force will continue discussion among representatives of local governments and the railroads. Issues for discussion would be common concerns about speed limits, grade crossings, delay analysis, safety, railroad consolidations, joint usage, and interface terminals. Analysis of the rail facilities includes both freight and passenger movement effects. Three subcommittees were formed in the Spring of 1986 and will continue into the next fiscal year.
IIIi. Grand Prairie Park-and-Ride Evaluation (Carryover)

This project is a consultant project for planning and design of a park-and-ride lot. Section 9 planning funds have been requested from UMTA for this project.

Dallas Rail Station Area Planning - Phase II

The purpose of this project is to build upon the information obtained from detailed evaluation of station area planning activities in other cities. This project would use Computer Aided Design (CAD) techniques to evaluate the report of alternative development policies.

IIa. Master Usage Plan for D/FW RAILTRAN System (Carryover)

This project would begin to develop a unified plan for usage of the RAILTRAN Corridor for future commuter rail. The first phase would be an initial assessment of Corridor width and station location requirements to develop a land acquisition plan.

PROGRAM ADMINISTRATION

RTC and Committee Support

This task includes preparation of material for meetings, preparation of minutes, and any followup required. Any other staff activity and expenses associated with RTC activities are covered in this task.

UPWP/TIP Support

This task includes preparation and revision of the UPWP and TIP, including notification to funding agencies, revisions, grant application compliance submittals, Texas Review and Comment System requirements, etc.

Miscellaneous Administration

This task includes monitoring budgets and costs, payment of bills, contract management, consultant contract monitoring, and miscellaneous items such as preparation of progress reports, personnel information, monitoring of the Federal Register and the Texas Register, legislative monitoring, review and routing of periodicals, mailing of publications on requests, update of mailing lists, and general office management.

Computer Resource Management

Computer Resource Management includes various computer system maintenance functions and hardware costs that are not directly accountable to individual projects. Computer overhead costs are contained in this project.
APPENDIX B

Description of Accomplishments in 1985-86 Unified Planning Work Program
1985-86 UNIFIED PLANNING WORK PROGRAM
Accomplishments

I. REGIONAL TRANSPORTATION PLANNING

Ia. Travel Model Revisions/Documentation - This task included changing the travel forecasting model system to incorporate results of the regional travel survey analysis. Transit modeling improvements requested by DART and highway modeling improvements were also included. A major effort began to document the revised model system to enable local governments to use the model system, data, and networks for studies in their respective areas.

Ib. Demographic Data Collection and Maintenance - This ongoing task provided demographic data for use in transportation planning. Data included population and employment forecasts and characteristics; 1986 work tasks included updating land use data files, examining aerial photographs, preparing annual population estimates, and technical demographic planning for transportation studies.

Ic. Demographic Forecasting Models - Started in FY 1985 and funded through a special Urban Mass Transportation Administration grant, this project developed improved population and employment forecasting procedures for the Dallas-Fort Worth metropolitan area.

Id. Regional Thoroughfare Plan - Carried over into next fiscal year.

Ie. Travel Pattern Monitoring - This task included collecting current information on the region's transportation system. The annual VMT study and traffic count program continued and were used to update and validate the NCTCOG travel models. Special care was taken to collect traffic counts in the newly added portions of the expanded Intensive Study Area. Nearly 6,000 traffic counts were collected in 1986.

If. Transportation Reporting - This task included two principal activities in FY 1986:

- Area Information Reports - Presentations and articles on transportation issues were developed and presented to business and developer groups and local government staffs.
- Newsletter - Three issues of Metroplex Transactions, the joint newsletter of SDHPT and NCTCOG, were published and mailed to over 3,000 recipients.

Ig. Airport System Planning - Several specific activities addressing long-range planning for airport needs in the region were included in this project. Other activities included analysis of the economic impacts of general aviation airports for local economies, continued monitoring of area airport activity, and support of efforts to implement the Regional Airport System Plan - 2000.
Ih. Regional Transportation Plan Update--2000 Mobility Plan for North Central Texas - This work completed the update of the Regional Transportation Plan to the year 2000. The update, started in FY 1984 and based on the regional travel forecasts, included the latest DART and FWTA service plans as well as the SDHPT 20-year highway plan. Copies of the Plan were published in summary form for general circulation.

II. Air Quality SIP Revisions - This project involved monitoring revisions to the Dallas County and Tarrant County State Implementation Plans for Air Quality. The effectiveness and implementability of projects previously proposed in transportation-air quality planning documents prepared by NCTCOG and the local governments were assessed. NCTCOG worked with the local governments and the Texas Air Control Board to conduct an evaluation of reasonable further progress to air quality objectives.

Ij. Travel Pattern Analysis - This work examined 1980 Census journey-to-work data and results from all components of the 1984 regional travel surveys. It enabled planners to incorporate current travel characteristics in the regional travel forecasting models. Data summaries were prepared for local governments for use in transportation planning and development analysis efforts.

Ik. 1986 Population and Employment - Carried over into new fiscal year.

II. TRANSPORTATION PLANNING ASSISTANCE

IIa. Mid-Cities Subarea Study - The analysis of Mid-Cities transportation needs, initiated late in FY 1985, continued during FY 1986. The study area is between Loop 820 and Loop 12 and from Mansfield to Grapevine. The study included an examination of the nature and timing of public transportation needs and coordination of possible services on the Rock Island railroad with the new transit authorities. Also included was consideration of the needs for improvement to existing freeways as well as the possibilities of demand for new major arterial streets and highways. The project included review of the results of alternatives analyses with local staff, elected officials and citizens. Portions of this project may be completed in the fall of 1986.

IIb. Highway Planning Technical Assistance - The opportunity for NCTCOG to respond to various technical analysis requests from local governments was provided in this task. Often these requests were for information from the NCTCOG Thoroughfare Information System or other data bases. However, the requests often required computer processing and associated staff time for analysis and documentation of special conditions. These projects are not as extensive as the "TAP Studies" that have individual task identification, but they often follow much the same approach, only with less demand for resources. The projects completed under this task include numerous trip origin/destination studies, roadway inventory summaries, origin/destination travel time studies, traffic impact studies, level of service analyses, speed information and traffic volume studies.
IIc. **Transit Technical Assistance** - This assistance was similar to the efforts described in IIb except that the technical analysis was almost entirely of transit system performance and demand. The nature of assistance provided was also somewhat broader than traffic analysis, including administrative and planning support. The technical procedures used for these analyses also were not wedded to the conventional MTAP process. Several computer runs were conducted for DART as part of this project.

IID. **Transportation Network Maintenance** - Keeping the roadway and transit network data base current is the principal purpose of this ongoing task. This information is used in travel forecasting and technical assistance requests. This task included establishing a program of routine monitoring and notices of improvements to maintain NCTCOG awareness of physical and operating conditions and changes throughout the region's transportation network.

IIe. **Transportation Data Base Maintenance** - This continuing task provides for updating the demographic and non-network transportation and travel data base used by the NCTCOG model system. Forecast year data were the principal focus of this updating, based upon trends in current data and other changes. The data monitored for change are population, employment, and all parameters of the travel forecasting models.

IIf. **Travel Model Maintenance** - The travel model computer programs are continually updated to improve procedures and to remedy problems that are identified during operation. Maintenance of the computer modeling system is an ongoing process to incorporate better data structures, program organization, and output presentation. Documentation improvements are also addressed in this task.

IIg. **Traffic Impact--Public/Private Analysis Process** - Many of the requests that are received under Technical Assistance to Local Governments consist of small area traffic impact analyses. This project was to develop a planning manual to explain how to do these small scale studies. Providing a uniform method of analysis for use across the region will save time and money because developers will not have to know different procedures for different cities.

IIh. **Transportation Computer Data Base/Model Integration** - This task involved an initial effort to link individual local government transportation offices by telecommunication to the NCTCOG computer and data base in order to permit interactive data base maintenance and use. This task also studied the feasibility of cooperatively purchasing and operating a mainframe computer to be used by member governments for various planning functions.

IIi. **Transportation Analysis Process (TAP) Studies** - Several detailed thoroughfare studies were completed under this work element. Specifically, NCTCOG staff developed travel forecasts using the TAP model system for North Dallas, Hurst, Richardson and Plano.
IIj. Fort Worth Master Thoroughfare Plan Update - NCTCOG assisted Fort Worth in refining the alignments of the thoroughfares contained in the Fort Worth Master Thoroughfare Plan. Detailed analysis of permitted plat activity and travel needs were included in the evaluation.

IIk. Tarrant County Outer Loop Study - As part of the development of the Regional Transportation Plan, detailed study of the need for an outer loop freeway on the west and south side of Fort Worth was conducted. The results of this effort are contained in the Mobility 2000 Plan.

III. Dallas Computer Assistance - The City of Dallas requested special assistance from NCTCOG to develop software and data to support their applications of the MicroTRIPS software program. This work was completed so city staff could develop travel forecasts for the Dallas Thoroughfare Plan.

III. Highway Safety Analysis - Unfunded

III. Pavement Maintenance - Carried over into new fiscal year.

III. SPECIAL STUDIES

IIIa. Fort Worth Transit Management Studies - Consultant assistance was provided to the City of Fort Worth for the conduct of management studies in support of the Fort Worth Transportation Authority Service Plan.

IIIb. Fort Worth Transit Development Program - This project included several transit operation tasks recommended in the Fort Worth Transportation Development Program. Activities included developing a fare plan, refining the five-year route plan, and preparing rider estimates for the five-year plan. Some tasks will be carried over to the Fiscal Year 1987 Program.

IIIc. Fort Worth Parking Studies - Parking demand and parking lot site selection studies were conducted for the CBD and the Stockyards area.

IIIId. Dallas Area Transit Development Program - This task includes several technical transit studies for DTS which are being used to update the TDP for the Dallas area. The studies included a fixed asset inventory, continued work on the bus system and service data base, site selection studies for timed transfer centers and garages, and an update of the short-range capital needs study. Some tasks will be carried over to the Fiscal Year 1987 Program.

IIIe. Dallas Transit System Operations Study - The work conducted in this item included several transit technical studies for the Dallas area. The studies include a preferential treatment study, a fare structure study, and an automated scheduling analysis.

IIIf. DART Impact Study - Carried over into new fiscal year.

B.4
Illg. Dallas Rail Station Area Planning - This project examined transit station area planning and development in four cities with operating rail systems. The City of Dallas evaluated development scenarios and alternative development policies.

IIIh. Railroad Coordination - The previously formed Rail Planning Task Force reconvened to reestablish discussion among representatives of local governments and the railroads. Issues of discussion were related to speed limits, grade crossings, safety, railroad consolidation, and joint usage.

IIIi. Grand Prairie Park-and-Ride - Carried over into new fiscal year.

IIIj. DART Transit Educational Program - This task developed a transit education program curriculum for public schools. The objective of this project is to promote awareness, usage and a positive attitude toward public transportation.

IV. PROGRAM ADMINISTRATION

IVa. RTC and Committee Support - This ongoing task included preparation of mailout material for meetings, preparation of minutes, and followup. Staff activity and expenses associated with the RTC are covered in this task.

IVb. UPWP/TIP Support - This continuing task provided preparation and revision of the UPWP and TIP, including notification to funding agencies, revisions, grant application compliance submittals, etc.

IVc. Miscellaneous Administration - This task included monitoring budgets and costs, payment of bills, contract management, and miscellaneous items such as preparation of progress reports, personnel information, monitoring the Federal and Texas Registers, review and routing of periodicals, mailing of publications on request, update of mailing lists, and general office management.

IVd. Computer Resource Management - Computer Resource Management provides for various computer system maintenance functions and hardware costs that are not directly accountable to individual projects.
APPENDIX C

Technical Committee Membership

- Air Transportation Technical Committee
- Highway Technical Committee
- Public Transportation Technical Committee
NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS
AIR TRANSPORTATION TECHNICAL ADVISORY COMMITTEE
May 1986

Jack Downey, Chairman
1010 Tanglewood Lane
Arlington, Texas  76012
(817) 274-3918

Robert L. Gore, Vice Chairman
North Dallas Jetport
16051 Addison Road, Suite 325
Dallas, Texas  75248
(214) 490-9546

John Anderson
Supervisor, Airport Plans
Environmental Section
Federal Aviation Administration
P. O. Box 1689
Fort Worth, Texas  76101
(817) 877-2617

Larry Baldwin
Assistant City Manager
City of Mesquite
P. O. Box 137
Mesquite, Texas  75159
(214) 288-7711

Danny Bruce
Director of Aviation
Love Field
210 Terminal Bldg. LB 16
Dallas, Texas  75235
(214) 352-2663

Charles Clack
2820 Country Club Road
Garland, Texas  75041
(214) 278-3667

Doyle Dobbins
Airport Manager
Grayson County Airport
4700 Airport Drive
Denison, Texas  75020
(214) 786-2904

Dan Echols
Mayor
City of North Richland Hills
P. O. Box 18609
North Richland Hills, Texas  76118
(817) 281-0041

Jeff Fegan
Chief Planner
D/FW International Airport
P. O. Drawer DFW
Dallas/Fort Worth Airport, Texas  75261
(214) 574-3101

Lt. Col. Harvey Hettick
Chief, Airfield Management
7CSG/OTM
Carswell AFB, Texas  76127
(817) 735-5541

Frances Pelley
Director of Community Development
Texoma Planning Commission
10000 Grayson Drive
Denison, Texas  75020
(214) 786-2955

Ross Litman
Emergency Management Coordinator
Denton City-County Civil Defense
215 East McKinney
Denton, Texas  76201
(817) 566-8484

Henry Newman
Aircraft Owners and Pilots Association
3700 Walton Avenue
Fort Worth, Texas  76133
(817) 292-1661
AIR TRANSPORTATION TECHNICAL ADVISORY COMMITTEE

Page Two

Don Paschal, Jr.
City Manager
City of McKinney
P. O. Box 517
McKinney, Texas 75069
(214) 542-2675

Dana Ryan
Texas Aeronautics Commission
P. O. Box 12607
Austin, Texas 78711
(512) 476-9262

Dave Shockley
Chief Pilot
Aerospatiale Helicopter Corporation
2701 Forum Drive
Grand Prairie, Texas 75051
(214) 641-3501

J. D. Thompson (Ike)
Aviation Director
City of Fort Worth
Meacham Field - Admin. Room 228
Fort Worth, Texas 76106
(817) 624-1127
NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS
HIGHWAY TECHNICAL COMMITTEE
MAY 1986

Don Walden, CHAIRMAN
Regional Planning Engineer
SDHPT, RPO
910-A North Watson Road
Arlington, Texas  76011-5262
(817) 640-6031

Donna Stewart, SECRETARY
SDHPT, RPO
910-A North Watson Road
Arlington, Texas  76011-5262
(817) 640-6031

Robert E. Abbott
Senior Planner
City of Fort Worth
1000 Throckmorton Street
Fort Worth, Texas  76102
(817) 870-8000

Cheryl Alatriste
Associate Planner
Tarrant County
100 East Weatherford
Fort Worth, Texas  76196
(817) 334-1267

Don Bean
Supervising Engineer of Trans. Prog.
City of Fort Worth
1000 Throckmorton Street
Fort Worth, Texas  76102
(817) 870-8058

Jerry Bevel
Director of Traffic and Trans.
City of Irving
821 West Irving Boulevard
Irving, Texas  75061
(214) 721-2646

John Blain
District Design Engineer
SDHPT, District 18
P. O. Box 3067
Dallas, Texas  75221
(214) 320-6100

Marvin Brown
Staff Engineer
Dallas County
161 E. Commerce Street
Dallas, Texas  75202
(214) 749-8151

Terry Cearley
Administrator of Tech. Prog.
SDHPT, D-10
P. O. Box 5051
Austin, Texas  78763-5051
(512) 465-7412

Larry Cervenka
Traffic Engineer
City of Farmers Branch
P. O. Box 819010
Farmers Branch, Texas  75381-9010
(214) 247-3131

Mildred Cox
Director of Transportation
City of Dallas
1500 Marilla, Room 5C South
Dallas, Texas  75201
(214) 670-4032

Don Cranford
Administrative Assistant
City of Dallas
1500 West Mockingbird
Dallas, Texas  75235
(214) 670-6723

Clarence Daugherty
Director of Public Works
Collin County
County Courthouse
McKinney, Texas  75069
(214) 542-9441

Tom Dingler
Director of Public Works
City of Lewisville
151 West Church Street
Lewisville, Texas  75067
(214) 436-2591
George Dowling
Engineer
City of University Park
P. O. Box 8005
Dallas, Texas 75205
(214) 363-1644

R. Marshall Elizer, Jr.
Director of Traffic and Trans.
City of Arlington
P. O. Box 231
Arlington, Texas 76010
(817) 275-3271

Jim Foster
Director of Public Works
City of Hurst
1505 Precinct Line Road
Hurst, Texas 76054
(817) 281-6160

N. M. Goodwin
Supervising Planning Engineer
SDHPT, D-10
P. O. Box 5051
Austin, Texas 78763-5051
(512) 465-7466

Billy Hardie
District Design Engineer
SDHPT, District 2
P. O. Box 6868
Fort Worth, Texas 76115-0868
(817) 292-6510

John Higinbotham
Traffic Engineer
City of Mesquite
P. O. Box 137
Mesquite, Texas 75149
(214) 288-7711

Bob Hodge
Supervising Traffic Engineer
SDHPT, District 2
P. O. Box 6868
Fort Worth, Texas 76115-0868
(817) 292-6510

Dan Hoyt
DART Coordinator
City of Dallas
1500 Marilla, Room 5B North
Dallas, Texas 75201
(214) 670-3731

Wayne Kurfees
Director of Traffic and Trans.
City of Garland
P. O. Box 469002
Garland, Texas 75046-9002
(214) 494-7332

Michael Leary
Community Planner
Federal Highway Administration
826 Federal Office Building
Austin, Texas 78701
(512) 482-5511

Don Penny
Director of Traffic and Trans.
City of Carrollton
P. O. Box 110535
Carrollton, Texas 75011-0535
(214) 323-5145

Walter Ragsdale
Traffic Engineer
City of Richardson
P. O. Box 830309
Richardson, Texas 75083
(214) 235-8331

Gary Santerre
Director of Trans. and Public Works
City of Fort Worth
1000 Throckmorton Street
Fort Worth, Texas 76102
(817) 870-7800

Dennis Schwartz
Director of Engineering and Planning
City of Duncanville
P. O. Box 380280
Duncanville, Texas 75138-0280
(214) 780-5015
Highway Technical Committee
Page Three

Gordon A. Shunk
Director of Transportation and Energy
North Central Texas Council of Governments
P. O. Drawer COG
Arlington, Texas 76005-5888
(817) 640-3300

Tony R. Tramel
Director of Transportation Services
City of Grand Prairie
P. O. Box 530011
Grand Prairie, Texas 75053-0011
(214) 660-8131

Tom Walton
Director of Transportation
City of Plano
P. O. Box 358
Plano, Texas 75074
(214) 424-6531
NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS
PUBLIC TRANSPORTATION TECHNICAL COMMITTEE
JUNE 1986

Jim Wiesehuegel, CHAIRMAN
Assistant General Manager
Dallas Transit System
101 North Peak Street
Dallas, Texas  75226
(214) 828-6700

Nancy Amos, VICE-CHAIRMAN
Assistant Director of Transportation and Public Works
City of Fort Worth
1000 Throckmorton Street
Fort Worth, Texas  76102
(817) 870-7802

Wayne Kurfees, SECRETARY
Director of Traffic and Transportation
City of Garland
P. O. Box 469002
Garland, Texas  75046-9002
(214) 494-7332

Robert Abbott
Senior Planner
City of Fort Worth
1000 Throckmorton Street
Fort Worth, Texas  76102
(817) 870-8000

Cheryl Alatriste
Associate Planner
Tarrant County
100 East Weatherford
Fort Worth, Texas  76196
(817) 334-1267

Jerry Bevel
Director of Traffic and Transportation
City of Irving
821 West Irving Boulevard
Irving, Texas  75061
(214) 721-2646

John Blain
District Design Engineer
SDHPT, District 18
P. O. Box 3067
Dallas, Texas  75221
(214) 320-6100

Marvin Brown
Staff Engineer
Dallas County
161 Commerce Street
Dallas, Texas  75207
(214) 749-8151

Larry Cervenka
Traffic Engineer
City of Farmers Branch
P. O. Box 819010
Farmers Branch, Texas  75381-9010
(214) 247-3131

Mildred Cox
Director of Transportation
City of Dallas
1500 Marilla Street, Room 5C South
Dallas, Texas  75201
(214) 670-4026

George Dowling
Engineer
City of University Park
P. O. Box 8005
Dallas, Texas  75205
(214) 363-1644

R. Marshall Elizer, Jr.
Director of Traffic and Transportation
City of Arlington
P. O. Box 231
Arlington, Texas  76010
(817) 275-3271

Jim Foster
Director of Public Works
City of Hurst
1505 Precinct Line Road
Hurst, Texas  76054
(817) 281-6160

John Higginbotham
Traffic Engineer
City of Mesquite
P. O. Box 137
Mesquite, Texas  75149
(214) 288-7711
Public Transportation Technical Committee
Page Two

Bob Hodge
Supervising Traffic Engineer
SDHPT, District 2
P. O. Box 6868
Fort Worth, Texas 76115-0868
(817) 292-6510

Dan Hoyt
DART Coordinator
City of Dallas
1500 Marilla Street, Room 5B North
Dallas, Texas 75201
(214) 670-3731

Emil Moncivais
Assistant Director of Planning
City of Fort Worth
1000 Throckmorton Street
Fort Worth, Texas 76102
(817) 870-8000

Don Penny
Director of Traffic and Transportation
City of Carrollton
P. O. Box 110535
Carrollton, Texas 75011-0535
(214) 323-5145

Dennis Schwartz
Director of Engineering and Planning
City of Duncanville
P. O. Box 380280
Duncanville, Texas 75138-0280
(214) 780-5015

Thurman Schweitzer
Transportation Planner
Fort Worth Transportation Authority
P. O. Box 1477
Fort Worth, Texas 76101
(817) 870-6221

Judson Shook
Director of Transportation
City of Richardson
P. O. Box 830309
Richardson, Texas 75083
(214) 235-8331

Tony R. Tramel
Director of Transportation Services
City of Grand Prairie
P. O. Box 530011
Grand Prairie, Texas 75053-0011
(214) 660-8131

Don Walden
Regional Planning Engineer
SDHPT, RPO
910-A North Watson Road
Arlington, Texas 76011-5262
(817) 640-6031

Tom Walton
Director of Transportation
City of Plano
P. O. Box 358
Plano, Texas 75074
(214) 424-6531

Michael York
Assistant Executive Director of Operations
Dallas Area Rapid Transit
601 Pacific Avenue
Dallas, Texas 75202
(214) 748-3278