

RESOLUTION NO. 37-1987

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS APPROVING THE 1987-88 UNIFIED PLANNING WORK PROGRAM FOR TRANSPORTATION PLANNING.

WHEREAS, the City of Abilene as designated Metropolitan Planning Organization is responsible for coordinating and documenting all transportation planning activities in the Abilene Urbanized Area; and,

WHEREAS, the City of Abilene proposes to undertake several transportation planning tasks for which U.S. Department of Transportation funding will be used; and,

WHEREAS, the City of Abilene has determined that these planning tasks are essential to the orderly growth and development of a safe and efficient transportation system; now, therefore,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

PART 1: That the 1987-88 Unified Planning Work Program, dated October 1, 1987 - September 30, 1988, is hereby approved; and,

PART 3: That this resolution shall take effect immediately from and after its passage.

PASSED this 9 day of July, 1987.

ATTEST:

Dolucia Hancock  
CITY SECRETARY

Dale Ferguson  
MAYOR

APPROVED:

Harry Cayul  
CITY ATTORNEY

UNIFIED PLANNING WORK PROGRAM

For

FY 1987-1988

October 1, 1987 through September 30, 1988

A part of the continuing, cooperative,  
and comprehensive multi-modal transportation  
planning process for the Abilene Urbanized Area

**Acknowledgement:** This document was prepared by the Planning Department of the City of Abilene, Texas as the designated Metropolitan Planning Organization.

**Agency Review:** This document has been submitted to the West Central Texas Council of Governments for local A-95 review and to the Governor's Office of Budget and Planning for State Clearinghouse Review.

UNIFIED PLANNING WORK PROGRAM

TABLE OF CONTENTS

	<u>Page</u>
Introduction and Special Considerations . . . . .	1
Work Task Details . . . . .	2
Proposed Timetables . . . . .	10
Funding Summary Tables . . . . .	12
Attachments . . . . .	14

## INTRODUCTION

The Unified Planning Work Program (UPWP) provides descriptive and scheduling details for work undertaken in pursuit of the Abilene Urban Transportation Study process for Fiscal Year 1987-88.

The UPWP has been prepared in accordance with U.S. Department of Transportation guidelines and with the assistance of State and local agencies. Detail of the study's organizational structure and objectives may be found in the prospectus.

This UPWP will serve as the base document for the fiscal year 1987-88. All elements described will further the goals of the 3C transportation planning process. The document is divided into the following elements:

**Work Task Details:** These are summary descriptions of each proposed task including a brief project description, a review of previous related work, a description of the anticipated finished product and identification of the responsible agency/entity. The summary description format is felt to be consistent with the goal of facilitating other agency reviews.

**Proposed Timetables:** The proposed timetables represent the anticipated project initiation and completion periods for all of the work tasks covered by this UPWP. Obviously these are estimates and may be subject to adjustments as the year proceeds. It is, however, the MPO's goal to adhere to these timetables as closely as possible to ensure timely completion of the UPWP tasks.

**Funding Summary Tables:** The funding summary tables provide a concise description of funding source for each task and also describe the funding recipient by source of funds. These items are provided for quick reference and have been arranged in a format that will convey the necessary information completely and clearly.

In conclusion, the UPWP has been developed as a cooperative venture between the Metropolitan Planning Organization (City of Abilene) and the State Department of Highways and Public Transportation. Upon submission it will have been approved by the City Council of the City of Abilene, Texas, and the MPO policy group. It will be submitted simultaneously to the West Central Texas Council of Governments for their review and to the Governor's Office of Budget and Planning for their review. Any subsequent changes or modifications to the UPWP will be subject to the same processes.

WORK TASK DETAILS

TASK INDEX

<u>TASK</u>		<u>PAGE</u>
1.0	Transportation System Data Collection and Maintenance . . . . .	2
2.0	Continuing Transportation Planning . . . . .	4
3.0	Transportation Planning Operations Audit . . . . .	6
4.0	Computerize R.O.W. Information. . . . .	7
5.0	Study Design for Employment Information . . . . .	8
6.0	Training for Traffic Engineering Personnel. . . . .	9

## 1.0 Transportation System Data Collection and Maintenance

Funding Source: FHWA

Amount of Funds: \$30,000

Objectives: To collect and maintain data for all aspects of the transportation system. The data base will be used to evaluate the various components of the transportation system leading to more effective utilization of transportation facilities and modes.

Previous Work: A continuing traffic count program is in effect in the City of Abilene. This involves machine counts at approximately 600 locations. These counts are coordinated with the count program maintained by the state. Turning movements are counted at approximately 150 locations, with movements at approximately half of these locations being counted annually. Vehicular speeds on arterials are monitored to ensure that speed limits and signal progression timing are appropriate for conditions. Traffic accident data is maintained in files by location and in the form of a location, or "pin", map. Collision diagrams and other relevant data are maintained for all signalized intersections and other locations of high accident frequency.

Proposed Work: Data collection necessary for all phases of engineering and statistical analysis of transportation network, facilities and modes. These collection and analytical operations include:

- 1.1 Manual turning movement counts to be made at approximately 70 locations.
- 1.2 Non-recording machine traffic counts to be made at approximately 250 locations.
- 1.3 Speed studies at approximately 100 locations will be made.
- 1.4 Vehicle accident analysis and locations will be maintained on a pin map and in files.
- 1.5 Collision diagrams and analysis for signalized intersections and other high accident frequency locations to be made.
- 1.6 Miscellaneous transportation data will be collected as needs are perceived. Statistical and engineering data will be developed and analyzed.
- 1.7 Based on data analysis performed, recommendations for improvements to the overall transportation network will be made.
- 1.8 Collect traffic signal, traffic sign, and pavement marking data for microcomputer base traffic control inventories.

Responsibility: The City of Abilene will be responsible for the proposed work with the Director of Traffic and Transportation being the project director.

Products: The results of proposed work include:

- An update to the City's official traffic count map and updated files on turning movement and vehicle classification data.
- Updated files on arterial street operating needs.
- An annual update to traffic accident files and recommended remedial action for high accident location.
- An annual re-evaluation of the overall operations of the Abilene Urban Transportation System.
- An updated traffic control devices inventory.



## 2.0 Continuing Transportation Planning

Funding Source: \$35,500 SDHPT, \$15,000 Local

Objective: To provide for the continuing review and appraisal of the Abilene Urban Transportation Plan.

Previous Work: An annual update of the transportation plan was completed in previous years.

Proposed Work: The following work elements will be accomplished to complete the 1987-88 Annual Review:

- 2.1 Data Maintenance--Gather and maintain significant data on each of the Plan elements as defined by the continuing phase agreement.
- 2.2 Review Forecasts--This element includes the comparison of forecasts to measure conditions in order to permit early identification of conditions which might require deviations from or modifications to the plan.
- 2.3 Consider Plan Modifications--Should conditions warrant, modifications to the Plan would be formulated and recommended for consideration/adoption by the appropriate agency.
- 2.4 Coordination with Other Elements of the Transportation Planning Process--Modifications of the plan will be evaluated to determine their appropriateness and consistency with the Transportation Systems Management Element, Transportation Improvement Plan and Annual Element. Where necessary, these modifications will be incorporated into these elements as part of a continuing process of refining and developing the Plan, TSME, TIP, and AE. A continuous re-evaluation of all elements will be accomplished.
- 2.5 Determination of Consistency with Other Special Concerns--The Plan, its modifications, and all other elements will be reviewed to determine their consistency with air quality planning, Title VI and State assurances, public transportation services for elderly and handicapped, energy conservation, and other social and environmental factors. Where indicated by this review, the Plan will be modified to ensure compliance and effectiveness in dealing with these concerns. (Detailed descriptions of this process are included in the Prospectus.)
- 2.6 Planning for the Elderly and Handicapped--The programs developed for elderly and handicapped in the Transit Development Program will be

continuously monitored to ascertain their appropriateness and effectiveness in meeting the needs of this special group. Where additional actions or programming are indicated, programs to develop and implement them will be initiated.

**Responsibility:** The responsibility for completion of each task, and subtasks thereof, is defined in the existing Continuing Phase agreement between the City of Abilene and the State Department of Highways and Public Transportation. Performance of tasks will be accomplished by the staffs of the two agencies.

**Coordination:** The Planning Coordinator, on the staff of the District Office of the State Department of Highways and Public Transportation, will coordinate activities 1-4 and certain parts of 6. The MPO Coordinator, on the City of Abilene staff, will coordinate activities 5, parts of 6 and 7.

**Products:** (1) An updated source of data for use in further transportation planning/decision-making, (2) updated and refined TIP and AE, and (3) various plans, programs, or modifications to existing programs for the elderly and handicapped. An updated and refined Long-Range Element.

3.0 Transportation Planning Operations Audit

Funding Source: FHWA

Amount of Funds: \$500

Objectives: To perform an examination of accounts and financial records in relation to transportation planning activities during fiscal year 1986.

Previous Work: Auditing of all City financial records is generally done annually. Specific transportation program audits have been done periodically.

Proposed Work: 3.1 Investigate accounts with regard to task performance and expenditures.  
3.2 Recommendations for future financial management of funds used to facilitate transportation planning in the City of Abilene.

Responsibility: The Director of Finance will be project director.

Products: An audit of the City's transportation related funding accounts will be produced.

#### 4.0 Computerize Highway and Thoroughfare Right-of-Way Information

Funding Source: FHWA

Amount of Funds: \$17,500

Objectives: To provide a single source file in computerized format of right-of-way and paving width data for major thoroughfares, collector streets, and local streets in selected areas that may be easily manipulated for use in transportation planning, modeling and decision-making analyses.

Previous Work: The City of Abilene has a right-of-way/paving file that is currently kept on 1" = 100' base maps. These maps, while useful for many purposes, do not readily lend themselves to easy manipulation or use with computerized modeling techniques.

With the recent acquisition of computers for transportation planning purposes, the City is now in a position to augment its capabilities by adding the right-of-way files.

Proposed Work: 4.1 Data Entry--All current right-of-way and paving width data along major thoroughfares, arterials, collectors, and selected local streets will be manually entered into the computer system.  
4.2 Data Verification--Data will be verified in the office utilizing the existing files, plat maps, and tax parcel records and field verified on a spot basis to improve accuracy and reliability of the data once entered.

Responsibility: The City of Abilene will be responsible for the proposed work. The Director of Planning will be the project director.

Products: A complete, automated source file of existing right-of-way and paving data in an automated format suitable for use with computer modeling and forecasting techniques.

5.0 Preparation of Study Design for Development of Survey Zone Employment Information

Funding Source: FHWA

Amount of Funds: \$1,500

Objectives: To investigate alternative methods for developing accurate employment information by survey (serial) zones and to prepare recommendations for a suitable study design to provide survey zone employment information for the City of Abilene. This information when finally developed will be used to improve demand forecasting and traffic assignment models for use in transportation plan revisions.

Previous Work: The City of Abilene has previously prepared land-use by survey zone information for use in demand forecasting and traffic assignment and the City currently maintains an automated land use information system for these purposes. No employment information by survey zone has previously been developed, however.

Proposed Work: 5.1 Identification of alternative strategies and techniques. Strategies and techniques for efficiently and accurately developing employment by survey zone data will be identified and analyzed by staff. Special attention will be devoted to those approaches which maximize use of existing resources such as the City's land-use system and other data bases (i.e., Census, City's site plan files, etc.) in an attempt to develop a cost-effective approach to providing the necessary information.

5.2 Preparation of study design and recommendations for implementation. A study approach will be selected from those alternatives identified in 5.1 which best meets the needs and resources of the City of Abilene for collection of employment by survey zone information which may ultimately be used in forecasting and modeling the local transportation system.

Responsibility: The City of Abilene will be responsible for the proposed work. The Director of Planning will be the project director.

Products: A plan for systematic, efficient development of employment by survey zone information emphasizing local resources and utility. The plan will enable the City to collect the requisite data as subsequent resources become available for eventual use in the transportation planning process.

6.0 Training for Traffic Engineering Personnel

Funding Source: FHWA

Amount of Funds: \$500

Objectives: To provide training for traffic engineering personnel on current traffic engineering procedures. Particular emphasis will be placed on the 1985 Highway Capacity Manual and traffic engineering microcomputer programs.

Previous Work: The Traffic and Transportation Engineering Department has acquired a microcomputer and traffic engineering software. A copy of the 1985 Highway Capacity Manual has been obtained.

Proposed Work: 6.1 Fund training, travel and per diem for one staff person to attend a continuing education course or seminar on current traffic engineering techniques.

Responsibility: The City of Abilene will be responsible for the proposed work with the Director of Traffic and Transportation being the project director.

Products: Training for traffic engineering staff.

TASK TIMETABLES

TASK TIMETABLES

(By Quarterly Periods)

TASK	Quarter (FY)			
	1	2	3	4
1.0 Transportation System Data Collection & Maintenance				
1.1				
1.2				
1.3			Ongoing Work	
1.4				
1.5				
1.6				
1.7				
1.8				
2.0 Continuing Transportation Planning				
2.1				
2.2				
2.3			Ongoing Work	
2.4				
2.5				
2.6				
3.0 Transportation Planning Operations Audit				
3.1	*	*	*	*
3.2				*
4.0 Computerize R.O.W. Information				
4.1	*	*	*	*
4.2			*	*



TASK TIMETABLES (CONTINUED)

<u>TASK</u>	Quarter (FY)			
	1	2	3	4
5.0 Study Design for Employment Data				
5.1			*	*
5.2			*	*
6.0 Training for Traffic Engineering Personnel				
6.1			Ongoing Work	

FUNDING SUMMARIES

PROPOSED FUNDING SOURCES

Task	FHWA	SDHPT	Local	UMTA	Local	Other	Total Federal	Total SLS*
1.0 Transportation System Data Collection and Maintenance								
1.1 Manual Turning Movement	5,000	-	-	-	-	-	5,000	-
1.2 Non-Recording Machine Traffic Counts	5,000	-	-	-	-	-	5,000	-
1.3 Speed Studies	3,300	-	-	-	-	-	3,300	-
1.4 Maintain Accident Analysis File and Map	3,300	-	-	-	-	-	3,300	-
1.5 Prepare Collision Diagrams and Analyze High Frequency Miscellaneous Transportation Data Analysis	5,000	-	-	-	-	-	5,000	-
1.6 Miscellaneous Transportation Data Analysis	3,400	-	-	-	-	-	3,400	-
1.7 Recommendations for Improvement of Overall Transportation Network	-	-	-	-	-	-	-	-
1.8 Data Collection for Computer Based Traffic Control Inventories	5,000	-	-	-	-	-	5,000	-
SUBTOTAL	30,000						30,000	
2.0 Continuing Transportation Planning								
2.1 Data Maintenance	-	2,500	3,500	-	-	-	2,500	3,500
2.2 Review Forecasts	-	19,000	4,500	-	-	-	19,000	4,500
2.3 Consider Plan Modifications	-	11,000	7,000	-	-	-	11,000	7,000
2.4 Coordinate with Other Elements	-	1,000	-	-	-	-	1,000	-
2.5 Other Special Elements	-	1,000	-	-	-	-	1,000	-
2.6 Elderly & Handicapped	-	1,000	-	-	-	-	1,000	-
SUBTOTAL	-	35,500	15,000	-	-	-	85,500	15,000

\*SLS - State and Local Shares

PROPOSED FUNDING SOURCES

Task	FHWA	SDHPT	Local	UMTA	Local	Other	Total Federal	Total SLS*
3.0 Transportation Operations Audit								
3.1 Investigate Accounts	250	-	-	-	-	-	250	-
3.2 Recommendations	<u>250</u>	-	-	-	-	-	<u>250</u>	-
SUBTOTAL	500	-	-	-	-	-	500	-
4.0 Computerize R.O.W. Information								
4.1	8,750	-	-	-	-	-	8,750	-
4.2	<u>8,750</u>	-	-	-	-	-	<u>8,750</u>	-
SUBTOTAL	17,500	-	-	-	-	-	17,500	-
5.0 Study Design for Employment Data								
5.1	750	-	-	-	-	-	750	-
5.2	<u>750</u>	-	-	-	-	-	<u>750</u>	-
SUBTOTAL	1,500	-	-	-	-	-	1,500	-
6.0 Training For Traffic Engineering Personnel								
6.1 Continuing Education	<u>500</u>	-	-	-	-	-	<u>500</u>	-
SUBTOTAL	500	-	-	-	-	-	500	-
GRAND TOTAL	50,000	35,500	15,000	-	-	-	85,500	15,000

ATTACHMENTS

- Planning Committee Approval
- MPO: City Council Approval
- Regional Review Transmittal
- State Review Transmittal