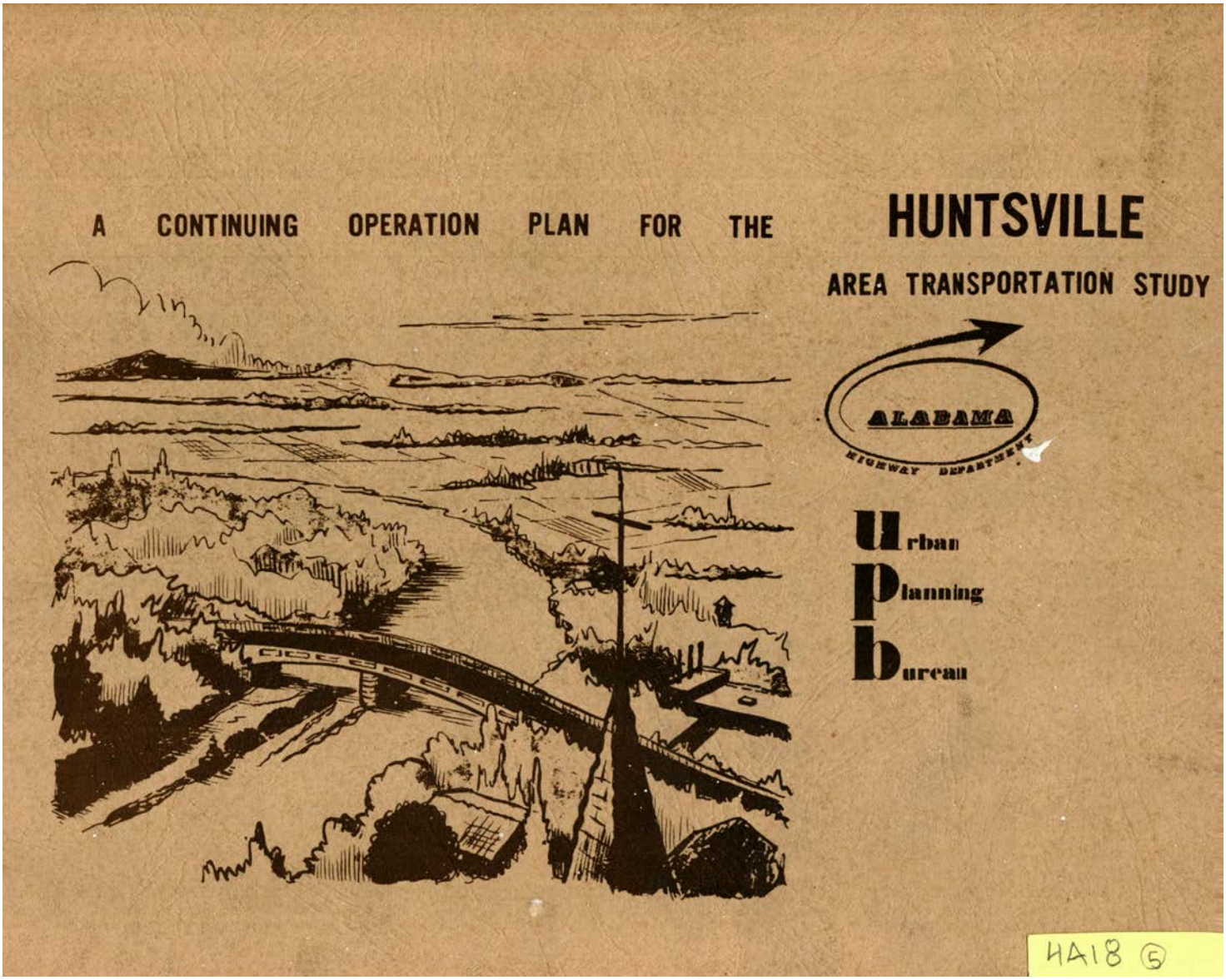


Names:

Alabama Highway Department	Huntsville Area Transportation	Operation Plan for Transportation

Places:

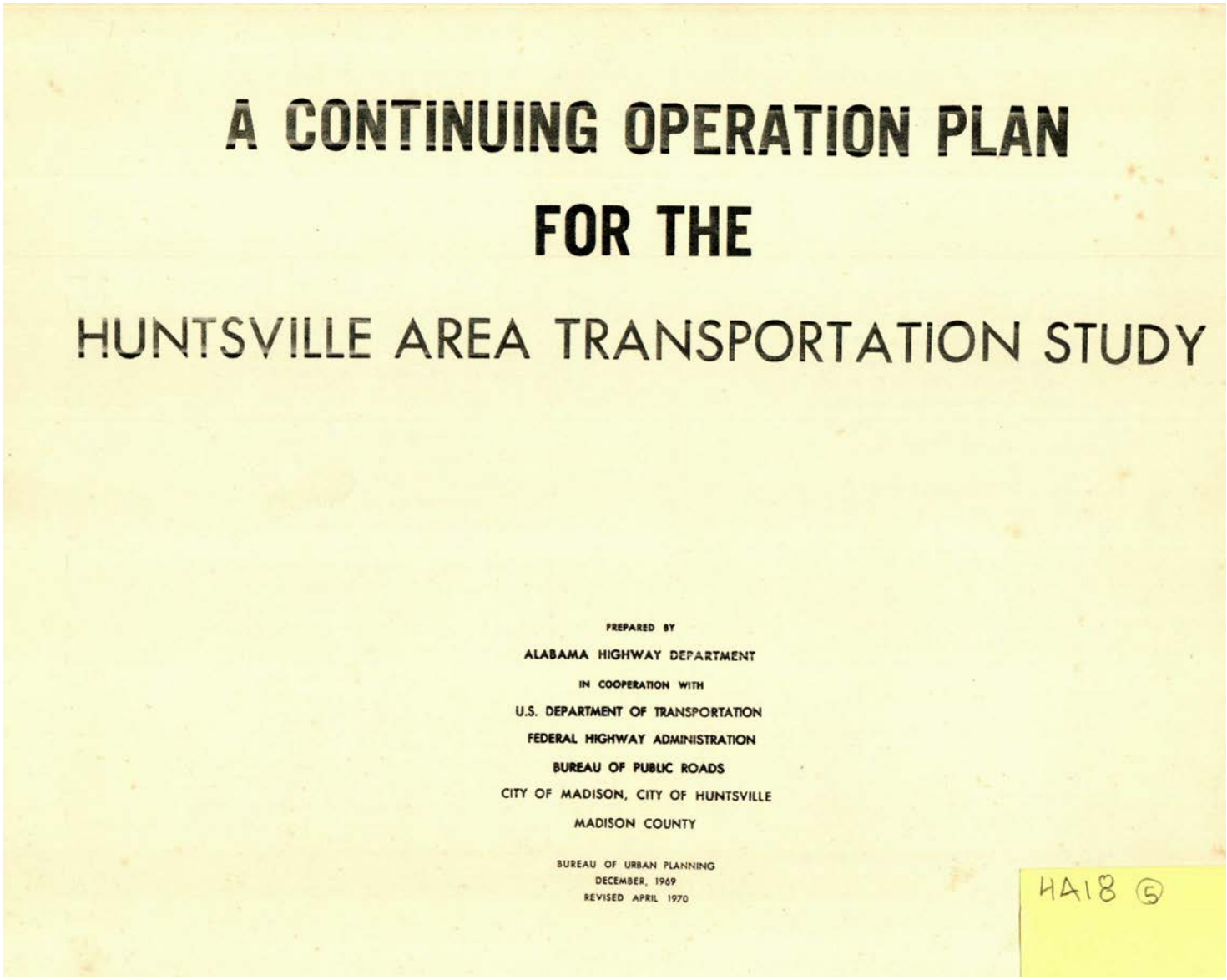
Madison County, AL

Types:

cover study

Dates:

Apr 1970



A CONTINUING OPERATION PLAN

FOR THE

HUNTSVILLE AREA TRANSPORTATION STUDY

PREPARED BY

ALABAMA HIGHWAY DEPARTMENT

IN COOPERATION WITH

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

BUREAU OF PUBLIC ROADS

CITY OF MADISON, CITY OF HUNTSVILLE

MADISON COUNTY

BUREAU OF URBAN PLANNING

DECEMBER, 1969

REVISED APRIL 1970

HA18 ⑤

Names:

Alabama Highway Department

Huntsville Area Transportation

Operation Plan for Transportation

Places:

Madison County, AL

Types:

study

Dates:

Apr 1970

CONTENTS

HA18 (5)

Names:
Contents, Chapter and Page

Types:
study

ILLUSTRATIONS

HA18 (5)

Names:
Illustrations

Types:
study

CHAPTER I

INTRODUCTION

The basic purpose underlying a continuing comprehensive planning process is to provide guidance and assurance for the administrators in responsible positions in economically expending public funds in building the future community which will result in a more satisfactory environment for living, working, and recreation.

The Huntsville area, in cooperation with the Alabama Highway Department, entered into an agreement on September 3, 1963, for the purpose of conducting a base year study and providing a continuing comprehensive transportation planning process. The base year study has documented a program of financially feasible transportation facilities which will serve the forecasted transportation needs for a 20-year period. The forecasted date selected in the base study was 1985. Through the continuing planning process, 20-year projections are to be maintained on a current basis.

Guidelines in the form of a Policy and Procedure Memorandum (P.P.M.) 50-9 dated June 21, 1967, and later, as amended, outline the definitions and interpretations of the urban transportation planning process. This process is required under the Federal-aid Highway Act of 1962, approved October 23, 1962. This act amended Chapter I, of Title 23, United States Code, by the addition of a new Section 134 which reads as follows:

"It is declared to be in the national interest to encourage and promote the development of transportation systems embracing various modes of transport in a manner that will serve the States and local communities efficiently and effectively. To accomplish this objective the Secretary shall cooperate with the States, as authorized in this title, in the development of long-range highway plans and programs which are properly coordinated with plans for improvements in other affected forms of transportation and which are formulated with due consideration to their probable effect on the future development of urban areas of more than fifty thousand population. After July 1, 1965, the Secretary shall not approve under Section 105 of this title any program for projects in any urban area of more than

HA18 (5)

Names:
Introduction

Types:
study

fifty thousand population unless he finds that such projects are based on a continuing comprehensive transportation planning process carried on cooperatively by States and local communities in conformance with the objectives stated in this section."

Under date of May 3, 1968, designated guidelines for the development of the continuing aspect of the transportation planning process were issued by the Bureau of Public Roads. Within these basic guidelines, the plan for the continuing planning operations is developed.

Three planning requirements are stated emphatically in the 1962 Federal-aid Highway Act. These are (1) continuing planning, (2) comprehensive planning, and (3) cooperative planning.

In order to comply with the continuing aspect, this plan of operation is developed for the purpose of setting forth the responsibilities of all parties, defining insofar as practical these responsibilities, and establishing a schedule of when the required activities are to be performed.

There are ten basic elements required for a transportation planning process to be comprehensive. These are:

(1) Economic factors affecting development
(2) Population
(3) Land Use
(4) Transportation facilities including those for mass transportation
(5) Travel patterns
(6) Terminal and transfer facilities
(7) Traffic control features
(8) Zoning ordinances, subdivision regulations, building codes, etc.
(9) Financial resources
(10) Social and community value factors

Beginning in late 1964, and continuing through 1965 and 1966, the basic elements listed above were extensively inventoried, analyzed, and reported. From this analysis the comprehensive transportation plan was developed.

The development of this plan was the cooperative effort of the City of Huntsville, Madison County, the Town of Madison, and the Alabama Highway Department, all in cooperation with the Bureau of Public Roads.

Therefore it follows that the three basic requirements referred to above have been met, but only initially.

It is of paramount importance that the tools developed in the base study, those tools which are available for development during the continuing phase, be utilized to their fullest extent for providing a factually based plan to those officials who are legally empowered to implement the plan.

4A18 (5)

Names:
Study Basic Elements

Types:
study

CHAPTER II

ORGANIZATION

In order for the continuing planning process to be fully effective, it is necessary that a Policy Committee be formed for the purpose of providing policy guidance for the study. These persons on the Policy Committee should have a knowledge of community activities, and because of their respective positions in the community structure, should contribute greatly to the implementation of the plan.

Policy Committee

The Policy Committee members are designated by office rather than name, since from time to time changes in officeholders will occur. These members are as follows:

Mayor of Huntsville
Madison County-County Chairman
Huntsville City Engineer
Mayor of Madison
Madison County Engineer
Division Engineer--Alabama Highway Department

In addition to the responsibility for providing policy guidance for the study, this committee is responsible for presenting the study progress and study findings, providing administrative support to their respective agencies, and providing public support through public meetings and other appropriate dissemination of information. Predicated on the premise that the Policy Committee is directly responsible for the implementation of the Transportation Plan, it follows that the Policy Committee must also concur that the plan recommendations are compatible with and in conformance with the goals and objectives of the area.

The Policy Committee is to be responsible for the following aspects of the plan:

(1) To design and set goals and objectives of the planning process and plan.

(2) To give advice regarding development or re-development occurrences transpiring in the study area.

(3) To review and advise relative to proposed changes in transportation planning concepts.

HA18 (5)

Names:
Organization of Study Policy Committee

Types:
study

(4) To review results of surveillance items and make recommendations relative to re-evaluation of surveillance items and other parameters.

(5) To serve as liaison representatives between governmental units in the study area in order to obtain optimum cooperation of all governmental units in providing information and in implementing various elements of the plan.

The Policy Committee is to meet at least once each year or as development dictates for the purpose of reviewing the plan and actions which may materially affect the plan and its implementation. A regular meeting date should be set by the Policy Committee for an annual meeting, and provision should be made for called meetings, if necessary.

The Technical Committee

The purpose of the Technical Committee is to provide technical assistance in the various planning elements which comprise the comprehensive planning process. The Technical Committee is listed below according to title of position and the agency that position holder represents.

Director of Planning
Huntsville City Planning Commission

Traffic Engineer
City of Huntsville

Clerk-Treasurer
City of Huntsville

City Attorney
City of Huntsville

Airport Manager
Huntsville-Madison County Airport

Federal Aviation Agency Representative

County Engineer
Madison County Courthouse

Engineer of Public Works
City of Huntsville

Mayor
Madison, Alabama

Chief, Engineering Division
Redstone Arsenal

Deputy Chief
Engineering Division
Redstone Arsenal

Division Engineer
First Division
Alabama Highway Department

Director
Model Cities Office
City of Huntsville

HA18 (5)

Names:
Technical Committee

Types:
study

Assistant to Deputy Director
Marshall Space Flight Center
NASA

Manager
Huntsville Transit, Inc.

Urban Planning Engineer
Alabama Highway Department

Non-Voting Members

District Engineer
Bureau of Public Roads
U.S. Department of Transportation

Planning & Research Engineer
Bureau of Public Roads
U.S. Department of Transportation

The Technical Committee is to be responsible for the following aspects of the planning process:

(1) Maintain inventories of current data used as input to the planning process.
(2) Analyze data collected and prepare reports of findings.
(3) Review and advise relative to proposed changes in transportation planning concepts.
(4) Review proposed improvements and make recommendations to policy makers and governmental officials relative to these proposed improvements.

The Technical Committee is to meet at least twice each year or as development dictates.

The Director of the Huntsville City Planning Commission is the designated chairman of this committee and is vested with authority to call the meetings of this Committee at any appropriate time and place.

Huntsville-Madison County
Chamber of Commerce Highway Committee

A Committee made up of public, spirited citizens interested in the overall development of the area should be established. The function of this Committee is to:

"Serve as a spear head for public support of the plan. Whether the improvement plan will stand or fall will depend largely upon the degree of understanding and acceptance generated among the local citizens."

In addition, the members of this Committee can contribute information and data that are useful in the analysis to be performed during the continuing phase. The Committee can render invaluable assistance in an advisory capacity to both the Policy Committee and the Technical Committee.

HA18 (5)

Names:
Chamber Highway
Committee

Types:
study

The Huntsville-Madison County Chamber of Commerce Highway Committee is to consist of 29 members. The members of this Committee are listed below.

Harry L. Pennington, Chairman
Huntsville Lumber Company
809 Shoney Driver
Huntsville, Alabama

Jimmy Horton, Co-Chairman
Horton Oil Company
902 Wheeler Avenue
Huntsville, Alabama

Loyd H. Little, Director
State National Bank
P. O. Box 127
Huntsville, Alabama

Louis Salmon, Attorney
7th Floor
Terry Hutchens Building
Huntsville, Alabama

Guy Spencer, Jr.
Alabama Oil Company
120 Woodson Street
Huntsville, Alabama

A. Warren
Business Manager
Oakwood College
P. O. Box 97
Huntsville, Alabama

Alvin Blackwell
G. W. Jones & Sons
P. O. Box 407
Huntsville, Alabama

Elwyn Reed
Reed-Mullins & Associates
117½ Green Street
Huntsville, Alabama

Tommy A. Harvey
Brown Pipe Company
P. O. Box 3119
Huntsville, Alabama

C. B. Miller
Miller & Berry Incorporated
3505 8th Avenue
Huntsville, Alabama

William Childress
First Federal Savings & Loan Asso.
P. O. Box 448
Huntsville, Alabama

E. C. Meyer
GMAC
532 Madison Street
Huntsville, Alabama

Roy Blair
J. E. Sandlin Hardware Co.
149 Leeman Ferry Road
Huntsville, Alabama

HA18 (5)

Names:

Blackwell, Alvin
Blair, Roy
Chamber Highway Committee
Childress, William
Harvey, Tommy A.
Horton, Jimmy
Little, Loyd H.
Meyer, E. C.
Miller, C. B.
Pennington, Harry L.
Reed, Elwyn
Salmon, Louis
Spencer, Guy, Jr.
Warren, A.

Types:

study

Hugh A. Smith
P. O. Box 3190
Huntsville, Alabama

David Byers
Byers Nursery
7002 North Memorial Parkway
Huntsville, Alabama

Charles Cummings, Jr.
Cummings Agency
P. O. Box 57
Huntsville, Alabama

W. Russell Moose, Jr.
W. Russell Moose Insurance Co.
P. O. Box 82
Huntsville, Alabama

C. H. Hicks
C. D. Hicks Construction Co.
P. O. Box 527
Huntsville, Alabama

James E. Abernathy
Vulcan Materials Company
P. O. Box 1455
Huntsville, Alabama

Cecil Ashburn
Ashburn & Gray, Inc.
P. O. Box 921
Huntsville, Alabama

John A. Rodenhauser
Rodenhauser Real Estate
104 Westchester Avenue
Huntsville, Alabama

R. G. Davis
Intertech Research Service
2809 Governors Drive
Huntsville, Alabama

Arnold R. Beckhardt
TBM Federal Systems
P. O. Box 1250
Huntsville, Alabama

Hon. Joe W. Davis, Mayor
Municipal Building
Huntsville, Alabama

Charles H. Cummings, Sr.
Cummings Bonded Warehouse
2308 Meridian Street
Huntsville, Alabama

Billy Laxson
Conner & Company
3611 South Memorial Parkway
Huntsville, Alabama

Col. William T. McClary
Assist. for Operations and
Sec. DASO
Redstone Arsenal
Huntsville, Alabama

R. B. Gillette
Division Engineer
Bureau of Public Roads
Montgomery, Alabama

HA18 (5)

Names:

Abernathy, James E.
Ashburn, Cecil
Beckhardt, Arnold R.
Byers, David
Cummings, Charles H., Sr.
Cummings, Charles, Jr.
Davis, Joe W., Mayor
Davis, R. G.
Gillette, R. B.
Hicks, C. H.
Laxon, Billy
McClary, William T.
Moose, W. Russell, Jr.
Rodenhauser, John A.
Smith, Hugh A.

Types:

study

Ed Sebastian
Post Engineer
DASO
Redstone Arsenal
Huntsville, Alabama

Woolsey Finnell
City Engineer
Municipal Building
Huntsville, Alabama

Program Goals and Objectives

It is of paramount importance to the Huntsville area that the continuing planning process be maintained at a proficient level of service. This is dictated by the changing economy, land use, and other environmental factors which influence the travel patterns in the area. The continuing planning process, a prerequisite to obtaining Federal-aid funds for public improvements, is a necessary tool for the public administrator charged with investment of public funds in reaching a sound decision relative to public improvements which are to be implemented.

In order to provide the basis for a continuing plan, a transportation study was conducted in 1965. However, since urban areas are constantly changing, it is necessary to establish a procedure for maintaining current planning data. Therefore, it is the primary objective of the Alabama Highway Department and the governmental agencies of the Huntsville area, working jointly in cooperation with the Bureau of Public Roads, Department of Transportation, to provide adequate current planning data on a continuing basis. When this objective is accomplished, the necessary information for planning transportation facilities on a continuous basis will be available at all times.

Study Director

The Director of the Huntsville City Planning Commission and the Urban Planning Engineer of the Alabama Highway Department are appointed by their respective agencies.

The Chairman of the Technical Committee (Director of the Huntsville City Planning Commission) will be responsible for the overall general guidance of the continuing planning activities.

In addition, the Chairman will be directly responsible for coordination at the local level of all data collection for those elements of the study which are the responsibility of the local area.

These elements are as follows:

HA18 (5)

Names:
Program Goals and Objectives

Types:
study

(1) Economic factors affecting development

(2) Population projections

(3) Land use data

(4) Transportation facilities (Mass transit facilities only)

(5) Traffic control features

(6) Zoning ordinances, subdivision regulations, building codes, etc.

(7) Financial resources

(8) Social & community value factors

(9) Annual Report

The Urban Planning Engineer of the Alabama Highway Department will be responsible for coordinating the collection of any data and analysis of data involving the following elements:

(1) Transportation facilities (Highway facilities only)

(2) Travel patterns

(3) Terminal facilities

In addition, he will be responsible for coordinating with the Chairman of the Technical Committee the data collection analysis and reporting performed by the State. He is further responsible for providing the necessary feedback analysis and reports to the Chairman of the Technical Committee.

General Functions and Financing

The general functions of the two agencies involved designated as key personnel have been outlined above. Due to staff limitations of various levels of government involved, which are directly concerned with the detail workings of the study, a full-time staff is not exclusively assigned for the continuing study. The actual work-load for the Alabama Highway Department will be assigned by the Bureau of Urban Planning, while the work of the City of Huntsville will be assigned by those professional staff people engaged by the city and other governmental units involved. No new function of work is involved, but the work is expanded and becomes a part of a competent completion of assigned plan activities. In delegation of the duties to the respective entities, no restriction is placed on their utilizing the services of other governmental units, governmental agencies, departmental units, boards, or consulting firms.

HA18 (5)

Names:
General Functions & Financing

Types:
study

There is no exclusive funding for the continuing operation, and therefore it follows that the contributing agencies will assume full financial responsibility for the functions to be performed. This should not be construed as restricting either agency in any way from acquiring or obtaining by grant or otherwise any financial assistance from other agencies.

The continuing operation will be carried on under the agreement executed between the City of Huntsville and the Alabama Highway Department on September 3, 1963. The intent of that agreement must be recognized, and the study must recognize a degree of flexibility and mutual cooperation in order to provide for and carry out the intent of that agreement.

HA18 (5)

Names:
Funding

Types:
study

CHAPTER III

COMPLETION OF THE BASE STUDY

The ten basic elements necessary in the Comprehensive Transportation Planning Process have previously been referred to in the Introduction. A description of these elements, the status in the continuing planning process, and corrective measures for the base year study deficiencies are discussed in this chapter.

Economic Factors

Economic factors measure the total change in the level of economic activity in the study area from the present to the forecast year. These factors not only measure the growth of the area but also are directly related to the trip making capability of the area. Economic factors are such items as labor force, employment, income, and vehicle ownership.

These data are required at two levels of geographic detail, namely, the entire study area and individual traffic analysis zones.

The economic data have been collected and analyzed for the base year and forecasted for the year 1985.

Population

Population forecasts along with economic forecasts are the underlying ingredients required for estimating future land use and travel demands that will be placed upon the transportation system. The number of people and the employment are major determinants of trip making capabilities.

Like economic data, population data are required at two levels of geographic detail. These are the entire study area and in each traffic analysis zone.

The population data for the base year and for the projected year of 1985 has been completed.

HA18 (5)

Names:

Completion of Base Study
Economic Factors
Population

Types:

study

Land Use

The land use study is for the purpose of providing an accounting of the current land use structure of the entire study area. It is necessary to have a forecasted land use which will accommodate the forecasted population and economic activity. The land use provides for the location of activities including the intensity of use and is the primary determinant in geographic distribution of activities within the study area.

The land use inventory and analysis has been completed for the base year and forecast of land use activity has been made for the year 1985.

Transportation Facilities

The inventory of existing transportation facilities provides information pertaining to the physical features and operational characteristics for each segment of the major street system and collector streets. These features include right-of-way width, roadway width, parking regulations, traffic control regulations and devices. Also included is a measure of the speed at which the traffic moves at different volumes, along with information relative to the frequency and location of accidents.

Since the base study, the City of Huntsville has developed a system of providing data for accident analysis. It is planned to take advantage of this data bank in future analyses.

The inventory of the transportation facilities will need to be updated, and it is planned for this work to be accomplished. This phase will be discussed in Chapter IV.

The study of travel patterns includes the development of two mathematical models. One model is for the trip distribution and one model is for trip generation. Huntsville is not considered large enough to warrant a modal split of trips.

The department plans to re-evaluate the base study as well as the trip distribution and generation models. This work will be performed by the Alabama Highway Department with its own forces at its own expense.

Travel patterns for the base year have been defined and forecasted for the year 1985. It is considered that the above mentioned re-evaluation is warranted and will provide for a more efficient means of maintaining the travel patterns in the continuing phase.

Terminal and Transfer Facilities

A parking study of the Central Business District was conducted for the base year and a forecast of parking needs was made for the year 1975.

HA18 (5)

Names:
Land Use
Terminal and Transfer Facilities
Transportation Facilities

Types:
study

It is not considered that any other area warrants further analysis of this type; however, the Central Business District parking requirements and forecast are to be maintained in the continuing process.

Traffic Control Features

The study of traffic control features is concerned with the operational improvements which can be accomplished with a minimum investment of funds to obtain a substantial increase in capacity of the existing system.

A TOPICS Study in the Huntsville area was completed in 1969; therefore, the inventory of traffic control features is considered to be current with a few exceptions, and as the TOPICS improvements are made, these will require adjustments accordingly.

Financial Resources

Following development of the transportation plan, an analysis of financial resources was compiled and reported by the Alabama Highway Department.

The financial capabilities to implement the recommendations of the transportation plan are considered to be the most important aspect of the planning process.

The aforementioned fiscal evaluation was a part of the base study and this element is complete.

Social and Community Values

The continuing operations plan will make effective the physical implementation of the urban transportation plan. The construction of more roads and highways will solve the problem of transporting people and goods from place to place but the effect of these highways upon the way of life of the community must be considered. An effort must be made to locate and design highway facilities to be cohesive instead of separating forces.

The highway system is part of a many faceted attempt to better the living environment of the community. The desires of any community as to the best living environment will vary according to its residents. Determining and establishing the goals for the community will be a difficult task in any social and community value consideration. Generally, the physical, social and cultural elements which are vital to community and individual well being are considered.

The possible effect of any new highway features on the community and its residents must be

HA18 (5)

Names:
Financial Resources
Social Values
Traffic Control Features

Types:
study

considered. An analysis to determine which of several possible alternates will give the greatest return, similar to a benefit-cost analysis, can be used. A community must not inadvertently sacrifice its dwindling open space. There should always be provision for the protection of valuable landmarks, parks, and wildlife. The community must maintain these civilities to insure its continued viability.

Subdivision Regulations

The Subdivision Regulations specify the methods and improvements necessary to subdivide or resubdivide land in the community. The most important provision, as related to transportation planning, is street right-of-way, pavement type and pavement width. Most subdividing is for residential purposes and these subdivisions provide the normal service and collector roads which feed arterial routes.

Additionally, where a major road is defined by an adopted Major Street Plan, and where that street is adequately described, the Planning Commission can prohibit the development of a subdivision in the planned route and may require the dedication of the right-of-way for such planned street. The important correlation between these regulations and transportation planning is obvious.

Zoning Ordinance

The Zoning Ordinance is one tool used to implement the Land Use Plan. Zoning specifies use of land, density, lot coverage, packing requirements and other use-of-land characteristics.

Changing needs often are reflected by changes in the Zoning Map or text of the Zoning Ordinance. These changes are considered on a continuing basis by the Planning Commission and, where warranted, are recommended to the City Council for official action.

Zoning can have a special impact on a road network and on segments of a road. Too often zoning or rezoning of an area of the City improperly eventually permits a resultant decrease in capacity of the frontage road, increase accident points, increases traffic demand and other, often undesirable, characteristics.

Building Codes

Building codes are devices used to insure a minimum structural and mechanical capability in the construction of new buildings or renovations.

The requirement of a permit prior to engaging in the various construction components will provide us with some of the basic information needed to keep the land use up-to-date.

HA18 (5)

Names:
Building Codes
Subdivision Regulations
Zoning Ordinance

Types:
study

The data will be utilized on both a study area level and on a block-by-block and traffic zone level to provide another segment of needed information in the transportation planning process.

Summary

It may be concluded from the above that the basic elements are generally complete; however, there is a substantial amount of work to be accomplished in the continuing planning process.

This work includes updating and forecasting of economic factors, population, land use, updating of the inventory of transportation facilities, terminal and transfer facilities, traffic control features, and allied data.

HA18 (5)

Names:
Data Usage Summary

Types:
study

CHAPTER IV

SURVEILLANCE

The concept of surveillance as intended in this operation plan is a systematic collection of data on a continuing basis and the analysis of these data for the purpose of reflecting the growth of the entire area and any sub-areas. This growth is to be compared with that which was forecasted in the development of the recommended plan or any subsequent modified plan. The methods used in the surveillance will provide the necessary inputs from which forecasted projections may be updated at periodic intervals.

To facilitate detailed study and evaluation of the data, the study area was divided into 117 internal zones. In the analysis it is necessary to consider the external stations or those points where highways cross the study area boundary as a zone. These are referred to as external stations. Each zone is assigned a consecutive number.

Shown in Figure 5 on Page 43 is a map which depicts the traffic zones, the external stations, and the study area boundary. If during the continuing phase it is found necessary to sub-divide any of these traffic zones, this may be done and will present no problem in the analysis of travel patterns.

Traffic Surveillance

A comprehensive system of traffic counting has been underway by the Alabama Highway Department in the Huntsville Study Area since 1966. Depicted in Figure 1 on Page 15 are the locations where these traffic counts were taken.

At the external stations or on all roads entering the study area at the study area boundary, hourly traffic machine counts using portable counters were taken for one week during the spring and one week during the summer of 1966. These counts were repeated again during the winter and summer of 1967 and winter, spring, summer, and fall of 1968.

The counts, referred to above, were adjusted to Average Daily Traffic by factors de-

HA18 (5)

Names:
Surveillance of Data Traffic Surveillance

Types:
study

veloped from urban key stations counted by the Alabama Highway Department for several years on a seasonal basis.

Depicted in Figure 5, Page 41, traversing the study area in a north-south direction along the L&N Railroad is located the screen line. The purpose of this screen line was to serve as a basis for checking the accuracy of the Origin-Destination data collected in the base study. By obtaining the traffic volumes crossing this screen line, this will be one method of monitoring travel growth and maintaining surveillance.

The counting methods used on the screen line through 1968 were very similar to the methods used for the external cordon line counts as previously described.

The counting methods for 1969 forward at the external and screen line stations will be discussed in a later paragraph.

In addition to the machine traffic counts, manual classification counts by hour period, are made for a duration of sixteen hours (6 A.M. - 10 P.M.) on an average of once every four years. Additional manual counts at intersections on the street system are made as needed.

A blanket traffic count of the street system is maintained on an annual basis. The blanket counts are made with the K-Hill type cumulative counters, placed at as many locations on the street system as possible during the year. These counts are adjusted to Average Daily Traffic by the same method described above for the external and screen line counts.

Beginning January 1, 1969, twelve (12) traffic control counting stations were selected by street system. Four control stations were located on major state routes, four on other major streets, and four on the collector streets. The control stations are counted for a duration of seven consecutive days once each month. A monthly factor is developed and used to adjust the blanket counts to Average Daily Traffic.

The external stations as well as the screen lines are now counted as blanket stations. They are counted at least one time during the year for not less than 48 hours and adjusted to Average Daily Traffic by the same method used for the blanket counts.

One permanent traffic recording station (Automatic Traffic Recorder) is located on Memorial Parkway near the intersection of Memorial Parkway and the Lee Highway. This station has been in continuous operation since July of 1961.

Three additional Automatic Traffic Recorders are to be installed at control stations early in 1970. These continuous recorders will be located on (1) Whitesburg Drive south of Drummond Road, S.W. (2) Bob Wallace Avenue west of 1st Street, S.W. and (3) Springfield Road east of Sheron Road.

HA18 (5)

Names:

Huntsville Area Study
Transportation Traffic Counts

Types:

study study cover

Since the Automatic Traffic Recorders are continuous counts, it will be possible in addition to developing a monthly factor to develop daily factors and peak period factors.

A total of twelve (12) control stations are presently being counted in the Huntsville Study Area on a monthly basis. During 1970 four of these stations will be counted on a continuous basis with Automatic Traffic Recorders.

The analysis of the traffic surveillance will include comparisons of traffic on the major and collector street system with estimated traffic from the trip generation equations. Existing economic and land use data will be used as input to the trip generation equations. Comparisons of the growth of travel crossing the study area boundary along with that crossing the screen line will also be made. The analysis of the traffic surveillance is the responsibility of the Alabama Highway Department.

The estimated time and annual costs requirements for the traffic surveillance are tabulated below.

Salaries and Travel	$ 8,000.00
Equipment	3,645.00
Total	$11,645.00

Man Days -- 192 days

Street and Highway Inventory

Improvements to the major street and collector street system will be monitored through an annual review of improvements which will update the system inventory.

This review will include all improvements to the roadway made by the county, the cities involved, and the Alabama Highway Department. Information will include the location of the improvement, width of travel ways, width of right-of-way, control of access, parking restraints or provisions, median widths and turning lanes with appropriate widths along with costs of the improvement separated into right-of-way cost and construction cost.

A comparison of the improvements with the laneage recommended in the plan will be included. When laneage deviations occur, these will be noted with respect to the significance of these to the plan or to the development.

A second and very important phase of the inventory will include the intersection characteristics. These include geometric configuration and signalization characteristics. This latter data is most beneficial for input to the computer program "CAPINTR", revised Signalization Capacity Program. This capacity program will provide the capacity data needed for analysis of the existing system in order to measure its capabilities of meeting the forecasted demand. The Alabama Highway Department will be responsible for the collection of this

HA18 (5)

Names:
Street and Highway
Inventory

Types:
study

data in cooperation with the local agencies involved and will be responsible for the processing of the computer program.

The estimated time requirements and associated costs are as follows:

Responsibility	Man Days	Cost
Local Area	65	$2,015
State	73	2,850

Land Use Surveillance

A constant surveillance of land use change will be maintained for the purpose of determining the extent and nature of land use changes.

The 1965 land use data is in tabular form by traffic zones and also depicted in map form.

The City of Huntsville plans to establish a new system of computer punch cards which will contain land use information on a block basis. When this system is established, this will then provide the flexibility of aggregating land use information to any zonal configuration that is considered warranted for analysis.

Within the city limits, land use will be updated by utilizing zoning, building permits, demolition permits, and subdivision regulations and plats.

For that area between the city limits and the study area cordon which is rather sparsely settled and developed, the land use will be updated utilizing building permits, demolition permits, and subdivision regulations and plats.

For other areas involved, which are sparsely settled, aerial photographs will be obtained from the Department of Agriculture, as available (approximately every five years), and utilized in monitoring land use activities for these areas.

Land use variables will be furnished to the State in tabular form along with maps and charts, as necessary. The local area will be responsible for furnishing the land use information. This information is to be furnished for a five-year and a 25-year forecast by traffic zone.

The collection, analysis, and forecast of the land use data are to be the responsibility of the local area. The State will assist in providing computer tabulations in the event such need arises.

HA18 (5)

Names:
Land Use
Surveillance

Types:
study

The estimated time requirements and associated costs are as follows:

Responsibility	Man Days	Cost
Local Area	49	$2,270*
State	2 Hours (CPU Time)	300

*This cost does not include initial data collection.

Socio-Economic Surveillance

Population, as referred to in the transportation study, includes total population within the area who is afforded the opportunity of making trips either in a capacity as auto driver or auto passenger. To adequately review and project population trends, population size, composition, density, and distribution must be considered in the analysis.

A basic source of information will be the 1964 special census for the Huntsville standard metropolitan statistical area and the 1970 census. The Alabama Highway Department, in cooperation with the Bureau of Census, is developing an Address Coding Guide for the Huntsville area. With the development of the Address Coding Guide, the tools will be available for aggregating census data by traffic zones or modifications thereof. The local area plans to obtain from the Census Bureau the computer tapes of the 1970 census and then extrapolate resident population by traffic zones from block counts of the census record. Average persons by dwelling unit can be determined from the population counts and dwelling unit counts which will be maintained as a part of the economic factors affecting development.

School enrollment will be obtained from the Board of Education. This will provide an indication of growth of the area and a measure of activity in zones which contain school plants of significant enrollment.

School enrollment here is considered to be the number of students attending schools in each traffic zone. A study of the average daily attendance for the past 12 years has been initiated by the local area. This study will be continued on a yearly basis. A review of live birth records for the past 18 years is also included in the study. Information on survival rates as well as immigration of school children into the area will be revealed.

This population will be presented in text, tabular, and graphic forms indicating the present population status and projected trends for the next five-year and 25-year period. The local area will be responsible for the collection, analysis, and reporting of this data.

Estimated time requirements and annual associated costs are as follows:

HA18 (5)

Names:
Socio-Economic
Surveillance

Types:
study

Responsibility	Man Days	Cost
Local Area	21	$982

Dwelling unit counts by traffic zones will be maintained by utilizing punch data cards obtained from the Huntsville Utility Department. These cards contain all water connections within the city limits. Annual updating of these cards will give a listing of dwelling units by traffic zones. A dwelling unit count in the area between the city limits and the cordon line will be maintained from the electric meter cards which are available from the Huntsville Utility Department.

The collection of this information will be the responsibility of the local area.

Since it is anticipated that this information can be obtained within routine operations, there is no cost for this operation shown herein.

One of the basic economic factors found in the base year study is automobile ownership. To a degree, automobile ownership reflects income of an area. The Alabama Highway Department will provide records of ownership which will indicate the ownership by city and county. From these records, automobile ownership will be factored. All data will be reported by traffic zones on an annual basis.

The responsibility of factoring the data will rest with the local area.

The estimated time requirements and annual associated costs are as follows:

Responsibility	Man Days	Cost
Local Area	20	$1,000

Employment data include employment stratified by white collar and blue collar. The employment data are to be developed by zones and is the location of the employee's place of work.

Zonal estimates of existing employment will be made for those zones of concentrated high density employment by requesting the large employer firms to provide this information. The success of this will depend upon the cooperation of the data source.

Redstone Arsenal will also be requested to provide employment data; however, it has to be realized that there may be certain restrictions on this governmental agency relative to making such information available.

All employment information available will be requested from the Alabama Department of Industrial Relations. This information will be utilized to its fullest extent in allocating employment to the traffic analysis zones.

The local area will be responsible for the collection and analysis of this data.

The estimated annual time requirements and associated costs are tabulated below.

HA18 (5)

Names:
Cost Estimates

Types:
study

Responsibility	Man Days	Cost
Local Area	20	$1,000

Transit Surveillance

All of the transit service is now operated by Huntsville Transit, Inc., whose central office is located in Anniston, Alabama.

During February of each year the following information will be obtained from Huntsville Transit, Inc.:

(1) Number buses required for peak service, off-peak service, school service, and spares.
(2) Total regular passengers. Total school passengers. (Listed by month.)
(3) Total revenue miles regular service. Total revenue miles school service. (Listed by month.)
(4) Route map (regular service) showing any additions or deletions.
(5) Route map (school service) showing any additions or deletions.
(6) Fare changes which may have occurred during previous year.
(7) Schedules for each route showing headways for each route.
(8) A brief survey to determine if transit could be utilized to a greater degree in certain areas.

The local area will be responsible for collection of the information listed above.

The estimated annual time requirements and associated cost are tabulated next.

Responsibility	Man Days	Cost
Local Area	2	$100

Accident Data Surveillance

Since 1966, the Huntsville Police Department has been recording and transcribing data from traffic accident reports to punch cards for use in data processing.

In 1967 the Traffic and Parking Department of the City of Huntsville developed a computer program to summarize the aforementioned data. The purpose of this summary is to provide guidance in determining priorities for traffic control improvements, and to measure the effectiveness of traffic control changes.

The information is output in two principal formats.

The first format is a series of tables providing the following information:

(1) Top 100 intersections vs. number of accidents/year.
(2) Top 25 intersections vs. contributing circumstances.
(3) Top 25 intersections vs. driver residence.
(4) Top 25 intersections vs. accident type.

HA18 (5)

Names:
Accident Data Surveillance
Transit Surveillance

Types:
study

(5) Top 25 intersections vs. hour of day.
(6) Top 25 intersections vs. road/light conditions.
(7) Hour of day vs. contributing circumstances-all accidents.
(8) City wide percentages of accidents vs. road/light conditions.
(9) City wide percentages of accidents vs. driver residence.

A second format is data output in a series of profiles in which all accidents are shown individually, in geographic order along each street in the city.

The first profile is a general profile showing all accidents. The second profile is a profile of all pedestrian accidents. The third profile is a listing of all accidents where vehicles struck fixed objects. The fourth profile is a listing of all accidents. The fifth profile is a listing of all parked car and driveway oriented accidents.

This information has become invaluable to the city in many ways. Some specific uses of this information are listed below:

(1) Each year all requests for additional signalized intersections are studied from an accident warrant.
(2) Major intersections are analyzed in detail to determine indications of traffic control needed changes.
(3) Citizen's complaints regarding slippery streets are checked out to determine priorities for pavement resurfacing.
(4) Citizen's requests for additional street lighting are studied from an accident warrant.
(5) Exaggerated claims from emotional citizens of extraordinarily dangerous intersections are squelched.
(6) Evaluation of traffic control or operational changes is possible.

The city uses a standard accident report form identical to that recommended by the National Safety Council, and the computer could be applicable to all governmental jurisdictions using the aforementioned form.

Each year improvements in the data output are investigated and explored.

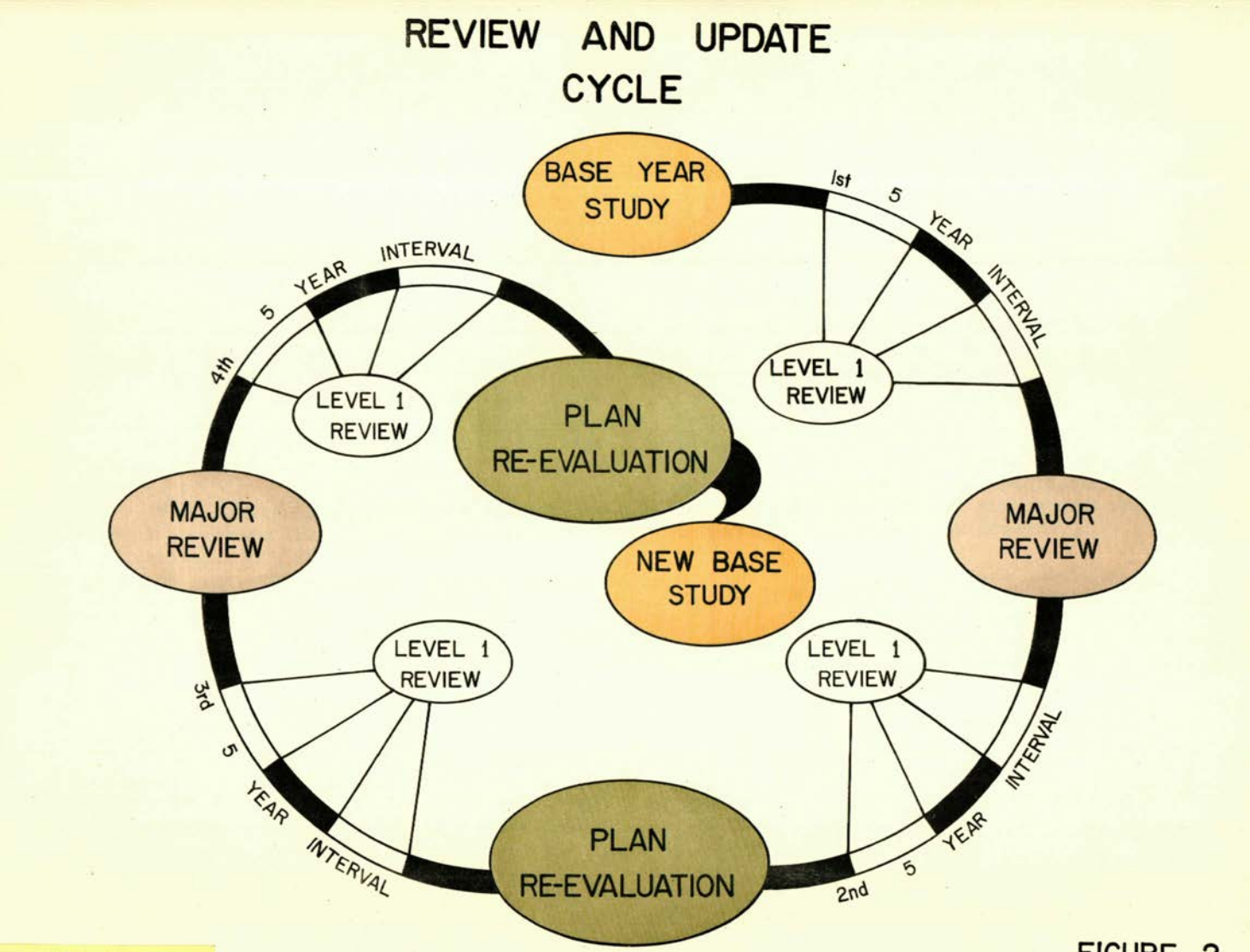
In addition, the city has developed a program for traffic enforcement analysis which indicates the number of summaries and profiles. It is considered that high enforcement areas are indications of a less than desirable traffic engineering environment, and these profiles and summaries are used in determination of the traffic control needs and the evaluation of the performance of individual traffic officers.

This is an on-going operation of the city's, and therefore, no annual associated cost is included for the continuing phase of this operation.

HA18 (5)

Names:
Study Elements

Types:
study



Names:
Flow Chart of Cycle

Types:
study

CHAPTER V

REVIEWS AND UPDATES

In order that a systematic approach may be established relative to a continuous planning operation, three levels of review are needed. Depicted in Figure 2 on the previous page, the reviews required at the various time intervals are given.

The reviews are divided into three categories. These reviews are to be accomplished during the year following the base study.

The first category is a routine or Level 1 review which consists of an annual surveillance of economic factors, land use changes, growth patterns, and traffic flow. If this review reveals a significant change in traffic flow, a more detailed analysis is warranted.

The second of these reviews consists of the "major review", which review is to be made at a minimum of 5-year intervals. This review consists of an evaluation of the ability of the entire travel forecasting process to assimilate actual travel. Trips developed from the trip generation analysis are assigned to the existing network system, and the assigned volumes compared to actual growth counts. If there are inconsistencies which are significant, then it may be necessary to collect additional travel data and make adjustments to the distribution and forecasting mathematical models. Application of revised forecasted trip desires assigned to the recommended plan would then need to be performed. Following this, it would be necessary that a network analysis be conducted for the purpose of determining the adequacy of the recommended plan to satisfy the forecasted demands.

This review is to also include an updating of the priority program listing.

The third type of review is a plan re-evaluation which is to be performed at least every other 5-year interval or 10-year period.

The re-evaluation of the plan is to include all of the aforementioned analyses performed in the major review process along with re-consideration of the planning goals and objectives of the local area.

HA18 (5)

Names:
Reviews and Updates

Types:
study

A review of the economic factors and forecast, a review of the land use forecast, and a comprehensive network analysis are to be performed. For an area the size of Huntsville, it is not considered that a re-examination of the role of mass transit is warranted unless there are radical changes in mass transit development which would necessitate this re-evaluation.

The plan re-evaluation is to include parking and land use densities along with a re-study of the financial resources available to finance the needed improvements.

In addition, a re-evaluation of the priorities of the program to be implemented is also to be accomplished.

An examination and updating of the technical procedures employed is to be made in view of the continually advanced development of land use planning technology.

The forecast of land use and socio-economic data through the forecasted year is the initial step in the major review and plan re-evaluation. Due to the time element involved in the development of detail design plans, it is considered advantageous that the 25-year forecast date be utilized at all times. The land use and socio-economic data, which are required for the two geographic areas (namely, traffic zones and the entire study area), are as follows:

Automobiles
Population
Dwelling Units
White Collar Labor Force
Blue Collar Labor Force
White Collar Emp.
Blue Collar Emp.
School Enrollment
School Attendance
Retail Area, Conv. (Sq. ft. floor area)
Retail Area, General (Sq. ft. floor area)
Commercial Area, Conv. (Sq. ft. floor area)
Commercial Area, General (Sq. ft. floor area)
Industrial (Sq. ft. floor area)
Recreational Attendance

The socio-economic data and land use data are to be updated and forecasted as soon as the 1970 Census data is available. These data will then be used as input to the trip generation equations. Existing synthetic trip data and forecasted trip data will be developed, and these data distributed by use of the Gravity Model. These trips will then be assigned to the existing and recommended plan respectively.

The existing system will be analyzed for the purpose of determining the reliability of the trip generation equations to adequately represent changing conditions between the base year study and this point in time.

Assuming this analysis proves satisfactory, the forecasted trip desires will be assigned to the recommended plan, and the recommended plan evaluated to determine its capability of adequately meeting the forecasted traffic demand, goals, and objectives.

4A18 (5)

Names:
Economic Factors

Types:
study

The estimated time requirements and associated costs for each major plan review are tabulated below:

Responsibility	Man Days	Cost
Local Area	60	$ 2,600
State	80	20,000*

*Includes computer costs.

4A18 ⑤

Names:
Estimated time and cost

Types:
study

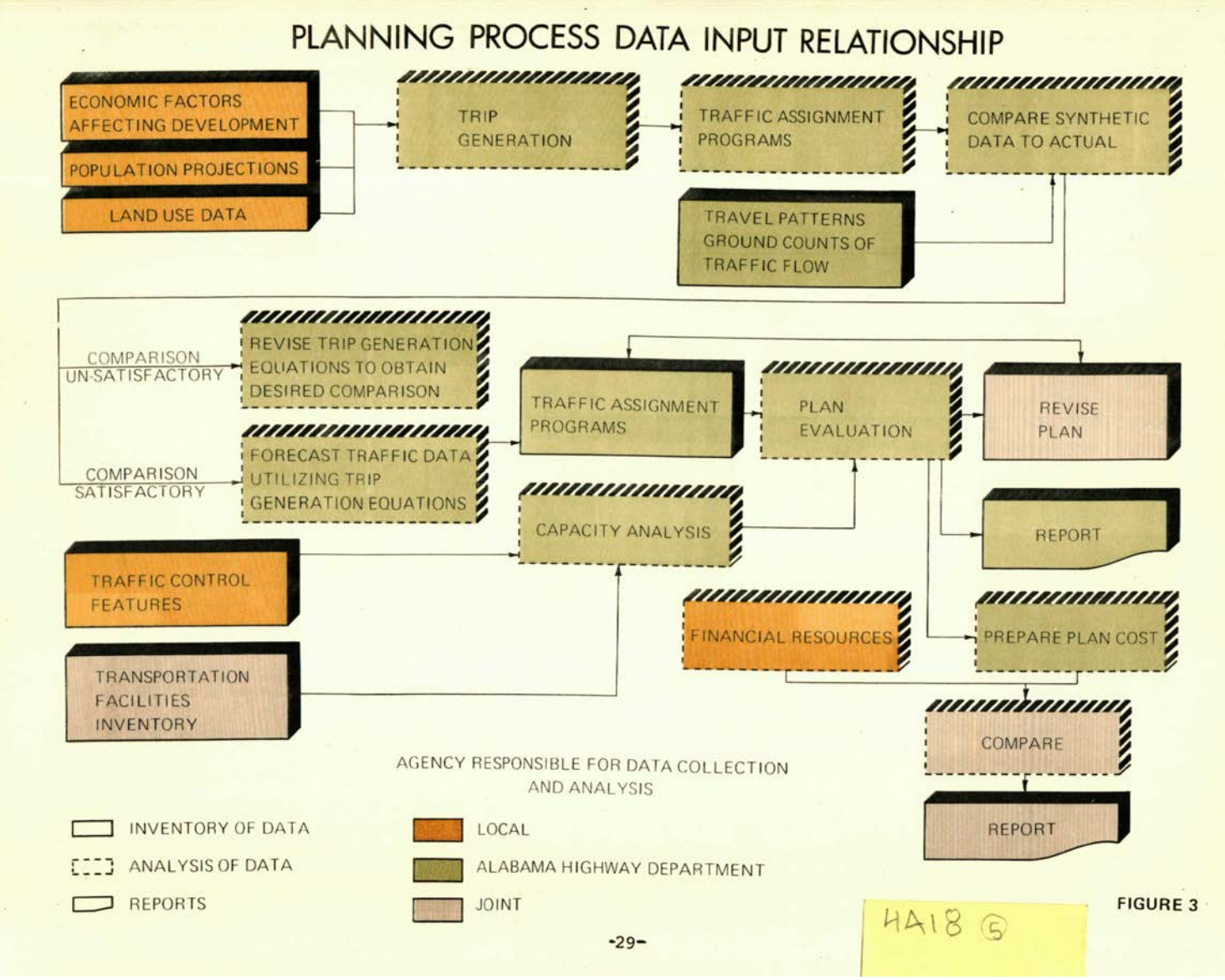


FIGURE 3

Names:
Data Input
Relationships

Types:
study

CHAPTER VI

PROCEDURAL DEVELOPMENT

Generalized Procedure

Previously in the report, reference has been made to the various components of data required for input to the planning process.

Depicted in Figure 3 on the previous page is the relationship of the various inputs and the agency responsible for data collection and analysis of the various components.

The first set of data involves the economic factors, population, and land use data. These data are necessary as input to the trip generation models in order to determine the trips produced or attracted in any given analysis area. The local area is responsible for the economic, population and land use data, and the state is responsible for the generation of trip data.

The next step involves utilizing several computer programs which are necessary to obtain a traffic assignment. The state is responsible for the traffic assignment programs and the processing of these programs.

Utilizing the existing economic, population, and land use data, synthetic trip data can be developed for the existing travel patterns. The existing travel patterns can then be compared to the actual measured travel patterns which are developed from the traffic counting procedure previously discussed in Chapter IV.

In the event the comparison proves inadequate, a re-evaluation is then in order for the trip generation equations for the purpose of obtaining a comparison which would reflect the actual travel patterns.

In the event the comparison of the synthetic data to the actual data is adequate, the forecasted traffic desires are obtained from the trip generation equations utilizing the forecasted economic, population and land use data.

The next step involves the development of a forecasted traffic assignment utilizing the various traffic assignment programs.

HA18 ⑤

Names:
Procedural
Development

Types:
study

Following development of the forecasted traffic assignment, the plan evaluation can then be accomplished. Input required to the plan evaluation includes the traffic assignment and the capacity analysis.

Prior to obtaining the capacity analysis, the factors affecting capacity have to be inventoried and analyzed. These include the traffic control features and transportation facilities inventoried.

In the plan evaluation phase, if the plan, as recommended, satisfies the demands and is not over-designed, then it would not be necessary to revise the plan. Based on past observations, this is not likely to occur.

Following the plan evaluation, it is necessary to prepare an estimate of cost of the approved recommended plan.

The financial resources, along with the plan costs, provide the two ingredients for comparing and determining the capability of financing and hence, implementing the recommended plan.

Re-Evaluation of Base Study

The base study which was conducted in 1964 and 1965 was analyzed using the 7090-94 Package of computer programs.

Since this time, the IBM 360 package of programs has been developed and made operational. In this interim, the Alabama Highway Department has made extensive progress in developing its "in-house" capability for processing these programs.

In addition, the Alabama Highway Department has obtained the Bio-Med package of programs and developed the processing capability for these programs. This battery of programs is used to develop the trip generation models.

Also, in this interim the Computer Services Division of the Alabama Highway Department has been expanded and upgraded, and there is available for use an IBM 360 Model 40 with 256 "K" memory, which is not only adequate for processing the Huntsville area but is adequate for all urban areas in the state.

Recognizing this capability, the state plans to re-evaluate the base year data. This re-evaluation will consist of linking the origin and destination data and development of production and attraction equations for the following trip purposes:

(1) Home Base Work Arsenal Oriented
(2) Home Base Work Non-Arsenal Oriented
(3) Home Base Non-Work
(4) Non-Home Base
(5) Truck and Taxi
(6) Local External
(7) Through Trips

HA18 (5)

Names:
Base Study Re-evaluation

Types:
study

Trip generation equations compatible with the previously listed trip purposes will be developed using the Bio-Med Programs.

The above work is considered fully warranted, and when completed, the state will then have all transportation studies in this state in the same standardized format. This is not intended to infer that trip purposes are the same in all study areas.

The development of the above information will put the department in a position to expeditiously process the various analyses required in the continuing planning process.

Peripheral Computer Programs

Vehicle Miles Program

A Vehicle Miles Program is under development which will permit vehicle miles to be tabulated by jurisdiction and functional classification and maintenance responsibility. This is considered to be of great benefit in analysis relative to comparison of maintenance responsibility and traffic services provided.

Multiple Screen Line Program

The department has developed a Multiple Screen Line Program which provides information aggregated by corridors relative to the desired demand. This program is most beneficial in comparison of laneage deficiencies or surpluses.

Address Program

The department has under development an Address Program whereby an address taken from any given set of data can be aggregated into analysis zones.

Capacity Program

The program provided by the Bureau of Public Roads titled "CAPINTR" has been revised. The original program was written for hourly traffic analysis.

The revision consists of providing an average daily traffic analysis, which produces the surplus and deficiencies of the links included in the network system analysis.

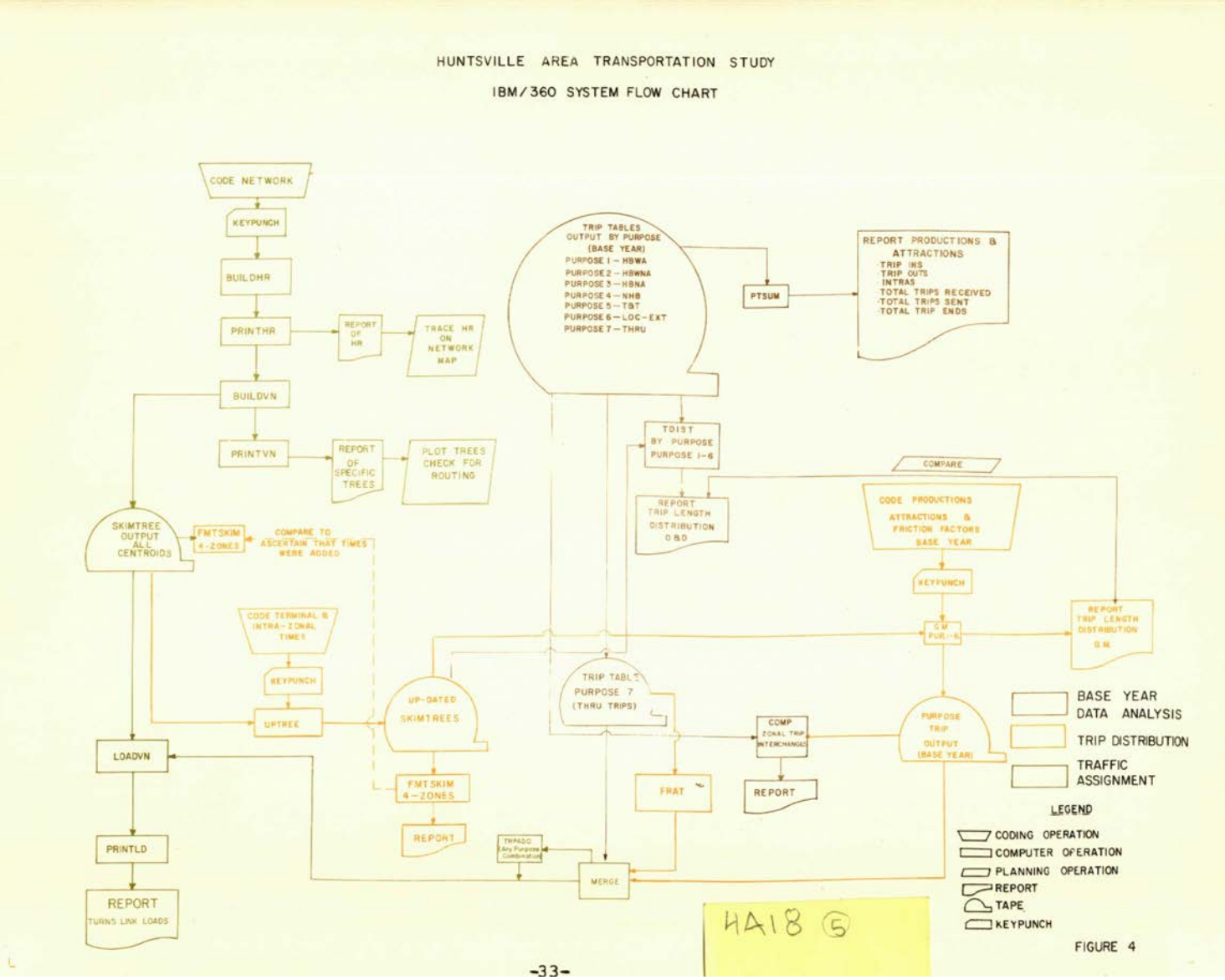
Special Generator Analysis

Those traffic zones having unusual characteristics will be treated as special gen-

HA18 (5)

Names:
Preripheral Computer Programs

Types:
study



Names:
System

Types:
study

erators when they do not fit into the normal condition. These zones, no doubt, will develop as time passes and will have to be given special consideration and analysis.

IBM 360 System Flow Chart

Shown on the previous page is a flow chart of various computer programs utilized in the base year data analysis, trip distribution, and traffic assignment process. This chart is provided so that the technical committee may have a working knowledge of the volume of work involved in a traffic assignment and the other allied procedures.

An explanation of these is given below:

(1) The first step in any traffic assignment is to develop the network system and code this system so it can be interpreted by the computer.

(2) The next operation consists of building the historical record (BUILDHR) and printing this record (PRINTHR). This historical record identifies the various pieces of the network system and relates the travel speeds or travel time and other pertinent information.

(3) The build vine program (BUILDVN) determines the minimum time paths from each traffic zone to all other traffic zones.

The print vine program (PRINTVN) is a print of information which provides the analyst data which can be plotted on a map so he can relate these time paths to the area and make a judgement decision relative to the reasonableness of the time paths.

(4) Terminal times are those times required for traversing between the trip origin and the beginning of vehicular travel and those times required for traversing between the ultimate destination of where the driver parks his vehicle and where he is destined. Intrazonal times are those times required to traverse by vehicular travel the specified traffic zone.

(5) These times are required in the Up Tree Program (UPTREE) for use in the Gravity Model Program (GM) which distributes trips. It is necessary to add the minimum time paths to the terminal and intrazonal times and the results are identified as the UP-DATED SKIM TREES.

(6) The productions and attractions, along with the friction factors, which is a calibration factor, are input to the Gravity Model along with the up-dated skim trees and the output is the Gravity Model trip table.

In the Gravity Model, trips are developed by trip purposes, which have previously been mentioned in this chapter.

The output of the Gravity Model trip table is then processed through the Merge Program. The

HA18 (5)

Names:
IBM 360 Flow Chart

Types:
study

Merge Program does not add the various trip tables together but merely creates one file of data.

(7) The Trip Add Program (TRPADD) adds the various trip purposes together depending upon how many trip purposes the analyst desires added together.

(8) The build vine program outputs the skim trees which have previously been mentioned as being the minimum time paths between any given pair of zones or centroids.

(9) The Load Vine Program (LOADVN), utilizing as input the skim tree output and the output from the Trip Add Program, assigns the trips to the network.

(10) The Print Load Program (PRINTLD) outputs a printed report which provides the analyst with the traffic assignment by link or segment as originally identified in the network.

The assignment process does not involve just one operation but involves various programs which are required to obtain the assignment of traffic to any given network configuration.

HA18 (5)

Names:
PROGRAMS

Types:
study

CHAPTER VII

SERVICE

Service, insofar as the planning process is concerned, may be defined as the provision of data necessary in decision making in order that benefits will be accrued and liabilities averted.

The base study has provided a transportation plan for the Huntsville urbanized area which is based on the land use plan and supporting planning data which were generated by the City of Huntsville for the initial base study. During the continuing phase, the major plan reviews will project the land use plan forward for 5-year and 25-year increments, and the other attendant analyses will provide additional street and highway facilities to support the forecasted growth.

The information developed in the base study, along with that developed in the continuing planning process, will be of considerable interest, use, and guidance to various governmental agencies and private enterprise in policy and decision making and plan implementation. In addition, this information will be available to the local governmental units and the state in the development of laws relating to transportation and development.

The services which the planning data will provide are as follows:

(1) Basic marketing analysis information relating to internal trade area and/or external trade area.

(2) Facility location and size information for locally oriented business or service organizations.

(3) An expected housing market by location.

(4) Basic elements of input data relating to private and/or public organization research.

(5) Information relating to local movements of people and commodities.

(6) Information relating to tourism, both present and projected.

The technical committee will serve as the central dissemination agency for information needed by governmental agencies and private

HA18 (5)

Names:
Service of Data

Types:
study

individuals for planning purposes. Actual dissemination will be made by the agency directly responsible for the data. For information such as land use and socio-economic data, the Planning Director of the City of Huntsville will be responsible for furnishing this data. The Bureau of Urban Planning of the Alabama Highway Department will be responsible for providing traffic data which is needed by both governmental agencies and private industry.

Data and information obtained from other agencies may or may not be available for distribution dependent upon the policy constraints placed on the source supplying the information. The governmental agencies of the local area or the Alabama Highway Department will not jeopardize their position with cooperating agencies and will respect all confidential information entrusted to it by another agency.

HA18 (5)

Names:
System Flow Chart

Types:
study

CHAPTER VIII

REPORTING

Commencing in 1970 or as soon as the census data is available, an annual report describing the activities of the year will be published and distributed. Compilation of the report will be the joint responsibility of the local area and the state. The report will be prepared in several parts, as discussed below. The parts as discussed below do not necessarily mean that the report is to be assembled in this order. The parts do not have any order of priority but are included for purposes of the discussion of content of the annual report.

Part I

Part I will be prepared by the local area. The following surveillance items and discussion of these items and/or conclusions will be included in Part I:

(1) Automobiles
(2) Population
(3) Dwelling Units
(4) Labor Force - White Collar
(5) Labor Force - Blue Collar
(6) Employment - White Collar
(7) Employment - Blue Collar
(8) School Enrollment
(9) School Attendance
(10) Retail - Convenience
(11) Retail - General
(12) Commercial - Convenience
(13) Commercial - General
(14) Industrial
(15) Recreational Attendance

This information is to be presented as illustrations, maps, or tables.

Part II

Part II will be prepared by the State. This part will consist of narrative and illustrations relating traffic counts at the external cordon, screen line, and the C.B.D. cordon. In addition, manual counts and machine counts for various areas of the city will be shown.

Part III

Following assembly of Part I and Part II, a meeting will be held between professional

4A18 (5)

Names:
Reporting of Study

Types:
study

and technical representatives of the state and local area. The purpose of this meeting is to prepare Part III which will be a joint analysis of the findings of Parts I and II.

Part III is to be a discussion of the actions and interactions of these findings. This part of the report is to be prepared by the local area.

Part IV

Part IV will include work which is anticipated to be undertaken with regard to the study for the coming year. This part will be a discussion of the evaluations which are to be prepared for the coming year. Procedures for these evaluations are to be developed and included in this part of the report.

Part V

Part V will consist of a descriptive listing of improvements placed under construction during the preceeding year. These improvements will be illustrated on a map indicating the transportation plan and this map will be included in the report.

This part of the report will include a discussion of the relationship of the improvements placed underway to the recommended transportation plan with emphasis placed on the adequacy of the improvements and compliance with the recommended transportation plan. A discussion of projects having substantial variance from the plan are to be included in the report.

Part VI

This part of the report will be devoted to a five-year priority program. The surveillance program will furnish the data needed to re-assess the priorities and/or changes to the network to provide the level of service necessary for efficient operation of the system during the ensuing five-year period for recommended improvements.

By deleting the improvements placed underway during the preceeding year and adding to this program, additional recommended improvements to be placed underway in the fifth year of the five-year program, a current five-year program can be maintained.

An illustrative map of these improvements will be included.

Part VII

Part VII will include any changes in the organizational structure. Also, any other significant items such as legislative ac-

HA18 (5)

Names:
Programs

Types:
study

tion or policy changes which may affect the transportation plan will be included in the annual report.

General Comments

The report is to be prepared in draft form, edited, and then submitted to the Policy Committee for its review and comment. Following the review and comments by the Policy Committee, the report is to be printed by the State for distribution.

Distribution is to be made to the Bureau of Public Roads, the State Highway officials, local area officials, and local area groups and citizens. Wide distribution of this report is needed to keep the public informed, as well as those individuals and officials directly connected or associated with the planning process.

HA18 (5)

Names:
Comments on Plan

Types:
study

CHAPTER IX

SUMMARY

The comprehensive base year studies have provided an excellent base for the Continuing Comprehensive Transportation Planning Process. A mass of factual data has been collected, analyzed, and is available for use in the implementation of the transportation plan.

This report has set forth a procedure for maintaining surveillance of the growth patterns in the area. Provision is further made for a continuing updating process which should reflect the forecasted needs, goals, and objectives of the local area.

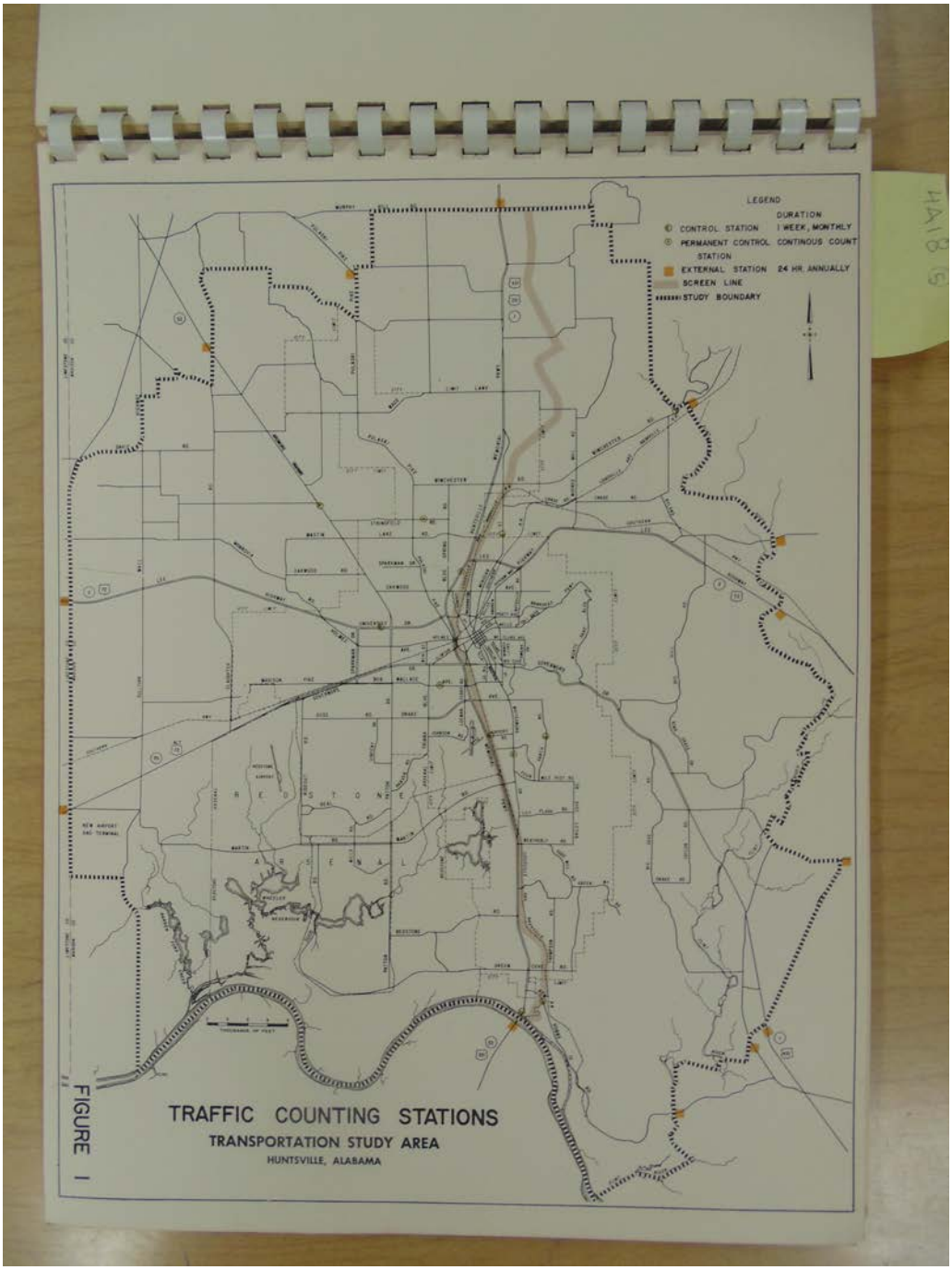
The total estimated annual cost, not including cost of work carried on in routine operations, amounts to an estimated cost of $44,762.00 annually. Of this cost, financial participation by the local area for the portion of the work which is the responsibility of the local area amounts to $9,967.00 annually, with the remainder, or $34,795.00 being the financial responsibility of the Alabama Highway Department.

This amount of funds is a small investment for the purchase of the product, the product being current planning data available for the public administrator in resolving decisions relative to the priority of facilities to be implemented.

HA18 (5)

Names:
Summary of Study

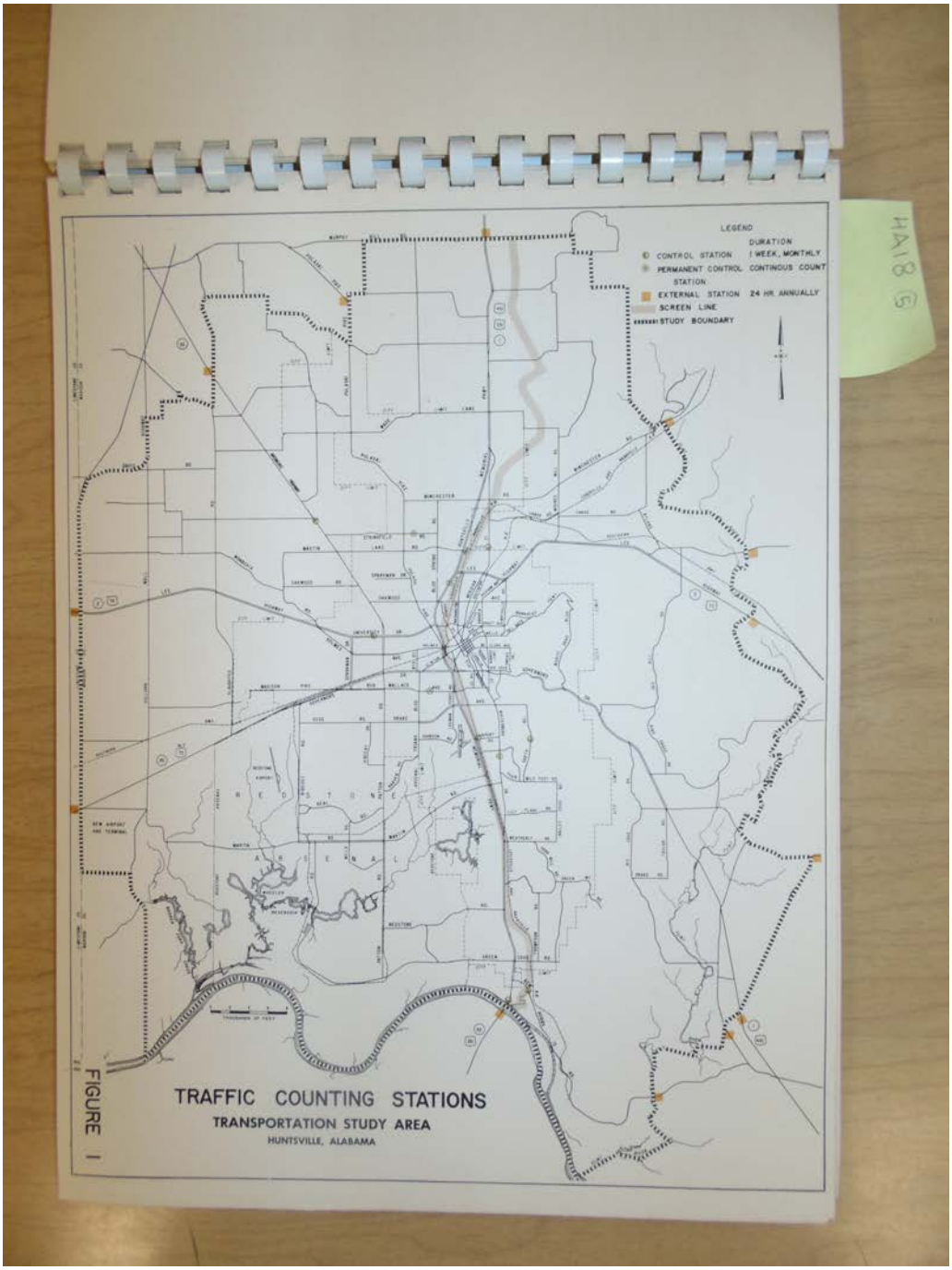
Types:
study



Names:
Traffic Counting Stations

Places:
Huntsville, AL

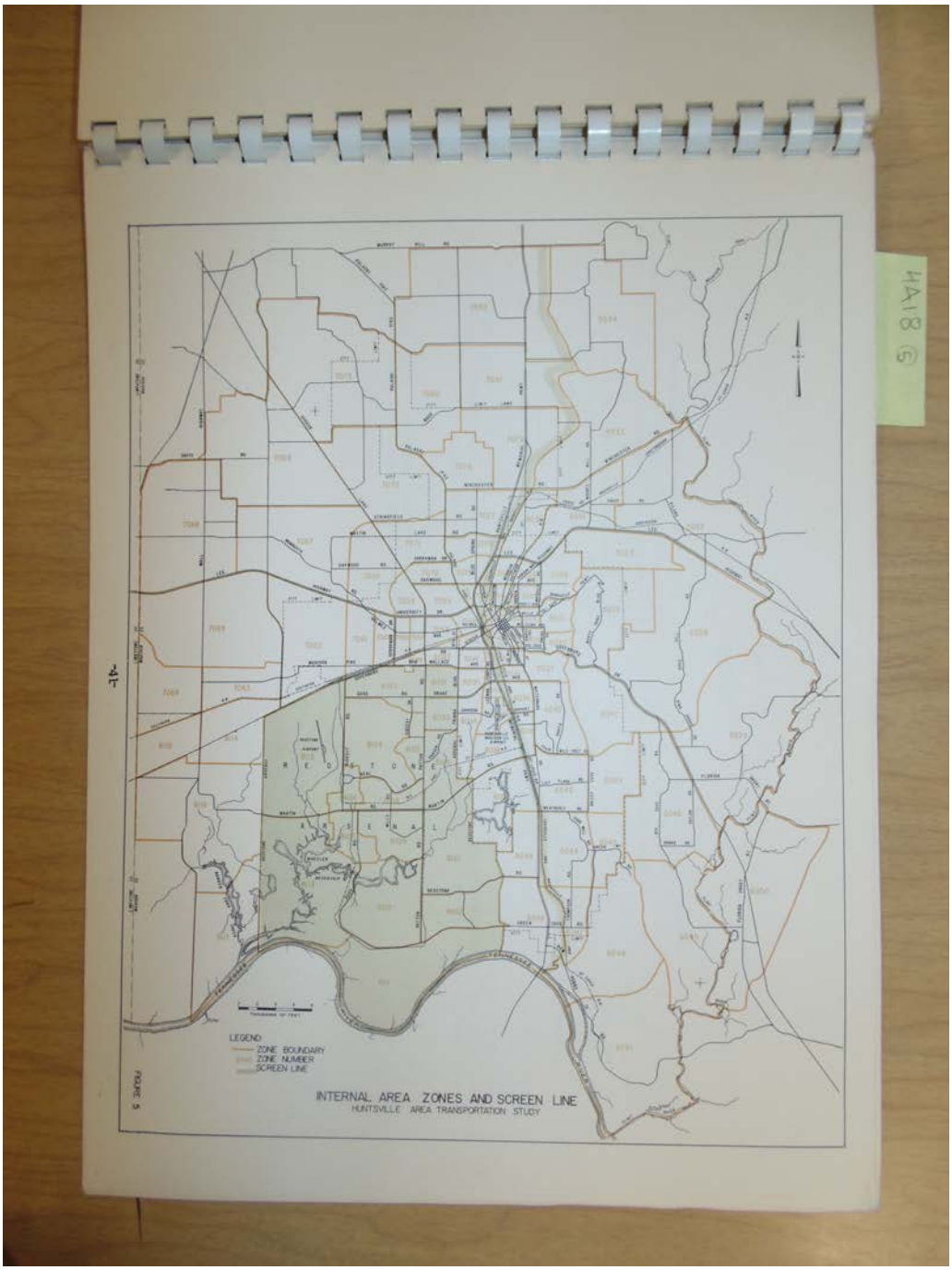
Types:
map



Names:
Traffic Counting Stations

Places:
Huntsville, AL

Types:
map



Names:
Traffic Counting Stations

Places:
Huntsville, AL

Types:
map

Table of Contents

Name & Place Index

Frances Cabaniss Roberts Collection

Preferred Citation: Frances Cabaniss Roberts Collection, Archives and Special Collections, M. Louis Salmon Library, University of Alabama in Huntsville, Huntsville, AL.

Collection Scope and Content: The Collection of 114 Linear ft. includes a total of 156 Archival Boxes. The Frances Cabaniss Roberts collection covers the historical records of the Cabaniss Roberts family. This collection contains extensive correspondence records of the Cabaniss Roberts family circa 1830 to 1930.

Archives/Special Collections Access Restrictions: None

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