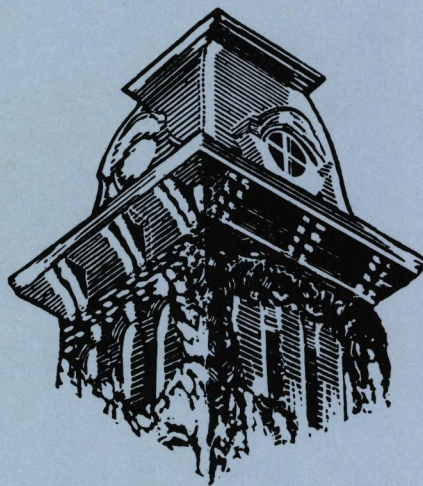


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THE STATUS OF HIGHWAY PLANNING AND IMPLEMENTATION IN URBAN AREAS OF ARKANSAS

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VOLUME 2
FINAL REPORT
HIGHWAY RESEARCH PROJECT 49
OCTOBER 1978

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THE STATUS OF HIGHWAY PLANNING
AND IMPLEMENTATION IN URBAN AREAS OF ARKANSAS

FINAL REPORT
HIGHWAY RESEARCH PROJECT 49

VOLUME 2

October 1978

Prepared by
Division of Community Affairs
University of Arkansas
Fayetteville

FOR
The Arkansas State Highway and Transportation Department
Planning and Research Division
in Cooperation with
The U. S. Department of Transportation
Federal Highway Administration

The opinions, findings, and conclusions expressed in this publication are those of the Division of Community Affairs and not necessarily those of the Arkansas State Highway and Transportation Department or the Federal Highway Administration.

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16. Abstract This Volume consists of the six reports on six urban areas in Arkansas which were studied in respect to current planning and implementation activities by the Arkansas State Highway and Transportation Department, the Metropolitan Planning Agencies, and local governments. The reports give special attention to the status of current plans. The six urban areas studied were: Fayetteville - Springdale Fort Smith Hot Springs Pine Bluff Pulaski Texarkana, Arkansas			
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FAYETTEVILLE - SPRINGDALE

URBAN TRANSPORTATION STUDY AREA

FOREWORD

This investigation is part of a larger transportation study about the status of transportation planning in Arkansas and designated as HPR-49 by the Arkansas Highway Department, Division of Planning and Research. This investigation was limited to the urban transportation study area of the cities of Fayetteville and Springdale, Arkansas. Study procedure included the gathering and analysis of transportation and land use data, existing plans, land use controls, distribution of transportation status questionnaires to public officials and administrators, and interviews with professional planners responsible for land use and transportation plan development and implementation activities. No response to the questionnaire was received from the city of Fayetteville, therefore, secondary data was used and supplemented with interviews from the NARTS transportation study staff. Appreciation is extended to members of the Northwest Arkansas Regional Planning Commission Staff and others who provided information, data, and illustrations for this investigation.

The opinions, findings and conclusions expressed in this report are those of the Division of Community Affairs and not necessarily those of the Arkansas State Highway and Transportation Department or the Federal Highway Administration.

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SUMMARY OF FINDINGS

Major findings about the status of transportation planning in the Fayetteville - Springdale transportation study area include the following:

1. The Northwest Arkansas Transportation plan has provided very useful guidelines for the location and improvement of transportation facilities in the cities of Fayetteville and Springdale. As a result, almost all development of transportation facilities has been in general accordance with the general transportation plan prepared for the urban study area of the two cities. The more significant accomplishments include improvements of College Avenue, Crossover Road, portions of service road along Highway 71 Bypass, Highway 62 West, and numerous rights-of-way dedications by land developers.

2. There exists significant areas of discontinuity between general transportation planning and transportation plan implementation levels including:

a. Transportation planning policy

1) Discontinuity in operational planning may be seen in the suggestion of rural and urban classification systems at the regional level and their absence in the cities' master street plans. A strategic planning discontinuity may be found in the regional goal reference to airport system planning, whereas no mention is made of airports at the local transportation goal level.

2) Local transportation policies become more comprehensive in technical subject matter and social concerns as attention is given to citizen participation and representation on technical subcommittees.

b. Land development and use controls

Local master street plans differ from regional transportation plans in planning area, area of jurisdiction and classification of streets in many locations. Street standards and terminology differ between regional and local areas planning guidelines.

c. Land use plans

Regional land use plans differ from local land use plans in spatial distribution and amount of land allocated to various uses.

3. The 1990 Fayetteville - Springdale Transportation Plan (1973), in its entirety, has not been adopted by either the Fayetteville City Board of Directors or the Springdale City Council. However, each governing body

has accepted their portion of the 1990 Fayetteville - Springdale Transportation Plan (1973).

4. Existing state planning enabling legislation pertaining to planning study area jurisdiction tends to create coordination problems between city and county transportation activities within municipal planning areas.
5. Local land use development and control authority is adequate and is being used to implement the transportation plan by the cities of Fayetteville and Springdale. Of special significance is the city of Fayetteville Ordinance No. 1661 titled "An Ordinance to Control Development of Land Abutting Controlled Access Highways and Providing for Access Thereto". This Ordinance is unique in that it requires land developers to construct frontage roads along facilities that are now only partially controlled.
6. Boundaries of local planning jurisdictional areas and the transportation study area do not conform with the Fayetteville and Springdale planning area and extend well beyond the transportation study limits in several locations.
7. Approximately fourteen minor discrepancies now exist between the 1990 Fayetteville - Springdale Transportation Plan (1973) and the present Fayetteville Master Street Plan.
8. Dissimilarities between the original NARTS transportation plan and present transportation network facilities appear to be the result of the continuing transportation planning process. For example, the non-adjustment of the transportation study area to conform to the planning area or vice versa.
9. Completion of system elements toward the transportation plan has been greatest in the City of Fayetteville.
10. The administrative structure for continuing transportation planning and those responsible for its operation have contributed substantially to the present implementation success of the plan for the study area. Recommendations for improvement of the continuing transportation planning process include:
 - a. Expansion of the continuing inventory system to provide for the faster collection, processing, and dissemination of data for decision-making activities.
 - b. Undertake appropriate transportation attitudinal surveys of citizens of the area as a means of providing greater citizen input into the planning process.

TRANSPORTATION PLANNING POLICY

Areawide Transportation Planning Policy

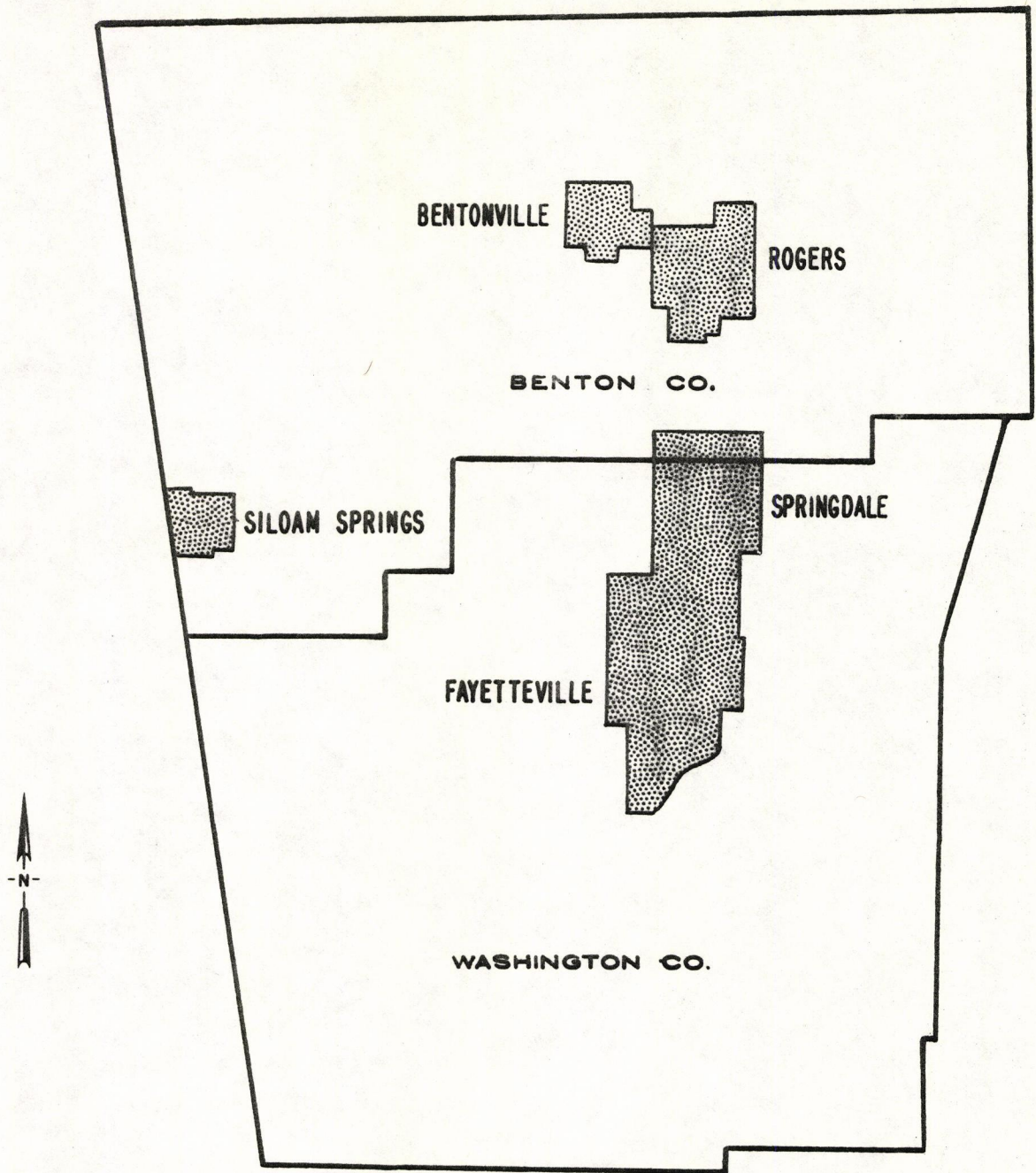
The 1970-1990 Northwest Arkansas Regional Transportation Study (NARTS) since its joint preparation by the Northwest Arkansas Regional Planning Commission and Arkansas Highway Department has provided basic guidelines for transportation facilities planning and development in Benton and Washington Counties and selected cities and towns of Rogers, Bentonville, Siloam Springs, Springdale, and Fayetteville. Fundamental to the transportation planning process is the establishment of and agreement on transportation policy within the study area. (See figure next page) Transportation planning and development goals set forth in the NARTS transportation policy statement include:

1. "Provide a forum for discussion and idea interchange by implementing the council of governments concept as deemed feasible from time to time."
2. "Construct a variety of thoroughfares - expressways, major arterials, collector and local streets - designed to serve existing and future land uses."
3. "Encourage adequate traffic capacity by designing thoroughfares on the basis of projected traffic needs."
4. "Protect the public investment in thoroughfares by restricting on-street parking and controlling or limiting access to allow traffic to move freely - the primary function of the street and highway network."
5. "Reduce points of rail-thoroughfare conflict for the safety of the region's citizens."
6. "Construct and maintain a system of airports to provide for the individual needs of the various localities."
7. "Assure traffic safety by locating and designing commercial areas for convenient but efficient access by providing adequate off-street parking and by separating vehicular from pedestrian traffic."

These policy guidelines provide an important base for the analysis of transportation policy at the local level.

Local Transportation Policies

Areawide transportation planning policy and local transportation planning policy should be highly correlated in purpose, scope, and content to promote mutual support of transportation facilities planning and development. Analysis of areawide (NARTS) transportation planning policies and local transportation planning policies (Fayetteville and Springdale



**NORTHWEST ARKANSAS REGIONAL
TRANSPORTATION STUDY AREA**

General Plans) find these policies ranging from very high correlations to no relationships at all. Areawide and local transportation policies set forth in the studies and plans were generally divergent in intent and content although all policies placed emphasis upon the planning and development of trafficways. The common policy thrust toward areawide trafficway improvements has provided general direction for implementation activities. Only minor attention appears to have been given toward the concept of "comprehensiveness" in local transportation policy statements. Areawide transportation policy statements, however, do reflect concern for "comprehensiveness" as seen in reference statements, such as, "system of airports", "rail-thoroughfare conflict" and "idea interchange". However, no policy directly reflected a concern for mass transit, energy or pollution problems. A summary of areawide and local transportation policy is as follows:

1. Areawide transportation policy is general in nature and more "comprehensive" in scope than local transportation policy. For example, areawide policy references are made to administration, communication, and transportation modes such as air transport.
2. Local transportation policy is more specific in nature and content than areawide policy. Major concern is expressed at the local level of the relationship between land use traffic generators and trafficways systems; for example, the connection of major trip generators such as shopping centers by major arterials.
3. Local transportation policy includes detailed design standard guidelines for elements such as access control, lighting, and water drainage systems. These elements are only implied in areawide policy statements.
4. Local transportation policy tends to reflect a clearer definition of the purpose of transportation systems than does areawide policy. For example, specific references are made to the importance of trafficway development to provide access to all types of property and movement of traffic rather than the broad reference of "to serve existing and future land uses".
5. Similarity of intent between areawide and local policies include:
 - a. Need for variety of thoroughfare types.
 - b. Street traffic capacity improvements.
 - c. Reduction of conflict (e.g. vehicle-pedestrian, land use).
 - d. Provision of off-street parking and loading.
 - e. NARTS and Fayetteville comprehensive transportation plans stress public investment considerations.

In support of areawide and local goals specific implementation guidelines and standards have been recommended in the NARTS study relating to

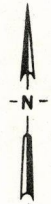
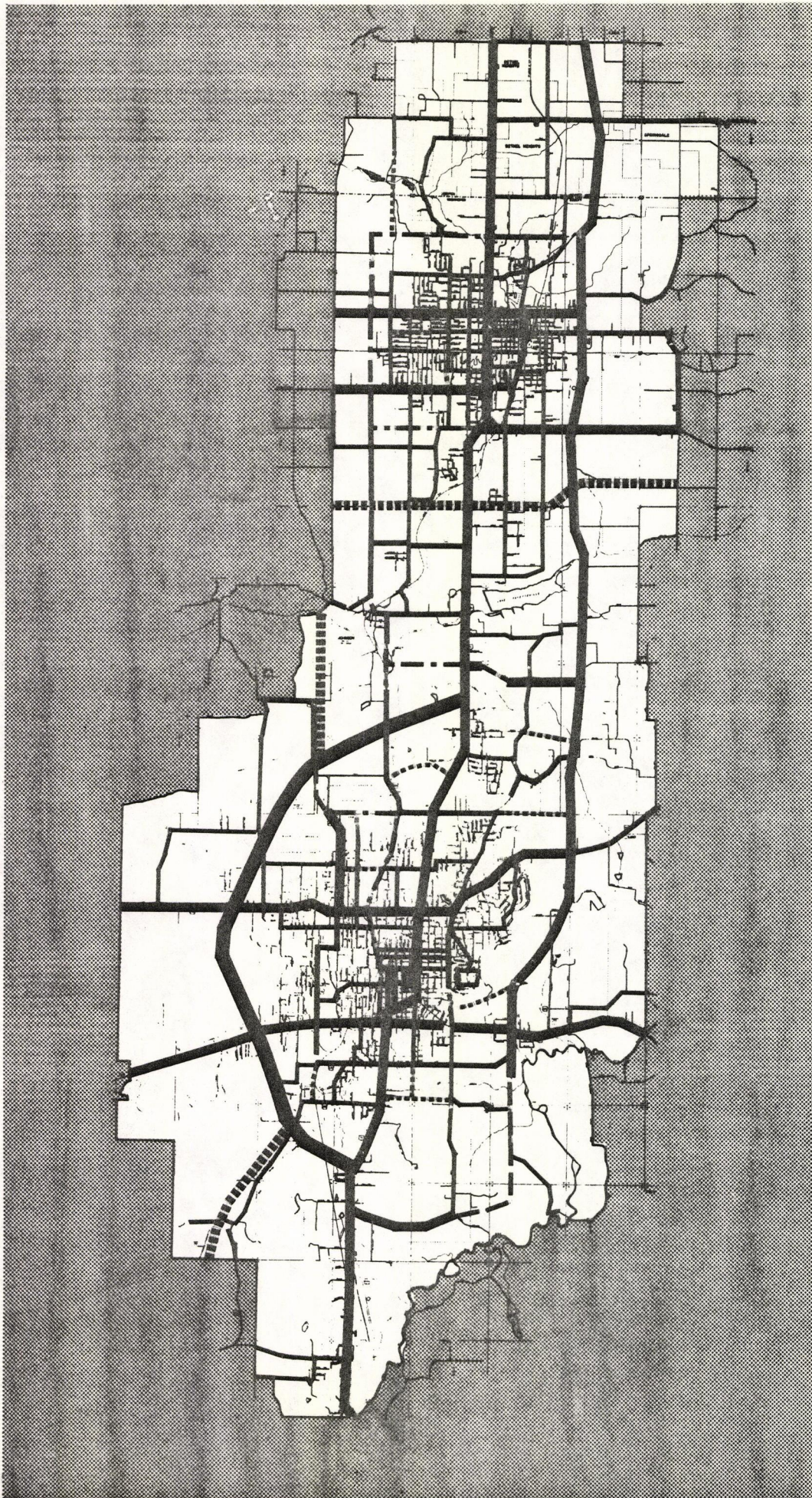
land use distribution, development control, trafficway classification systems, urban and rural trafficway cross-section, and continuing evaluation of planning elements. The 1990 Transportation Plan (see figure next page) for the Fayetteville-Springdale urban area contains both general land use and transportation facilities elements. Proposed total system mileage within this area by type of facility is shown in the following table:

FAYETTEVILLE - SPRINGDALE
TRANSPORTATION SYSTEM MILEAGE BY FACILITY TYPE

Urban Area	Transportation Facility Type in Miles				
	Freeway Expressway	Other Principal Arterial	Minor Arterial	Collector Street	Total
Springdale	2.6	13.2	12.2	24.3	52.3
Fayetteville	7.6	39.6	26.3	42.2	115.7
Total:	<u>10.2</u>	<u>52.8</u>	<u>38.5</u>	<u>66.5</u>	<u>168.0</u>









Source: Tabulated from Northwest Arkansas Regional Transportation Study 1970-1990.

1990 TRANSPORTATION PLAN



FAYETTEVILLE — SPRINGDALE

LEGEND

-  FREEWAY/EXPRESSWAY
-  PROPOSED
-  OTHER PRINCIPAL ARTERIAL
-  PROPOSED
-  MINOR ARTERIAL
-  PROPOSED
-  COLLECTOR STREET
-  PROPOSED

CITY OF FAYETTEVILLE

The Board of Directors of the City of Fayetteville accepted selected elements of the Northwest Arkansas Regional Transportation Study on July 17, 1973. Elements adopted were limited to those parts of the Fayetteville - Springdale 1990 Transportation Plan which existed within the city's planning jurisdiction. These elements were used as the master street plan and accepted as cross-section standards for various types of trafficway facilities. This transportation plan since 1973 provided the primary guidelines for planning and programming of transportation facilities within the Fayetteville transportation planning area. (See Figure next page.) The NARTS study indicates the Fayetteville transportation system contains approximately 119 system miles. A breakdown of this mileage is as follows:

1990 TRANSPORTATION PLAN SYSTEM MILES

Type Facility	Proposed	Completed	In Process
Freeway/Expressway	10.2	-	9.5
Other Principal Arterial	39.6	2.9	11.9
Minor Arterial	26.3	0.2	2.8
Collector Street	42.2	0.4	1.9
Total Miles	118.3	3.5	26.1

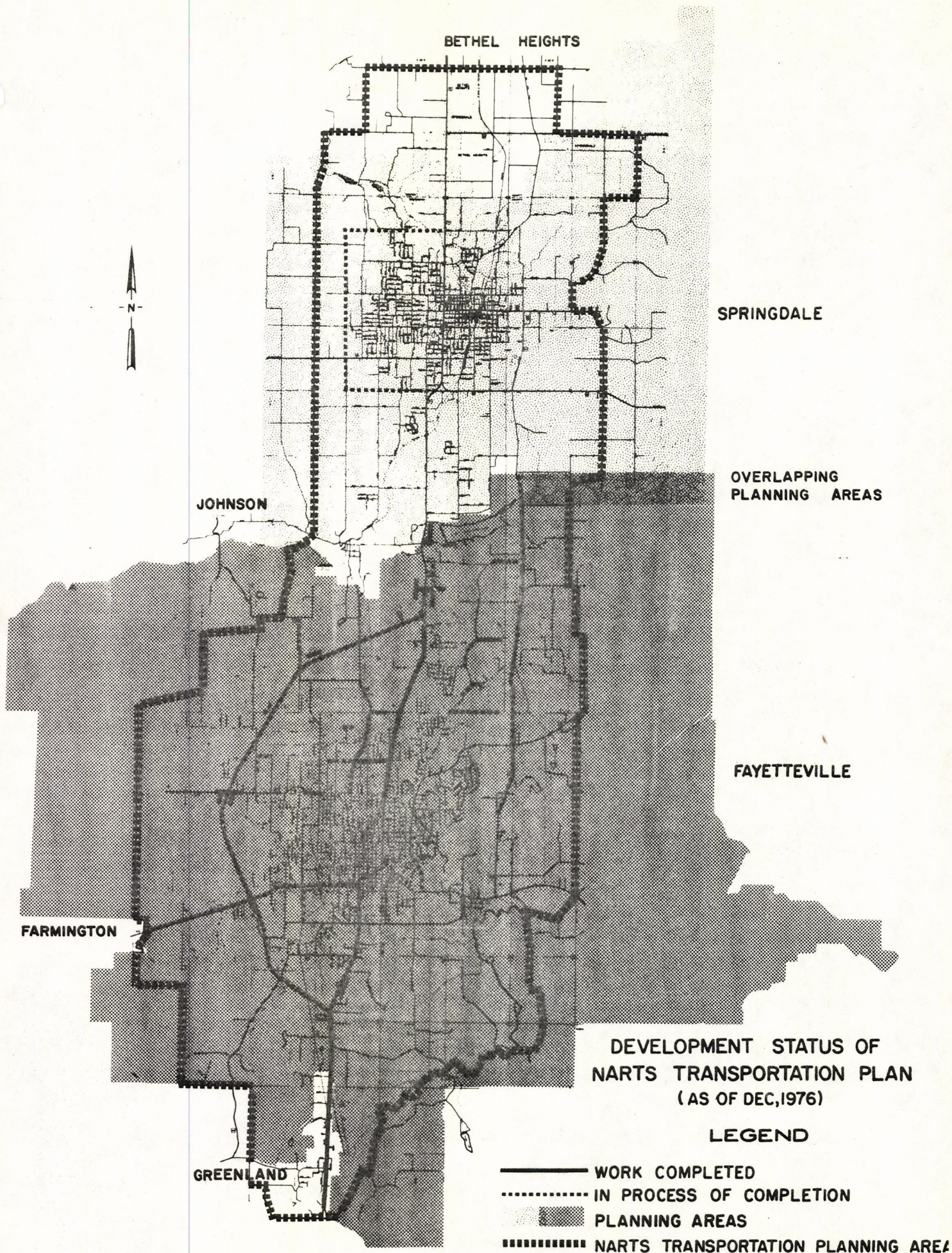
Source: Figures calculated from Northwest Arkansas Transportation Study 1970-1990

Land Use Development Mechanisms as Tools for Transportation Plan Effectuation

The official street map, subdivision regulations, zoning ordinance, access control, "set back" ordinances and mandatory referral are principal existing local public devices and procedures which can be used to implement transportation plans in the City of Fayetteville. Basic to these means is the necessity of securing a similarity of development policy, definitions, development standards and criteria between the transportation plan and development controls and procedures. This consideration is important to the coordination of activities within the transportation planning process.

Official Street Map

The street plan of Fayetteville, known as the Fayetteville Master Street Plan Map, provides specific location and design guidelines for development of trafficway facilities and administration of land development related activities such as subdivision regulations. The relationship between the NARTS transportation plan and the Fayetteville Master Street Plan Map is critical to the continuing planning process. The Master Street Plan Map of Fayetteville differs from the NARTS recommended 1990 Transportation Plan in study area and facility designations as follows:



A. Freeway/Expressway:

Freeway/Expressway (1.9 miles) south of Bypass 71 and parallel to Arkansas 265 south of Fayetteville is not shown on Master Street Plan Map.

B. Principal Arterial:

Fayetteville Master Street Plan Map shows Arkansas 16 (east) to be a Principal Arterial to eastern planning area boundary.

C. Minor Arterial:

1. Arkansas Highway 45 (east of Oakland Road) designated as minor arterial on Master Street Plan extending eastwardly to eastern boundary of planning area.
2. Bailey Road (east of Ark. 265) designated on Master Street Plan as minor arterial to northern boundary of planning area.
3. Arkansas 112 (north) designated as minor arterial on Master Street Plan Map north of Salem Road to the northern boundary of the planning area.
4. Minor arterial location (Gregg Avenue) between Sycamore and Maple Streets are recommended in the NARTS study to generally follow the St. L & SF railroad. The Master Street Plan indicates Gregg Avenue to be designated as the minor arterial to serve this area.
5. Central Business District:
 - a. Master Street Plan indicates Center St. as minor arterial between East Avenue and College Avenue. NARTS plan indicates Center St. as minor arterial between Locust and College.
 - b. Master Street Plan indicates Mountain Street as minor arterial between East Avenue and College Avenue. NARTS plan indicates Mountain Street as minor arterial between Block and College Avenue.
 - c. Master Street Plan indicates Church Street as minor arterial between Dickson and College Avenue (south) whereas the NARTS plan indicates Locust between Dickson and College Avenue (south) as a minor arterial.

D. Collector Street:

1. Wyman and Crossover (Ark. 265) Road west of Stone Bridge and north of Arkansas Highway 16 designated as collector street on Major Street Plan. NARTS designated Stone Bridge as collector street for this area.

2. Wyman Road designated as collector street on Master Street Plan from a point east of Stone Bridge Road to eastern boundary of planning area.

3. Black Oak extended on Master Street Plan Map to southern boundary line of planning area.

4. Itson Road designated as a collector street on Master Street Plan.

E. Service Roads:

Service roads (By-pass 71) shown only on Fayetteville Master Street Plan Map.

Many of the above fourteen dissimilarities between the Fayetteville Master Street Plan and the Fayetteville/Springdale Transportation Plan (NARTS) appear because of the difference between study area boundaries. The Fayetteville planning area contains approximately 97.9 square miles. The transportation study area contains approximately 54.4 square miles. Similarity of study areas is useful to the coordination activities such as the administration of subdivision regulations with transportation activities within the planning area. The relationship between the NARTS area and municipalities within the area is seen in the following table.

NARTS - PLANNING AREA COMPARISON IN SQUARE MILES

Unit	Square Miles	
	NARTS Study Area	Planning Area
Fayetteville	54.4	97.9
Springdale	30.1	41.8
Rogers	22.9	79.2
Bentonville	12.3	62.0
Siloam Springs	8.3	18.5
Total sq. miles	128.0	299.4

Source: Northwest Arkansas Regional Planning Commission. All planning area figures contain changes since 1973.

Zoning

Zoning contributes to implementation of the NARTS transportation plan by controlling land developments in ways intended to influence the spatial patterns of population density and land activities within the city of Fayetteville. (City zoning regulations are legally applicable only within the corporate boundaries and are not applicable outside the city in the extraterritorial planning jurisdiction area). In addition to controlling land usage and the height, bulk and occupancy usage of structures, the zoning ordinance also requires that off-street parking and loading

spaces be provided in all districts in connection with industrial, business, institutional, recreational, residential and other uses. Zoning district regulations also require attention be given to visibility at intersections in residential districts and to require adequate access and minimum setback in the design and development of parking lots. The zoning regulations contain the following requirement relating to setback lines:

"Where an official set-back line has been established for future widening or opening of a street upon which a lot abuts, then the width or depth of a yard shall be measured from such official set-back line..."

The value of this regulation to effectuation of the transportation plan is that it directly contributes toward the preservation of traffic right-of-way for future development of street facilities. Significant r-o-w requirements are also referenced in "Large-scale development" regulations of the zoning ordinance. "Planned Developments" section of the ordinance specifies off-street parking lot location, surfacing, barriers and screening requirements.

Administration and enforcement of the zoning ordinance is presently the responsibility of a planning administrator appointed by the Fayetteville City Manager. Final land use control decisions about zoning of all land within the city is the responsibility of the Fayetteville City Board of Directors. Decisions and action by the Board on such zoning matters is one indicator of land use change pressure which influence the transportation planning process and plan update requirements. A total of 108 zoning change requests were considered by the Board between January, 1973 through October, 1976. Approximately 87 percent of the total zoning change requests reviewed and acted upon the Board were approved while approximately 13 percent were disapproved. During this period, 100 of the zoning requests reviewed by the Board requested a land use classification change to a higher intensity use (e.g., residential to industrial use). Eight requests were for "down zoning" (e.g., industrial to residential use). The table on the next page summarizes Board actions involving approval and disapproval of zoning requests reviewed during the period January 1973 through October, 1976.

Subdivision Regulations

Existing Subdivision Regulations continue to be of significant value in implementation of the Fayetteville transportation plan for several reasons. First, present subdivision regulations establish minimum land development design standards, improvement guarantees, and penalties. These regulations are applicable in the city and within the city's area of planning jurisdiction outside of the city. Second, subdivision regulations require that all proposed subdivisions "shall conform to the official plans and regulations that make up the comprehensive plan including the land use plan, the street plan, access control, setback ordinances, community facilities plan and the zoning ordinance." Third, the planning commission may require the subdivider to reserve sites indicated for public use within the proposed subdivision for a period of six months after approval of a preliminary plat. This provides opportunity for the city to purchase needed public sites. Fourth, the planning commission may require the subdivider to establish building setback lines which allow future acquisition of street right-of-way

FAYETTEVILLE ZONING ACTIVITY: JANUARY, 1973 - OCTOBER, 1976

<u>Zoning Request From</u>	<u>Number of Requests</u>		
	<u>Approved</u>	<u>Disapproved</u>	<u>Total</u>
Agriculture to Residential	14	-	14
Residential to Residential	13	5	18
Residential to Residential-Office	7	1	8
Residential to Commercial	19	-	19
Residential to Industrial	8	-	8
Residential to Public Institution	5	-	5
	<u>66</u>	<u>6</u>	<u>72</u>
SUB TOTAL:			66.6
Agriculture to Commercial *	13	4	17
Commercial* to Commercial *	5	3	8
Commercial to Industrial	1	-	1
Industrial to Industrial	2	-	2
	<u>21</u>	<u>7</u>	<u>28</u>
SUB TOTAL:			26.0
Commercial to Residential	-	1	1
Industrial to Residential	5	-	5
Industrial to Commercial	2	-	2
	<u>7</u>	<u>1</u>	<u>8</u>
SUB TOTAL:			7.4
TOTAL:	<u>94</u>	<u>14</u>	<u>108</u>
			<u>100.0</u>

* Commercial includes residential-offices

Source: Minutes of Fayetteville City Board of Directors Meetings from January 1, 1973 through October 31, 1976

by the city for street improvements. Fifth, the planning commission may require that steep grades, unstable soil, and flood plains be set aside and not subdivided until corrections are made to protect life, health, and property.

The NARTS transportation plan recommends two classes of trafficway facilities -- urban and rural. The urban class consists of six facility types including freeways, other principal arterials (2 types, divided or undivided facility), minor arterials, collector streets, and local streets. The rural class also consists of six types of trafficways. Rural type trafficways include principal arterials (two (2) types, divided or undivided facility) minor arterials, (two (2) types, four-lane or two lane facility), major collectors, minor collectors. The Fayetteville subdivision regulations also indicate two classes of trafficway facilities - rural street and urban street. However, no distinction is made in subdivision regulations between urban and rural arterial street facilities.

Design Standards

Design standards ("typical cross sections") are recommended in the NARTS plan as an aid in providing adequate right-of-way and surfacing for the various street facility types. Fayetteville subdivision regulations which could influence the effectiveness of design standards set forth in the NARTS plan include:

- A. Variations: Provision for city planning commission to grant relief from design standards which create undue hardship to the subdivider.
- B. Conformity: Subdivision design and development must conform to the comprehensive plan including the land use plan, street plan, access control, setback ordinances, community facilities plan, and zoning ordinance. Planning commission may require reservation of public sites (up to six months) and to establish building lines to allow for future acquisition of right-of-way for arterial streets.
- C. Fitness for Development: Planning commission may require steep grades, unstable soil and flood plains to be set aside and not subdivided until corrections are made to protect life, health, and property.
- D. Street Design Principles: Design principles assisting in the implementation of the transportation plan include the following.

Extensions: All street extensions shall be projected at the same or greater width, but in no case less than the standards.

Substandard Widths: Subdivisions that adjoin existing streets shall dedicate additional right-of-way to meet the minimum widths listed.

Street Names: Names of streets shall be consistent with natural alignment and extensions of existing streets and new street names must be used which will not duplicate or be confused with existing names.

Tangents: A straight tangent at least one hundred feet long shall separate reverse curves.

Access: Safe and adequate vehicular and pedestrian access should be provided to all parcels.

Access control: Local streets and driveways should not detract from the safety and efficiency of bordering arterial routes.

Through Traffic: Local street systems should be designated to minimize through traffic movements.

Speed: Local streets should be designed to discourage excessive speeds.

Pedestrian: Pedestrian-vehicular conflict points should be minimized.

Economy: A minimum amount of space should be devoted to street uses.

Traffic Conflict: There should be a minimum number of intersections.

Street Pattern: The arrangement of local streets should permit economical and practical patterns, shapes and sizes of development parcel.

Specific standards for street design are shown on the next page.

Intersection Design Standards

Design Standards:

	<u>Ordinary</u>	<u>Hilly</u>
Approach speed	25 mph	20 mph
Sight distance	90 ft.	70 ft.
Grades within 100'	Flat	4%
Minimum angle	75 degrees	75 degrees
Minimum curb radius		
Minor streets	30'	30'
Collector Streets	50'	50'
Minimum jogs		
Minor streets	150'	150'
Collector streets	200'	200'

Subdivision street design principles and intersection design standards were further clarified in February 1976 when Ordinance No. 2196 pertaining to access and access control was passed by the city requiring that street

STANDARDS FOR STREET DESIGN *

	Local Streets			Collector Streets		
	Ordinary		Hilly	Ordinary		Hilly
Density	Urban	Rural	Urban	Urban	Rural	Rural
Spacing	300'-1400'	300'-1400'	300'-1400'	300'-1400'	300'-1400'	300'-1400'
Right-of-way	50'	60'	50'	60'	80'	80'
Pavement width	30'	24'	30'	36'	30'	30'
Border	vertical curb; gutter	8' shoulders; swales; roll curb	vertical curb; gutter	vertical curb; gutter	8' shoulders; swales; roll curb	8' shoulders; swales; roll curb
Off-street parking	one side	none	none	both sides	none	none
Sidewalk	one side	one side	one side	both sides	one side	one side
Maximum grade	10%	10% max)	15% (300' max)	6%	6%	12%
Dead-end streets	500	1000	1000	500		
Length	50	50	--	--		
Radius (ROW)	25	30	20	30	35	30
Design speed						
Sight distance at centerline	250	250	110	350	350	150
Intersection to curb cut	40'	40'	50'	50'	50'	60'
Between curb cuts	25'	25'	25'	30'	30'	30'
Street Lighting	Yes		Yes	Yes	Yes	Yes

* Fayetteville Subdivision Regulations, as amended.

intersection plans and design be approved by the city traffic superintendent. Revision of subdivision regulations procedures (February 26, 1976) for large scale development (LSD) has strengthened relationships between land use planning and development and transportation plan implementation activities. One major change consists of the transfer of final LSD approval responsibility from the City's Board of Directors to the City Planning Commission's Subdivision Committee. This change in administrative responsibility reduces plat processing time. The subdivision committee is composed of three or more members of the city planning commission appointed by the planning commission. Administration of LSD proposals is the responsibility of the planning administrator. Of particular transportation plan implementation importance is the requirement that a large scale development proposal may be disapproved by the City Planning Commission or Subdivision Committee provided "the developer refuses to dedicate the street right-of-way... required by this Ordinance." "Planned Development" permitted under the zoning ordinance is similar to the LSD in intent by providing land design flexibility. However planned development provisions permit a variety of land uses which could influence planned trip generation calculations and street traffic capacities.

SPRINGDALE

The City of Springdale accepted, in total, the Northwest Arkansas regional Transportation Study on May 8, 1973. This NARTS study is the primary guideline presently used for transportation planning and facilities programming purposes within the city.

Major transportation activities completed since 1973 which are in conformance with the NARTS transportation plan include:

1. Establishment of the center line for the "Northwest Loop" and "Southwest Loop" for future construction.
2. Relocation of Commercial Street.
3. Huntsville Avenue widening and sidewalk improvements. Approximately \$11,800 was spent for street improvements during fiscal 1975-76.

Implementation emphasis by the city is presently upon activities which contribute toward establishment and preservation of future street r-o-w. This is being accomplished primarily by the city's establishment of street center lines and administration of subdivision regulations. In support of the NARTS transportation plan, the Master Street Plan, zoning ordinance, and subdivision regulations are considered essential tools in the implementation of the transportation plan.

Land Use Development Mechanisms As Tools for Transportation Plan Effectuation

Official Street Plan

The Springdale City Council accepted the NARTS Fayetteville/Springdale 1990 Transportation Plan on May 8, 1973 (see figure, page 5). However, several modifications have been made to the plan since that time. The single major change has been the westwardly and eastwardly expansion of the original transportation study area of approximately one mile. As a result the original plan has been revised and officially approved (November 18, 1975) to show the proposed north-south freeway/expressway location (Alternate "A"). Eastwardly extensions of Arkansas 68 and Mountain Road have also been added. System mileage by facility type in the Springdale transportation area is presently as follows:

<u>Facility Type</u>	<u>System Additions in Miles</u>	<u>Total System Miles</u>
Freeway/expressway	8.8	11.4
Other Principal Arterial	1.7	14.9
Minor Arterial	-	12.2
Collector Street	0.3	24.6
Total	10.8	63.1

Zoning

The land use classification system used in the analysis and preparation of the NARTS transportation plan included standard land use categories of residential, commercial, industrial, public facilities, park and playground, agriculture, and vacant land. Parks, playgrounds, agricultural and vacant land designations have been grouped into a single category known as Agricultural or Vacant Land. Zoning contributes toward implementation of the transportation plan through administration of regulations governing the use of land. Approximately 51 zoning change requests have been reviewed by the Springdale City Planning Commission between January 1973, and October 1976. Of this total about 90 percent of the requests were approved by the Springdale Planning Commission and City Council and ten percent denied. Forty-three percent of the zoning requests approved were requests for a change from residential to a commercial use of property.

Supplementary zoning regulations providing for adequate visibility at intersections in residential districts and off-street parking and loading requirements in all districts are also part of the present ordinance. The zoning ordinance requires consideration be given to the intent of the comprehensive plan for large scale development plans (1-20 acres). Planned developments (20 acres or larger) must comply with present subdivision regulations.

Subdivision Regulations

Present subdivision regulations governing the process of dividing land into developable tracts are closely related to recommended transportation study guidelines and are considered by many Springdale city officials to be very useful in the implementation of the transportation plan. Of particular implementation importance is the relationship of subdivision development design guidelines and standards to transportation plan design standards.

One aspect basic to any implementation and coordination effort is the understanding of the intended use of transportation terms. The NARTS study sets forth two types of function classification system - rural and urban. The Springdale Subdivision Regulations set forth four types of trafficways but do not distinguish between urban and rural trafficways as does the NARTS. Transportation definitions in both the NARTS plan and subdivision regulations are reasonably compatible with greatest similarity occurring at the local, minor street and collector street levels.

In administering of the subdivision regulations the Springdale City Planning Commission may require the developer to establish building lines for future r-o-w acquisitions for arterial streets or reserve public use sites within the boundaries of the subdivision for future acquisition by the city. This requirement is very significant in assisting transportation plan implementation activities outside of the city since subdivision regulations also govern the design of land use and street r-o-w acquisition within an extraterritorial planning area surrounding the city. All land for street r-o-w within the city's planning area is presently acquired through the subdivision

dedication process. Enforcement guidelines of present subdivision regulations require that no street dedication will be accepted unless adjoining land use is shown and if the purpose of opening a street is to make affected land available for sale. Hence, the street may not be accepted unless a subdivision plat is provided. Present subdivision regulations relating to the use and design of lots must also conform to the provisions of the zoning ordinance. In the transportation planning area where zoning does not exist, land design provisions have been made in the subdivision regulations to permit location and opening of future streets and application of appropriate trafficway design standards.

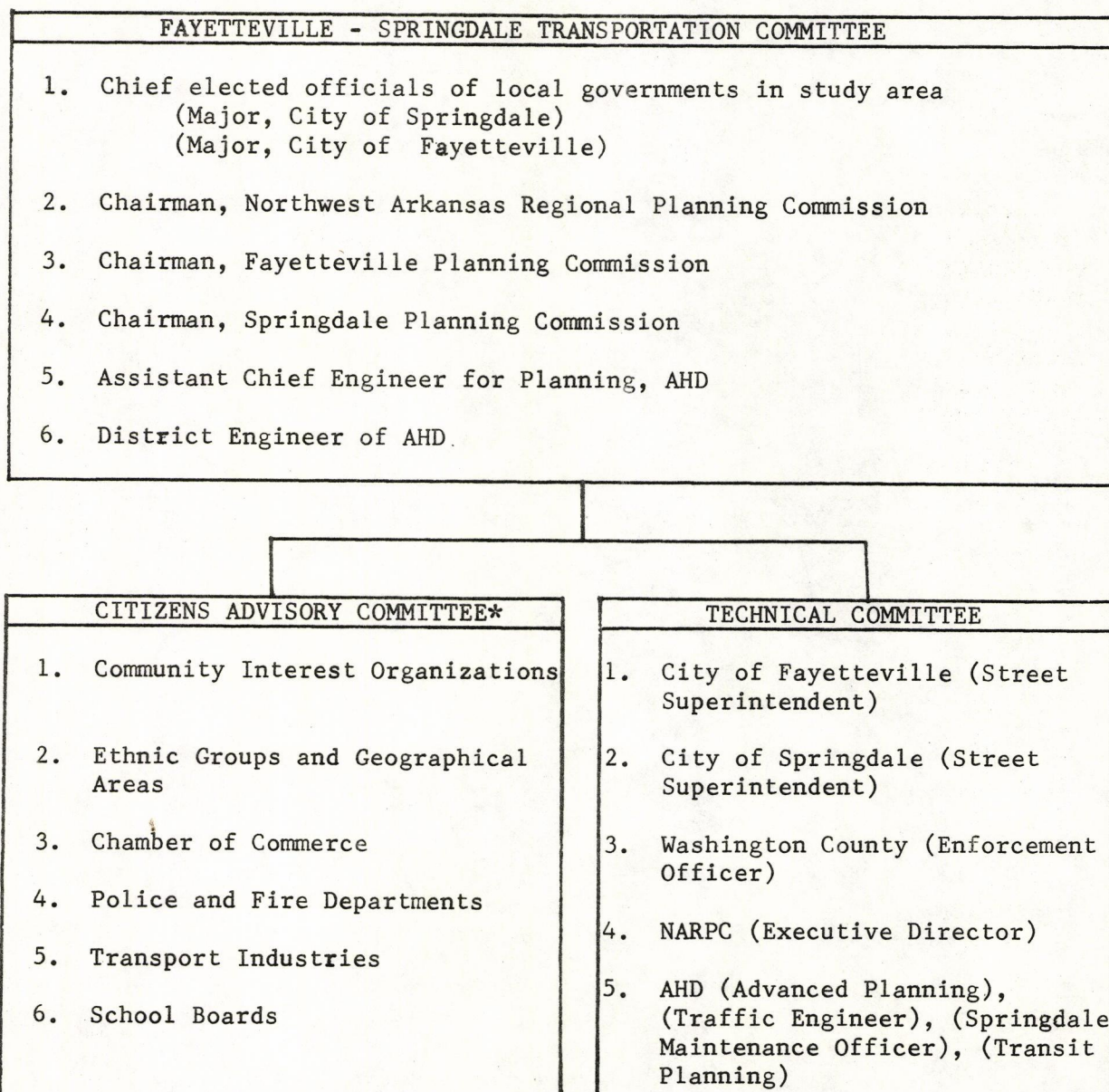
Design Standards

Subdivision design standards presently require a subdivision to conform to official plans and regulations that comprise the comprehensive plan including the land use plan, street plan, access controls, setback ordinances, community facilities plan and the zoning ordinance. General design principles important to implementation of the transportation plan are set forth for street extensions, substandard widths, access and access control, street names, speed, through-traffic, economy, traffic conflict, topography, street pattern, pedestrian - vehicular conflict and residential development. Specific design standards for street name signs and intersections are also included. However, specific "cross section" standards and r-o-w width requirements are lacking in the regulations. Large scale development plan (LSD) requirements in the subdivision regulations require trafficway consideration of location, size, arrangement of curb cuts, driveways, parking and loading areas, and proposed dedications or vacations of street r-o-w. LSD plans must also be compared to the official street plan and drainage plan.

CONTINUING TRANSPORTATION PLANNING AND ADMINISTRATIVE STRUCTURE

Continuing transportation planning and administrative activities within the Fayetteville-Springdale transportation study area are outlined in the "Fayetteville-Springdale Transportation Study Agreement of Understanding" (Appendix C), as approved on December 14, 1973 by representatives of the cities of Fayetteville and Springdale, Benton and Washington Counties, Northwest Arkansas Regional Planning Commission, and the Arkansas State Highway Department. The organizational structure established to carry out the continuing transportation planning process is shown in the following diagram.

PARTICIPATING AGENCIES AND UNITS OF GOVERNMENT



7. Airports	6. FHA (Little Rock Office)
8. Other Users	7. UMTA (No representation)
	8. Other Appointed Officials (None)

*Citizen Advisory Committee representation as set forth in the transportation "Continuing Phase Program" is as follows:

1. Community Interest Organizations
 - a. Carpenters Union
 - b. Council on Aging - City of Fayetteville
 - c. Mayor's Advisory Committee - City of Springdale
 - d. Springdale Board of Realtors
 - e. University of Arkansas Government
 - f. Washington County League of Women Voters
 - g. Highland Chapter Ozark Society
 - h. PTA Council - City of Springdale
 - i. Highroller Cyclery Inc.
 - j. Women's Civic Club - City of Fayetteville
 - k. Citizen's Expressway Coalition
 - l. ACORN
 - m. Senior Citizens of Springdale
2. Ethnic Groups and Geographical Areas
 - a. Northwest Arkansas Human Relations Council
 - b. EOA
3. Chamber of Commerce
 - a. Fayetteville Chamber of Commerce
 - b. Springdale Chamber of Commerce
4. Police and Fire Departments
 - a. Fayetteville Police and Fire Department
 - b. Springdale Police and Fire Department
5. Transport Industries
 - a. Jones Truck Line
 - b. City Cab Company - City of Fayetteville
6. School Boards
 - a. Springdale School Board
 - b. Fayetteville School Board
 - c. University of Arkansas

7. Airports

- a. Scheduled Skyways

8. Other Users

- a. Citizen
- b. Springdale Memorial Hospital

The County Judge of Benton Counts is presently a member of the transportation committee but chose not to appoint a Benton County representative because of the smallness of the geographical area involved. Although the communities of Greenland, Bethel Heights, and Johnson are not now participating in the transportation process they are presently considering becoming active members in the process.

Primary administrative responsibility for the continuing phase of the transportation program rests with the Northwest Arkansas Regional Planning Commission (NARPC). The executive director of NARPC is the study director. Continuing transportation, technical planning and advisory services to municipalities is provided primarily through the professional planning staff of the commission. These services have been numerous, prompt, and of high quality. In addition the technical staff assists the Fayetteville-Springdale Transportation Committee, Technical Committee, and Citizens Advisory Committee in the calling, conduct, and recording of activities of each of the committees. All committees have been very active in the carrying out of their respective charges, particularly the technical advisory committee. The participation of members in committee meetings has been high in attendance and number of comments and ideas presented during meeting.

Continuing Process Activities

The continuing transportation planning process is based on constant reappraisal of (1) the continuing, comprehensive, and cooperative guidelines set forth in the NARTS 1970-1990 report, (2) the transportation plan subject matter discussed in previous sections, and (3) the responsibilities and functions of the Fayetteville - Springdale Transportation Committee as outlined in the Fayetteville - Springdale Transportation Study agreement of Understanding of December 14, 1973. These elements provide the basis for suggestions about improving the transportation planning process. Continuing transportation planning process activities set forth in the Fayetteville - Springdale Transportation Plan include (1) the continuing surveillance and reappraisal of transportation elements in relationship to changing needs of the cities of Fayetteville and Springdale planning areas, (2) the transportation improvements program, (3) the investigation of ways to increase regional mobility, and (4) review of transportation policy. Participation in these continuing transportation activities is quite evident as indicated by activities of the Northwest Arkansas Regional Planning Commission members and technical planning staff in:

- a. Daily planning advisory service to land developers within the City and Region.
- b. Daily planning advisory services to City Board of Directors, Planning Commission, and City Department heads.

c. Conduct of special studies influencing land use distribution patterns such as water and sewer facilities.

d. A-95 Clearinghouse review and comment.

e. Giving equal opportunity for all persons in the study area to participate in the planning process.

This involvement permits the identification of plan adequacies and inadequacies. Continuing consideration of transportation programming and ways of increasing the region's (including cities of Fayetteville and Springdale networks) mobility is indicated by activities such as:

a. Advising city planning commission on technical transportation problems and assembling transportation expertise and resources when required and not available on the staff.

b. Participation in airport, expressway and taxi service analyses.

Transportation goals as outlined in the original study continue to be very relevant guidelines for continuing transportation planning within the region and its parts.

Although current activities are being directed toward the original goals of (1) providing a forum for discussion and (2) conduct of continuing transportation inventory, it is suggested these two goals be given a higher priority. The reasons for this suggestion are: (1) society's growing concern for citizen participation in all areas of public interest including transportation planning and (2) expansion of data and information as an aid to the transportation management process. For example, annual conduct of a citizen's attitude survey about the transportation planning process and management activities could provide guidelines for budgeting and information dissemination efforts.

APPENDIX A

Comparability of Transportation Plan and Development Control Definitions in the Northwest Arkansas Transportation Study Area of the Cities of Fayetteville and Springdale, Arkansas.

The compilation of the following definitions has been limited to selected terms relating to transportation plan development and continuing effectuation activities found in the Northwest Arkansas Regional Transportation Study 1970-1990; Fayetteville General Plan 1970-1990; Fayetteville Zoning Ordinance No. 1747, as amended; Fayetteville Subdivision Regulations, Ordinance No. 1750, as amended; Springdale Comprehensive Plan 1970-1990; Springdale Zoning Regulations, Ordinance No. 887; and Springdale Subdivision Regulations, Ordinance No. 869. For ease of comparison, terms have been grouped by function. For example, all types of streets (arterial, collector, local) have been included alphabetically under the term street.

Sources of definitions have been identified as follows:

- (SCP)= City of Springdale Comprehensive Plan 1970-1990.
- (SS) = City of Springdale Subdivision Regulations (Ordinance 869).
- (SZ) = City of Springdale Zoning Regulations (Ordinance 887)
- (FS) = City of Fayetteville Subdivision Regulations (Ordinance No. 1750)
- (FZ) = City of Fayetteville Zoning Ordinance (Ordinance No. 1747)
- (FGP)= City of Fayetteville General Plan 1970-1990.
- (NTS)= Northwest Arkansas Regional Transportation Study 1970-1990.

Summary of Findings

A total of 63 transportation definitions were selected for comparison from existing zoning ordinances, subdivision regulations, and comprehensive and transportation plans within the NARTS area. While definitions relate to both land use and transportation development, emphasis has been placed upon transportation. The largest number (43 of 63) of transportation and land use related definitions were found in subdivision regulations. A total of twelve and eight transportation related definitions were found in comprehensive and transportation plans and zoning ordinances respectively. All definitions within the Northwest Arkansas Regional Transportation Study were limited primarily to terms pertaining to street classifications. No definitions about types of plans, land use controls or development requirements (e.g. parking, access, right-of-way) were included in the NARTS transportation plan. Definitions contained in the transportation plan, general plans, zoning ordinance, and subdivision regulations are largely operational in nature (i.e. term is defined by what the referent does rather than what the referent is). All definitions in the NARTS are operational in nature. Most definitions in subdivision regulations are also of the operational type with a small number of terms defined qualitatively (i.e. term is described by qualities, characteristics, or properties). Very few terms are described by a dimensional aspect.

There exists a high degree of similarity between number and type of terms found in the general plans, zoning ordinances, and subdivision regulations of the cities of Fayetteville and Springdale. This similarity would tend to expedite communication. The number of transportation terms utilized in local plans and guidelines far exceed the number used in the regional transportation plan. The regional plan limited its explanation of transportation terms to those directly related to trafficway classification. Substantial discrepancies appear to exist between and in meanings of terms used in the regional transportation study and local plans and development controls. These discrepancies are particularly noticed in street (trafficway) classification definitions. Several major definition problems are related to the following:

1. NARTS indicates two major categories for transportation facilities improvements - urban and rural. Local areas do not make this distinction.
2. Many definitions generally lack enough specific properties to clearly distinguish them from other definitions.
3. Description of many terms are not complete enough to make recognition of the term explicit and clear.

More attention at all decision levels should be given to the meaning and relationships of definitions if transportation purposes, policies, and programs are to be conveyed in an effective manner.

DEFINITIONS

ACCESS:

Access: Safe and adequate vehicular and pedestrain access shall
(FS) be provided to all parcels.

Access Control: Local streets and driveways shall not detract from the
(FS) safety and efficiency of bordering arterial routes.

ALLEY:

Alley: A minor public way dedicated to public use for utility
(FS) easements and vehicular access to the back or the side of
properties abutting a street.

Alley: A minor public way dedicated to public use for utility
(SS) easements and vehicular access to the back or the side of
properties abutting a street.

DEDICATION:

Dedication: Land and improvements offered to the city, county, or
(FS) state and accepted by them for public use, control and maintenance.

Dedication: Land and improvements offered to the city, county, or
(SS) state and accepted by them for public use, control and maintenance.

EASEMENT:

Easement: A grant by the property owner to the public, a corporation
(FS) or persons, of the use of a strip of land for specific purposes.

Easement: A grant by the property owner to the public, a corporation
(SS) or persons, of the use of a strip of land for specific purposes.

IMPROVEMENTS:

Improvements: Physical changes made to property to prepare it for
(FS) development such as street grading, drainage structures, street
surface, sidewalks, curbs, gutters, utility lines, bridges
and similar items.

Improvements: Physical changes made to property to prepare it for
(SS) development such as street grading, drainage structures, street
surface, sidewalks, curbs, gutters, utility lines, bridges
and similar items.

LOADING, OFF-STREET:

Loading Space, off-street: Space logically and conveniently located
(FZ) for bulk pickups and deliveries: scaled to delivery vehicles expected to be used, and accessible to such vehicles when required off-street parking spaces are filled. Required off-street loading space is not to be included as off-street parking space in computation of required off-street parking space.

Loading Space, Off-street: Space logically and conveniently located for
(SZ) bulk pickups and deliveries, scaled to such vehicles when required off-street parking spaces are filled. Required off-street loading space is not to be included as off-street parking space in computation of required off-street parking space.

PARKING, OFF-STREET:

Parking Space, Off-street: For the purposes of this ordinance, an off-
(FZ) street parking space shall consist of a space adequate for parking an automobile with room for opening doors on both sides, together with properly related access to a public street or alley and maneuvering room. Required off-street parking areas for three or more automobiles shall have individual spaces marked, and shall be so designed, maintained and regulated that no parking or maneuvering incidental to parking shall be on any public street, walk or alley, and so that any automobile may be parked and unparked without moving another.

Parking Space, off-street: For the purposes of this ordinance, an off-
(SZ) street parking space shall consist of a space adequate for parking an automobile with room for opening doors on both sides, together with properly related access to a public street or alley and maneuvering room.

PLANS:

Plan, Comprehensive: The plan made and adopted by the planning commission
(FS) and accepted by the city board of directors indicating the general locations recommended for the various land uses, major streets, parks, public buildings, zoning districts and other public improvement

Plan, Comprehensive: The plan made and adopted by the Planning Commission
(SS) and accepted by the City Council indicating the general locations recommended for the various land uses, major streets, parks, public buildings, zoning districts, and other public improvements.

Comprehensive Plan: A long-range plan for the planning area including plans
(FS) for land use, streets and community facilities.

Comprehensive Plan: A long-range plan for the planning area including
(SS) plans for land use, streets, and community facilities.

Development Plan: A drawing showing all proposed improvements to a piece
(FS) of property such as streets, parking lots, buildings, drives, signs, utilities, drainage, grading and planting by size and location.

Development Plan: A drawing showing all proposed improvements to a
(SS) piece of property such as streets, parking lots, buildings, drives, signs, utilites, drainage, grading, and planting by size and location.

General Plan: The plan is a statement of public policy and this policy
(FGP) is fulfilled by public improvements, development regulations and administrative decisions.

General Plan: The plan is a general, comprehensive long-range document,
(SCP) that deals with primarily physical problems. It is a document for debate, resolution and support by the community... It should aid policy decisions, guide administrative decisions and inform the public.

Large-scale Development: The development of a lot or parcel larger than
(FS) one acre; the term development shall include, but shall not be limited to, the construction of a new improvement, the construction of an addition to an existing improvement, or a parceling which results in the need for access and utilities.

Major Street Plan: A part of the comprehensive plan made and adopted by
(FS) the planning commission and accepted by the city board of directors classifying certain streets within the planning area jurisdiction as arterial or collector streets.

Major Street Plan: A part of the Comprehensive Plan made and adopted
(SS) by the Planning Commission and accepted by the City Council classifying certain streets within the planning area jurisdiction as arterial or collector streets.

RIGHT-OF-WAY:

Right-of-way: The land opened, reserved or dedicated for a street, walk,
(FS) drainage or other public purposes.

Right-of-way: The land opened, reserved, or dedicated for a street, walk,
(SS) drainage, or other public purposes.

Street Line: The right-of-way line of a street.
(FZ)

SETBACK LINES:

Official Set-Back Line: Where an official set-back line has been
(FZ) established for future widening or opening of a street upon which a lot abuts, then the width or depth of a yard shall be measured from such official set-back line to the nearest line of the principal building, including porches, attached garages, attached car ports, eaves and overhangs.

Official Setback Line: Where an official setback line has been established
(SZ) for future widening or opening of a street upon which a lot abuts, then the width or depth of a yard shall be measured from such official setback line to the nearest line of the principal building, including porches, attached garages, attached carports, eaves, and overhangs.

Setback Lines or Building Lines: A line on a plat generally parallel
(FS) to the street right-of-way, indicating the limit beyond which buildings or structures may not be erected except as provided in ordinances.

Setback Lines: A line on a plat generally parallel to the street right-
(SS) of-way, indicating the limit beyond which buildings or structures may not be erected except as provided in ordinances.

Setback Line: Where a setback line has been established for future
(SZ) widening or opening of a street upon which a lot abuts, then the width or depth or a yard shall be measured from such setback line to the nearest line of the principal building, including porches, attached garages, attached carports, eaves and overhangs.

STREET:

Street: A strip of land, including the entire right-of-way, intended
(FS) primarily as a means of vehicular and pedestrian travel which may also be used to provide space for sewers, public utilities, trees and sidewalks.

Street: A strip of land, including the entire right-of-way, intended
(SS) primarily as a means of vehicular and pedestrian travel which may also be used to provide space for sewers, public utilities, trees, and sidewalks.

STREET CLASSIFICATIONS:

ARTERIAL FACILITY:

Arterial Street: A street or road of considerable continuity which serves
(FS) or is intended to serve as the principal traffic-way between separated areas or districts which is the main means of access to the primary street system or expressways.

Street, Arterial: A street or road of considerable continuity which
(SS) serves or is intended to serve as the principal trafficway between separated areas or districts and which is the main means of access to the primary street system or expressways.

Minor Arterial (rural): Serve interstate and intercounty travel to and
(NTS) through cities and larger towns and provide connections to and through large traffic generators with minimum interference to through movement.

Minor Arterial (urban): Interconnect with and augment the principal
(NTS) arterial system and provide service to trips of moderate length.

Other Principal Arterials (urban): Serve major generators and link
(NTS) virtually all portions of the urbanized area with the Freeway and Expressway systems.

Principal Arterials (urban)- Expressway/Freeway: Provide for large
(NTS) volumes of traffic at relatively high speeds and are primarily intended to serve long trip lengths.

Principal Arterials (rural): Serve major corridor traffic movements
(NTS) of substantial length and volume at relatively high speeds linking major urban areas in and between states.

Major Street: Streets and highways designed to carry large volumes
(SS) of traffic between major traffic generators.

COLLECTOR FACILITY:

Collector Street (urban): Have the joint function of traffic service
(NTS) and land access, with principal service oriented to intermediate and short distance travel with much lower traffic volumes than on arterial facilities.

Collector Street: A street which in addition to serving abutting
(FS) properties, intercepts minor streets, connects with community facilities and carries neighborhood traffic to the major arterial street system. Where possible, houses should not front on collector streets.

Collector Street: A street which in addition to serving abutting
(SS) properties, intercepts minor streets, connects with community facilities, and carries neighborhood traffic to the major arterial street system. Where possible, houses should not front on collector streets.

Major Collectors (rural): Provide intra-county service to and into
(NTS) population centers, collect and distribute traffic to and from major roads.

Minor Collectors (rural): Collect traffic from local roads and bring
(NTS) all developed areas within a reasonable distance of a collector road; provide service to smaller communities; link locally important traffic generators with rural cities and towns.

LOCAL STREET FACILITY:

Dead-end Street: A street having one end open to traffic and being
(FS) permanently terminated by a vehicular turnaround.

Dead-end Street: A street having one end open to traffic and being
(SS) permanently terminated by a vehicular turnaround.

Frontage Street: A minor street which is generally parallel and
(FS) adjacent to a major highway or railroad right-of-way and which provides access to abutting properties and protection from through-traffic.

Frontage Street: A minor street which is generally parallel to and
(SS) adjacent to a major highway or railroad right-of-way and which provides access to abutting properties and protection from through traffic.

Local Street: Primary function is to provide direct access to abutting
(NTS) land and access to higher order systems.

Minor Street: A street used primarily to provide access to abutting
(FS) properties.

Minor Street: A street used primarily to provide access to abutting
(SS) properties.

Rural Street: A street located, or to be located, outside the city
(FS) limits of the city of Fayetteville, Arkansas, but within the planning area jurisdiction of the City of Fayetteville, Arkansas.

Urban Street: A street located, or to be located, within the city
(FS) limits of the City of Fayetteville, Arkansas.

SUBDIVISION:

Subdivision: A division of a lot, tract or parcel of land into two (2)
(FS) or more lots or other division of land, for the purpose of transfers of ownership or development, extension of utilities, dedication of easements or right-of-way, whether immediate or future, including all changes in street or lot lines, provided, however, that where no new streets or easements of access is involved the following shall not be included in this definition and may be processed as an informal plat;

The combination or recombination of portions of previously platted lots where the total number of lots is not increased and the original lot areas are not decreased;

The divisions of land into parcels of five (5) acres or more;

The subdivision or resubdivision of land where public sewers and improved streets are available and the resultant lots comply with the requirements of the zoning ordinance.

Subdivision: A division of a lot, tract or parcel of land into five or
(SS) more lots or other division of land, for the purpose of transfers of ownership or development extension of utilities, dedication of easements or right-of-way, whether immediate or future, including all changes in street or lot lines, provided, however, that where no new streets or easement of access is involved the following shall not be included in this definition and may be processed as an informal plat;

The combination or recombination of portions of previously platted lots where the total number of lots is not increased and the original lot areas are not decreased below minimum lot sizes as prescribed by Springdale Zoning Regulations.

The divisions of land into parcels of one acre or more.

The subdivision or resubdivision of land where public sewers and improved streets are available and the resultant lots comply with the requirements of the Zoning Ordinance.

SUBURBAN:

Suburban: Located outside the corporate city limits.
(FS)

URBAN:

Urban: Located within the corporate city limits.
(FS)

APPENDIX B

Municipality: _____

Date: _____

This questionnaire is to determine to what extent your city has found the Fayetteville - Springdale 1990 transportation plan to be useful in street and highway facilities development. Since emphasis is placed upon physical facilities (freeway/expressway, other principal arterials, minor arterials, and collector streets), we would appreciate your completing Part I of this questionnaire. Part II is optional.

Part I: Physical Facilities

1. What official action has your city government taken on the Northwest Arkansas Regional Transportation Study?

_____ No official city governmental action taken.

_____ City government accepted total Northwest Arkansas Regional Transportation Study. _____ (date)

_____ City government adopted parts of study (i.e., Fayetteville - Springdale 1990 transportation plan element). _____ (date)

2. Does your city use a street and highway plan other than the one prepared in the Northwest Arkansas Regional Transportation Study for city transportation planning and facilities programming purposes?

Yes _____ No _____

If yes, please list the title of the plan or plans and mark in order of usefulness (1= most useful, 2 next, etc.)

_____	_____
_____	_____
_____	_____

Using a copy of your city map, please show in red all street and highway improvements (excluding local street improvements), rights-of-way acquisition (including widenings) completed during the period between when the study was approved or accepted and June 30, 1975, and attach to questionnaire before returning.

What would you estimate, in percent, the amount each of the following elements has been completed in your city? (Please reference transportation plan most used as a guide, if applicable.)

Reference: _____

	<u>Percent Element Completed</u>
New construction and major improvements (surfacing, lighting, widening,) for primary arterials	_____
New R-O-W acquisitions (including widening) for primary arterials, if applicable	_____
New grade separations and bridges for primary arterials, if applicable	_____
New construction or improvements (including widening) for other principal arterials	_____
New construction or improvements (including widening) for minor arterials	_____
New construction or improvements (including widening) for collector streets	_____
Total Transportation Plan completion estimate	_____
Please indicate what you think present major problems of the continuing transportation planning process to be (including implementation activities).	

Part II: Land Use Controls and Fiscal Information

Does your city have a street and highway right-of-way acquisition plan?

Yes _____ No _____ In process of development _____

How useful have your subdivision regulations, if any, been in implementing your present transportation plan?

(Circle appropriate number on scale: 1= worthless, 10= very useful)

1	2	3	4	5	6	7	8	9	10
									(very useful)
(worthless)									

How useful has your zoning ordinance, if any, been in implementing your present transportation plan?

(Circle appropriate number on scale: 1= worthless, 10= very useful)

1	2	3	4	5	6	7	8	9	10
									(very useful)
(worthless)									

Were any of the following transportation elements used in developing the last (1975-76) annual city budget? (Circle most appropriate number on scale: 1= no help at all, 10= helpful). No mark indicates no element was used.

Freeway/Expressway R-O-W acquisition

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Other principal arterials R-O-W acquisition

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Traffic Operations Improvements

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Off-street parking

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Grade separation and bridges

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Traffic data collection

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Intersection geometrics

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Traffic facility standards

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Please estimate, in nearest thousand dollars, total public (city only) funds spent on street and highway planning and implementation activities for the following fiscal years:

Fiscal Year	New Construction and major improve- ments	New R-O-W Widenings	Traffic Operations Improve- ments	Off Street Parking	Percent Trans. funds of city budget	Total Percent Public funds used for Implementation
1969-70						
1970-71						
1971-72						
1972-73						
1973-74						
1974-75						
1975-76						
Total:						

FAYETTEVILLE-SPRINGDALE TRANSPORTATION STUDY
AGREEMENT OF UNDERSTANDING

APPENDIX C

BETWEEN

City of Fayetteville, Arkansas
City of Springdale, Arkansas
Benton County, Arkansas
Washington County, Arkansas
Northwest Arkansas Regional Planning Commission
Arkansas State Highway Department

IN COOPERATION WITH

The U. S. Department of Transportation
Federal Highway Administration

RELATIVE TO

The responsibilities and functions of the participating agencies in the development and maintenance of a comprehensive transportation plan and the establishment of a continuing, coordinated transportation planning process under the direction of the Fayetteville-Springdale Transportation Committee.

WHEREAS, it is the desire of the participating agencies that there be a continuing, comprehensive and cooperative transportation planning process which is responsive to the needs of the Fayetteville-Springdale area and to changes occurring in the area, and

WHEREAS, the goal of this planning process is a Fayetteville-Springdale Transportation Plan accepted by all participating agencies and formally approved as a plan for implementation; and

WHEREAS, it is understood that the respective governing bodies of the participating agencies possess the final decision-making prerogatives and this Agreement does not violate any prerogatives of the agencies granted them through legislation;

NOW THEREFORE, it is hereby agreed that the participants in this Agreement shall jointly be responsible for the operation of the continuing planning process to be described in a "Continuing Phase Program" developed in accordance with the Federal Highway Administration's Policy established pursuant to Section 134, Chapter 1, Title 23, U.S. Code. The organization, composition, responsibilities, and functions of the Fayetteville-Springdale Transportation Committee shall be specified in the "Continuing Phase Program" and, upon approval by the participating agencies, said Continuing Phase Program shall become the governing document for conducting the continuing transportation planning process.

IT IS FURTHER AGREED, that, the Transportation Plan of the City of Springdale, adopted by said city on May 8, 1973 and by the Northwest Arkansas Regional Planning Commission on May 24, 1973; and the Transportation Plan of the City of Fayetteville, adopted by that said city on July 17, 1973 and by the Northwest Arkansas Regional Planning Commission on September 27, 1973 do constitute "The Transportation Plan" herein referred to for the purposes of the continuing, comprehensive and cooperative transportation planning process.

IT IS FURTHER AGREED, that the Fayetteville-Springdale Transportation Plan will contain appropriate development standards for all types of major transportation facilities which are included in the Fayetteville-Springdale Transportation Plan; and all building permits, right-of-way acquisitions, utility locations and easements will be in accordance with the applicable development standards required by the Transportation Plan unless a participating agency grants a variance.

IT IS FURTHER AGREED, that before official action is taken on any proposed changes in the participating agency's major street or transportation plans, they will be submitted to the Transportation Committee for review and the Committee shall submit proposed changes in the Transportation Plan to each agency for review.

IT IS FURTHER AGREED, that in cooperation with the Transportation Committee the participating agencies shall formally adopt a priority listing of construction projects in accordance with the Transportation Plan and that each agency shall formally adopt a five-year Transportation Capital Improvement Program from this priority listing. The Transportation Committee shall then assemble and approve an areawide priority listing and Capital Improvement Program. The Capital Improvement Program shall be updated as necessary, or at least annually.

IT IS FURTHER AGREED, that this Agreement and the "Continuing Phase Program" can be modified by mutual agreement between the participants and that any action to substantially change the scope or boundary of the planning process or to revise the Transportation Plan, Capital Improvement Program, or development standards shall be submitted for review by the Fayetteville-Springdale Transportation Committee.

IN WITNESS WHEREOF, the parties thereto have executed this Agreement of Understanding this the 14th day of December, 1973.

City of Fayetteville

Russell S. Purdy
Mayor

City of Springdale

Jack Phillips
Mayor

Benton County

Ralph Bala
Judge

Washington County

W. B. Lester
Judge

Northwest Arkansas Regional Planning
Commission

James H. Jones
Director

Arkansas State Highway Department

Henry Dyer
Director

FORT SMITH BI-STATE

URBAN TRANSPORTATION STUDY AREA

PART I

AREAWIDE TRANSPORTATION: PLANNING, PROGRAMMING AND CONSTRUCTION

Areawide transportation planning was begun in the Fort Smith area in early 1965, following initiatives taken by the Arkansas Highway Department to get the area to comply with provisions of the national Highway Act of 1962. At the beginning of this planning work it appears that the Highway Department provided most of the "glue" that held a loose confederation of local governments and private enterprise together for such an effort. Consequently, as might be expected, the 1967 organization of the Arkhoma Regional Planning Commission caused some reshuffling of coordination responsibilities.

Primary financing of the new R.P.C. by the national Department of Housing and Urban Development (D.H.U.D.) resulted in rather strict program guidelines being imposed on the new agency. Minutes of "Coordinating Committee" meetings suggest that frictions, caused by conceptual differences between the two national financial support programs, eroded both coordination and enthusiasm among participants in area transportation planning. The new R.P.C.'s first director's remarks at 1967 meetings seemed to indicate considerable intransigence concerning policies and objectives for the supposedly cooperative effort. Highway Department representatives appeared inclined to accept this as a challenge to their responsibilities and prerogatives in the process.

The upshot of this reshuffling of roles and responsibilities appears to have been a barely perceptible, and gradual, aligning of participants into two "camps" with different (but generally inexplicit) philosophies about the central purposes of transportation planning. The R.P.C. staff and Highway Department staff appeared to constitute the focal points of this split, with the R.P.C. group emphasizing conventional city planning doctrine that development of streets and highways was a tool to be used in achieving "planned growth" and the Highway Department (gradually relinquishing some early accommodation to this concept) emphasizing highway development as a response to actual or "prospective" growth.

The R.P.C. policy position was bulwarked both by D.H.U.D. regulations and, to an increasing extent, by Federal Highway Administration regulations. Consequently, the R.P.C. gained, and maintained, considerable dominance over the formal, overt and relatively superficial aspects of transportation planning, while the "real" planning, of physical and financial

commitments appeared to become increasingly dominated by less idealistic local development interests--with the latter process substantially more successful, influential and invisible.

It seems evident that both sides, at times, resorted to "playing games", to protect their positions and initiatives, or to embarrass the "other side". Unfortunately, this procedure was intertwined at times with conflicts and contests, on the local scene, at most only remotely related to the transportation planning process. The evidently forced resignation of the Executive Director for the R.P.C. (as well as the Western Arkansas Planning and Development District) in 1974, while overtly related to temporary "decertification" of the area in 1973 (based on a relatively trivial technical deficiency) surely reflected invisible dissatisfactions unrelated to the transportation planning situation. As a matter of fact, the record (of meetings and other documents) appears to reflect creditably on this Director's attempts to smooth out the frictions and disarray in transportation planning which occurred between 1967 and 1969. It is conceivable, however, that this appearance may have resulted from "playing both ends against the middle", to create more the impression than the reality of cooperative planning--for the purpose of satisfying the funding agencies.

In any event, and regardless of the purported structure, philosophy, or operating mode of the "3C" process in the Fort Smith Bi-State area, there seems to be little doubt that by 1974, at the latest, the developmental pragmatists had gained the upper hand in the invisible contest. This result may have been a foregone conclusion, considering the general philosophical "climate" in the area, but, an apparent subordinate result was an incongruous splitting of the "3C" process into two components: (1) a publicly advertised and minimally directive "adaptive" planning activity, which more often than not responded to actual development directions induced by (2) an informal, unobtrusive, coalition of pragmatic local officials, investment interests, and State and local street and highway officials which was basically committed to opportune economic development, with transportation systems (and other functional systems) planning used to enhance, reinforce and respond to such opportunities. Effectively, the areawide "plan" gradually became a projective (rather than a prescriptive) instrument which in practice required incremental "adjustment" of the published plan to account for the "real world" developmental divergence from the "idealized" original planning concept. Since the future land use pattern projected in the areawide plan was essentially a composite reflection of separately developed local governmental land use plans it is not particularly surprising that the degree of "adjustment" was different in the two major Arkansas municipalities participating in the "3C" process from the beginning.

Whether because of relative size, rate of development, degree of official commitment to established plans--or, more realistic original assessment of

development potentials--Van Buren's actual development deviated less from its plan 1/ than was, or is, the case in Fort Smith. While deviation from the 1967 Fort Smith plan, 2/ most prominent in the southern part of the City, could be attributed somewhat to effects from deactivation of Fort Chaffee, it seems more likely that the original land use concept was excessively "idealistic" and untenable. Both residential and industrial development, in various parts of Fort Smith, subsequently occurred in patterns markedly different from those "planned". Under the circumstances, and despite sincere efforts by the Fort Smith Planning Commission to apply planning principles and standards to development, the City could not successfully implement a plan which needed a far greater degree of governmental control capability than was, or is, likely to be available.

Again, it seems likely that the D.H.U.D. intervention in planning, with its unrelenting emphasis on land use controls, must have encouraged a more prescriptive approach in Fort Smith (and the areawide effort) than would have been "natural" for either local planners or the Highway Department. The fact that F.H.W.A. regulations issued in 1969 3/ stated that the land use study required in transportation planning should take into account, "---the current land use activity structure of the study area and the most probable or desirable future structure." (emphasis added) was either overlooked or overridden by the D.H.U.D. orientation towards "desirable future structure". F. H. W. A. guidelines issued since 1969 generally have required that transportation planning be "consistent" with local land use plans--without suggesting whether these might be prescriptive or projective. Recent policy changes in the D.H.U.D. also seem to be aimed at relaxing their traditional stance on land use. Under such circumstances, and considering that Fort Smith now receives no direct support for local planning under the "701" D.H.U.D. program anyway, there would seem to be no regulatory bar to substantial reconstruction of the city's land use plan,

1/ Prepared by the University of Arkansas City Planning Division and adopted by Resolution #13-1976 of the Van Buren City Council on December 4, 1967.

2/ Prepared by Harland Bartholomew and Associates and adopted by Resolution #191 of the Fort Smith Board of Directors on August 19, 1968.

3/ Federal Highway Administration Policy and Procedure Memorandum 50-9, Sec. 5, c. (1), dated 11/24/69.

and planning concepts, to better suit local needs and philosophical context.

In keeping with the more or less continual flux in the character of land development in Fort Smith, the city has made a number of revisions to its Master Street Plan. While there appear to have been some efforts made to synchronize city and areawide studies and revisions on these, there seems to be considerable uncertainty about the permanence of some city decisions. Despite the area plan being revised to reflect a number of changes made by the city, there are still fairly significant differences in the two plans. Most differences are in the south part of the city's planning jurisdiction and most involve collector streets. But, a few differences, in both collector and arterial street locations, occur in other areas of the city. The illustration map on page 1-5 shows the location and nature of differences noted.

The Van Buren Comprehensive Development Plan, which includes the master street plan, has not been revised since adoption in 1967. The only differences between this plan and the current areawide plan appear to comprise a few short sections of collector streets and one short arterial section added to the area plan. These variations do not appear very significant, but could, nevertheless, be "harmonized" by revision of one or both plans. The variations are shown on the map on page 1-5.

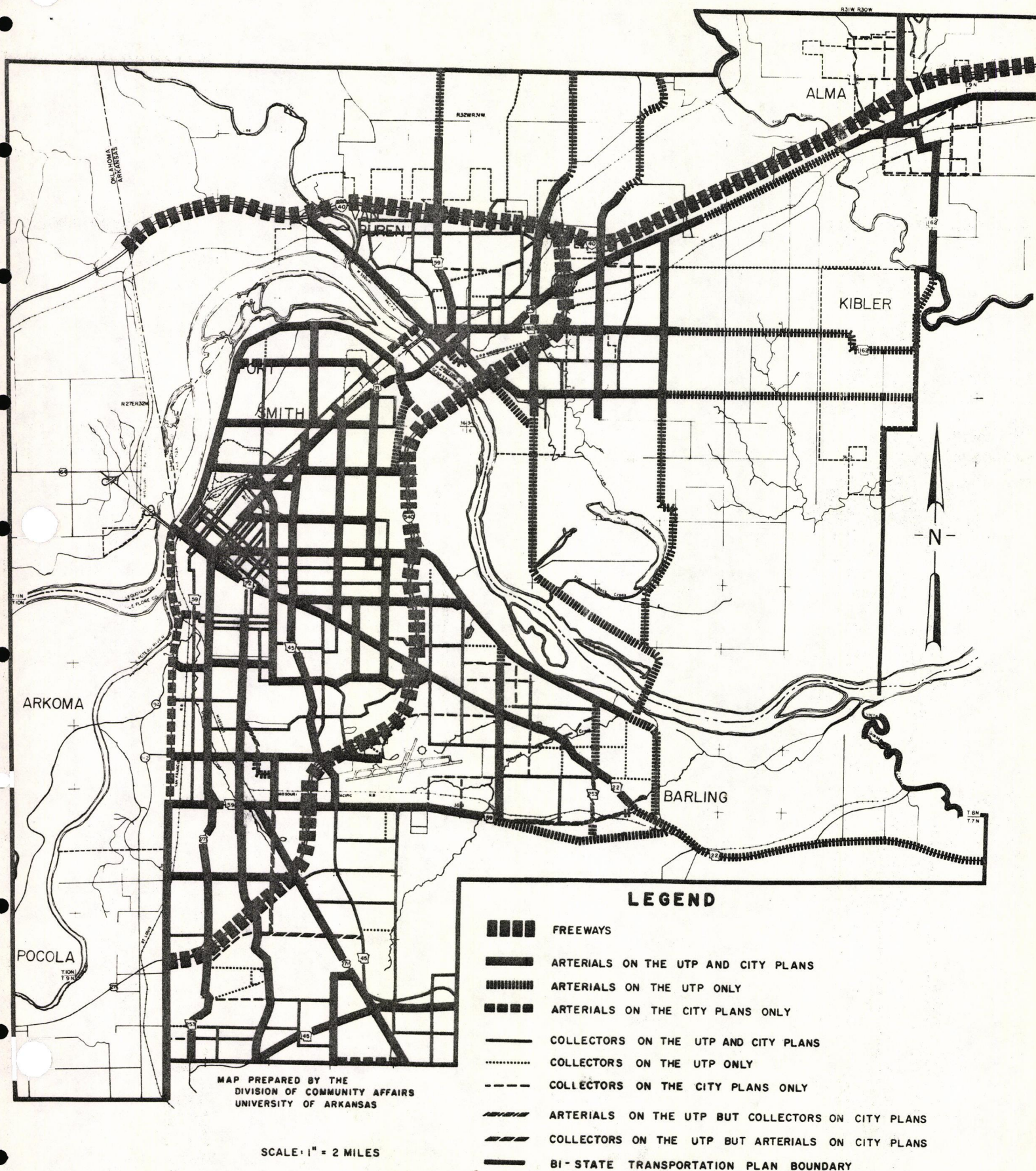
The planning jurisdiction of the City of Alma has only recently been included in the Bi-State Transportation Study Area. This may account for the fact that the published 1976 area plan shows only arterial routes in the Alma area. Apparently, the 1965 Alma Comprehensive Development Plan is being reviewed by the City Planning Commission with assistance from Arkhoma RPC staff, and decisions on confirming or revising the local street plan (and any changing of the areawide plan) will be forthcoming later. The arterial routes shown on both current plans are identical.

The City of Barling has no master street plan.

The Crawford County Road Standards booklet published in August 1977 ^{4/} contains a map showing functional classification of roads in the county. The map coincides with the 1980 functional classification map prepared by the AHTD except that the county's map excludes a principal arterial route, running due north from the I-40/I-540 interchange, which was shown on the

^{4/} Crawford County Road Standards, August 1977; ARPC Report No. 77-06 adopted August 16, 1977 by Order of the Crawford County Court, Judge Walter L. Kaylor County Judge.

BI-STATE TRANSPORTATION PLAN COMPARISON OF LOCAL AND AREA-WIDE STREET PLANS



AHTD map. Both maps show State Highway #59 and U.S. Highway #71 North of I-40 as minor arterial routes. All other roads indicated as major roads are designated "collectors" (including U.S. Highway #64 and several other roads shown as arterials on the urban transportation plan). The pattern of functional classification matches the statewide 1980 functional classification plan for rural arterial systems, but leads to some confusion when its application in the immediate environs of an urban transportation area causes different functional classification names to be used in different maps of the same route segment.

Sebastian County has not adopted any locally produced document pertaining to road classification, but has accepted the AHTD 1980 functional classification system. As in Crawford County, there are some noticeable differences between this system and urban classifications. State highways #253 and #45 (west of U.S. #71) and the proposed road between Lock and Dam #13 and State Highway #22 are classified as arterials in the urban plan and collectors in the rural plan.

Overall, it seems necessary to conclude that with respect to land use patterns both general community planning and areawide transportation planning in the Fort Smith/Bi-State area was hampered by a combination of unrealistic expectations for governmental land use controls (introduced through the medium of the planning support program of the Department of Housing and Urban Development) and a degree of injudicious local enthusiasm for such high risk/high cost features of economic development as the projected industrial park adjacent to the Arkansas River and extensive redevelopment of downtown Fort Smith. Now that these influences seem to be waning, local and areawide land use planning seem likely to be more effective, but it will still take some time to complete "adjustments" to local and area transportation plans.

With respect to definition and application of planning standards relating directly to transportation systems, local governments use substantially different right-of-way and development standards. None of the sets of local standards matches areawide plan standards. Fort Smith standards, contained in the city's subdivision regulations, differ most drastically from those in the area plan, but the City Planning Commission has been working recently to prepare revised regulations which, if approved by the Board of Directors, will be closer to areawide standards, but not identical.

No local government has adopted a "setback" ordinance (exactly identifying future right-of-way lines for specific thoroughfares). Fort Smith exercises limited access control on major streets through some provisions of its subdivision regulations and through Ordinance 3452 (adopted in April 1977) covering curb-cut standards.

Programming of work, and expenditures, for construction of Bi-State transportation plan elements has only modestly conformed to the priorities recommended in the original transportation plan. Presumably, the substantial deviation of actual areawide development from the projected land use pattern has been largely responsible for throwing original priorities "out of kilter". However, the generally affirmative attitude towards opportunism in development activities, throughout the area, makes the idea of setting priorities for actions during a twenty to twenty-five year period questionable anyway.

In Fort Smith the general magnitude of aggregate expenditures for transportation capital improvements by state and local agencies has amounted to approximately \$23,000,000 for projects completed by October 1977. Adjusted to compensate for inflation, the amount spent on projects other than Route 540 and 2 new Arkansas River bridges is about 31% of the total amount projected to be spent in the original plan on priority I and II work. Admittedly, this is something of an "apples and oranges" comparison, since the original plan projected expenditures only for major system elements whereas the actual expenditure amount includes work on relatively minor elements. However, this underscores the fact that, despite a seemingly cautious projection of available revenues and implementation costs, the original plan reflected undue optimism about availability of local government funds for use on transportation capital improvements. Apparently, less than 10% of the amount projected to be contributed from Fort Smith funds for Priority I and II projects has actually been available.

The lack of direct financial participation in transportation capital expenditures by Fort Smith is offset slightly by local officials' ability to apply various pressures and inducements in obtaining needed rights-of-way. However, this still has left the Arkansas Highway and Transportation Department to bear an exceptionally high proportion of costs for all work accomplished. The Fort Smith Board of Directors has, from time to time, considered various procedures for raising local revenues for transportation capital costs. But, to date, the Board has been unable to agree on, and carry out, any action to this end.

In Van Buren, the financing situation appears somewhat similar to Fort Smith in that the city has not since 1967 attempted to raise funds for major transportation capital works by bond issue, vehicle taxes or establishing improvement districts. During this same period construction projects with authorized costs of more than a million dollars were undertaken in Van Buren, by the Arkansas Highway and Transportation Department, excluding work on the U.S. Route 64 bridge and on Interstate 540. Additional projects, costing nearly \$400,000, are planned by the AHTD for Van Buren. It appears that such work as the city of Van Buren has done with its own resources has been concentrated on surfacing or resurfacing

several existing streets (mostly collectors) with little or no change in either pavement widths or rights-of-way. By and large, this work would have to be considered major maintenance, rather than capital expenditure.

In summary, there is considerable evidence, in the pattern of projects undertaken (and their funding), suggesting that municipal governments in the area have come to expect the AHTD to be responsible for virtually all construction required to meet standards set out in the area plan. Completion of the major arterial system (freeways, expressways and principal arterials) is now "in sight", and it will be substantially more difficult to warrant AHTD involvement in some (if not most) of the minor arterials and collectors in the area plan. Consequently, without either a major modification of AHTD policy on expenditure of state funds for relatively minor system streets, or an initiative by local governments to raise funds for such work, transportation related capital expenditures in the urban area seem likely to be reduced to a relative "trickle" within the foreseeable future. It is conceivable, under such circumstances, that Federal funds available for work on minor elements of the urban system could be lost to other communities for lack of matching funds. Thus, local reluctance to accept responsibility for upgrading minor system elements will not only penalize local traffic but could result in a direct financial penalty--and an indirect financial penalty as a consequence of reduced construction activity (and payrolls) in the area.

PART II

LOCAL GOVERNMENT: PLAN IMPLEMENTATION BY REGULATORY PROCEDURES

From all indications, local municipal governments and planning commissions in the Bi-State study area are more concerned about their responsibilities in relation to subdivision development than in relation to land use controls. As noted earlier in this report, Van Buren's land use plan may well reflect a better guess than Fort Smith's about developmental prospects, but, even so, actual development appears to have been held under tighter rein in terms of physical development standards than in terms of prescribed land use patterns. The Van Buren zoning map provides evidence of considerable, if so far relatively innocuous, "spot zoning" for high density residential and commercial usage. Available evidence suggests that the Van Buren Planning Commission generally "holds the line" on subdivision development standards, although the commission may, on occasion, be overly flexible on matters of street alignment. There seems to be no doubt that the commission is aware of transportation planning implementation requirements, and is likely to bear such matters in mind when making subdivision design decisions. There is less evidence, however, that the Commission recognizes a connection between developing patterns of land activity and transportation network function and capacities. In the long run, this latter "blind spot" could lead to the same type of confusion evidenced in south Fort Smith if the magnitude of development in the Van Buren planning area were to increase dramatically.

The Fort Smith Planning Commission appears to be very serious about responsibilities in connection with subdivision development, despite a rather lengthy delay in proposing upgraded developmental standards for municipal regulations. And, as is the case in Van Buren, the planning commission appears well aware of transportation planning activities and requirements. To a considerable extent, it seems probable that the commission has accepted the approved areawide transportation network as a major technical determinant for local planning and subdivision regulations. But, like Van Buren, there appears to be insufficient recognition of the interaction between land activity and transportation network structures. In the case of south Fort Smith, evident tolerance for allowing events to establish land activity patterns, without even making any very studious attempt to forecast such events, effectively abdicates municipal responsibility for land use planning in advance of development and saddles the transportation planning process with the responsibility for considering future land use as a dependent variable considerably responsive to

transportation network arrangements as developmental stimulants. The greatest problem likely to ensue from such procedure results from the lack of strong municipal commitment to any particular land use outcome; lacking such commitment, local officials are likely to tolerate incremental changes in land use patterns which, cumulatively, can result in mismatching traffic generation and transportation system capacities.

As previously indicated, Barling has no local planning, hence does not (and apparently declines to) exercise land use or subdivision controls. Considering the high growth rate reported for this community, some traffic problems could result from this. However, most effects from such problems will be experienced entirely within the municipality due both to location on the periphery of the transportation study area and inability to expand geographically. Some added inconvenience for travelers on State highways #22 and #59, whose origin or destination points are east of Barling, could occur as a result of unregulated development, but there is also the possibility that personal experience with such inconvenience will motivate the citizens of Barling to reconsider the value of regulation before the situation gets too bad.

Alma has had a fairly recent spurt in growth and municipal officials appear to be manifesting renewed interest in community planning as a result of this. Considering that Alma, like Barling, is a peripheral community (and even more remote from the metropolitan center) and that I-540 provides the main connection with the rest of the study area, virtually all possible benefits from local planning will accrue to Alma residents. It seems unlikely that Alma's regulatory activities will (or can) affect overall metropolitan transportation very much, one way or another, barring unexpected growth in population or industry.

Crawford County has planning jurisdiction within the study area for those areas not included in the extraterritorial planning jurisdiction of Alma and Van Buren. The County has established a planning board and the County Court has adopted roadway development standards. There may be some prospect for adoption of county subdivision regulations in the foreseeable future, but the county is quite unlikely to adopt land use (zoning) regulations. Lacking any "track record" in enforcement, it is impossible to judge the probable effect of county regulations on transportation.

Sebastian County presently has no regulations on land use or subdivisions and, in any event, would not exercise subdivision controls within the study area. Fort Smith's extraterritorial jurisdiction covers all of the area not included in the City of Barling and Fort Chaffee, and municipal planning preempts county planning authority in the extraterritorial jurisdiction. It seems extremely unlikely that Sebastian County will enact a zoning ordinance. The county government appears interested in developing a county

road plan and, if this contains development standards exceeding Fort Smith standards, this may effectively regulate road and street development in the unincorporated area of Fort Smith's extraterritorial jurisdiction by reason of the county court's constitutional authority over roads and bridges.

Overall, it would seem that "political realism" forbids much control over land use in the study area. Even if State or Federal regulations were to require such controls as a condition for eligibility to receive transportation funds, it seems likely that area communities would resist and frustrate such requirements in some fashion. Under the circumstances there is little to be gained from any attempt to relate aspects of transportation planning to purported "land use plans". A more profitable approach would be to develop a soundly based projection of future land use keyed to probable effects of street and highway improvements as development stimuli.

PART III

ROLE OF THE "3C" PROCESS IN THE BI-STATE AREA PAST AND POSSIBLE

Original development of the Bi-State transportation plan was accomplished by compiling and coordinating plans separately prepared for Fort Smith and Van Buren. The area plan has continued to be viewed by local officials primarily as a composite depiction of local objectives. It seems somewhat ironic, therefore, that responsibility for funding physical completion of the transportation network has been so heavily imposed on the Arkansas Highway and Transportation Department. Funding characteristics make it seem that the area plan, including the continuing phase activity, serves almost totally as a device for programming the expenditure of State and Federal transportation funds.

To a very considerable extent it seems possible that the "3C" process in the Bi-State area, with an emphasis on taking maximum advantage of State and Federal fund availability, has somewhat diminished local fiscal responsibility. It is also possible that the de facto process of maximizing use of transfer payments has diminished local capability for perceiving transportation priorities in terms of systemic needs (rather than allowing funding characteristics to influence priorities).

However, the proclivity of local participants for devising non-capital-intensive solutions for minor transportation problems does fit in with the basic concept of the recently established Transportation System Management (TSM) approach. Of course, the concept of "making the most of what we have" need not be carried to the extreme of deferring local capital expenditures until crises force action. But, in the Bi-State area, it seems plausible to suppose that political "realism" is based on knowledge that citizens are willing to trade-off even considerable inconvenience and potential hazard to maintain low levels of taxation and governmental initiative.

It seems extremely unlikely that the "3C" process can have any significant role to play, under these circumstances, at that point in the future when most State and Federal construction "obligations" have been fulfilled. Assuming that the "3C" process, or something like it, is not required in connection with the recently established state aid systems for subsidizing improvements in county roads and city streets, local governments are unlikely to perceive how benefits can be gained from any areawide discussion of locally funded projects or regulatory systems. Given the apparent predominance of economic considerations in area decision making, it seems likely that only

those public activities where "economies of scale" could be achieved would be considered suitable for intergovernmental discussions. In fact, it seems most plausible to project a scenario of intergovernmental competition, fueled by economic "attractiveness", in the area.

Consequently, it would be idle to suggest, or expect, that the "3C" process in the Bi-State area will ever substantially inform or influence decisions other than those mandated in connection with State and Federal funding programs.

HOT SPRINGS

TRANSPORTATION STUDY AREA

Highway Planning and Implementation
in the
Hot Springs Transportation Study Area

Introduction.

On January 23, 1974, an Agreement of Understanding was executed between the City of Hot Springs, Garland County, the West Central Arkansas Planning and Development District and the Arkansas Highway Department relative to "the responsibilities and functions of the participating agencies in the development and maintenance of a comprehensive transportation plan and the establishment of a continuing, coordinated transportation planning process under the direction of the Hot Springs Transportation Policy Committee."

The Agreement provided among other things, for the following:

- * All existing street plans within the Hot Springs area be revised to be identical to the Hot Springs Transportation Plan developed under the Agreement.
- * The Transportation Plan is to contain appropriate development standards for all types of major transportation facilities. Variances to standards cannot be made by participating parties to the Agreement without consulting with the Transportation Policy Committee.
- * All changes to an agency's major street or transportation plans must be submitted to the Transportation Policy Committee for review.
- * Each agency is to formally adopt a priority listing of construction projects in accordance with the Transportation Plan and is to adopt a five-year Transportation Capital Improvement Program from the priority listing. The Transportation Policy Committee shall then assemble and approve an areawide priority listing and Capital Improvement Program.

The Agreement does spell out the obligations and responsibilities of the parties to the Agreement.

The Agreement was developed in order to qualify the City of Hot Springs for UMTA funds for public transportation.

Hot Springs Transportation Study and Transportation Plan.

The Hot Springs Transportation Study and Transportation Plan was published in February 1976. The report covered existing conditions, future conditions, long range plan (1975-1995) and continuing efforts.

The Transportation Plan covered the planning jurisdiction for the City of Hot Springs and included both urban and rural components.

The Transportation Plan was approved as follows:

Technical Committee	June 10, 1975
Policy Committee	June 17, 1975
Public Hearing and Planning	
Commission Approval	Sept. 11, 1975
City Council Approval	Oct. 1975 Ordinance 3306

The Transportation Plan was adopted as the Master Street Plan for the City of Hot Springs including its planning jurisdiction with the statutory procedures for plan adoption being duly observed. Thus the Transportation Plan and the Master Street Plan are in fact the same.

The City of Hot Springs planning jurisdiction exceeds the designated urban area for transportation planning but the transportation plan encompasses the entire planning jurisdiction.

Plan Implementation.

The City of Hot Springs undertakes a number of activities to implement elements of the Transportation Plan.

The following legal instruments adopted by the City Council are utilized:

Ordinance No. 2881 adopted 10/7/66 (10 amendments 5/19/69 through 8/2/76.) The Zoning Ordinance.

Ordinance No. 2901 adopted 2/20/67 (4 amendments 10/4/71 through 9/23/74.) Subdivision Regulations.

Ordinance No. 3309 10/3/75

Curb and gutter and sidewalks in all commercial and high density areas of the city. (Does not apply beyond corporate areas).

Ordinance No. 3333 3/1/76

Street classification, pavement and right-of-way requirements of specific highways and streets, reserving rights-of-way.

The City's specific implementation activities include:

- * Building permit applications require sufficient information to insure buildings are built to proper set-backs.
- * Commencing January 1, 1977, a new information check list was adopted by the Building Inspector to insure compliance with city's plans and ordinances for all new commercial structures. Effort made at time of application to secure necessary right-of-way for arterials and collectors prior to issuance of building permits.
- * For all new commercial and high density residential uses; curbs, gutters and sidewalks are required in conformance with city street improvement standards.
- * All proposed subdivision plats are reviewed to insure compliance with the City's master street plan.
- * The Traffic Improvements Program and the City's annual capitol improvements budget are prepared during the budget process by the City Council's Public Work's Committee.
- * The City of Hot Springs has widened St. Louis from Airport Road (U.S. 70) east.

The Future Role of Transportation Planning and Implementation.

The future of transportation planning implementation in the Hot Springs urban area requires a continuing comprehensive process carried out cooperatively by the Arkansas Highway and Transportation Department and the local governments. The framework for this continuing process has been established through an Agreement of Understanding.

Both the planning and implementation phases of the process need continual reinforcement. This can be achieved in a number of ways. One is for the Transportation Policy Committee to meet periodically to review the status of planning and implementation activities on the part of all parties. The Committee can advise the citizens of Hot Springs and vicinity on highway needs and progress being made toward meeting these needs.

Resource limitation is a major stumbling block to plan implementation. Local governments must understand the full range of resources available to carry out plans and be willing to take the lead to marshal citizen support for use of available resources. The local planning commissions, municipal and county, need to take the initiative to establish priorities and suggest resources. The City Council and the Quorum Court should develop street and road maintenance and improvement programs and assign hard dollars to them.

Another way to reinforce the process is to maintain open communication between all agencies involved and their staff personnel. The Transportation Policy Committee should be a key link in the communication system--but this

is virtually impossible as the Committee does not have any support staff.
The City might designate a coordinator who has the responsibility for
information flow between the parties of the Agreement of Understanding
and internally within the City.

PINE BLUFF

URBAN TRANSPORTATION STUDY AREA

FOREWORD

This investigation is part of a larger transportation study about the status of transportation planning in Arkansas designated as HPR-49 by the Arkansas Highway Department, Division of Planning and Research. This study was limited to the cities of Pine Bluff and White Hall. Study procedure included the collection and analysis of existing transportation and land use plan data, land use controls, transportation questionnaires to public officials and interviews with professional transportation planners. Appreciation is extended to members of the Pine Bluff area transportation study staff, Southeast Arkansas Regional Planning Commission staff and others who provided information and data for the investigation.

The opinions, findings and conclusions expressed in this report are those of the Division of Community Affairs and not necessarily those of the Arkansas State Highway and Transportation Department or the Federal Highway Administration.

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SUMMARY OF FINDINGS

A summary of the major findings of the investigation include the following:

1. The original 1990 Recommended Transportation Plan of 1969 has generally provided the cities of Pine Bluff and White Hall with useful guidelines which aid in the orderly development of street and highway transportation facilities.
2. Plan modifications to the original transportation plan within the city of Pine Bluff have been small in number but of significant impact including,
 - a. The largest single modification to the original transportation study has been the inclusion of the city of White Hall and its study area into the PBATS study area.
 - b. The greatest number of changes to the original transportation plan have occurred within the study area immediately adjacent to the corporate boundaries of the city of Pine Bluff.
 - c. Changes have been predominantly reclassification of trafficway facilities. Major changes include the elimination of certain proposed freeways and arterials from the original transportation plan and relocation of interchanges and grade separations.
3. Transit service as recommended in the original transportation plan has become an important and integral part of the city of Pine Bluff's transportation system as noted in the Annual Transportation Report 1975. Recent attention to transit service and other transportation modes (i.e., taxi, bicycle) also indicate increased interest in making the transportation process more comprehensive.
4. Conformance between the present land use plan and zoning map is weak within the cities of Pine Bluff and White Hall.
5. The PBATS continuing transportation planning process is dynamic and one in which attempts are continuously being made to implement goals and objectives set forth in the transportation plan of 1969. Specifically, present transportation policies, plans, and implementation activities continue to be based upon the original premise that predominant modes of transportation within the PBATS area for the next 20-25 years will be "street and highway oriented". The past continuing planning process has been responsive to environmental change and has resulted in updating plans such as the addition of the White Hall land use and transportation network plan.

6. The original PBATS transportation plan was never adopted, legally, by the city of Pine Bluff as its "master street plan" although the transportation plan has been used as the primary guideline for system development, and for imposing street requirements under subdivision regulations.
7. The original PBATS transportation plan was never adopted, in total, by the city of White Hall. A master street plan consisting of policy and map was adopted on Feb. 22, 1973, which incorporated major elements of the original transportation network (i.e., arterials).
8. Acquisition of right-of-way for future street and highway development relies heavily upon administrative procedures of existing subdivision regulations. A direct purchase plan for future right-of-way by local governmental units is not part of present implementation policy activities.
9. Diffusion of transportation information about future streets and highway locations is presently limited primarily to the publication of the annual report and meetings of the PBATS Coordinating Committee.
10. The PBATS transportation plan presumably reflects local community values and goals in view of its acceptance by the governing bodies of both Pine Bluff and White Hall. Pine Bluff has, in fact, been improperly using the PBATS plan instead of its outdated Master Street Plan in connection with subdivision regulation.
11. The presently proposed predominantly "radial-grid" system connects residential areas with recreation, business, industry and other employment intensive use areas.
12. Relationships between the transportation system and land use design and implementation practices need to be strengthened particularly within the city of Pine Bluff transportation area.
13. Subdivision regulations for the city of Pine Bluff presently have many elements helpful in implementation of the transportation plan. Most notable of these elements are (1) the dedication of r-o-w requirements, (2) street and neighborhood design and improvement standards, (3) relationship to the existing zoning ordinance and "master" plan, and (4) the authority of the city to apply its subdivision improvements regulations in the one-mile area immediately outside the city's corporate limits. Street design standards have been adjusted to reflect many county development requirements and interests.
14. The city of White Hall has made substantial progress toward coordinating development control devices with the major street plan. Of

particular importance is the major street policy statement which clearly states the goals, policies, and standards needed for a successful continuing transportation planning program.

INTRODUCTION

The general purpose of this study is to analyze and report findings about the status of the Pine Bluff Transportation Plan, Vol. 2, completed May 29, 1969 as part of the Pine Bluff Transportation Study (PBATS). While recognizing the transportation plan is composed of eight major elements including (1) planning principles, (2) 1990 Recommended Transportation Plan, (3) traffic operations improvements, (4) design standards, (5) cost estimates, (6) plan implementation priorities, (7) parking needs and (8) a continuing transportation planning process, special attention will be given the Recommended Transportation Plan (see figure, next page). This transportation plan element was selected for emphasis since it was the major product of the original 1969 transportation study and therefore reflects most readily the usefulness of past transportation system planning and development efforts. Analysis of the status of the transportation plan required, as a minimum, the establishment of a set of plan components against which plan change could be identified and evaluated. Components selected as basic to such an investigation were (1) PBATS transportation planning principles and (2) PBATS transportation plan facility classifications.

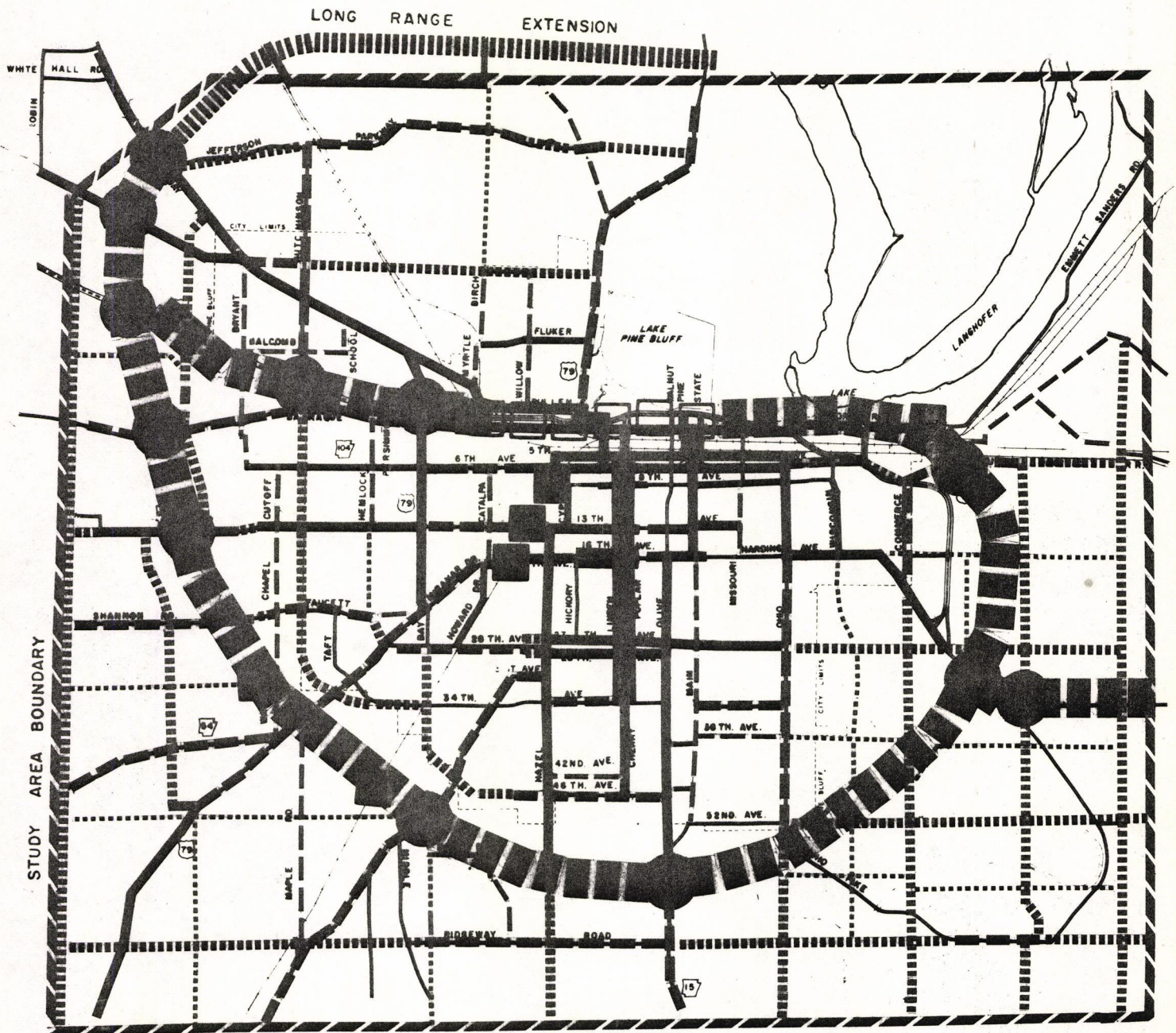
TRANSPORTATION PLANNING PRINCIPLES








The following general transportation planning assumptions and "principles" have been interpreted from the Transportation Plan, Vol. 2 as follows:


1. The predominant modes of transportation in the PBATS area for the next 20-25 years will be street and highway oriented.
2. The transportation plan should (a) consider potential long-range development and (b) be adaptable to change in urban development patterns.
3. The transportation plan must embody practical and economical elements of improvement including the "preobtainment" of right-of-way and appropriate facility classification of existing streets and highways.
4. Both public officials and private developers must be knowledgeable of future streets and highway facilities and locations.
5. The transportation plan must take into consideration aesthetic values and community goals.
6. Motor vehicle travel is best accommodated by a coordinated transportation network which functionally connects and integrates all


RECOMMENDED TRANSPORTATION PLAN - 1969

PINE BLUFF AREA TRANSPORTATION STUDY



FACILITY CLASS	ADEQUATE RIGHT OF WAY	WIDENED RIGHT OF WAY	NEW RIGHT OF WAY
FREEWAY-EXPRESSWAY	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	NONE	
ARTERIAL			
COLLECTOR			


NEW GRADE SEPARATION


NEW INTERSECTION

residential areas with recreation, business, industry and other employment areas.

7. The transportation system must be related to land subdivision design principles and practice.

8. Other general planning considerations governing formulation of the transportation plan of 1969 include:

- a. "Provide the most economical system to meet the travel desires for the design year (1990) with proper consideration for future expansion."
- b. "Accommodate the majority of traffic movements on relatively few, well-improved, high-capacity facilities."
- c. "Be compatible with other elements of the comprehensive plan for the area and provide the best place for people to live, work, and play."
- d. "Make the maximum practicable use of the existing street and highway system."
- e. "Provide minimum disruption to existing and planned neighborhoods and other stable land uses."
- f. "Provide adequate access from the main highway routes serving the community to various points within the urban area."
- g. "Eliminate indirect or circuitous routes where practicable."
- h. "Provide a street and highway system that meets the needs of the area and enhances aesthetic values and community goals while at the same time be financially attainable under the financial capabilities of the community."

With the above criteria in mind and the 1990 Recommended Transportation Plan prepared in 1969, the PBATS Transportation Plan status findings are presented in three parts - Part I, 1990 Transportation Plan Status Within the City of Pine Bluff; Part II, 1990 Transportation Plan Status Within the City of White Hall; and Part III, Continuing Transportation Planning Process.

PART I
1990 TRANSPORTATION PLAN STATUS
WITHIN THE CITY OF PINE BLUFF

The government of the City of Pine Bluff accepted in principle the Pine Bluff Urban Area Transportation Study (PBATS) on July 7, 1969. Elected officials adopted certain elements of the study as the city's official transportation development guidelines on September 15, 1969. These guidelines include planning principles, recommended transportation plan, traffic operation, design standards, cost, implementation, parking, and continuing planning process. The Recommended Transportation Plan and related elements have provided the primary guidelines for transportation facility planning in the City of Pine Bluff since 1969. While the areawide transportation plan (1969) has been used continuously for transportation implementation purposes the city of Pine Bluff has not adopted the areawide transportation plan (1969) as its master street plan. Few modifications have been made to the basic intent of the city's original transportation plan although the scope of the plan has been broadened substantially since 1972. Planning considerations now include transportation modes relating to port and airport activities, bikeways, taxi, railroad and trucking, public transportation, and citizen participation. More extensive and comprehensive consideration of land use planning relationships have been made in the continuing transportation planning processes efforts (1975) than were referenced in the original transportation plan of 1969.

TRANSPORTATION SYSTEM AND FACILITY DEVELOPMENT

System mileage within the 1969 Recommended Transportation Plan (see figure, page 5) by right-of-way was as follows:

TABLE I

1969 PINE BLUFF AREA TRANSPORTATION STUDY AREA SYSTEM MILEAGE

<u>Facility</u>	<u>R-O-W miles</u>	<u>Percent of Total</u>
Freeway/Expressway	23.2	11
Arterial	145.4	66
Collector	52.3	23
	220.9	100

A total of 166.9 miles of new and existing r-o-w to be widened were proposed in the plan. About 54 miles of existing r-o-w were found adequate for future needs. A breakdown of the urban - non-urban classification system comprising the area transportation system may be seen in the following table:

TABLE II

1969 TRANSPORTATION SYSTEM FACILITIES BY FACILITY MILEAGE*

Transportation Plan Facility - 1969	System mileage within Urban Study Area		
	Within City of Pine Bluff	Outside City of Pine Bluff	Total
Freeway/Expressway	6.3	16.9	23.2
Arterial	64.6	80.8	145.4
Collector	16.8	35.5	52.3
TOTAL MILES:	87.7	133.2	220.9

* Does not include the City of White Hall

Source: Calculations from Recommended Transportation Plan, Plate 13, PBATS, Transportation Plan, Vol. 2.

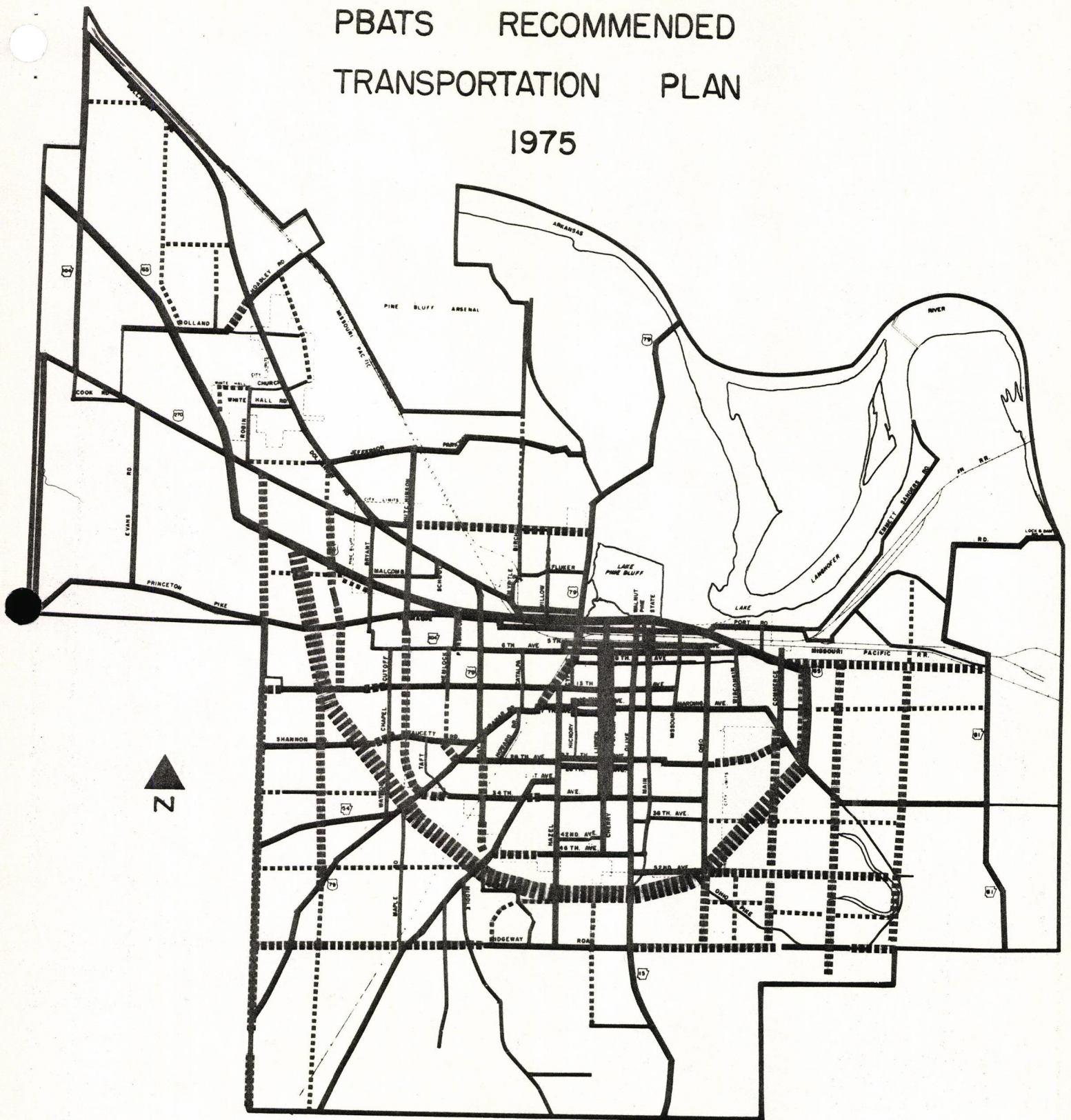
New interchanges and new grade separations are set forth in the recommended plan plate number 13. No direct attention has been given in published annual reports of 1972 and 1975 to parking needs although such recommendations were made in the 1990 transportation plan.

The original Pine Bluff transportation study area of approximately 87 square miles was expanded in 1973 (see figure, next page) to include the city of White Hall and its hinterland and additional land areas lying east and south of the City of Pine Bluff. Geographically, the PBATS transportation study area has increased from 87 square miles to 121 square miles (39 percent increase). PBATS annual reports indicate population within this expanded study area increased from about 67,000 (1965) to 75,000 (1975) persons or approximately 12 percent between 1969 and 1973.

Facilities proposed in the Recommended Transportation Plan (1975) within the corporate limits of Pine Bluff have remained relatively unchanged since the original plan of 1969. Six major facility changes to the plan that have occurred within the city limits of Pine Bluff include:

1. Elimination of two proposed interchanges on the "Downtown Expressway" (now U. S. Highway 65) at the intersection with Blake St. and Hutchinson St. Also eliminated was the proposed interchange at Bartholomew Expressway and East 6th Avenue.
2. Elimination of a proposed grade separation in the area of 6th Avenue and Miramar extension.

PBATS RECOMMENDED TRANSPORTATION PLAN 1975



LEGEND

EXPRESSWAY:	— EXISTING,	===== PROPOSED
ARTERIAL:	— EXISTING,	----- PROPOSED
COLLECTOR:	— EXISTING, PROPOSED

3. Elimination from the 1969 plan of the north and eastwardly extension ("Long Range Extension") of the proposed Bartholomew Expressway (0.75 mile).
4. Elimination of a short extension of Main St. from 46th St. south to 52nd Avenue (0.3 mile).
5. Elimination of a short westward extension (0.5 mile) of Malcomb Avenue between Bryant Avenue and the corporate limits.
6. Facility reclassification of Faucett Road from a collector to arterial (0.5 mile) between Hemlock and Blake Street.

In addition to the previously mentioned expansion of the PBATS study area, a total of 23 facility changes have been made to the original Recommended Transportation Plan in the transportation study area existing outside the corporate limits of Pine Bluff. These changes to the original plan by facility class include,

1. Freeway/Expressway:

- A. Elimination from the Recommended Transportation Plan of approximately 4.8 miles of Expressway known as the "Long Range Extension". (An additional 0.75 mile exists within the corporate limits of Pine Bluff.)
- B. About 3.6 miles of U.S. Highway 65 between 27th Avenue and Barraque has been constructed west of the general location proposed east of Commerce Road on East 6th Avenue.

2. Arterial Street:

- A. Elimination of 28th Avenue east of Commerce Road to Airport Road as an arterial (2.0 miles).
- B. Elimination of proposed E Road "offset" collector at Ridgeway Road; replaced by proposed "straight" collector in same area (0.3 mile).
- C. Elimination of Commerce Road as a proposed arterial south of Ridgeway Road to study boundary (0.8 mile).
- D. Elimination of Ohio St. as a proposed arterial south of Ridgeway Road to study boundary (0.8 mile).
- E. Elimination of Hazel St. as a proposed arterial south of Ridgeway Road (0.8).

F. Elimination of a small (0.2 mile) proposed diagonal arterial between U.S. 270 and Dollarway Road.

G. Elimination of proposed Industry Road (Jefferson Parkway east of McFadden Road to U.S. 79 as an arterial (1.1 mile).

3. Collector Street:

A. Minor eastwardly relocation of proposed Wisconsin Road between 38th Avenue and Harding Avenue.

B. Elimination of proposed diagonal collector connection (0.2 mile) between 38th Avenue and Commerce Road.

C. Addition of a proposed 1.8 mile collector known as Mulberry Street between D. Road and Rosswood Road.

D. Addition of a proposed 1.2 mile collector (C Road extended west and south of Hobo Road) between Hazel Street and Middle Warren Road.

E. Elimination of Bay Road (0.5 mile) as a collector south of Hobo Road.

F. Addition of Middle Warren Road (2.9 miles) as a collector south of Old Warren Road to study area boundary.

G. Addition of Brinkley Road as a collector south of Old Warren Road (2.2 miles).

4. Interchange:

A. Relocation of a proposed interchange at the intersection of E. 6th Avenue and Proposed Bartholomew Expressway to the intersection of Barraque and Bartholomew Expressway.

B. Elimination of a proposed interchange at the intersection of the "Downtown Expressway" (U.S. Highway 65) and Thomas Road.

C. Elimination of a proposed interchange at the intersection of E. Road and U.S. Highway 65.

5. Grade Separation:

The following separation changes have been made to the 1969 Recommended Transportation Plan within the study area outside the corporate limits of Pine Bluff:

A. Elimination of proposed grade separations at the following locations:

- a. 6th Avenue and Miramar Drive.
- b. Bartholomew Expressway and St. Louis SW RR.

B. New grade separations have been proposed in the Recommended Transportation Plan 1975 (Level I, 1975) at the following locations:

- a. Hazel Street and Bartholomew Expressway.
- b. Ohio Street and Bartholomew Expressway.

Also of continuing transportation planning and implementation importance is the relationship between the transportation study area boundary and municipal planning jurisdictional area. Together Pine Bluff and White Hall planning jurisdictional area boundaries are larger than the present transportation study area boundary and contain 136.5 and 24.9 square miles respectively. The present transportation study area contains approximately 121 square miles.

LAND USE

Transportation planning and plans are highly dependent upon political and market allocative processes that influence the spatial location and use of land. Land use plans prepared for the city of Pine Bluff as part of the original transportation plan in 1969 have been rather extensively modified regarding planned general land use allocations. Major changes have been primarily in commercial and public space land use. Land use comparisons between recommended plans of 1969 and 1975 may be seen in the following table.

TABLE III

1969 AND 1975 PLANNED LAND USE COMPARISONS IN ACRES

<u>Land Use</u>	<u>1969</u>	<u>(%)</u>	<u>1975</u>	<u>(%)</u>
Residential	8,269	(70.3)	7,451	(63.3)
Commercial (Business)	649	(5.5)	1,007	(8.6)
Industrial (Mfg.)	2,440	(20.8)	2,470	(21.0)
Public (Semi-public)	401	(3.4)	831	(7.1)
TOTAL ACRES	11,759	(100.0)	11,759	(100.0)

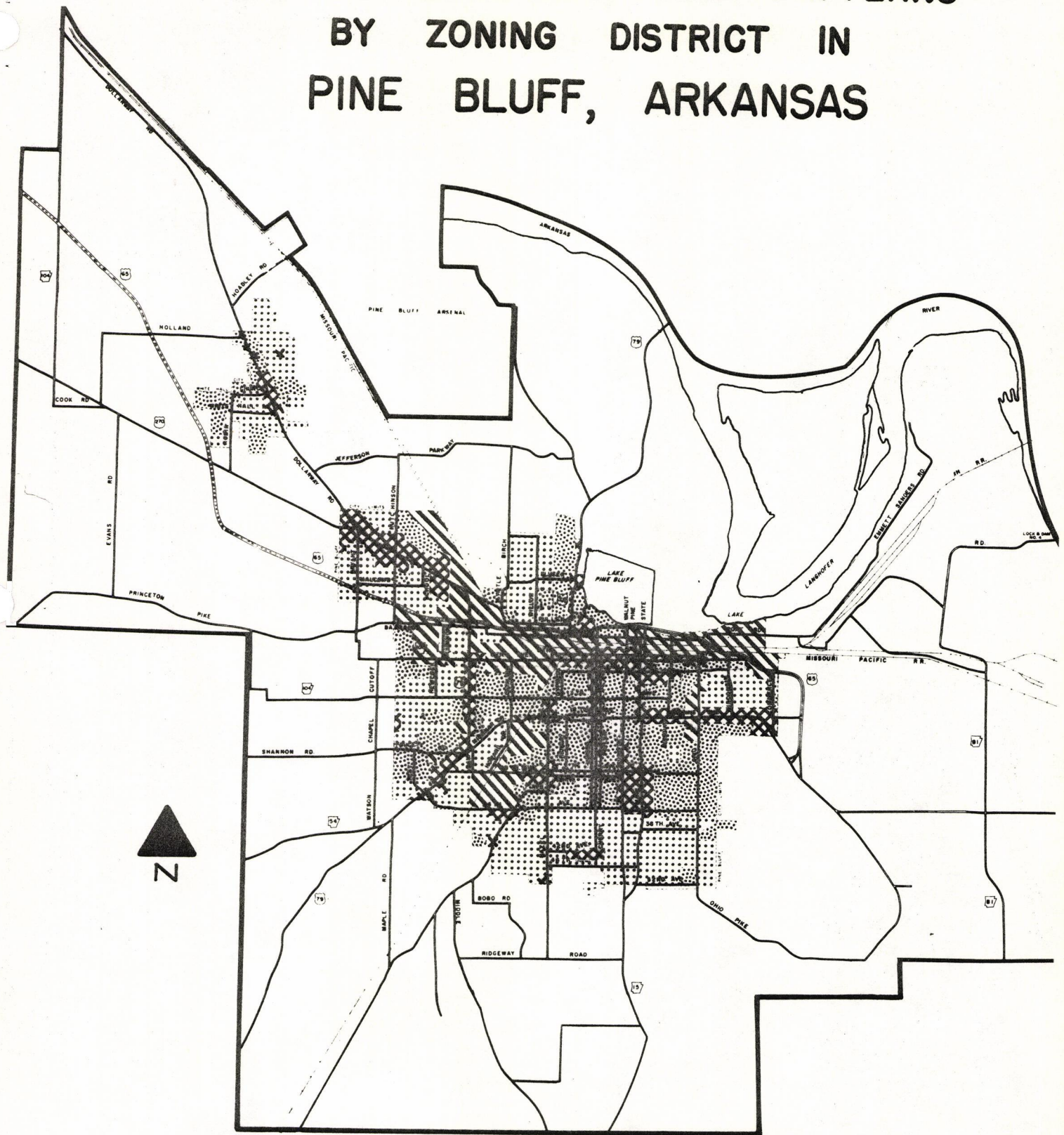
Source: Figures calculated from Level I reports of 1972 and 1975. (Transportation Plan 1972 is identical to transportation plan 1969).

Substantial changes in planned land space allocation are seen in commercial (55% increase) and public (10% increase) land use areas between 1969 and 1975. A residential land use reduction of approximately 10 percent (818 acres) occurred within the corporate limits of Pine Bluff during this same period. Increases in future commercial space needs set forth in 1975 Recommended Land Use Plan were met by substantially expanding previously proposed commercial area and adding new commercial area (shopping centers). New proposed commercial areas in the 1975 land use plan of major significance include the general areas of (1) Olive St. between 21st and 32nd St., (2) 28th St. between the S.L. & S.W. railroad and Maple St., and (3) the intersection of U.S. 79 & 28th St. The largest proposed expansion of a previously planned shopping area is along Blake Ave. between Miramar & 15th Avenue. Public and semi-public (schools and colleges) land use increases proposed in the 1975 land use plan are almost entirely the result of newly designated public use areas. A total of 24 new public use areas have been designated on the 1975 land use plan. A relatively small increase in proposed industrial land use (30 acres) has been the result of the expansion of the previously proposed industrial area east of Ohio St. between 6th Avenue and 25th St. Neither the 1969 or 1975 residential land use plan differentiates low, medium, or high density living areas. The distribution of population density within the City of Pine Bluff is presently influenced through the zoning ordinance and Map.

Spatially, 1975 land use planning patterns within the city remain unchanged from basic patterns set forth in the original land use plan of 1969. Proposed residential, public use, and shopping development continue to encourage development in a southerly direction from the central business district. The majority of industrial uses continue to be planned for the northern sector of the city with two smaller industrial areas to be located in the southwest and southeast sectors of the city.

Of equal importance to the implementation of the transportation plan is the relationship between the land use plan and the city's zoning ordinance since the zoning ordinance and its map (see next page) influence land use development and location and provide a minimal degree of land use stability. Investigation of the City's Official Zoning Map (adopted April 17, 1967) as a means to implement the original land use plan between April, 1969 and November, 1975 finds the zoning ordinance to be of only general value. Assuming the land use plan and zoning map to be in conformance at the time the original transportation plan was prepared, enough zoning map amendments have occurred to make the transportation and land use plan of limited implementation value to decisionmakers within the city. This is evidenced in the following table which shows general land area allocation comparisons between the 1969 land use plan and the 1975 zoning map.

GENERALIZED LAND USE PATTERNS BY ZONING DISTRICT IN PINE BLUFF, ARKANSAS



LEGEND





-  SINGLE-FAMILY RESIDENTIAL (R-AM, R-5, R-1)
-  SINGLE & MULTIPLE FAMILY RESIDENTIAL (R-A, R-2)
-  BUSINESS (BL, BG, BH, C-1, C-2)
-  MANUFACTURING (ML, MG, MH)

TABLE IV

1969 RECOMMENDED LAND USE PLAN-ZONING MAP COMPARISON IN ACRES*

<u>Land Use</u>	<u>1969 Land Use Plan</u>	<u>Percent</u>	<u>1975 Zoning Map</u>	<u>Percent</u>
Residential	8,269	(70.3)	8,318	(70.7)
Commercial (Business)	649	(5.5)	1,398	(11.9)
Industrial (Mfg.)	2,440	(20.8)	2,043	(17.4)
Public	401	(3.4)	-	-
TOTAL ACRES	11,759	(100.0)	11,759	(100.0)

* Data tabulated from 1969 land use plan and 1975 Zoning Map of the City of Pine Bluff.

An examination of the relationship between the 1975 land use plan and the 1975 Zoning Map indicates general areas of plan agreement in land use distribution patterns. However, when relationships between the zoning map and the land use plan are viewed in light of specific and detailed land use needs for trip generation determination substantial discrepancies exist. The fundamental discrepancy is that several zoning map districts do not conform to planned land use districts. For example, a large industrial area (25th & Ohio Sts.) set forth in the 1975 land use plan is presently zoned residential (R-A). Several other small zoning district incompatibilities exist. The following table shows general land area allocation comparisons between the Recommended Land Use Plan (1975) and the Zoning Map (1975).

TABLE V

1975 RECOMMENDED LAND USE PLAN AND ZONING MAP COMPARISON IN ACRES*

<u>Land Use</u>	<u>1975 Land Use Plan</u>	<u>Percent</u>	<u>1975 Zoning Map</u>	<u>Percent</u>
Residential	7,451	(63.4)	8,318	(70.7)
Commercial	1,007	(8.6)	1,398	(11.9)
Industrial	2,470	(21.0)	2,043	(17.4)
Public, Semi-Public	831	(7.0)	-	-
TOTAL ACRES	11,759	(100.0)	11,759	(100.0)

* Data tabulated from 1975 Level I Report and 1975 Zoning Map of the City of Pine Bluff.

DEVELOPMENT CONTROLS

In addition to the land use plan and zoning ordinance and map, subdivision regulations and the master street plan are also important planning statutory tools which can be used in implementation of the transportation plan. The importance of similarity between concepts, definitions, design and standards requirements of the transportation plan, land use plan, master street plan, zoning ordinance and map, subdivision regulation, and other public codes and ordinances (i.e., building and health ordinance) cannot be overemphasized. Investigation of relationships between present Zoning Ordinance and Subdivision Regulations of the City of Pine Bluff finds a general conformance between land design and development standards set forth in the recommended transportation plan, zoning regulation, and subdivision regulations. No detailed attention is given zoning or subdivision regulations in the transportation study. Only general subdivision land design principles are stated in the plan. As previously mentioned the city of Pine Bluff uses the PBATS recommended transportation plan as its "master street plan" (without formal adoption, however).

The present comprehensive planning jurisdictional area of the city of Pine Bluff contains approximately 137 square miles. Almost all of the transportation study area (105 square miles) exists within the planning jurisdictional area with the exception of approximately four square miles in the southwest and southeast areas of the city (see figure, page 2).

Zoning

The present zoning ordinance (Ordinance No. 4040) is the standard type ordinance found in most cities of the industrial nature and population size of Pine Bluff. The zoning ordinance is cumulative in structure and sets forth only those uses permitted in each district. The ordinance contains 10 zoning districts which are subdivided into broad use district classifications of residential (4) zoning and business (3) and manufacturing (3). The zoning map, however, references nine of the ten district classifications but uses only eight of the total nine districts for land use allocation purposes. The least intensive land use district (R-E, Residential Estate) and most intensive land use district (M-H, Manufacturing Heavy) are not shown on the official zoning map of the city. The zoning ordinance as a device to assist in implementation of the recommended transportation plan through land use distribution is based partly upon application of Sec. 3.1 and 3.2 of the Pine Bluff zoning ordinance as follows:

Sec. 3.1:

- "(a) No building, structure or land shall hereinafter be used or occupied, and no building or structure or part thereof shall hereafter be erected, constructed, reconstructed, moved or structurally altered unless in conformity with all of the regulations herein specified for the district in which it is located.
- (b) No building or other structure shall hereafter be erected or altered:
 - (1) to exceed the height;
 - (2) to accommodate or house a greater number of families;
 - (3) to occupy a greater percentage of lot area;
 - (4) to have narrower or smaller rear yards, front yards, side yards or other open spaces; than herein required; or in other manner contrary to the provisions of this ordinance.
- (c) No part of a yard or other open space of off-street parking or loading space required about or in connection with any building for the purpose of complying with this ordinance, shall be included as part of a yard, open space of off-street parking or loading space similarly required for any other building.
- (d) No yard or lot existing at the time of passage of this ordinance shall be reduced in size or area below the minimum requirements set forth herein. Yards or lots created after the effective date of this ordinance shall meet at least the minimum requirements established by this ordinance.

Sec. 3.2:

All territory which may hereafter be annexed to the City of Pine Bluff, Arkansas, shall be automatically classified in the R-S, Residential Single-Family District until otherwise classified by an amendment to this ordinance as provided by law."

Of particular importance to the provision of adequate right-of-way designated in the transportation plan is Section (d) of the zoning ordinance which states "no yard or lot existing at the time the ordinance became effective shall be reduced in size or area below minimum requirements set forth in the ordinance." Front yard requirements range from a minimum of 40 feet in the most restrictive residential district

to a minimum of 20 feet in the least restrictive business district and most restrictive industrial district. No yard regulations are required in heavy industrial districts. Zoning district regulations influencing traffic operations are found in requirements for adequate visibility at intersections in residential districts (e.g., planting shall not exceed 2.5 feet in height).

Off-street parking and loading spaces are required for new buildings and any additions to existing buildings such as residences, hotels, auditoriums, convention centers, medical offices, businesses and industrial buildings. Reasonable aesthetic requirements (i.e., screens, fences, planting) have been set forth in the ordinance for the design of public parking areas, automobile and trailer sales, and loading spaces. Provisions have been made in the zoning ordinance for the proper erection of official traffic signs. Setback line requirements have been established for certain outdoor advertising signs.

Subdivision Regulations

Subdivision regulations greatly assist in implementation of the city's transportation plan. Unlike zoning, subdivision regulations do not directly govern the type and intensity of residential, business, or industrial land use but rather directs specific platting and design activities for development of such land. Present city subdivision regulation requirements for preliminary and final plats useful in implementation of the transportation plan include:

1. "Location, name and dimension of all existing streets, alleys, and utility easements bordering or abutting the proposed subdivision."
2. "General layout of the proposed lots, blocks, and streets."
3. "A small free hand drawing showing the proposed subdivision and existing major streets, shopping centers, public schools, playgrounds, and other community facilities within one (1) mile of the proposed subdivision."
4. "Location and dimension of all proposed streets, alleys, and easements for public service and utilities."
5. "Location and description of any land to be dedicated or reserved for parks, schools, or other public or private purposes."
6. "Dimensions in feet and hundredth parts thereof, bearings, and

curve data of all lot blocks, streets, and street pavement lines."

7. "Building setback lines with dimensions.
8. "Street sign locations."
9. "Street light locations."

Further, all subdivisions proposed within the City of Pine Bluff or within one mile of the city limits of Pine Bluff must be provided (by developer) with appropriate street right-of-way, grading, surfacing, street and alley pavement widths, curbs and gutters, and sidewalks. Street right-of-way will be in accordance with design standards. Present subdivision right-of-way requirements are identical to right-of-way recommendations set forth in the PBATS transportation plan.

Land development design standards now contained in the city's subdivision regulations provide many opportunities to implement aspects of both the land use and transportation plan. For example, subdivision approval by the city will be based upon consideration of "...streets, easements, school site, public parks and playgrounds shown on an officially adopted master plan...". Other examples of street design standards presently existing in the city's subdivision regulations of major significance are:

A. Streets:

1. "Where such street is not shown on a master plan, the arrangements of streets in a subdivision shall either:
 - (a) Provide for the continuation or appropriate projection of existing or principal streets in surrounding areas: or
 - (b) Conform to a plan for the neighborhood approved or adopted by the planning commission to meet a particular situation where topographical or other conditions make continuation or conformance to existing streets impracticable.
2. Minor streets shall be so laid out that their use by through

traffic will be discouraged.

3. Where a subdivision borders on or contains a railroad right-of-way or limited access highway right-of-way, the planning commission may require a street on each side of such right-of-way, at a distance suitable for the appropriate use of the intervening land, as for park purposes in residential districts, or for commercial or industrial purposes in appropriate districts. Such distances shall also be determined with due regard for the requirements of approach grades and future grade separations.
4. Subdivisions that adjoin or include existing streets that do not conform to widths as shown on the master plan or the street width requirements of these regulations shall dedicate additional width along either one or both sides of said street. If the subdivision is along one side only, one-half of the required extra width shall be dedicated.
5. Half streets shall be prohibited, except where essential to the reasonable development of the subdivision in conformity with the other requirements of these regulations; and where the planning commission finds it will be practicable to require the dedications of the other half when adjoining property is subdivided. Wherever a half street is adjacent to a tract to be subdivided, the other half of the street shall be platted within such tract.

B. Large Scale Development:

The standards and requirements of these regulations may be modified by the planning commission in the case of a plan and program for a new town; a complete community; a neighborhood unit; or a large scale development including the construction of two (2) or more buildings together with the necessary drives and ways of access which is not subdivided into customary lots, blocks and street; which in the judgement of the planning commission provide adequate public spaces and improvements for the circulation, recreation, light, air and service needs of the tract when fully developed and populated, and which also provide such covenants or other legal provisions as well assure conformity to and achievement of the plan. Plans for such developments shall be submitted to, and approved by the planning commission whether or not such plat is to be recorded and no building permits shall be issued until such approval has been given."

NETWORK OPERATIONS IMPROVEMENT

To implement any transportation plan decision makers must also consider roadway geometrics, design standards, construction priorities, cost, and financing. Design standards and geometrics recommended in the original transportation plan (i.e., cross sections) have been of substantial assistance in development of the city's transportation system. Many elements of the traffic operations improvements plan are now part of the city's subdivision regulations.

Traffic Operations:

The traffic operations portion of the original transportation plan includes recommendations for improvements of one-way streets, intersections, traffic signal system, signs, pavement markings, on-street parking, maintenance and accident records. Substantial progress has been made regarding the implementation of these recommendations since 1969. Approximately 70 percent of the recommendations about the establishment of one-way streets have been completed or are in the process of completion. Excellent progress has also been made in improving the traffic signal system particularly at intersections containing problems such as signal face display, signal alignment and mounting, progressive recommendations have been completed. Four installations are between 50 - 75 percent completed. One installation recommendation was abandoned as not necessary. Seventeen of 28 signal face display related recommendations have also been implemented.

Resigning:

A resigning program for the entire city has been prepared; a grant application is pending approval under section 204 of the highway safety act. All new signs including replacements have been installed to conform with the Manual on Uniform Traffic Control Devices (MUTCD). A regular maintenance schedule has been developed and maintained for signals, signs, and pavement markings within the city. City personnel in various departments, such as the police department, have assisted substantially in the reporting of traffic operations problems.

Parking:

On-street parking standards are strictly followed for new facility construction and attempts are made to implement these standards elsewhere, as opportunities occur.

Intersections:

Intersection improvements completed (1974-75) total 14 in number. Turning radii have been improved at all intersection locations recommended in the transportation plan. However, some intersection improvements have been made that are not in conformance with the original or updated recommended transportation plan.

Accidents:

An adequate accident information system exists for the city, however, these records have been used very little in traffic engineering studies.

Construction Priorities:

A stage construction program for the implementation of the Recommended Transportation Plan was outlined in the 1969 transportation study (plate 17). Four construction priority groups extending over a 22 year period were suggested for the construction of facility types, r-o-w acquisition, and transportation related structures. Construction priority groups were designated as Priority I (1969-75), Priority II (1976-80), Priority III (1981-85), and Priority IV (1986-90). Examination of Level I reports of 1972 and 1975 indicate within the study area that approximately 22 miles of the originally recommended stage construction program have been completed. Of the 22 system miles completed approximately 16 miles have been within the City of Pine Bluff and six miles elsewhere in the study area. Improvements within the original 1969 study area but lying outside the corporate limits of Pine Bluff have been limited to U.S. 65 and 79. Although adjustments have been made to the scheduling of improvements almost all projects have been in conformance with the original transportation plan. Modifications have involved intersection improvements and two local streets - Cypress (between 13 and 16th Avenue) and Texas (between 65 and E. 6th Avenue). About 7.2 miles of U.S. 65 have been completed in the White Hall Study area which was added to the PBATS area in 1973.

PART II
1990 TRANSPORTATION PLAN STATUS
WITHIN THE CITY OF WHITE HALL

The city of White Hall and its surrounding study area were not included as part of the original transportation plan of 1969. However, the city of White Hall and its surrounding area were officially added to the original study area on July 17, 1973. This addition increased the original transportation total study area approximately 16.2 square miles. The comprehensive planning jurisdiction area of the city of White Hall is 24.9 square miles. Approximately 8.7 square miles of this planning area exists outside the present transportation study area. The governing body of the city accepted in total the Pine Bluff Urban Area Transportation study of 1969 as being relevant to its planning area and adopted the Recommended Transportation Plan as the transportation plan for the city on March 26, 1976.

TRANSPORTATION SYSTEM AND FACILITY DEVELOPMENT

The planned transportation system mileage within the White Hall area of the PBATS plan totals approximately 46 miles. A comparison of the PBATS recommended transportation system with the City of White Hall major street plan mileage may be seen in the following Table VI.

TABLE VI
COMPARISON OF PBATS AND WHITE HALL
MAJOR STREET PLAN SYSTEM MILEAGE

FACILITY	System Mileage					
	PBATS			WHITE HALL MAJOR STREET PLAN		
	Existing	Proposed	Total	Existing	Proposed	Total
Expressway	5.8	-	5.8	Facility not defined		
Arterial	26.6	1.0	27.6	15.3	6.3	21.6*
Collector	4.2	8.2	12.4	12.2	40.3	52.5
Total	36.6	9.2	45.8	27.5	46.6	74.1

* Includes expressway designation

Source: PBATS Annual Report, 1975; White Hall Street Plan 1974.

Specific differences in addition to system mileage and planning area include,

1. The White Hall major street plan shows a more intensive collector street system than does the PBATS recommended plan (1975).

2. There is disagreement between the two plans on the planned location of Turner and Cherry Streets.

3. Elkins street (0.4 mile) between Cook Road and U.S. Highway 270 is designated as an arterial facility on the White Hall major street plan whereas the PBATS recommends Elkins Road be a collector facility.

The planned transportation system within the city limits of White Hall consists of approximately 1.5 arterial r-o-w miles and 4.3 collector r-o-w miles. No expressway or freeway facilities or interchanges are proposed within the city.

Table VII shows percent completion of each major element of the White Hall area transportation plan.

TABLE VII
TRANSPORTATION PLAN COMPLETION STATUS

<u>Plan Activity</u>	<u>Percent Complete</u>
New arterial construction and improvement	30
New arterial r-o-w acquisition	15
New collector construction and improvement	20
New collector r-o-w acquisition	<u>10</u>
Total Transportation Plan Completed	30

Source: Division of Community Affairs transportation study questionnaire.

The PBATS transportation study appears to be of substantial assistance to city officials in the planning and scheduling of transportation and related activities within the city. For example, traffic operations improvements, arterial r-o-w acquisition, and development of cost estimates and construction priorities set forth in the plan were very useful in preparation of the city's 1976 annual budget. Prior to the federal community development funding program little local funding was available to implement transportation plans because all city transportation funds were needed for maintenance of the existing street system. Approximately \$27,000 (33%) of the city's fiscal 1975-76 total budget of \$83,000 was allocated to transportation related expenditures. This relatively high proportion of total funds for transportation purposes was also true for the 1974 city budget. Street and

highway r-o-w acquisitions have been and are presently being obtained through zoning and subdivision regulations.

Land Use

Planned land use allocations within the White Hall study area vary significantly depending upon the unit responsible for the planning effort. These differences are shown in Table VIII on the following page. The difference in presentation of land use classification details between the PBATS plan and White Hall plan is of particular planning interest. The White Hall plan provides a more detailed breakdown of major traffic generation activities relating to commercial land use (i.e. neighborhood and highway oriented businesses), than does the PBATS. The city of White Hall, at the present time, has not designated land within the city to be used for industrial purposes.

DEVELOPMENT CONTROLS

Major development controls utilized within the White Hall transportation study area include zoning, subdivision regulations, and street planning.

Zoning

Zoning regulations at the present time apply only to the use of land and structures within the city limits of White Hall. Zoning does not exist in any area within the transportation study area which lies outside municipal boundaries (i.e. cities of White Hall and Pine Bluff). Zoning regulations have been prepared in accordance with the city's comprehensive development plan. As seen in Table VIII, page 26, zoning limits the type of land use within the city of White Hall to residential (single and multiple family) and commercial (neighborhood and general purposes).

Purposes set forth in Chapter I of the city's zoning text important to transportation planning policy and development are,

"These zoning regulations are designed to lessen congestion in the street,... to prevent overcrowding of land; to avoid undue concentration of population; and to facilitate the adequate provision of transportation..."

The zoning text provides for the regulation of residential, commercial and industrial land use within the city as follows:

TA VIII
COMPARISON OF PLANNED GENERAL LAND USE WITHIN CITY OF WHITE HALL,
WHITE HALL PLANNING AREA JURISDICTION AND WHITE HALL TRANSPORTATION STUDY AREA
IN ACRES

LAND USE	AREA ⁴ WITHIN WHITE HALL			AREA WITHIN CORPORATE LIMITS OF CITY OF WHITE HALL		
	PLANNING JURISDICTION		TRANSPORTATION STUDY AREA	LAND USE PLAN (1973)		EXISTING ZONING MAP (1967)
	LAND USE PLAN (1973)	%		LAND USE PLAN (1973)	%	
RESIDENTIAL	4,700	30	3,874	871	83	995
SINGLE-FAMILY (R-1)	NOT DESIGNATED		NOT DESIGNATED	NOT DESIGNATED		(627)
MULTIPLE-FAMILY (R-2)						(368)
COMMERCIAL	260	2	195	13	1	56
NEIGHBORHOOD (C-1)	(135)		NOT DESIGNATED	(8)		(6)
HIGHWAY (C-2) (General)	(125)			(5)		(50)
INDUSTRIAL	90	-1	30	NA		NA
PUBLIC AND SEMI-PUBLIC	50	-1	90	50	5	NA
PROTECTED OPEN SPACE	1,300	8	NOT DESIGNATED	20	2	NA
STREET R-O-W	811	5	639	69	6	NA
Arterial	(315) ²		(519) ³	(19) ²		NA
Collector	(506) ¹		(120) ¹	(50) ¹		NA
AGRICULTURE AND NON- PROTECTED OPEN SPACE	8,725	54	5,510	28	3	NA
TOTAL ACRES	15,936		10,338	1,051		1,051
TOTAL SQUARE MILES	24.9		16.2	1.6		1.6

1. Assumed 9.7 acres per mile for collector street (80' R-O-W, White Hall Master Street Plan)
2. Assumed 14.6 acres per mile for arterial street (120' R-O-W, White Hall Subdivision Regulations)
3. Assumed 14.6 acres per mile for arterial street (80' R-O-W, PBATS, Transportation Plan, Vol. 2, Table 11. Figure includes 119 acres for U. S. Highway 65 (170' R-O-W) for comparison purposes.
4. Figures include area within city of White Hall.

Source: White Hall Land Use and Major Street Plan; PABTS Recommended Transportation Plan, Annual Report 1975.

Residential Use Zone:

This zone is intended primarily for residences. "Use-by-right" provisions permit uses such as churches, schools, and recreation facilities. Residential zone classifications are,

- R-1 Residential Single-Family
- R-2 Residential Multiple Family
- R-1M-H Residential Mobile Home

Commercial Use Zone:

The commercial use zone is intended for the conduct of business and services. Commercial zone classifications are,

- C-1 Neighborhood Commercial
- C-2 General Commercial

Industrial Use Zone:

The industrial use zone is intended for manufacturing, industrial, and goods storage activities. Uses include warehousing, wholesale storage and general manufacturing.

Zoning regulations also govern off-street parking and/or off-street loading spaces in residential areas, places of public assembly, hospitals, nursing homes and commercial and industrial areas. Parking standards govern number, size, and construction of parking spaces.

The zoning map, however, only provides for residential (R-1, R-2) and commercial (C-1, C-2) zones within the city. No zoning districts have been designated for mobile home or industrial development as provided in the zoning text.

Subdivision Regulations

Subdivision regulations of the city of White Hall are applicable to all territory within the planning jurisdictional area of the city and have direct implications to transportation facility development. These are generally implied in the stated purpose of the city's Subdivision Regulations, Section 1, which reads,

"The purpose of these regulations is to set forth the procedures, requirements, and minimum standards governing the subdivision of land..."

Other relevant requirements to transportation plan development and implementation activities include,

1. Approval by the planning commission (White Hall) of a preliminary and final plat for development.
2. Preliminary plat must relate to total area (e.g. major street plan).
3. Information about,
 - a. Location of all streets and easements within and bordering tract.
 - b. Dimensions of streets and alley easements.
 - c. Location of building lines
 - d. Approval of street system by registered engineer or qualified surveyor.
 - e. Street profiles
 - f. Restrictive covenants
4. Certifications concerning
 - a. Ownership and dedications
 - b. Accuracy (by registered engineer)
5. Design and Layout of subdivision including street considerations as follows,
 - a. Projection of Major Streets. Arterial and Collector streets in a subdivision shall conform to the Major Street Plan and be a continuation of or an approximate projection of existing arterial and collector streets in surrounding areas.
 - b. Minor Streets. Minor streets shall be laid out in a manner that will discourage through traffic.
 - c. Street Intersections. Streets shall be laid out so as to intersect as nearly as possible at right angles and no street shall intersect any other street at an angle or less than 60 degrees. Property lines at intersections shall be rounded with a radius of not less than 10 feet. Shrubs or other obstructions over two feet high shall not be permitted within 20 feet of the intersection to insure adequate sight distance.
 - d. Dead-End Streets. Dead-End streets, designed to be so permanently, shall not be longer than 500 feet and shall be provided at the closed end with a turnaround having a property line diameter of at least one hundred (100) feet.

- e. Street Width. Street right-of-way width, and paved cartway widths exclusive of curbs and gutters, shall be as shown on the Plan and where not shown shall be not less than as follows:

	<u>Right-of-Way</u>	<u>Cartways*</u>
Arterial -----	120 feet	48 feet
Collector -----	80 feet	36 feet
Minor -----	50 feet	29 feet

* Exclusive of curbs and gutters

- f. Curb and Gutter. All streets shall be curbed and guttered. The curb shall be 6" high and the gutter 18" in width, the material used shall be concrete.
- g. Cartway Paving. a. Asphalt, hot mix, one and one half ($1\frac{1}{2}$) inches thick laid on six inches of compact soil-cement; b. Asphalt, hot mix, one and one-half ($1\frac{1}{2}$) inches thick laid on an eight (8) inch stabilized aggregate base course on a compact sub-grade.
- h. Street Grades. No street grade shall be less than 0.5% and shall not exceed the following:
- | | |
|-----------------|------------|
| Arterial ----- | 5 percent |
| Collector ----- | 7 percent |
| Minor ----- | 10 percent |
- i. Street Jogs. Street jogs with centerline offsets of less than one hundred and twenty-five (125) feet shall be avoided.
- j. Street Curves. Curves in streets shall have a radius adequate to insure sight distances sufficient to permit a driver to stop safely.
- k. Subdivision with Arterial Streets. Where a subdivision abuts or contains an arterial street, the Planning Commission may require such improvements as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic. These improvements may include but not necessarily limited to, marginal access streets, reverse frontage with opaque fencing six (6) feet high contained in a nonaccess reservation along the rear property line, and deep lots with rear service alleys.

1. Half Streets. Half streets shall be prohibited, except where essential to the reasonable development of the subdivision in conformity with other requirements of these regulations and where the Planning Commission finds it will be practical to the dedication of the other half when the adjoining required property is subdivided. Wherever a half street is adjacent to a tract to be subdivided, the other half of the street shall be platted within such tract.
- m. Street Names. Names of existing streets shall not be used for new streets and there shall be only one name for each street. Street names shall be subject to the approval of the Planning Commission.
6. The length, width, and shape of blocks within the subdivision shall consider zoning requirements and needs for convenient access, circulation, control and safety of street traffic.
7. Residential lots will be of minimum lot area and square footage and provide satisfactory access to a public street. "Lots fronting on or having direct access to an arterial street shall be discouraged."
8. Building Setback Lines:
 - a. Where no zoning ordinance is in effect, the front building setback line shall be not less than fifty-five (55) feet from the centerline of the street and the side line shall be not less than 10 feet from the respective property lines.
 - b. Where lots abut existing streets of inadequate right-of-way the developer shall dedicate sufficient right-of-way so that the right-of-way standards are equal to or greater than those set forth in Chapter IV, Section 3, 5, or these Standards.
 - c. The Planning Commission shall have the right to review, to determine the minimum front yard setback, whenever small subdivisions are presented to the Planning Commission along existing streets where the subdivision of the lands may not require any improvements.
9. All land held for public use shall be approved by the planning commission.

Street Plan (Major)

The major street plan for the city of White Hall consisting of text and map was adopted on February 3, 1973, by the City Council and City Planning Commission (see figure next page). The street plan has served as a guideline for transportation policy and facility development since that time. The stated intent of the street plan within the Street Plan for White Hall Arkansas text is:

"To serve as a guide for the future growth and development of White Hall, Arkansas and the surrounding territory; and to promote the evolvement of a logical pattern of streets to meet the needs of the present and future community."

The intent is further defined by Article V of the street plan policy statement which sets forth the purpose of the street plan to be:

"to promote the development of a system of streets that will adequately serve the future population and land use expected to occur in the White Hall area."

Article V also places emphasis upon the need to coordinate roadways within the White Hall and Pine Bluff study area by establishing goals and policies for arterial, collector, and minor streets. For example:

1. Arterial streets are intended to "utilize to the fullest extent the economic advantages which may accrue to the area by use of the arterial streets as a vital link in the state and regional transportation system...."
2. Collector streets will be located and designed "...to channel traffic from minor streets to arterial streets or to local traffic generators such as schools, commercial centers, and industrial centers."
3. Minor streets are "To assure safe access to property, with a minimum of danger to residents of the surrounding area, especially to children."

The street plan text completes its guidelines by providing design standards for each type of trafficway facility. A comparison of design standards between White Hall development control devices and the PBATS transportation plan is seen in the following Table IX.

WHITE HALL LAND USE AND MAJOR STREET PLAN

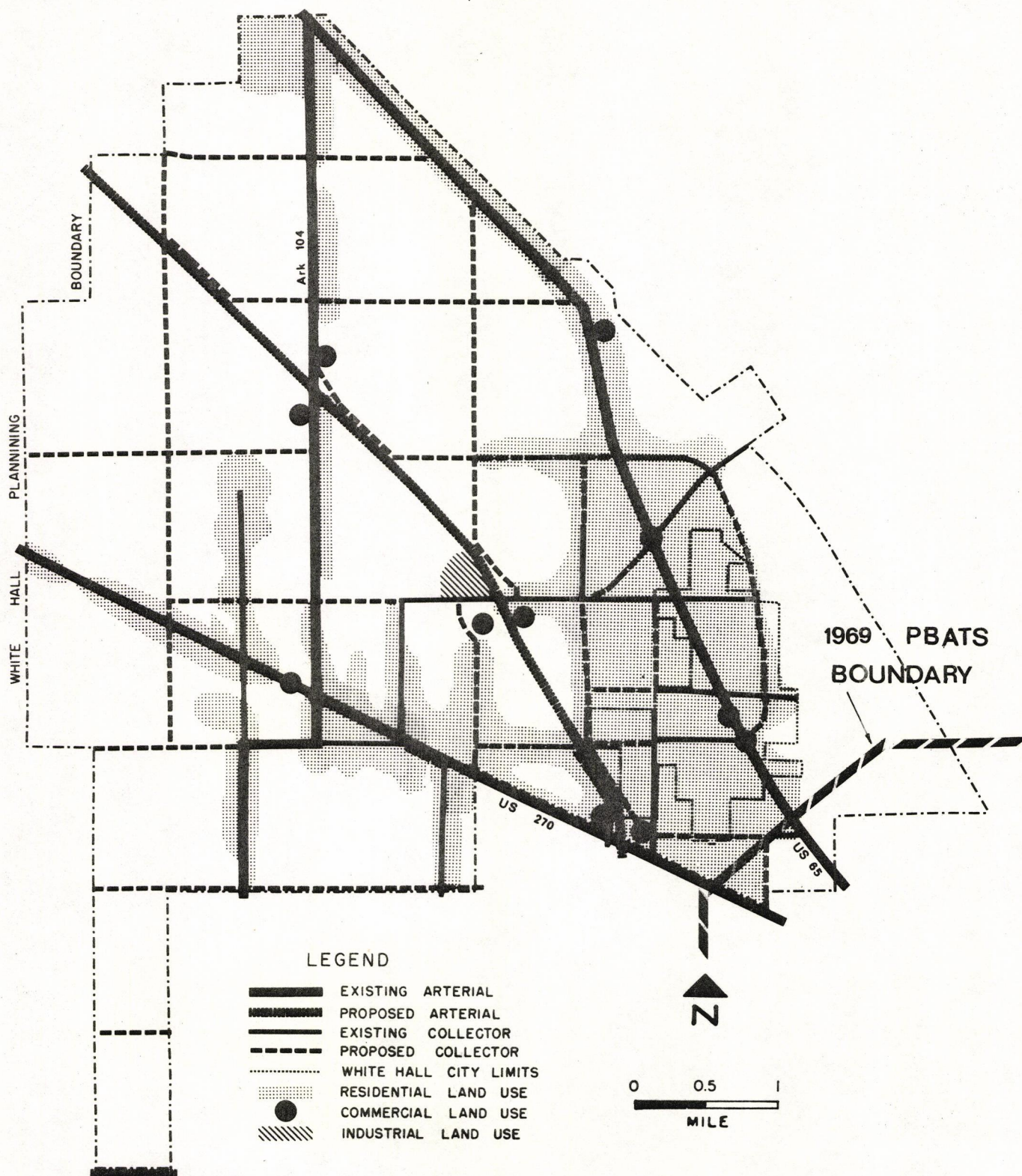


TABLE IX

COMPARISON OF TRANSPORTATION TRAFFICWAY DESIGN
STANDARDS BETWEEN CITY OF WHITE HALL AND PBATS

TRAFFICWAY FACILITY	City of White Hall		PBATS
	Street Plan	Subdivision Regulations ²	Trans. Plan Vol ²
A. Freeway/Expressway			
1. Design speed (MPH)	--	--	60/60
2. No. of lanes	--	--	4/4
3. Lane width (ft.)	--	--	2/24
4. Parking lane (No./ft.)	--	--	None
5. Cartway width (ft.)	--	--	--
6. Margin width (ft.)	--	--	--
7. R-O-W width (ft.)	--	--	200/170
B. Arterial Street			
1. Design speed (MPH)	Designated to be		50 3/
2. No. of lanes	State	--	4 3/
3. Lane width (ft.)	Highway	--	2/36 3/
4. Parking lane (No. ft.)	System	--	None
5. Cartway width (ft.)	(assumed Highway Dept. 48		--
6. Margin width (ft.)	standards)		
7. R-O-W width (ft.)		120	100
C. Collector Street			
1. Design speed (MPH)	40	--	40 4/
2. No. of lanes	2	--	2
3. Lane width (ft.)	12.25	--	--
4. Parking lane (No./ft.)	1/11	--	2/24
5. Cartway width (ft.)	36	36	--
6. Margin width (ft.)	44	--	--
7. R-O-W Width (ft.)	80	80	70
D. Minor Street			
1. Design speed (MPH)	30	--	30
2. No. of lanes	2	--	2
3. Lane width (ft.)	11	--	--
4. Parking lane (No./ft.)	1/7	--	--
5. Cartway width (ft.)	29	29	--
6. Margin width (ft.)	14	--	--
7. R-O-W width (ft.)	50	50	50

Source: 1/ City of White Hall, Street Plan for White Hall, Ark.
February 3, 1973.

2/ City of White Hall, Subdivision Regulations.

3/ Pine Bluff Area Transportation Plan, Vol. 2, Table 11,
"Major Arterial Streets (Two-way) less than 2, 500 DHV.,
p. 42.

4/ Ibid; collector streets less than 1,000 DHV, p. 42.

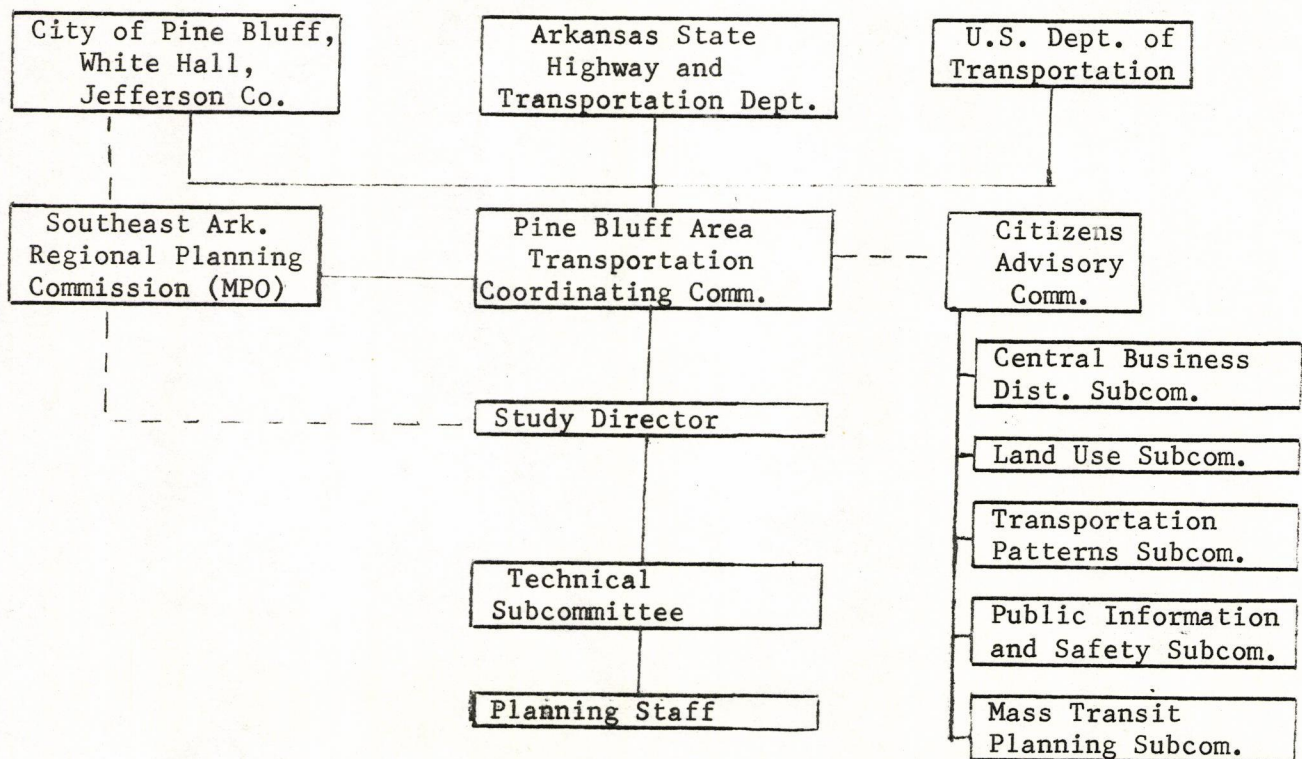
A comparison of transportation system mileage between the White Hall major street plan and the PBATS recommended plan (1975) appears in Table VI, page 23 of this report.

PART III
CONTINUING TRANSPORTATION PLANNING PROCESS

The Pine Bluff Area Transportation Coordinating Committee has conducted a continuing transportation planning process in a conscientious and consistent manner since 1969. The intent of the continuing process is reflected in the charge and structure of the coordinating committee and the content of functional objectives included in the process itself. The charge of the coordinating committee is:

"...establishing policies and procedures for conducting the continuing phase consistent with this (transportation) plan and related Federal Highway Administration's Policy and Urban Mass Transportation's Administration's Policy; and has authority to establish Technical Subcommittees and a Citizen's Advisory Committee."

The organizational structure originally created to carry out this charge included the establishment of a (1) Coordinating Committee, (2) Citizens Advisory Committee, and (3) Technical Subcommittees organized in the following general manner.



The transportation coordinating committee consists of representatives from participating local, state and federal units of government and agencies. The following table shows a comparison between the composition of the coordinating committee as originally proposed (1969) and the present committee (1977).^{1/}

TABLE X

PBATS TRANSPORTATION COORDINATING COMMITTEE
MEMBERSHIP 1969-1977

<u>Participating Unit</u>	<u>Representation by Title/position</u>	
	<u>1969</u>	<u>1977</u>
Municipal:	(2)	(2)
White Hall	Mayor WHCPC, Chrn.	Mayor WHCPC. Chrn.
Pine Bluff	(10)	(9)
	Mayor Alderman (1) City Eng. Com. Develop., Dir. Bus System, Mgr. Street Sup't. Assis. Police Chief PBCPC, Chrn. PBCPC Bikeways Com., Chrn.	Mayor Alderman (2) City Eng. Com. Develop., Dir. Bus System, Mgr. Street Sup't Assist. Police Chief PBCPC, Chrn. -----
County: Jefferson (4)	COC Highway Com., Chrn. (4)	----- (4)
	County Judge Quorum Ct. Mbrs. (2) Co. Road Sup't. (2)	County Judge Quorum Ct. Mbrs. (2) Co. Road Sup't. (2)
Areawide:		
SEARPC	Chairman	Chairman
SEARPC	Executive Dir.	Director
State:	(4)	(3)
Ark. Dept. of Planning	Comm. Planning Dir.*	-----
Ark. Highway Dept.	HP&R Dir. Eng.	HP&R Div. Eng.
Ark. Highway Dept.	Design Div. Eng.	Design Div. Eng.
Ark. Highway Dept.	District Eng., Dist. 2	District Eng.

^{1/} Southeast Arkansas Regional Planning Commission Prospectus & Unified Work Program, (Pine Bluff Area Transportation Study, FY1978.) p.8.

Federal:	(2)	(3)
Federal Highway Admin.	Division Eng. *	Division Eng.
Urban Mass Tran. Admin.	Regional Admin. *	Regional Admin.
Federal Aviation Admin.	----	Regional Admin.
TOTAL PATRICIPANTS	(24)	(23)

* Non-voting participant

This structure provides the opportunity for the exchange of ideas and coordination of activities between different levels of government. It is useful to note the membership of the coordinating committee has changed both in number and composition between 1969 and 1977. Membership has been reduced from 24 participants to 23 participants. More significantly however, is the present lack of certain public and private sector representation as formerly provided by the Pine Bluff Chamber of Commerce and the Arkansas Dept. of Planning a state agency disestablished in 1975. Transportation Committee interests have been expanded with the addition of a Federal Aviation Administration representative to the coordinating committee. Pine Bluff governmental interests and input into the decision-making process have been enhanced with the addition of another alderman to the committee.

Continuing Transportation Activities

All continuing transportation activities completed or in process relate to the "continuing analysis of travel demands and land utilization patterns." These continuing concepts and activities are well organized in the Transportation Systems Management (TSM) element and the Transportation Improvement Program (TIP) of the PBATS Certification Support Package FY1978. The Prospectus and FY1978 Unified Work Program (UWP) outlines quite extensively transportation related planning activities necessary to the conduct of the continuing planning process. Of particular relevance is careful attention given to the purpose, procedures, functional responsibilities, products, and scheduling requirements of each element within the UWP. Direction and continuity of the continuing process is provided by a set of core reference documents including (1) the Pine Bluff Urban Area Transportation Study Volumes II and III (TDP) and (2) the Pine Bluff Traffic Operating Program to Increase Capacity and Safety (TOPICS). Analysis of the TSM element, TIP program and resolutions contained within the PBATS Certification Support Package indicate an active and ordered continuing planning process. For example, the approval of new land use and growth policies by the Pine Bluff City Council in February, 1977, affirmation of the Pine Bluff area transportation plan by the PBATCC, adoption of TIP by PBATCC and current updating of the long-range element of the PBATS plan.

In summary, the TSM appears to be a valuable tool in aiding responsible persons in organizing and scheduling necessary continuing transportation planning and implementation activities in the PBATS area.

DEFINITIONS

The following selected definitions have been compiled for the purpose of comparison and aid in the coordination of transportation activities.

Definition source is identified as follows:

(PBSR) = City of Pine Bluff Subdivision Regulations
(PBZ) = City of Pine Bluff Zoning Ordinance
(WHSR) = City of White Hall Subdivision Regulations
(WHZ) = City of White Hall Zoning Ordinance
(WHSP) = City of White Hall Street Plan
(PBATS) = Pine Bluff Area Transportation Study, Transportation Plan, Vol.2.

Alleys.
(PBSR)

Alleys are public service-ways which are used primarily for vehicular access to the back or the side of properties otherwise abutting on a street.

Alley.
(WHSR)

A minor public way used for utility easements and vehicular service access to the back or the side of properties abutting a street.

Alley.
(WHZ)

A narrow public way not in excess of 20 feet which affords a secondary means of access to abutting properties and not intended for general traffic circulation.

Arterial Streets.
(PBSR)

Arterial streets, including major streets, secondary streets and highways, are those which are used primarily for fast or heavy traffic.

Arterial Streets.
(WHSR)

Provides continuous and efficient routes into and through the City. They are intended to accomodate inter-city or farm-to-market traffic and to serve major inter-city needs. Access to abutting property must be controlled along these streets to facilitate traffic movement.

Arterial Streets.
(WHSP)

Streets designated as the State Highway System in White Hall and its planning area.

Building Set-back Line.
(WHSR)

A line parallel to the street right-of-way, indicating the limit beyond which buildings or structures may not be erected.

<u>Cartway.</u> (WHSR)	That portion of a street between the curbs and gutters which is required to be paved and is intended for vehicular travel.
<u>Collector Streets.</u> (PBSR)	A feeder route which carries vehicles from minor service streets to thoroughfares.
<u>Collector Streets.</u> (WHSP)	Streets which consist of those county roads and municipal streets necessary to collect traffic from minor streets and direct it to arterial streets or to major traffic generators such as schools, places of employment, or shopping areas.
<u>Dead-end Street.</u> (WHSR)	A street similar to a cul-de-sac, but providing no turnaround at its closed end.
<u>Easement.</u> (WHSR)	A grant by a property owner to the public, a corporation, or persons of the use of a strip of land for specific purposes.
<u>Improvements.</u> (WHSR)	Street grading and surfacing, curbs and gutters, water mains and hydrants, sanitary and storm sewers, culverts and bridges, and other utilities and related items.
<u>Improvements.</u> (PBSR)	Street grading and surfacing, curbs and gutters, water main and lines, fire hydrants, sanitary and storm sewers, culverts and bridges, street lights, and other utilities and related items.
<u>Loop Streets.</u> (PBSR)	Loop streets are minor streets that begin from one minor street and curve around to end of the same minor street.
<u>Minor Streets.</u> (PBATS)	"...their major function is land service rather than traffic service."
<u>Minor Streets.</u> (PBSR)	Minor streets are those which are used primarily for access to the abutting properties.
<u>Minor Streets.</u> (WHSR)	A street intended primarily to provide street access to abutting properties.
<u>Minor Streets.</u> (WHSP)	Streets which are designed and intended primarily to serve abutting properties and render accessibility from such properties to collector streets.
<u>Plan, Master.</u> (PBSR)	A composite of the mapped and written proposals recommending the physical development of the community which shall have been adopted by the planning commission.

Plan. City.
(WHSR)

The Comprehensive Development Plan made and adopted by the Planning Commission and accepted by resolution by the City Council indicating the general location recommended for the various land uses, major streets, parks, public buildings, zoning districts and other public improvements and revisions to the Comprehensive Development Plan which may be officially made from time to time.

Streets.
(PBSR)

Any existing street, avenue, boulevard, road, lane, parkway, viaduct, alley or other way which is shown on a plat heretofore approved by law or by official action and duly filed and recorded in the office of the county recording official prior to the enactment of these regulations, and includes the land between street lines, whether improved or unimproved, and may comprise pavement, shoulders, gutters, sidewalk, parking areas and other areas within the street lines.

Street.
(WHSR)

A dedicated public right-of-way which provides vehicular and pedestrian access to adjacent properties.

Street.
(PBZ)

A public primary thoroughfare including avenue, place, way, drive, lane, court, boulevard, highway, road and any other thoroughfare except an alley.

Street.
(WHZ)

A public way which affords the principal means of access to abutting properties.

REFERENCES

1. Arkansas State Highway Department, Pine Bluff Urban Area Transportation Study, Transportation Plan, Volume 2, Harland Bartholomew & Associates, 1969.
2. City of Pine Bluff, Pine Bluff Code, Chapter 35, Sections 1-10,: Subdivisions.
3. City of Pine Bluff, Pine Bluff Code, Ordinance No. 4040: Zoning.
4. Southeast Arkansas Regional Planning Commission, Pine Bluff Area Transportation Study: 1975 Annual Report.
5. Southeast Arkansas Regional Planning Commission & Arkansas Highway & Transportation Department, The 1976 PBATS Annual Report.
6. City of Pine Bluff, City of White Hall, Jefferson County, Arkansas State Highway Commission, Southeast Arkansas Regional Planning Commission, Agreements of Understanding, 1975.
7. City of White Hall, White Hall Subdivision Regulations, City Planning Division, University of Arkansas & Southeast Arkansas Regional Planning Commission, September 12, 1972.
8. City of White Hall, Street Plan for White Hall, Arkansas, Southeast Arkansas Regional Planning Commission, February 3, 1973.
9. City of White Hall, Zoning Regulations for White Hall, Arkansas, City Planning Division, University of Arkansas & Southeast Arkansas Regional Planning Commission, August, 1967.
10. Southeast Arkansas Regional Planning Commission, Certification Support Package: FY1978, Pine Bluff Area Transportation Study.
11. Southeast Arkansas Regional Planning Commission, Five-Year Transit Development Plan 1976-1980, Pine Bluff Area Transportation Study.
12. Southeast Arkansas Regional Planning Commission, Prospectus & FY1978 Unified Work Program, Pine Bluff Area Transportation Study.

PULASKI

URBAN TRANSPORTATION STUDY AREA

PREFACE

This report consists of five parts. Part I covers areawide transportation activities from 1968 through 1975 including planning, programming and construction. Part II covers the local government street plans and physical implementation. Part III is concerned with plan implementation through regulatory procedures by the local governments. Part IV covers the past and future role of the "3C" process in the Pulaski Area with specific recommendations to be undertaken in the continuing phase. Part V lists transportation related local government accomplishments during 1976 and 1977.

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PART I

Areawide Transportation: Planning, Programming and Construction

Following submission of the Pulaski Area Transportation Study, in October 1966, by Wilbur Smith and Associates, the Metropolitan Area Planning Commission initiated discussions with local governments in the area for the purpose of getting such governments to adopt the PATS report and plan. At the time, the Commission was established as a "regional joint planning agency" under Act 26 of 1955, and had in its membership representatives of business and other interests.

As indicated in subsequent parts of this report the cities of Little Rock and North Little Rock were the only local jurisdictions to adopt the PATS plan as an expression of governmental transportation planning policy. This occurred in 1967 and appeared to be virtually the only area activity related to planning or policy formulation on transportation matters until 1970.

In mid 1970 the Metropolitan Area Planning Commission was disestablished and succeeded by Metroplan, a Council of Governments organized as a governmental non-profit corporation. Apparently, as a contingent aspect of this reorganization an "Agreement of Understanding", with respect to a continuing program for administering transportation planning matters, was executed on May 28, 1970 between the Arkansas State Highway Commission and Metroplan (in behalf of member local governments), and the Director of Planning for Metroplan was designated as the Study Director for the continuing transportation planning effort. No written record appears to have been made of the reason(s) why much of the continuing activity recommended in the 1966 PATS plan took so long to implement or, the rationale on which the decision was made to disregard the PATS plan recommendation that the Study Director should be an employee of the Arkansas State Highway Department. Presumably, limited funding prior to 1970 induced limited activity.

Following reorganization, Metroplan published annual reports related to the transportation planning process. The first such report, for 1970, to a considerable extent summarized statistical material for the entirety of the PATS plan Stage I period. Abstracting from this report, only the City of Little Rock appeared to have substantially conformed its street construction activities to the PATS schedule--utilizing bond issue funds for work on half of the recommended Stage I projects. The City of North Little Rock reportedly had done a minor amount of work on a single Stage I project, but had done a substantially greater amount of work on projects scheduled for later construction in the PATS plan.

A revised "Agreement of Understanding" was executed on May 4, 1976. Activities carried out under this new agreement were not reviewed in detail in this report since the investigations and analyses were essentially limited to the 1966-1975 Stages I and II period of the PATS plan to provide a basis for evaluating performance of participants. It may be noted that formation of a "Policy Committee", under the new agreement, appeared intended to lessen deviation of local governmental actions from schedules and standards contained in the PATS plan and by coordinating such matters at a higher level. Also, to permit recognition of significant accomplishments occurring after January 1, 1976, a postscript section has been provided as Part V of this report.

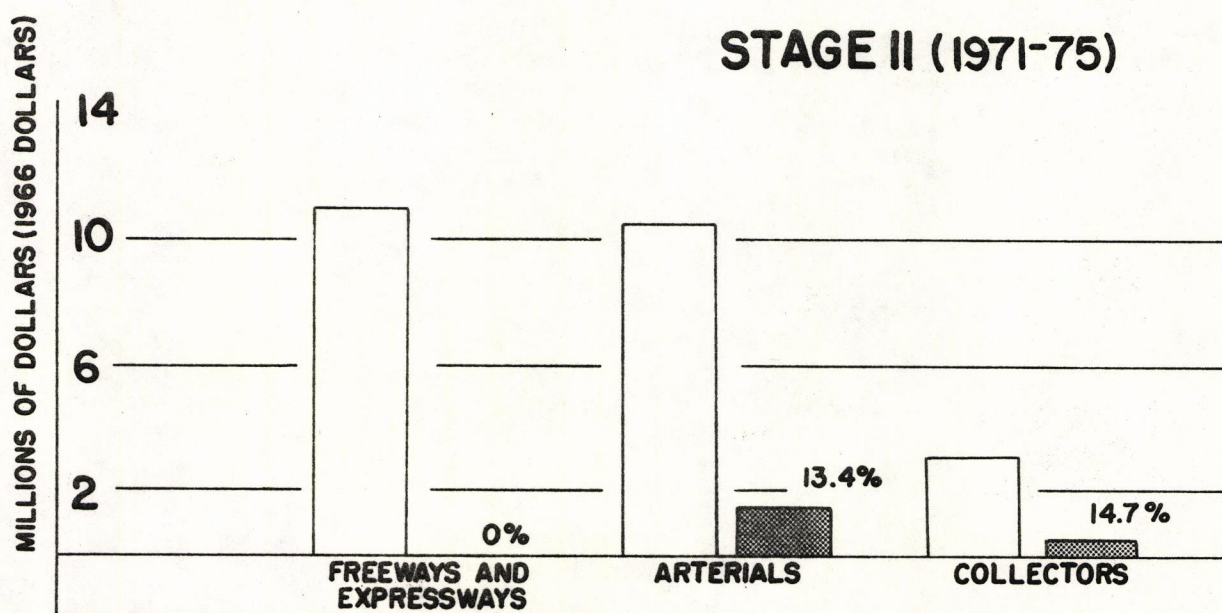
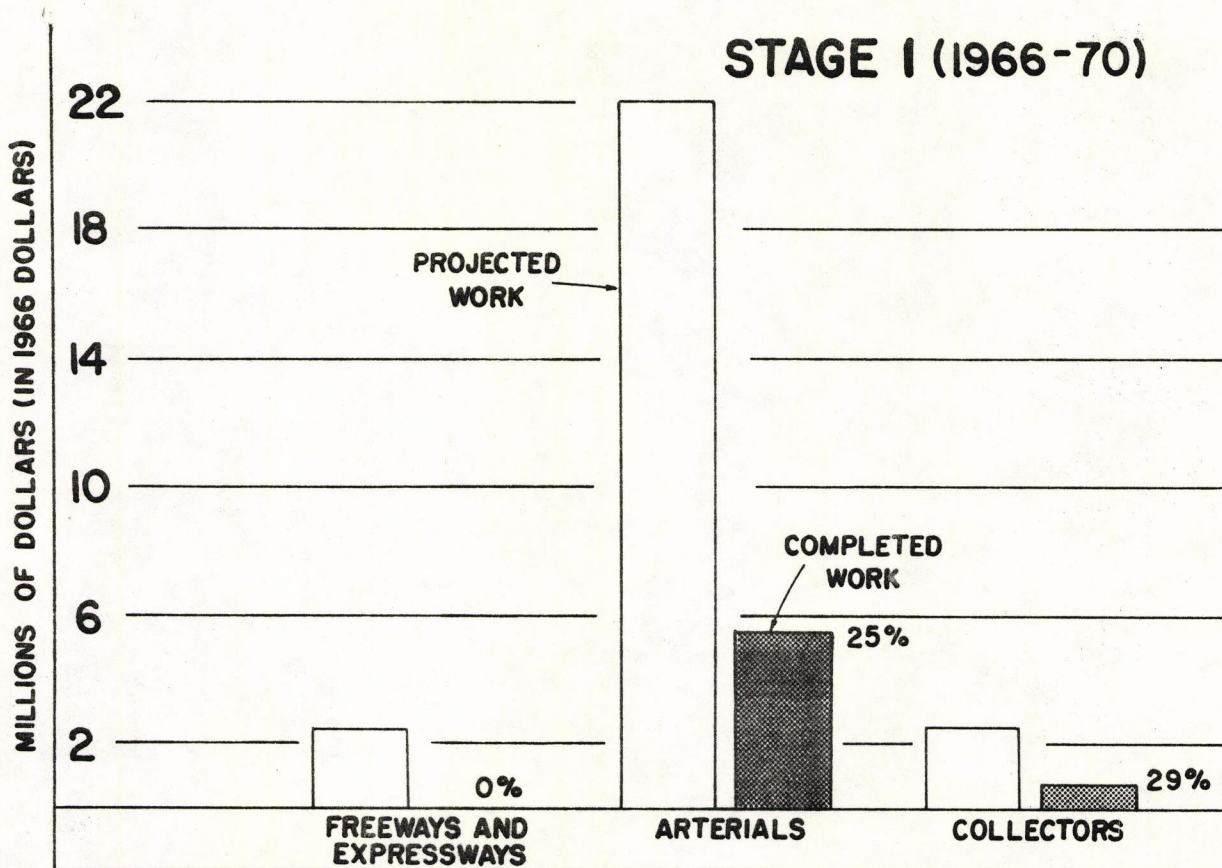
The PATS plan, if viewed as an areawide "Master Street Plan", has served moderately well even though, as previously stated, only two of the five local governments had adopted it officially as of the end of 1975. ^{1/} Although a number of collector streets have been built or improved on locations where one might fairly question whether the alignments were truly satisfactory substitutes or alternates to the routes shown in the PATS plan, the majority of all work actually done (Freeways, arterials and collectors) fits this plan quite closely.

On the other hand, the PATS plan also purported to be a capital expenditure plan, but the "fit" of actual project completions with the projected schedule was poor. Assuming that the original project cost estimates were all equally valid at the time they were made it was possible to calculate from the total cost of reported project completions (in terms of original dollar estimates) divided by the total estimated cost of scheduled projects in Stages I and II that 17.8% of the work which was supposed to be accomplished was actually accomplished by the end of 1975. If this rate of completion were to persist (and no change were to be made in the PATS list of projects) it would take approximately 5.6 times as long to complete all projects as the original schedule contemplated; instead of 25 years, the planned work would take 140 years to complete. Such a span of years is an unrealistic time-frame for even so-called "long-range" planning.

^{1/} Little Rock adopted, by Resolution #3757, on April 17, 1967; North Little Rock adopted, by Resolution #795, on June 26, 1967. The Arkansas Highway Commission also adopted, by Minute Order #67-383, on July 28, 1967.

An additional defect in the programming, or scheduling, aspect of the PATS plan and continuing process resulted, apparently, from failure of the original plan to specify the need for continuing capital expenditures budgeting which would set the priority of projects both within each specified Stage and within each jurisdiction area for a "rolling" current short term period. The consequence of this deficiency appears to have been an inclination on the part of participants to set specific priorities and propose PATS plan revisions in an ad hoc way. Inevitably, such a procedure would invite and/or reinforce private developer's inclinations to initiate land development activities in essentially random, opportunistic, patterns. In view of the very recent controversy about the concept of "growth management", in Little Rock, it does not seem implausible to suppose that developers (and probably some governmental officials) have become accustomed and attached to the ad hoc character of the PATS decision-making (and comparable procedures in local governments which the PATS process has either instigated or supported). Under such circumstances, the best that could be expected, in terms of the PATS plan or local plans influencing development activities, was that these activities would adhere to the "Master Street Plan" pattern of desirable development.

COMPARISON OF ACTUAL AND PROJECTED PROGRESS TOWARDS COMPLETION OF PATS PROJECTS 1966-1975



NOTE: THE I-430 AND I-630 PROJECTS AND THE BROADWAY AND MAIN STREET BRIDGE IMPROVEMENTS WERE NOT INCLUDED ON THE PATS SCHEDULE AND ARE NOT INCLUDED ABOVE.

PART II

Local Government Street Plans and Physical Implementation

One of the more apparent features of local officials' views on the relationship of the PATS plan and local "Master Street Plan" was the inclination to accept (even with apparent reservations) the PATS plan as the local "Master Street Plan".

This appeared most evidently the case in the jurisdictions where the governing body adopted neither the PATS plan nor effective local street or road plans (Pulaski County, Sherwood and Cammack Village). This may have been an example of "following the path of least resistance"--until some legal challenge might force a change. Of the participating local jurisdictions only the City of Little Rock has attempted to maintain a properly adopted and effective local "Master Street Plan",^{2/} together with implementing ordinances. Little Rock's efforts, nevertheless, have produced a Master Street Plan which differs in a number of significant elements from the PATS plan. Most notably, a large number of collector streets appearing on the PATS plan do not appear on the city plan provided for review (dated November 20, 1973). Also the city plan delineated some arterial streets not shown on the PATS plan, dated 1974, one of which (Lindsey Road) apparently has been built.

As of the end of 1975, North Little Rock had not updated its "Master Street Plan" since adoption by the City Council on January 13, 1964,^{3/} as far as any local official was aware, and, furthermore, an effort made by city officials to find a copy of this plan in the city hall was fruitless, so a copy was obtained from the planning consultant to the city. Quite evidently, the "official" city plan has had little significance, even in connection with applications of the city's subdivision control regulations ^{4/} (which, by law, are supposed to be partially based on such a plan). The 1964 plan,

^{2/} Ordinance No. 12,077, as amended by Ordinance No. 12,865.

^{3/} Ordinance No. 3360, January 13, 1964.

^{4/} Ordinance No. 2620 (3/11/57), as amended by Ordinances No's 2621 and 3442.

also, did not conform in a number of important features to the PATS plan which, apparently, has been used in place of the "official" plan--without benefit of adoption under procedures specified in planning enabling legislation. In all likelihood, the relative ease with which the PATS plan could be revised, using the ad-hoc process referred to previously, had more appeal for local officials than the more arduous procedure specified by statute for revising the "Master Street Plan". In any event, both the evidently greater "flexibility" of the PATS plan and the undoubtedly conscious awareness that the realistic time frame for completion of this plan was preposterously long may have lead many local officials to view all "long range" street plans as merely "conceptual possibilities" to which no firm commitment need be made.

Neither Sherwood nor Cammack Village had adopted a Master Street Plan as of the end of 1975; the latter because the community was fully developed, could not expand, and local officials anticipated no change in the character of development. Sherwood, on the other hand has been experiencing considerable development, has expanded in the past and probably will in the future, and will likely have changes in development characteristics occur over time. Under the circumstances, and considering the fact that Sherwood has adopted, and administered, city subdivision regulations 5/ (which, by State law, are not authorized unless a Master Street Plan has been adopted beforehand) the lack of such a local plan is of some significance. From the nature of comments made by city employees in Sherwood, it seemed likely that city officials in the past may have assumed that the PATS plan was, de facto, the Master Street Plan as it applied to the area of Sherwood. But, if such were the case, actions by the city in approving subdivision plats which violated the PATS plan were inexplicable except in terms of official reluctance to enforce the provisions of any plan. In any event, the city's enforcement of subdivision regulations has not conformed to State law--which may become a matter of greater concern in the community than failure to implement a street plan. Considering both past administrative performance and the amount of revenues reportedly available, the prospects for Sherwood physically developing any portion of the PATS plan within its borders appear minimal; in particular, the proposed North Belt Freeway route has been effectively blocked by subdivision developments and no alternative location lying within Sherwood at any point is likely to be feasible. If Sherwood does adopt a local Master Street Plan, past performance suggests that this will be done primarily to comply with the "letter" of State law. It seems doubtful that there will be any official commitment to constrain developments or schedule public works for accomplishing whatever system of major streets

5/ Sherwood City Ordinance No. 209, adopted 3/23/1971.

the plan may delineate.

The "Official Road Plan" adopted by Court Order of the County Court of Pulaski County on June 17, 1970, was, in fact, only a road map. This so-called "Plan" appeared to be only a slightly modified version of the Arkansas Highway Department map of the county and no pretense of delineating proposed roads was made, with the exception of roads already (in 1970) programmed for (or under) construction. Also, no distinction of roadways by functional classification was displayed on the map. In effect, for all practical purposes the term "Plan" was only applicable in the same sense that "As Built Plans" prepared by architects and engineers are documentations of actual (as opposed to "contemplated") construction. Consequently, Pulaski County appears to have had no published plan for future development which could be compared with the PATS plan. The nearest thing to such a "local" plan was the 1980 functional classification plan approved by the Arkansas Highway Department for Pulaski County's unincorporated area. As would be expected, this short-range plan conformed to the PATS plan as far as it went.

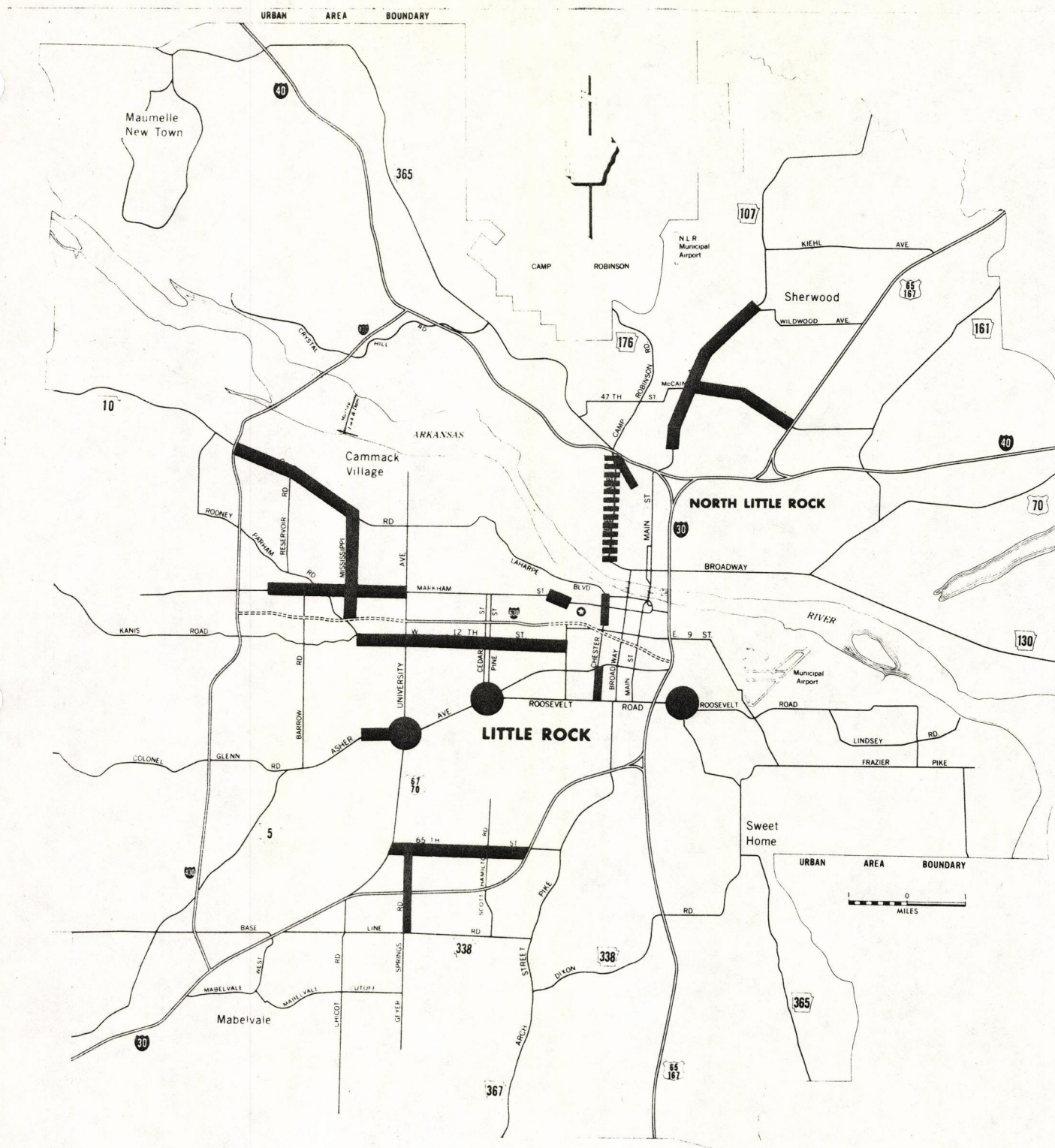
The reported project completion performance of the City of Little Rock, though modest compared with the ambitious PATS plan schedule, was clearly superior to other local participants in the PATS program in all matters directly related to street planning and plan implementation. Little Rock's performance, in completing scheduled projects (25.9% completion of Stage I and II projects) was much greater than North Little Rock (13%) or Pulaski County (8.5%)--and on approximately 47% of the total PATS work projected for Stages I and II. Consequently, the overall percentage of progress was considerably "enhanced" by Little Rock's performance. (Continuing past performance North Little Rock would need about 210 years to complete work on elements of the PATS plan in their jurisdiction and Pulaski County would need 295 years.) It is worth noting that, among local government participants, only the City of Little Rock had used bond issue funds before 1976 for construction of streets. Also, while urban renewal programs in both Little Rock and North Little Rock had made land "available" for new streets, such land had been used only in Little Rock.

With respect to performance of the Arkansas Highway Department, the PATS plan did not specifically assign project responsibility for any facility to the Department. The plan even excluded both I-430 and I-630 projects on the questionable basis that these facilities, although not built in 1966, were "programmed" for construction. The plan appeared to contemplate that the Highway Department would simply be responsible for providing a total of \$6,670,000 in various grant-in-aid funds during Stages I and II to support projects for which local governments were assigned project responsibility.

Under these circumstances, it was infeasible to make any direct comparison of Highway Department performance in terms of project completions. It was

noted that A.H.D. expenditures authorized during Stages I and II for the I-430 and I-630 projects totalled more than 84 million dollars; even allowing for inflation, this exceeded the cost of \$36,119,600 estimated in the PATS plan. It was also noted that expenditures authorized before 1976 for the East Belt Freeway totalled nearly 43 million dollars, whereas the PATS plan estimated expenditures of only \$3,480,000 during Stage II and a total expenditure of \$23,360,000 by 1990. Finally, it was noted that a total of approximately eleven million dollars of expenditures from funds controlled by the Highway Department had been authorized for non-maintenance work on roads and streets included in the PATS plan--which, considering inflation, appeared to be reasonably equivalent to the support projected in the PATS plan.

Additionally, in respect to procedural compliance of the Highway Department with the "3C" process, only relatively minor deviations were apparent. "Official" approval for deviating from PATS design standards in the improvement of J. F Kennedy Boulevard and Geyer Springs Road was apparently not sought. Otherwise, Highway Department personnel appear to have observed "protocol" meticulously in their handling of projects affected by the PATS plan. No doubt, this posture and performance was made easier for the Highway Department as a result of both its essentially single purpose mission and its somewhat more "programmable" financial resources. Even so, the predictability of Departmental adherence to planning objectives and procedures stood in sharp contrast to what appeared as a relatively indifferent attitude of local governments towards planning and plan implementation.



1966-1975

PATS PLAN CONSTRUCTION PROGRESS

(PROGRESS SHOWN ONLY FOR PROJECTS LISTED IN THE APPROVED PATS SCHEDULE)

	FREeways EXPRESSWAYS	ARTERIAL ROUTES	COLLECTOR FACILITIES	INTERSECTIONS
CONSTRUCTION COMPLETE	(NONE)			
WORK UNDERWAY	(NONE)			(NONE)

SOURCE: 1975 ANNUAL REPORT, PULASKI AREA TRANSPORTATION STUDY.

PART III

Local Government: Plan Implementation by Regulatory Procedures

Little Rock also has had at least a slight edge on other local jurisdictions with respect to adoption, maintenance and application of regulatory instruments directly related to attainment of transportation planning objectives. However, with respect to the use of "setback lines", the Little Rock Master Street Plan regulations (Ordinance #12,077 as amended by Ordinance 12,865 with accompanying map) appeared to imply that specific setback alignments would be set (or negotiated) only upon application for building permits--or, presumably, upon submission of proposed subdivision plats. The listing of major streets in the ordinance also contained 21 instances where a "range" of required right-of-way width was indicated and, the Master Street Plan map provided for project review did not depict anything relating to required rights-of-way. Under the circumstance, it must have been difficult at times to determine the "proper" location of setback lines in undeveloped and unsubdivided areas. There may be some question as to whether this aspect of uncertainty, about the location of setback lines, was legally in accord with the sense of the statute (AS Section 19-2829, d.) which provides that, "---the legislative body of the city, upon recommendation of the planning commission, may enact ordinances establishing setback lines on such major streets and highways as are designated by the plan---". The statute seemingly implies a conclusive establishment of setback lines as future rights-of-way lines, such as might be mapped or described from land surveys and/or land ownership records. Further complicating the issue, at least within proposed subdivisions, were some subdivision regulations requirements for setback lines in cases involving "open drainage within street rights-of-way" (Municipal Code Section 37-21, 2.) where the term "setback" appeared to refer to "building lines". No definition of the specific term appeared in either the subdivision regulations or the zoning ordinance.^{6/} (The same was true of comparable regulations and ordinances in North Little Rock,^{7/} Sherwood,^{8/} and Pulaski County^{9/}.) It seems quite likely that local planning administrators do not differentiate between "setback lines" and

^{6/} Chapter 43, Little Rock Municipal Code.

^{7/} Ordinance No. 3171 (Zoning) 3/26/62, as amended; Ordinance No. 2620 Subdivision Regulations.) 3/11/57 as amended.

^{8/} Ordinance No. 209 (Zoning and Subdivision Regulations) 3/23/71.

^{9/} Subdivision Regulations (only) originally adopted by County Planning Board 10/31/68, revised 1/31/72 and approved by the County Court 3/2/72.

"building lines"--leading to confusion concerning the meaning of the statutory provision cited above. Notwithstanding these relatively minor problems, the City of Little Rock has succeeded in reserving substantial amounts of right-of-way by using these regulatory tools. In particular, much of the right-of-way for I-630 has been so reserved, and a considerable part of South Riverfront Expressway actually has been constructed by developers as a consequence of applying such regulations.

One item of particular significance, with respect to the conceptual linkage of regulatory instruments and transportation planning in all local jurisdictions in the PATS area was the customary definition of "street" as "A dedicated and accepted right-of-way for vehicular traffic which affords the principal means of access to abutting property". None of the regulations reviewed in this investigation deviated in any significant way from this simple definition, even though such terms as "major streets" and "thoroughfares" were found within the texts of individual regulatory instruments. Two basic difficulties would seem likely to have resulted if developers and local officials "internalized" this simple definition as the essential concept in transportation matters. First, the unequivocal emphasis on "access to abutting properties" vitiated the prospects for achieving regulatory control of access on arterial streets and, second, the emphasis on "dedicated and accepted" directed attention away from planned (but not yet dedicated) streets. In any event, these two implications epitomized the lack of tie-in between "official" long range planning objectives and the regulations presumably intended to assist in reaching such objectives.

The foregoing definitional and/or semantic defects in regulatory instruments were selected as particularly exemplifying a lack of contact and congruence between administrative aspects of local planning operations and the implementation requirements (explicit and implied) for achieving long range transportation planning objectives in either local or areawide contexts. In addition, there was little evidence that local planning commission and board members have had any "first hand" continuing awareness of (let alone input into) decisions amending the PATS plan. Under the circumstances, the commission and board members were unlikely to assume responsibility for achieving PATS objectives and probably would not perceive related defects in the regulations and procedures they used. Essentially, the nature of their "calling" has been to deal with specific, and usually localized development activities--as these arose because of initiatives taken by "others".

There was no readily apparent evidence of local planning commissions and boards in the PATS area having taken any initiatives to seek changes in either their local plans and regulations or the PATS plan for the purpose of rationalizing inconsistencies among such planning instruments. On the

other side of this coin, elected officials and staff personnel directly involved in the PATS program appear to have had no inclination to educate and actively involve commission and board members in PATS affairs. Under the circumstances, it would seem that one, and probably two, of the "C's" in the so-called "3C" process could not be effective. The process was no doubt "continuing" but it was clearly less than "comprehensive" and questionably "cooperative".

Since local planning commissions and boards have had a relatively poor "track record" with respect to achieving PATS objectives through adopting and maintaining adequate Master Street Plans and administering subdivision regulations, both of which had a clearly visible connection with the PATS plan, it should be no surprise that their activities in land use planning and administering zoning have had little discernible relationship to PATS objectives. Their customary inclination to act in response to initiatives taken by "others" was highlighted in one meeting of the PATS coordinating committee where it was necessary for a planning staff member to counsel against changing the PATS plan to authorize new freeway ramps in a particular location because this would lead to "irresistible pressure" for zoning changes in the vicinity. From the discussion which ensued, it was evident that other PATS committee members accepted this state of affairs as customary and unavoidable. Zoning has evidently not been a very effective plan implementing tool in the area.

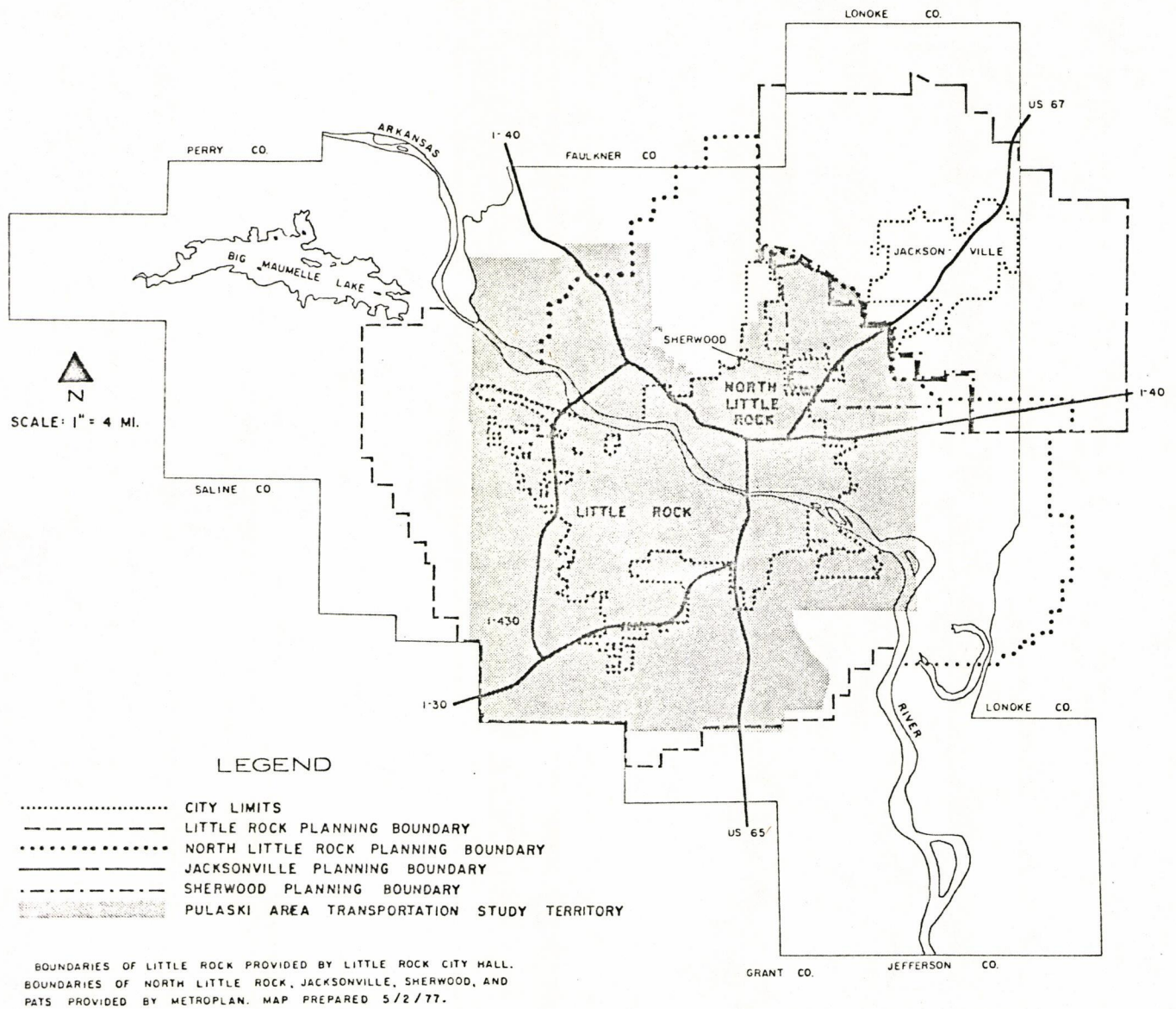
Fairly obviously, in a manner of speaking, the PATS area has had a planning situation where "the right hand didn't know what the left hand was doing" (or trying to do)--and the "left hand" has made no significant effort to ameliorate the problem. One of the more surprising aspects of this situation was the failure to utilize the PATS annual reports as a vehicle for highlighting deficiencies in planning and plan implementing activities. These reports have contained little more than bland recitations of un-analyzed statistics on traffic counts, governmental revenues and expenditures, and highly glossed-over estimates of "progress" towards achieving PATS objectives, together with annually reiterated platitudes about authorized local governmental actions which might be used to implement various aspects of the PATS plan. Some factual errors were found in reports, also, such as the reported 100% completion of College Station Cutoff on page 18 of the 1975 report and depiction of work underway on S.H. #5 West of University on the progress map on page 9 of the same report.

The reports have contained almost no trend analyses, or critical evaluations of the performance of local or state agencies in their actual use of implementation authority and conformance to construction priority schedules. Particularly noteworthy was the absence of annual summaries of local actions relating to "Control of Development: Protecting Future Streets" (a Section heading included under the major heading of "Progress of the Highway

Transportation Plan" in most recent reports). If the reports had specifically documented both local achievements and local derelictions, each year, all local agencies might have developed a greater appreciation of the extent to which their actions or inactions could affect the PATS plan. Perhaps equally importantly, such revelations might have caused more detailed and informed public discussion of weaknesses in governmental procedures.

Of somewhat less general significance, but still a matter which should have been of some concern in terms of documenting communications affecting the PATS plan, was the manner of recording proceedings in committee meetings. No record was made of discussions leading to decisions and decisions themselves appeared to have been reflected only in highly "sterilized" resolutions which did not indicate either the degree of support within the committee or any "minority opinions" if such ever existed. It was not possible to determine the extent to which any proposed resolutions may have been defeated. Consequently, there has been no continuous recording of events by way of which any reconstruction of PATS decision-making could be achieved. Such reconstruction could be particularly informative for members of local planning commissions and boards if they are to gain a working knowledge of how local and areawide decisions interact.

PLANNING BOUNDARIES IN PULASKI CO., ARKANSAS



PART IV

Role of the "3C" Process in the Pulaski Area: Past and Possible

In all candor, this report, and the investigations which it reflects, reveal only relatively superficial aspects of the decision-making which has occurred in the Pulaski area in connection with transportation planning and development. Clearly, there has been a very complicated, and constantly changing, network of "behind the scenes" communications impinging on and influencing those few decisions which are recorded and open to public view. Most of the persons interviewed for this study alluded to such informal contacts and pressures. Not unexpectedly, the nature of such matters was "sensitive" as well as complex; meaning that attributions could be embarrassing and/or that very precise documentation would be needed to substantiate any specific revelations that might have "political" repercussions. Unfortunately, the scope of this project was too limited to permit such an effort.

Summarized in a very general way, therefore, project investigations suggested that at least a substantial minority of both planning and management decisions affecting highway development in the Pulaski area had actually been rather parochially conceived and prearranged outside the framework of the "3C" planning process--with little concern for the eventual effect they might have on creation of a workable areawide system. "Oiling the squeaky wheel" appears to have been a substantial part of the planning strategy of most governmental leaders in the area. Investigations, as previously indicated, also suggested that the original highway development plans contained in the 1966 Pulaski Area Transportation Study were "overblown", to put it mildly. Even acknowledging that population growth has been somewhat less than forecast, the fact that area traffic conditions have not been extremely bad has essentially vindicated local government leaders' failure to support the original construction schedule. It seemed possible that a degree of general disrepute might have become attached to the PATS plans as a corollary to the unrealistic construction proposals. Such a consequence could explain, to some degree, the apparent partial devolution of the "3C" process to a "confirmation procedure" by which "incremental" decisions made outside the process were often (sometimes belatedly) "validated" as amendments to the areawide plan.

Comments which appear in other sections of this report, with respect to effectiveness of local plans, also tend to highlight an apparent disinclination among local decision makers to allow long range plans to limit their options and opportunities for acting on the basis of expedience. There was a strong temptation to judge, on the basis of the superficial evidence, that many local elected officials in the PATS area had become convinced that long range planning amounted to "an impossible dream" except, perhaps, for Federally funded

projects. And, presumably, the performance of appointed planning officials (either employees or members of commissions and boards) had been "tuned" by predominant philosophy and policies of elected officials. The fact that Federal transportation policy statements in recent years emphasized "making the most of what we have" (rather than shaping plans for ever larger investments in new facility construction) served to support such inclinations of local officials.

No doubt the effects of inflation in the national economy helped to influence the policy stance of both Federal and local officials, with respect to continued development of large capital expenditure transportation projects. In addition, the growth of concern about environmental degradation has triggered significant increases in both planning difficulties and the overall cost of highway development at the same time that demand for increased spending on governmental social service programs has been effectively reducing the proportion of resources allocated for capital works. (Of total gross State tax collections in Arkansas, for instance, highway supporting taxes declined from 25.9% of the total in 1973 to 23.4% in 1974, to 22.4% in 1975 and to 21.6% in 1976.^{10/})

Combining such indirectly related influences with the direct influences likely to result from fossil fuel supply problems in the near future provides the basis for speculating that the "3C" transportation planning process, in areas as populous as the Pulaski area, will focus on considerably different transportation issues in the future. Speculating on the nature of such issues is problematic, but it does seem plausible to suppose that the degree of uncertainty about what will constitute "appropriate" responses to such influences as cited above, will not enhance the prospects for major continuing emphasis on long range capital works planning. Perhaps the "Master Street Plan" aspects of roadway planning can survive as a conceptual framework for systemic organization--to be followed if, as, and when development occurs. The projection of construction schedules for very long periods of time seems unlikely, and an academic exercise, in the face of both the hypothesized uncertainties and the preference of local decision makers for shorter range decisions.

Despite the recent spate of financial difficulties experienced in the Central Arkansas Transit operation, it is plausible to assume that public transit will come to be an increasingly important factor in areawide transportation planning. While the population dispersion fostered by past land development practices will certainly not diminish quickly, it is also

^{10/} Source: Arkansas Highway Department, Planning and Research Division.

plausible to suppose that future "economics" of energy use will enhance prospects for both multi-family buildings and more condensed patterns of detached single family units--which will improve the viability of public transit in the long run. In the short run, various adaptations to exigencies of the energy situation, such as increasing use of sub-compact vehicles for personal transportation, could also significantly affect transportation facility needs.

All in all, there would seem to be less prospective justification for future "3C" planning modelled on the 1966 approach and an increasingly important need to monitor and analyze trends in changing traffic, energy, and behavioral characteristics. As previously noted, trend analyses have been almost completely absent from past PATS annual reports and, interviews confirmed that this omission resulted from failure to conduct surveys to generate data needed for such analyses. For planning operations emphasizing short range responses to changing conditions, this type of analytical information is imperative. If such is not developed from "scientific" survey activity it will most likely be developed from "gut feelings" and available surrogate information--either of which may prove misleading. It would seem entirely logical that a majority of Urban Transportation Planning funds ^{11/} should be expended for this type of surveillance and technical analysis.

Considering the apparent extent, in the past, of "behind the scenes" evolution of PATS plan amendments, one substantially beneficial result might ensue from a frankly acknowledged revamping of the PATS program to emphasize short range planning based on trend research. The "face" of planning operations would match the "facts" of decision-making--relieving at least some of the motivation for concealing evident mismatches.

It could be beneficial, in the "total" planning context, if amendments to the "Master Street Plan" aspect of future PATS plans were to be "validated" only after local adoption by affected jurisdictions as amendments to local Master Street Plans. Considering the fact that the A-95 Regional Clearinghouse for the Pulaski area is operated by the same agency responsible for Urban Transportation Planning, it also seems logical that activities involving revisions in an areawide plan supported by Federal grants-in-aid (which is supposed to set policies for transportation programs which also are largely supported by

^{11/} Federal funding provided, under Sec. 104, Title 23 U.S.C. to support "3C" operations.

Federal aid funds), should be reviewed for consistency with local plans. Such review should reveal inconsistencies between local and areawide plans at an early stage in plan revisions.

Apparently, as a consequence of the review conducted in this project, and some preliminary indications of findings, both North Little Rock and Sherwood undertook to correct deficiencies in certain local plans during 1977--providing an example of how such examination may assist coordination of planning.

It must be noted that project investigation revealed a definite, though muted, dissonance between Highway Department staff and Metroplan staff concerning which agency was "officially" responsible for certain technical work. The PATS Policy Committee ought to review the entire arrangement for funding and designating technical responsibilities. Failure, for whatever reasons, to follow the specific recommendations of the original consultant ^{12/} on this subject may well have contributed to the apparent uncertainty about division of responsibilities. In any event, the nature of required technical activities, for whatever type of continuing work is desired by the committee, could stand to be carefully reconsidered and spelled out in writing to provide some assurance that needed work will be done.

To a considerable extent, the fairly recently established Federal requirement for a "Transportation System Management" process (TSM), if implemented as envisioned by the Federal Highway Administration, should bring about a reorientation such as described above. Mr. Kevin E. Heanue, Chief of the Federal Highway Administration's Urban Planning Division has argued, " ---that under today's conditions, about 80 percent of our planning resources should be devoted to planning for short-term issues. The long-range system planner skilled in computer analysis will have to take a back seat to the traffic engineer and transit planner in most urban areas, if we are going to have an effective planning process." Mr. Heanue went on to conclude that, "We are suggesting that TSM offers a basis for looking at our existing transportation systems in a manner that may lead to low cost, energy efficient, improvements in urban mobility. If our planning guidelines did not call for this approach, I think federally aided planning should cease because much of what we would be funding would be irrelevant." ^{13/}

^{12/} pp. 66-68, Volume II: Pulaski Area Transportation Study, Wilbur Smith and Associates.

^{13/} From a paper entitled "Impact of Recent Federal Transportation Policies on Local Transportation Planning".

Even at present, and certainly between 1966 and 1975, the PATS continuing planning participants have been concentrating much of their attention and planning resources on an areawide long-range roadway facility construction plan. It seems, in retrospect, that the consequences have been trivial, relative to the amount of resources applied in the effort. Quite probably this was not unique to the PATS process, and may well have been so widely evident nationwide as to instigate development of the TSM approach. Under these circumstances, a review of past practices and performance such as attempted in this project may seem irrelevant, if they will be forced to be abandoned in any event. Perhaps a general justification arises from the project findings themselves, however. The PATS area participants appear to have been rather covertly practicing something like the TSM approach while superficially observing ground rules for the (now dubious) "grand plan" model. Hopefully, commentary such as contained herein may aid participants to take a critical look at what they have been doing in the interest of improving those facets of "traditional" activities which ought to be continued and, for the purpose of judging how best to proceed to implement the TSM concept with a minimum of dysfunctional attributes.

In summary, it is specifically recommended that the following be undertaken in the continuing phase program for PATS:

- 1) Critical annual review and evaluation of local regulatory activities affecting implementation of the transportation plan, with summaries of activities published in the annual report.
- 2) More detailed reporting of PATS committee proceedings in minutes of meetings, particularly for the Policy Committee, with dissemination of copies of approved minutes to each member of local planning commissions and boards as well as PATS committees.
- 3) Termination of long range scheduling (more than five (5) years) of capital projects, and establishment of local commitments to short term (five (5) years or less) capital budgets for projects, with project priorities established for, and by, local jurisdictions with the assistance of PATS advisory services.
- 4) Establishment of PATS policy that proposed revisions to the areawide street and highway network must be approved as revisions of local Master Street Plans before final adoption by the PATS Policy Committee.
- 5) Annual budgets (program and financial) for continuing planning and surveillance tasks should be adopted by the PATS Policy Committee with specification of annual work objectives including data and evaluation expected to be published in annual reports. Allocation of funds for technical tasks should be based on recommendations of the Technical Committee, in terms

of both definition of needed information and identification of agency personnel technically competent to do needed work.

6) Elimination of "collector" streets from the PATS plan map (collectors needed for any computer modelling can be identified without such mapping) with these streets subsequently mapped exclusively on local Master Street Plans and functional classification plans for local jurisdictions. PATS committee technical recommendations can, nevertheless, be sought and given with respect to local decisions on these streets.

7) Promotion of a \$5.00 motor vehicle tax, as a concerted effort by all local governments in Pulaski County, with available revenues from such tax used, at least primarily, to finance advance right-of-way surveys and land acquisition for streets and highways.

8) Expansion of the PATS area and committees to include Jacksonville, the planning area boundary of which extends into the PATS area already. Continued exclusion of the State's 11th (possibly now 10th) largest city, which has obvious, substantial and growing traffic links with the PATS area, is unjustified. Traffic volumes on arterials in the area of the Jacksonville/PATS interface appear to have doubled within 10 years and seem headed for flows well beyond 1990 volumes originally forecast.

PART V

Postscript

Between January 1, 1976 and September, 1977 the following transportation related actions were undertaken by PATS participants:

1) A revised local Master Street Plan was proposed for, and placed before the City Council of, North Little Rock.

2) Work was started on preparing a local Master Street Plan for Sherwood, but had not yet resulted in any recommendations to the City Council.

3) Construction was begun on major structures and grading for the East Belt Freeway.

4) Surfacing of I-630 was essentially completed from I-430 to University Avenue.

5) West Markham (Rock Creek) Parkway was constructed from Bowman to Kanis.

6) Major reconstruction of the McCain Boulevard interchange with U.S. Highway 67 was started.

7) North Little Rock municipal improvement bonds, authorized at an election in August 1975, were sold and will provide funds for city match on the Pershing Street underpass.

8) Little Rock municipal improvement bond issue was approved by the Arkansas Supreme Court in May 1977.

9) Voluntary right-of-way acquisitions and utility relocations are proceeding on I-630 near I-30.

TEXARKANA, ARKANSAS

URBAN TRANSPORTATION STUDY AREA

Introduction

The Texarkana Urban Transportation Study (TUTS) covers the Texarkana urban area consisting of four cities and portions of two counties located in the States of Arkansas and Texas. The development of and implementation of a transportation plan is complicated by the bi-state nature of the urban area. However, this situation does provide a challenge to all parties involved to be truly cooperative and to coordinate both planning and implementation activities.

This report is concerned primarily with the planning and implementation of highway improvements for the Arkansas portion of TUTS. However, a review of the history and structure of TUTS is helpful in understanding the Arkansas portion of the plan and its implementation.

The Texarkana Urban Transportation Study

The sponsoring agencies for the TUTS are:

Cities of:

- Texarkana, Arkansas
- Texarkana, Texas
- Nash, Texas
- Wake Village, Texas

Counties of:

- Bowie, Texas
- Miller, Arkansas
- Texas State Department of Highways and Public Transportation
- Arkansas State Highway and Transportation Department
- Ark-Tex Council of Governments

The TUTS is undertaken with the cooperation of the U.S. Department of Transportation's Federal Highway Administration and the Urban Mass Transportation Administration.

The Texas State Department of Highways and Public Transportation (SDH&PT) is the lead or responsible agency for transportation planning for the TUTS. Since initiation of the study in 1964, the SDH&PT has provided the study director. Both the Arkansas State Highway and Transportation Department (AHTD) and the Ark-Tex Council of Governments assign coordinators to the TUTS.

The initial phase of TUTS was started in 1964 and completed in June 1967, with publication of Volume II, Transportation Plan 1965-1985 under the direction of a Coordinating Committee.

From the beginning of the TUTS, the sponsoring agencies agreed that for the plan to be of value it had to be implemented and that first priority was to be placed on financing plan improvements. In 1967, the citizens of both Texarkana, Arkansas and Texas voted bond issues to finance street projects, many of which were included in the plan.

To guide the continuing phase of the study, the sponsoring agencies approved agreements in 1968 providing for continuation of the Coordinating Committee. In 1973, new agreements were entered into providing for the TUTS Policy Advisory Committee (PAC) and for the Steering Committee and the Technical Committee. The continuing phase has been guided by Operations Plan for the Continuing Phase published initially in 1968 and revised in 1974. On April 11, 1978, the PAC adopted a "Prospectus for the Continuing Phase" which eliminated the Steering Committee and combined its membership with the PAC.

During the period 1969-71, a Traffic Operation Program to Increase Capacity and Safety (TOPICS) was prepared. The intent of TOPICS was to upgrade the existing street and highway network within the area by increasing vehicle carrying capacity and to increase safety. TOPICS is still utilized in preparation of the Transportation Improvement Program (TIP) and the Transportation System Management (TSM) element of the TIP.

The TUTS is nearing completion of the Level III update for the period 1975-1995. Already published are Level III Basic Elements A and B. Element A includes traffic flow band maps for 1973 and maps indicating existing street use, average driving speed, traffic signal location, and plan implementation. Element B includes capacity and accident studies, traffic engineering features, travel patterns, terminal and transfer facilities, and the CBD parking inventory. Element C to be completed in late summer 1978 is to include the approved multimodal 1995 transportation system, proposed improvements, estimated cost of implementation, and priorities.

The TUTS was initially certified in 1966 and certification has never been removed.

The ARK-TEX Council of Governments serves as the Metropolitan Planning Organization (MPO) with the basic responsibility to coordinate activities between the study director and the local governmental entities. The MPO participates in the preparation of the Annual Work Program, and has responsibilities for various service functions in support of TUTS such as assisting with preparation of the TIP and TSM, the annual report, and securing planning and related information from the cooperating agencies. The MPO is the lead agency for

Technical Study Grants from the Urban Mass Transportation Administration (UMTA) with Texarkana, Arkansas being concerned with needs of the elderly and handicapped.

The PAC consists of representatives of the sponsoring agencies. All State Senators and State Representatives and the U.S. Congressmen whose areas include the TUTS are invited to serve as committee members. The PAC's duties as set forth in its Bylaws adopted July, 1978 include:

- Provide policy guidance for the MPO and the transportation planning process;

- Examine the adequacy of the transportation planning process at appropriate intervals;

- Review annually the transportation plan and recommend its adoption and implementation by local governments;

- Assign responsibility for updating the study elements;

- To take necessary actions relative to recertification;

- Conduct at least once a year a public meeting to discuss the status of TUTS.

A Technical Committee, consisting of representatives of the two State highway departments, the cities of Texarkana, Arkansas and Texas, and the ARK-TEX Council of Governments, is responsible for the development of standards, establishment of priorities, and the preparation of the TIP and the TSM. The Technical Committee is responsible for collecting data and providing the data to the Study Director.

The City of Texarkana, Arkansas is an active participant in the TUTS with the City Manager, the Mayor, the Director of Community Development, the Public Works Engineer and the Planning Director all being actively involved in various aspects of TUTS.

Planning for Texarkana, Arkansas

The City of Texarkana, Arkansas has had a long history of planning. It was one of the first cities in the State to receive technical planning assistance from the University of Arkansas. In July 1952, the City entered into a "Memorandum of Understanding" with the University for initial planning.

Major work elements provided for in the Memorandum included a detailed land use survey, preparation of land use and street plans, and recommended zoning and subdivision regulations. The City's first master street plan was adopted by the City Council on May 23, 1955.

The City's initial zoning ordinance, B-906, was adopted March 8, 1955 but was replaced by a new ordinance, B-1186, adopted September 7, 1965. The subdivision regulations ordinance was adopted March 26, 1957.

The 1955 Master Street Plan provided among other things; for a proposed inter-regional highway (now I-30), the extension of 39th Street (now Arkansas Blvd.) to Jefferson Avenue, the designation of Sugar Hill Road as a major street, and provided for a north-south major street from Sugar Hill Road to U.S. 71 South utilizing Sanderson Lane and other existing streets.

Texarkana was one of four Arkansas cities included in the State's first urban planning assistance grant authorized by Section 701 of the U.S. Housing Act of 1954. Work under this grant, initiated in October 1955 included updating of land use information and further work on the subdivision regulations.

Under a second Federal urban planning assistance grant in 1962 further planning work was undertaken for the City. Four reports were prepared and published in 1964 containing updated and more detailed information, plans and implementation measures. The four reports were:

Planning Unit Study (A Detailed Analysis of Existing Conditions and Growth Potentials)

Plans for Growth

Plans for the Central Area

Plans for Action.

These four reports were issued at about the time the TUTS was organized and provided much of the Texarkana, Arkansas information utilized in TUTS Volume II Transportation Plan 1965-1985.

In 1966, a third 701 urban planning assistance grant provided for two major elements for the Texarkana, Arkansas-Texas urban area. These elements were: 1) the preparation of a topographic map by photographic and planimetric methods, and 2) the preparation of a water and sanitary sewer plan.

Other planning type activities included the City's participation in the Model Cities Program. Texarkana was among the first group of 63 cities in the nation in 1967 to participate in the HUD sponsored program. Projects undertaken with

Model Cities funds and later with Community Development Block grants have resulted in a significant number of local streets in Model City neighborhoods being curbed and guttered and paved.

As part of the City's Neighborhood Development Program in the early 1970's a "Texarkana, Arkansas Downtown Development Plan" was prepared which built on previous planning studies and recommendations.

With the initiation of TUTS, planning activity by the Texarkana, Arkansas planning commission shifted from planning to planning administration. The main activity of the planning commission for the past decade has been one of administering the zoning and the subdivision regulations.

To assist the City in its planning function, a planning director was retained by the City in 1973. A second professional planner was added in 1978. The current planner developed a work schedule in 1976 for the planning commission which set forth both priority and on-going work items. Priority items listed in the schedule were: land use plan, zoning ordinance revision, subdivision regulation revisions, mobile home park ordinance revisions and an open space plan. On-going items included: environmental reviews, TUTS participation, and flood plain ordinance revision. Goals and objectives were developed for the guidance of the planning commission. While progress has been made on priority items, no major formal actions have been taken by the planning commission in revising plans or regulations.

Current Status of Planning. The following is the current status of the planning commission and planning for Texarkana, Arkansas.

Creation of Planning Commission

Ordinance B-877

March 10, 1953

Book E, page 224

Planning Area Map

Adopted by Planning Commission

April 27, 1960

Description of Planning Area

Recorded with City Clerk: June 28, 1960

Book G, page 104

Recorded with County Recorder: July 19, 1960

Volume 175 - 77 page 26

General Plan for Land Use, Streets and Community Facilities

Adopted by Planning Commission, April 8, 1965

Adopted by City Council, August 12, 1965

Recorded with County Recorder, Volume 175 - 79 page 46: Sept. 2, 1965

Zoning Ordinance B-1186

Adopted by Planning Commission, September 2, 1965

Adopted by City Council, September 7, 1965

Filed with City Clerk, September 7, 1965

Subdivision Regulations B-963

Adopted by Planning Commission, March 26, 1957

Adopted by City Council, March 26, 1957

Filed with City Clerk, March 26, 1957

Book F, page 420

Filed with County Recorder, July 19, 1960

Book 4, page 334

TUTS Volume II, Transportation Plan

Adopted by Planning Commission, December 15, 1967

Adopted by Board of Directors, December 18, 1967, Resolution No. 211

The City has not adopted any ordinance establishing setbacks or controlling access on major streets. The City does not exercise its extra-territorial authority over the development of land beyond the corporate area and within the planning area boundary as filed.

The planning commission uses the TUTS plan as its guide in reviewing subdivision plats within the city. The TUTS plan was not adopted in conformance with municipal planning statutory procedures required for the street plan. Consequently, the street portion of the city's plan has not been reconciled with the TUTS plan. While the two plans have a number of similarities, there are significant differences in the classification of streets as arterials and collectors. One such example is Sugar Hill Road which is classified as an arterial in the city's plan and as a collector in the TUTS plan.

County Planning. Miller County does not have a planning board and thus no county road plan or planning regulations. The County approved the TUTS plan December 12, 1967.

Implementation of the Recommended Transportation Plan
for Texarkana, Arkansas

Significant accomplishment has been made in the implementation of the 1965-1985 Transportation Plan as it applies to Texarkana, Arkansas. Table I consisting of Recommended Arterial Improvements lists the 20 priority projects in this category. Sixteen of these projects are either completed or financed and under construction. These sixteen projects represent 80% of the original priority arterial projects and whose estimated costs represent approximately 73% of the projected total.

Table 2 lists the Recommended Collector Improvements and contains the ten (10) priority projects. Of these projects, four have been partially or fully completed.

The TUTS Transportation Plan noted "that improvements are more vitally needed on the arterial street and highway system than on the collector system." Thus the AHTD and the City concentrated their efforts on the arterial system.

However, the City has focused increasing attention during the past ten years on improvements to its local street system. In 1970, the City initiated a permanent-type local street program of curb-gutter-pavement. In addition, the resurfacing and resealing program was expanded. During the period 1970-1976 the City budgeted for and undertook permanent improvements for more than 830 blocks of local streets. The funds utilized by the City for these improvements included general revenues, general obligation street improvement bonds, state turnback, model cities, Federal revenue sharing, and community development block grants. A large segment of the local street improvements was accomplished in model city neighborhoods located in the southern portion of the City.

Table 3 indicates the annual expenditures by AHTD and the City and the County for streets and highways for the period 1969-77. The expenditures include street debt service, construction, maintenance, and right-of-way acquisition. Table 4 indicates the annual expenditures for street and highway construction by the three funding units for the same period.

The City of Texarkana spent nearly as much on streets and highways as did the AHTD and the County combined in the Arkansas portion of the TUTS during the period 1969-1977. The City spent nearly seven and a half million on construction which was 47 percent of total spent on construction within the City. However, as indicated previously, the City spent a significant amount of its funds on local street construction, while AHTD expenditures were primarily on the arterials. Figures were not readily available as to the actual amount the City spent on arterial and collector construction during this period.

TABLE 1

RECOMMENDED ARTERIAL IMPROVEMENTS
TUTS TRANSPORTATION PLAN 1965-1985
ARKANSAS

<u>PRIORITY</u>	<u>SECTION</u>	<u>IMPROVEMENT</u>
1	* US 71 (East St.)-From Dudley St. to Forest St. - 0.8 mile	Widen to 48 foot pavement section inside 60 to 80 foot right-of-way.
2	* US 59 & US 71 (State Line Ave.) From College Dr. to 7th St. (US 67) 1.5 miles	Construct 72 foot pavement section with 16 foot median and channelized turning lanes inside 100 foot right-of-way.
3	* Broad Street - From just South-west of the Hickory St. Viaduct to E. 9th St. (includes E. 3rd St. connection)- 0.6 miles.	Construct new 52 foot pavement section inside 70 foot right-of-way. Hickory Street Viaduct will not have to be adjusted provided the Railroad through track is shifted South and the spur track realigned.
	* Jefferson St.-From E. Broad to North of E. 9th St.-0.15 mile	Construct 35 foot pavement section inside 40 to 60 foot of right-of-way.
4	* E. 7th St., E. 8th St., and E. 9th St. Improvements - 1.0 mile	Construct variable 37 to 52 foot pavement sections inside 60 to 78 foot right-of-way.
5	* Jefferson St.-From E. 24th St. to E. 39th St. -1.0 mile	Rebuild to 35 foot pavement section inside 50 foot right-of-way.
6	* Loop 245-From IH 30 to US 67 1.8 miles	Construct four lane divided limited control access facility (some at-grade intersections) inside 200 to 300 foot right-of-way.
7	* US 67-From Existing four-lane section to Loop 245 - 0.9 miles	Widen to 48 foot pavement section inside existing right-of-way.
8	** Loop 245-From US 67 to US 82- 1.3 miles	Construct four lane divided limited control access facility (some at-grade intersections) inside 200 to 300 foot right-of-way.

<u>PRIORITY</u>	<u>SECTION</u>	<u>IMPROVEMENT</u>
9	* US 59 & US 71 (State Line Ave.) From Loop 14 to W. 33rd St. (College Dr.) -0.8 mile	Construct 72 foot pavement section with 16 foot median and channelized turning lanes inside 100 foot right- of-way.
10	* E. 24th St.-From State Line Ave. to Garland - 0.6 miles	Widen to 45 foot pavement section inside 60 foot right-of-way.
11	US 82-From Oats St. to Loop 245- 0.5 mile	Widen to 48 foot pavement section inside existing right-of-way.
12	* Loop 245- From US 82 to Division St. - 1.0 mile (Two lanes only)	Construct four lane divided limited control access facility (some at-grade intersections) inside 200 to 300 foot right-of-way.
13	Loop 245 - From Division St. to US 71 (East St.) - 1.9 miles	Construct four lane divided limited control access facility (some at-grade intersections) inside 200 to 300 foot right-of-way.
14	* Euclid St. -From US 71 (East St.) to South State Line Ave.- 0.7 miles	Construct 37 foot pavement section inside 60 foot right-of-way.
15	* Ark. Blvd. -From State Line Ave. (US 59 & US 71) to Loop 245- 2.1 miles	Construct 48 to 52 foot pavement sections inside 80 to 100 foot right- of-way.
16	Loop 245 - From US 71 (East St.) to South State Line Ave. - 1.4 miles	Construct four lane divided limited control access facility (some at-grade intersections) inside 200 to 300 foot right-of-way.
17	* Jefferson St. -From E.39th St. to IH 30 - 0.8 miles	Construct 35 foot pavement section inside 60 foot right-of-way.
18	* US 82- From Loop 245 to Rondo Road - 1.5 miles	Widen to 48 foot pavement section inside 60 foot right-of-way
19	*** US 59 & US 71 (State Line Ave.) from IH 30 to North Study Area Boundary - 1.6 miles	Construct 72 foot pavement section with 16 foot median inside 120 foot right-of-way.
20	* Ark. Blvd. - From Loop 245 to US 67 - 0.6 miles	Construct 52 foot pavement section inside 100 foot right-of-way.

* Project Completed
 ** Financed and under construction
 *** Right-of-way acquisition approved

TABLE 2

RECOMMENDED COLLECTOR IMPROVEMENTS
TUTS TRANSPORTATION PLAN 1965-1985
ARKANSAS

<u>PRIORITY</u>	<u>SECTION</u>	<u>IMPROVEMENT</u>
1	* Beech Street - From E. Broad St. to North of E. 9th St. - 0.5 mile (Completed from E. 7th St. to E. 9th St. only).	Widen existing facility to 52 foot pavement section inside existing right-of-way.
2	Garland Street - From E. 6th St. to North of E. 9th St.-0.05 mile	Widen existing facility to 37 foot pavement section inside existing right-of-way.
3	Garland Street - From E. 9th to E. 24th St. - 1.0 miles	Widen to 32 foot pavement section inside 50 to 60 foot right-of-way.
4	County Ave. - From E. 39th St. to IH 30 - 0.7 mile	Rebuild facility to 32 foot pavement section inside existing right-of-way.
5	Forest Street - From Fairview St. to Oats St. -0.4 mile	Rebuild to 28 foot pavement section inside existing right-of-way.
6	Division Street - From 0.5 miles West of US 71 to Texas Viaduct Improvement - 0.7 mile	Construct 28 foot pavement section inside 60 foot right-of-way.
7	* E. 50th Street - From Jefferson St. to Sanderson Lane-1.0 miles	Rebuild facility to 37 foot pavement section inside 60 foot right-of-way.
	* Collector Street North of E. 50th St. - From Sanderson Lane to Arkansas Loop -0.3 mile (not built to collector standards).	Rebuild facility to 37 foot pavement section inside 60 foot right-of-way.
8	* Garland Street - From E. 24th St. to E. 39th St. - 1.0 miles (Completed from 32nd St. to Ark. Blvd. only.)	Widen and rebuild existing facility to 32 foot pavement section inside existing right-of-way.
9	Garland Street - From E. 39th St. to IH 30 - 0.7 mile.	Widen and rebuild existing facility to 32 foot pavement section inside existing right-of-way.
10.	E. 24th St.-From Arkansas Loop to Rondo Road - 1.6 miles	Construct 28 foot pavement section inside 55 foot right-of-way.

* Project Completed

Table 3

Annual Street and Highway Expenditures
by Participating Agencies
Arkansas Portion - TUTS
1969-1975

<u>Year</u>	<u>Miller County</u>	<u>AHTD</u>		<u>Texarkana</u>	<u>Total</u>
		<u>Inside City</u>	<u>Outside City</u>		
1969	37,452	288,640	8,885	392,737	727,714
1970	44,120	347,700	301,507	1,008,882	1,702,209
1971	47,953	18,380	282,261	1,388,191	1,736,785
1972	45,149	2,008,978	1,135,845	1,765,042	4,954,114
1973	47,910	0	0	1,611,367	1,659,277
1974	84,387	1,521,513	42,198	1,480,897	3,128,995
1975	562,000	45,492	9,962	1,310,457	1,927,911
1976	564,854	3,735,340	26,044	1,013,630	5,339,868
1977	682,328	644,463	621,257	2,336,947	4,284,995
TOTAL	2,116,153	8,610,506	2,427,959	12,308,150	25,461,868

Table 4

Annual Street and Highway Construction Expenditures
by Participating Agencies
Arkansas Portion - TUTS
1969-1975

<u>Year</u>	<u>Miller County</u>	<u>AHTD</u>		<u>Texarkana</u>	<u>Total</u>
		<u>Inside City</u>	<u>Outside City</u>		
1969	0	288,640	8,885	156,449	453,974
1970	0	301,700	301,507	563,239	1,166,446
1971	0	18,380	91,895	812,794	923,069
1972	0	1,790,070	930,580	1,145,449	3,866,099
1973	0	0	0	944,595	944,595
1974	0	1,521,513	0	644,339	2,165,852
1975	0	28,530	0	728,568	757,098
1976	0	3,706,590	0	631,728	4,338,318
1977	0	617,775	598,385	1,803,832	3,019,992
TOTAL		8,273,198	1,931,252	7,430,993	17,635,443

The Transportation Planning Process and Local Planning and Implementation

The TUTS is a continuing comprehensive cooperative transportation process carried out under the requirements of the Federal-Aid Highway Act of 1962 as amended.

Since the inception of TUTS, Montie Wade has served as Study Director, thus providing continuity to the program regardless of the formal structure utilized by the cooperating parties.

In developing the recommended transportation systems, "emphasis was placed on the rationalization of present operations, the construction of links now missing in the networks, and on the development of new facilities to complement those existing." In establishing priorities, correlation among projects was considered an important factor.

The impact of having a resident and on-going Study Director for TUTS probably had a strong impact on the plan itself. The Study Director recognized that his role was not only to guide planning, but also implementation activities, and consequently the plan with its priority projects appeared to be obtainable within the planning period. It is interesting to note that of the top ten priorities for the TUTS area, five are completed, two under construction, and three committed. Thus for practical purposes, all ten projects can be considered implemented. Of the top ten priority projects on the Arkansas side, all have been completed.

The 1978-79 annual element of the TIP and TSM has 28 projects listed for the Arkansas portion of TUTS. Of these, nine are TSM projects involving \$92,000 of Housing Community Development Act of 1964 funds. Of the remaining 19 projects, 15 are for local streets. Only two of the 19 projects involve Federal funds. Based on the TIP and TSM, a total of \$1,970,000 is proposed for expenditure in 1978-79 with \$1,172,500 from Federal funds.

The City in submitting its projects for inclusion in the TIP and TSM utilizes its budget process with input from the Public Works Department and for the HUD funds utilizes a citizen advisory committee that recommends priorities for use of funds on streets. The City Board of Directors makes the final decision as to projects to be undertaken. Then decisions are transmitted to the MPO and to the Technical Committee for inclusion in the annual element of the TIP and TSM.

The City's planning commission is not involved in passing on proposed projects for inclusion in the TIP and TSM. Thus there is no review and comment on

projects, as required by planning statute, to determine if the proposed projects are in conformity with the City's plan. (It is possible that some projects would not be in conformity due to the fact that the City's Street Plan and the TUTS Transportation Plan have differences in elements.)

The City Planning Commission has not been exercising its extra-territorial planning jurisdiction even though it had prepared a planning area map and filed a description of the planning area boundary with the county recorder. Failure to exercise this authority permits unregulated land development adjacent to the city and fails to protect the major and collector streets identified in the TUTS and city plans.

The City of Texarkana appears to be satisfied with the TUTS and its performance. The City Manager recognizes that the TUTS Study Director is a Texas SDH&TD employee and must give priority to Texas needs. However, the City Manager believes that the Study Director "leans over backwards" to aid the Arkansas side and historically the arrangement has been most rewarding.

The present City Manager and the Director of Planning were apparently not familiar with the current "Agreement of Understanding Between the Ark-Tex Council of Governments, City of Texarkana, Arkansas, Miller County, Arkansas, and the Arkansas State Highway and Transportation Department" dated the 16th of January 1978. This Agreement provides that "all existing master street plans or any other such plan for improvement of major transportation facilities within the Texarkana area be revised to be identical to the 1995 Texarkana Transportation Plan developed during the Level III update." To properly achieve this, the Texarkana City Planning Commission should be actively involved in the review of the TUTS Plan and to present their recommendations for consideration of the PAC through the Technical Committee and the MPO.

One of the deficiencies noted in studies of numerous cities in the State is the failure on the part of municipalities to conform to the requirements of the planning statutes. The following are the statutory requirements that municipalities in Arkansas must follow to plan and to adopt plans and implementing measures.

Planning Requirements

- * Creation of a planning commission by ordinance.
- * Adoption of bylaws by planning commission providing for election of officers, regular meeting dates and procedures for conducting business.
- * Preparation and maintenance of a planning area map.

- * Delineation of planning area boundary and filing description with city clerk and county recorder.
- * Studies must precede plans; plans must precede regulatory measures.

Adopting Procedures for Plans and Implementing Measures

- * Notice of public hearing by planning commission in paper of general circulation in community at least one time 15 days prior to hearing.
- * Conduct of public hearing by planning commission.
- * Adoption by planning commission by majority vote of entire membership.
- * Certification by planning commission of adopted item to legislative body.
- * Adoption of certified item by majority vote of entire legislative body.

or

- * Return by legislative body of certified item to planning commission for further study and recertification,

and

On re-certification by planning commission, legislative body may adopt as re-certified or modify by majority vote of entire membership.

- * Filing of adopted item with City Clerk.
- * City Clerk files adopted item with county recorder.
If applicable to planning area outside corporate boundary.

It is the responsibility of all parties participating in TUTS to understand the statutory planning requirements and to insure that they are complied with.

