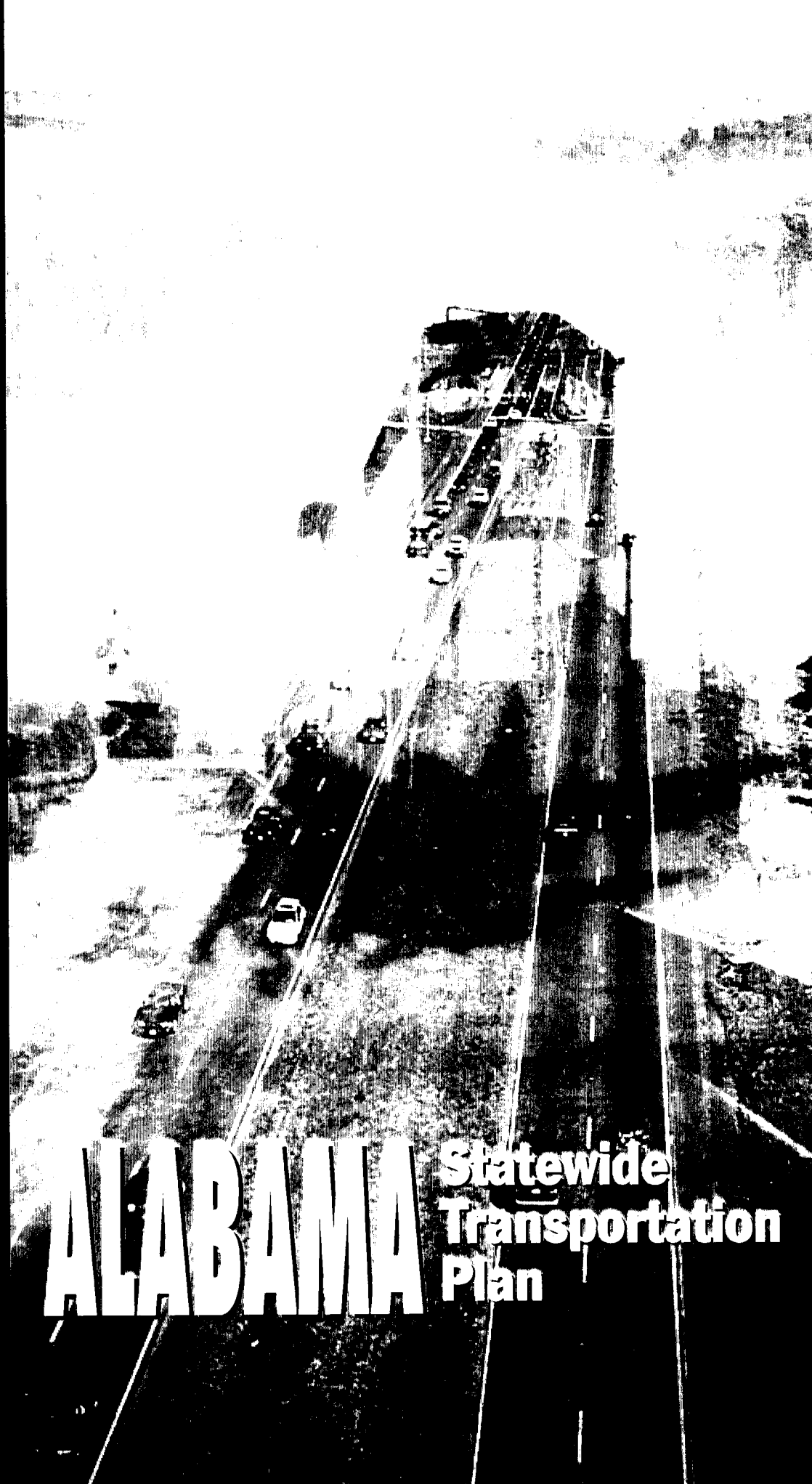
PHASE 1

Statement of Goals and Guidelines



ALABAMA Statewide Transportation Plan

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ALABAMA STATEWIDE TRANSPORTATION PLAN

PHASE 1

STATEMENT OF GOALS AND GUIDELINES

JUNE 1995

ALABAMA DEPARTMENT OF TRANSPORTATION

prepared with the assistance of

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EXECUTIVE SUMMARY

The Alabama State Transportation Plan (ASTP) presents the vision that will guide the development, growth, and maintenance of the state's transportation system for the next twenty years. The ASTP includes the objectives and guidelines that will enable Alabama to achieve its goals. In Phase 1 of the plan, presented here, goals, objectives and guidelines are identified. An inventory of the existing system including identification of major corridors is also presented. Phase 2 of the plan will add the needs assessment.

The ASTP was developed based on several components. Federal legislation in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) requires that statewide planning be carried out according to comprehensive and detailed guidelines which are intended to assure that the country's scarce funds for transportation are most wisely and economically invested. A diverse group of state, local, and federal transportation officials, representatives from other public agencies, members of the general public, and private organizations with concerns related to transportation provided input and guidance for the development of the ASTP. The Public Involvement Process (PIP) Action Program included a newsletter inviting comment as well as public meetings held throughout the state. This process allows groups and private citizens to become directly involved in the ASTP process.

"Intermodal" refers to smooth connections between the different transportation modes, such as highway, air, rail, and waterways. As required by the ISTEA, the ASTP considers a number of factors, including coordination with other state agency and local area plans, transportation efficiency in a variety of travel modes, enhancing the environment and energy conservation, connectivity of transportation systems, economic development, and providing enhanced mobility. The continuing planning process will draw on information supplied by six management systems designed to evaluate and monitor the condition of the transportation infrastructure, traffic safety and congestion, and other aspects of the transportation system. In keeping with another important ISTEA requirement, the ASTP is "fiscally constrained," meaning that funding sources will be identified for all planned programs and projects.

The goals defined in this plan are as follows:

1) Provide safe transportation for people and goods.
2) Protect the public and private investment in transportation.
3) Maximize the return on public investment in transportation.
4) Provide an interconnected statewide transportation system that supports economic development objectives.
5) Provide a transportation system that preserves the quality of the environment and enhances the quality of life.
6) Provide adequate funding to meet transportation needs in the state.

Based on these goals, general objectives and more specific guidelines are defined in the plan to serve as a foundation for decision-making over the 20-year planning period. The statewide transportation planning process includes an assessment of existing conditions and future needs. The Phase I ASTP inventories Alabama's existing transportation system, including highways and bridges, public transit, freight and passenger rail, airports, bicycle and pedestrian ways, and intermodal facilities, ports, and waterways. It presents profiles of these various modes that comprise the state's transportation infrastructure. Major transportation corridors and facilities are also identified.

Within each of 12 urbanized areas, a Metropolitan Planning Organization (MPO) is responsible for transportation planning. The MPOs follow a similar planning process, and each is preparing a new long-range transportation plan under ISTEA guidelines. Each of the MPO plans will be incorporated into the ASTP upon completion. In the interim, the ASTP contains profiles of the urbanized areas, including the major transportation issues and concerns in each.

Planning for future transportation needs must take into account existing and projected population and economic conditions. Statewide, population is expected to increase by 5.4% between years 1995 and 2015. Over this time period, population is expected to increase by over 20% in four counties and by over 10% in another eight counties. Projected trends in population help to identify those areas where additional transportation facilities and services may be required to adequately serve expected growth. The plan also looks at ways in which the state's transportation infrastructure can help promote economic growth.

The statewide transportation planning process specifically considers a number of federal regulations that concern energy and environmental issues. Among these are the Energy Policy Act of 1992, the National Environmental Policy Act of 1969, and the Clean Air Act Amendments of 1990.

The transportation needs that are identified in the ASTP cannot be met without adequate funding. In the ASTP, current and potential future funding sources, both state and federal, are addressed for each of the transportation modes. Examples of existing funding sources include the fuel tax, permits and licenses, and federal aid. Potential future funding sources are identified in the future in the plan.

The ASTP represents the beginning of a new transportation planning process in Alabama. The planning process is being carried out with public involvement and the participation of many agencies and organizations. The ASTP's major transportation corridors, which include not only highways but also major rail lines and waterways, symbolize the importance of an intermodal transportation system for connecting urban and rural centers and for moving people and goods.

SECTION 1
INTRODUCTION

SCOPE AND PURPOSE

The Alabama Statewide Transportation Plan (ASTP) presents a long-range vision of the transportation system for the next 20 years in the State of Alabama. The plan includes goals and objectives aimed at achieving Alabama's vision. The plan focuses on the various transportation modes, linkages between modes, and the various geographic areas of the state. It will be the foundation for more detailed transportation planning and for the construction and operation of transportation facilities and services. The ASTP is being developed in two phases: Phase 1 is a statement of goals and guidelines, while Phase 2 will present a needs assessment.

The Alabama Department of Transportation (ALDOT) is required to do statewide planning by federal guidelines based on the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). This planning is required in order to assure that the country's scarce funds for transportation are most wisely and economically invested. The State must carry out the policies and procedures established in ISTEA to participate in federal transportation funding programs. Federal funding is essential to providing the level of transportation facilities and services to which we are accustomed. Therefore, the policies, objectives, and requirements of ISTEA provide the framework for this plan.

This Phase 1 plan is the first step in a dynamic process just begun in the state. Several important inputs to the plan must be developed concurrently: in particular, the management systems and the metropolitan area long-range plans (these are discussed later). In addition, an assessment of future transportation needs will be incorporated into the Phase 2 ASTP in the coming months.

ORGANIZATION

This plan presents the vision for Alabama's transportation system and defines goals and objectives aimed at achieving that vision. The transportation planning process, including methods to measure the performance of the system, is discussed. A general profile of the existing systems, by mode and for each of the metropolitan areas, is also presented. Economic and social issues as they relate to statewide transportation are presented. Financing the transportation system is discussed. Finally, the plan sets forth recommended transportation guidelines and identifies major transportation corridors.

VISION

By the year 2015, Alabama is envisioned as a serious competitor in the global marketplace. The transportation system should meet the needs of the state for moving people and goods in the most

effective and efficient manner. It should do so while preserving the environment and making the best use of limited resources. This vision is consistent with the national policy stated in the ISTEA:

> **to develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the Nation to compete in the global economy and will move people and goods in an energy efficient manner.**

PUBLIC INVOLVEMENT

A public involvement program is needed throughout the transportation planning and programming process.[1] The goals of the public involvement process are as follows:

1) provide early and continuing public involvement opportunities;

2) provide timely information about transportation issues and processes to all interested parties and segments of the community affected by transportation plans, programs, and projects;

3) provide reasonable public access to information used in the statewide planning process (that is, comply with Americans with Disabilities Act requirements);

4) provide adequate public notice of public involvement activities and time for public review and comment;

5) provide a process for demonstrating explicit consideration and response to public input during the planning and program development;

6) seek out and consider the needs of those segments of the population traditionally underserved by existing transportation systems; and

7) provide periodic review of the effectiveness of the public involvement process.

A Public Involvement Process (PIP) Action Program, prepared by the ALDOT, outlines a process of providing opportunities for public input to development of the plan. Copies of the PIP Action Program have been available to the public at each of the nine division offices of the ALDOT, and public comment on the program was invited.

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[1]Requirements for public involvement are defined in the Intermodal Surface Transportation Efficiency Act of 1991, section 450.212.

The public involvement program has three major aspects: public information, especially through publication of newsletters; public meetings; and an advisory group representing organizations with particular transportation-related concerns or expertise.

The publication of newsletters has been an effective way of reaching a large portion of the public from around the state. Newsletters were used to inform and update the public about the statewide planning process and to announce scheduled public information meetings.

A series of nine public meetings was conducted during the initial phase of the ASTP development. The focus of the meetings was to identify the needs and goals of the transportation system with public participation. The meetings were held at each of the nine Alabama DOT division offices to be accessible to the rural population as well as to the citizens of the urban areas.

Overall, Alabama's citizens are very interested and concerned about transportation in their state and were eager to provide meaningful input into the planning process. The following statements provide an overall characterization of the comments received as a result of the public meetings.

- Alabama's roadways are currently, and will continue to be, the most important mode of transportation for the movement of people and goods around the state.

- Access to four-lane and/or interstate highways needs improvement, particularly in the northwest, southwest, and southeast parts of the state.

- Economic development highways are a priority to citizens and the business community.

- Safety on Alabama's roadways needs improvement, particularly on roadways heavily traveled by trucks and tractor-trailers.

- Bicycle/multi-use facilities should be provided in urban areas.

- Additional public transit opportunities should be provided in congested urban areas.

- In general, air, rail, and waterway transportation are not frequently used by the average citizen. However, these modes, especially waterways, are of primary importance to the business community and to the overall economic growth of the state, from which all citizens benefit.

- Representatives of the state's leading industry, timber products, are concerned about the condition of Alabama's secondary roads and bridges.

A draft of the ASTP was made available for public review and comment from May 1 through May 21, 1995. Many of the comments received addressed the need to provide for adequate public transit in both urban and rural areas. Another frequent topic was the need for highway improvements to

support economic development, particularly in northwest Alabama. In addition, many comments addressed specific highways, bridges, or other potential projects. The following comments are among those received from a variety of public officials/agencies and citizens who reviewed the draft ASTP.

- Changes in state law should be considered which would allow for the use of existing state gas tax revenues to fund transit systems.

- Areawide public transportation to assist the handicapped, elderly, and economically disadvantaged should be funded.

- Rural public transportation is severely lacking and needs to be funded.

- There is a need to identify permanent revenue sources to meet operating costs for urban public transportation.

- Projects to stimulate economic growth are needed in northwest Alabama.

A Public Involvement Report has been prepared as an addendum to the ASTP and includes more details about the public involvement process and all written comments received to date.

ISTEA FACTORS

In order to assure that transportation planning achieves the goals envisioned in the ISTEA legislation, that law establishes a number of factors which must be considered in the planning process. The factors, which are summarized in Table 1.1, may be grouped into five basic categories: coordination with other state agency and local area plans; providing for transportation efficiency in a variety of travel modes; enhancing the environment, including energy conservation; connectivity of transportation systems and economic development; and providing enhanced mobility. The degree to which each of the factors is considered and evaluated is based on the specific circumstances and needs of each state.

An informal survey of transportation officials within the ALDOT indicated the relevance of each of the factors for the development of the ASTP. The most relevant factors would generally be those to receive the most detailed consideration. The factors that were most often rated as highly relevant for Alabama included:

1. Transportation needs identified through the management systems;
2. Transportation system management and investment strategies designed to make most efficient use of existing facilities;
3. Long-range needs for movement of people and goods;
4. Coordinating with metropolitan area plans; and
5. Reducing or preventing congestion.

MANAGEMENT SYSTEMS

The ALDOT is developing management systems to more effectively manage existing transportation systems and resources. These systems will be integrated with each other and, when fully operational, they will provide up-to-date information on existing conditions and needs of all the various transportation modes profiled in this report. The systems are: Pavement, Bridges, Safety, Congestion, Public Transportation, and Intermodal. A traffic-monitoring system is also being established to provide traffic data to support the various management systems. The intent of the management systems is to assure that limited transportation funds are spent in the most cost-effective way to achieve the objectives set forth in the STP.

Table 1.1

ISTEA Factors

Category	Factor
Coordination	Metropolitan area and transit plans
	Land use plans and effect on development
	State water pollution plans
	Non-metropolitan areas; through consultation with local officials
	Indian tribal governments
Efficiency	Transportation needs identified through management systems (TMSs)
	TSM/investment strategies to more efficiently use existing facilities
	Bicycle and pedestrian facilities
	Enhancement of transit services
	Preserving rights-of-way for future needs
	Long-range needs for moving people and goods
	Transportation enhancement strategies (landscaping, etc.)
	Innovative financing mechanisms
	Using life-cycle costs to evaluate alternatives
Environment	Energy conservation
	Overall environmental effects of decisions
	Access to recreational areas and cultural resources
	Recreational travel and tourism
Connectivity	Access to intermodal facilities and military areas
	Connectivity between metropolitan areas and other states
	Port and airport plans and facility linkages
	Rural economic growth
Mobility	Efficient movement of commercial vehicles
	Traffic congestion; reducing single-occupant vehicles

Pavement Management System

A pavement management system has been in place for several years, although some changes will be made to meet new federal requirements. The Pavement Management System (PMS) collects data on the condition, construction, and maintenance history of pavements on state-maintained highways, and provides a means of analyzing performance, remaining service life, maintenance, and rehabilitation needs.

Bridge Management System

The Alabama Bridge Information and Management System (ABIMS), which has also been in place and under continual development for several years, will be amended to meet the new federal guidelines. This system, which includes all publicly-owned bridges [20 feet (6.1 meters) or more in length], among other functions, identifies bridges that are either structurally deficient or functionally obsolete (i.e. too narrow) for repair, improvement, or replacement.

Safety Management System

The Safety Management System (SMS) is a systematic process with the goal of reducing the number and severity of accidents by ensuring all opportunities to improve highway safety are identified, considered, and implemented as appropriate. Safety will be considered in all phases of highway planning, design, construction, maintenance, and operation. Participation by a number of agencies will be important in developing and operating this system: public safety and police departments, railroads, the trucking industry, health and education agencies, economic development agencies, and ALDOT are some of these.

Congestion Management System

The Congestion Management System (CMS) will provide information on transportation system performance and alternative strategies to alleviate congestion and enhance the mobility of persons and goods. In the development of the CMS, ALDOT will aim to identify and implement strategies that provide the most efficient use of existing and future transportation facilities wherever congestion is occurring or is expected to occur.

Public Transportation Management System

The Public Transportation Management System (PTMS) will be an on-going process that collects and analyzes data on transit facilities, equipment, and vehicles. The intent of the PTMS is to provide the information needed to select cost-effective strategies for providing and maintaining transit assets in a serviceable condition. It will help identify needs and strategies needed to meet those needs. It will include information on the capacity and condition of existing assets (vehicles, facilities, and expansion requirements). Transit operators, county commissions, and metropolitan planning organizations will cooperate with the ALDOT in the development and operation of this system.

Intermodal Management System

The Intermodal Management System (IMS) will develop a system and process to enhance the integration of all transportation facilities and systems. Intermodal facilities are those which provide linkages between two or more modes such as highway and rail, water and rail, air and highway, and include many types of terminals and transfer facilities. The IMS will identify key intermodal linkages and define strategies for improving linkages. Its ultimate aim will be to develop, evaluate, and implement strategies and measures to improve overall system performance.

Traffic Monitoring System

The state has collected and analyzed traffic data for years in order to make planning and design decisions. The Traffic Monitoring System for Highways (TMS/H) will include some changes to existing procedures to address the new federal requirements. Information is collected on traffic volumes, including detailed information about truck traffic, on roads of all types throughout the state.

SECTION 2
THE TRANSPORTATION PLANNING PROCESS

DESCRIPTION OF THE PLANNING PROCESS

Statewide transportation planning is a complex process defined by federal regulations and by the particular needs, history, and circumstances of Alabama. It involves many participants and a balancing of varied interests within constraints of financing, federal and state regulations, and public opinion. This section describes a conceptual process that has been initiated in order to plan and program transportation improvements. Figure 2.1 shows a flow chart representing this process.

Developing a Vision, Goals, and Objectives

The first step in the planning process is to develop a vision for the state's overall transportation environment. The vision establishes statewide transportation policy and will guide the development of specific goals and objectives. It is expressed in Section 1 of this document.

Later in this section, six goals are stated that the ALDOT will strive to meet when selecting projects. Several objectives for each of the goals are identified.

Analyzing Existing Conditions

The existing transportation system includes all surface transportation modes, as described in Section 3 of this plan. Although the ALDOT's planning process considers all surface transportation modes, many of these modes are under the authority of other agencies or private industry. The connections between the modes - intermodal facilities and services - are the concern of the ALDOT.

In order to analyze existing conditions, information is collected about the conditions and performance of the various elements of the transportation system. Within the ALDOT, this data-gathering effort is being coordinated into the management systems described previously. For the present effort, data will be collected from existing sources though possibly without the level of coordination that will be achieved when the management systems are in place in 1996.

Comparing existing conditions against a desirable standard indicates current deficiencies. For example, all bridges are inspected and numerically rated as to their structural integrity and functional characteristics, and those falling below certain scores are eligible for repair or replacement. Similarly, an assessment can be made of other transportation facilities and services as to what improvements are needed.

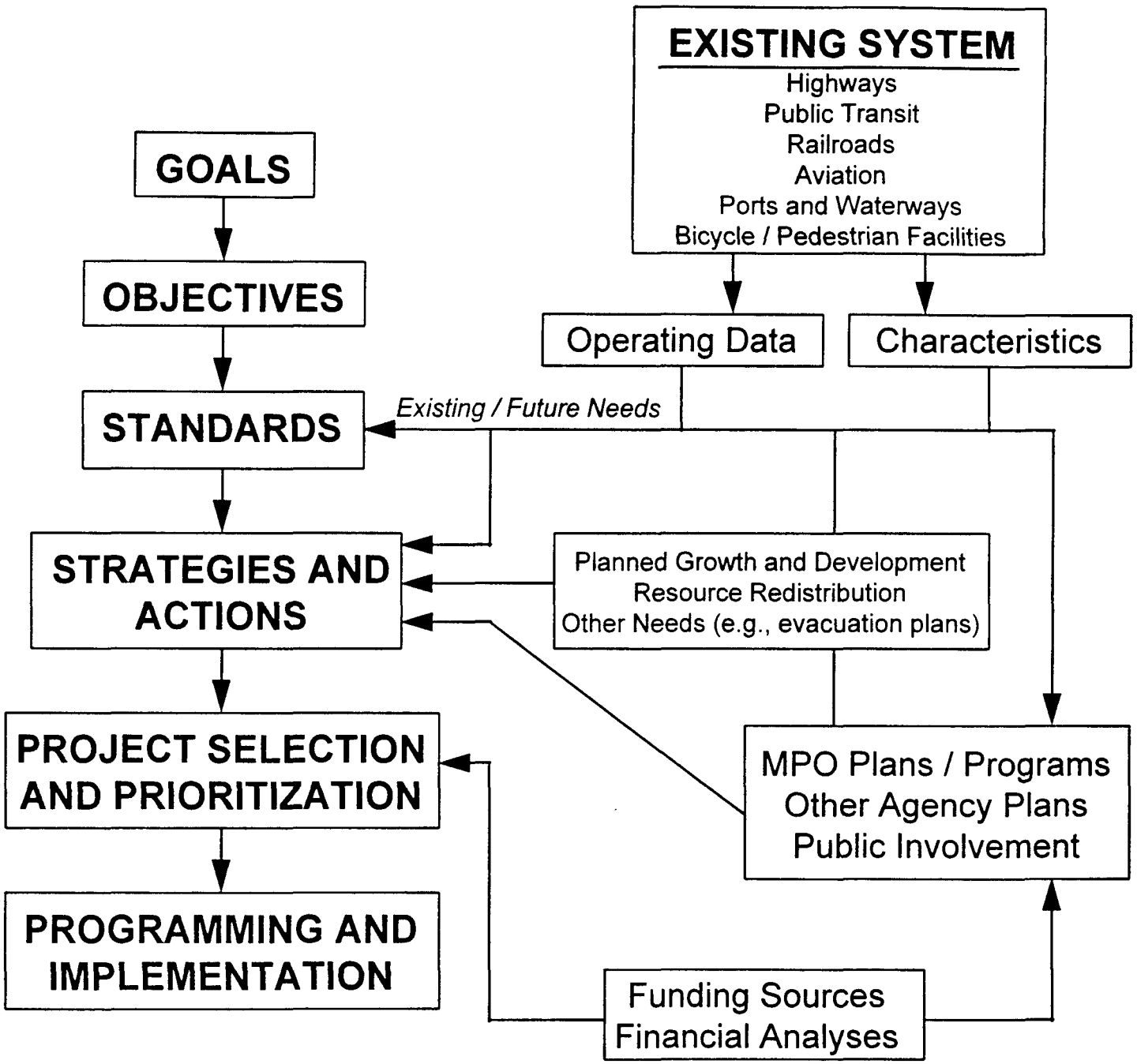


FIGURE 2.1
PLANNING PROCESS

Projecting Future Needs

In addition to addressing existing system deficiencies, future facility improvements are needed to: (1) meet the increased demands due to population growth, (2) provide a higher level of service to encourage economic development or meet other public objectives, (3) replace or rehabilitate due to normal life span of facilities, (4) adapt to changing facility/service needs due to social, economic, or political trends. These and other factors must be considered in making an estimate of future needs and ultimately in project selection. Standards will help to define these future needs, as services and facilities are designed to meet minimum desirable service levels.

The Alabama Statewide Transportation Plan

The ASTP provides the foundation for project selection and programming. It sets forth guidelines that ALDOT will follow in order to achieve stated objectives, and it identifies key transportation corridors within the state. It is long-range and general in scope, providing guidance while allowing specific projects to change when needed to meet changing conditions. Ultimately, the ASTP will define a general assessment of needs to be met over the 20-year planning horizon. Public involvement and coordination with other state and federal agencies provide important input to the ASTP.

The Metropolitan Planning Organizations

The Metropolitan Planning Organizations (MPOs), which are responsible for planning in urbanized areas, follow a parallel planning process resulting in a long-range plan and a short-term transportation improvement program (TIP). These plans become part of the ASTP and the statewide transportation improvement program (STIP), as they are prepared in consultation with the ALDOT. The state planning effort is directed at services and facilities provided on a statewide basis and in rural areas, and at assuring appropriate coordination of MPO plans.

The Statewide Transportation Improvement Program

The STIP describes the specific projects and programs that will be undertaken over the next few years. The process of identifying potential projects, evaluating, prioritizing, and selecting them for staged implementation is accomplished with input from the public as well as the various bureaus and divisions of the ALDOT. The projects that are within MPOs and listed in their respective TIPs are included directly in the STIP.

In developing the draft STIP which is offered for public input, the ALDOT considers among other things the following factors: the status of current projects, the need to add lanes to relieve congestion, developmental highways, freight movements, safety improvements, replacement of deficient bridges, preservation of the existing transportation system, projects recommended by the MPOs, the rural/urban balance, geographic location, and available financial resources. As the goals and objectives are established in the ASTP and translated into desirable levels of service or

standards, potential projects are evaluated according to how well they meet those standards and therefore achieve the objectives.

A Continuing Process

The STIP is updated every other year, serving as a current guide to how federal and state transportation dollars are invested. Similarly, the ASTP will be reviewed and updated as needed on a regular basis. Public involvement and interagency coordination will be an important part of each cycle of the ASTP/STIP planning process.

GOALS AND OBJECTIVES

This section presents long-range goals and objectives for the transportation system. These represent the general purposes and directions of transportation in the state, with objectives being somewhat more specific and of narrower focus than goals. They provide a policy framework for the state's transportation system. The programs and projects carried out in the next 20 years should be ultimately directed at achieving these general goals and objectives.

In order to know when we are achieving objectives and thus reaching our goals, more detailed, measurable standards must be defined for each objective. Over the next several months, the ALDOT will continue the process of defining objectives, standards, and performance measures to address each of the goals described below. Specific objectives for the various transportation modes will be accomplished with a cooperative effort by the ALDOT and the various appropriate agencies, private sector organizations, and the public. The establishment of standards and performance measures will be accomplished in large part by development of the management systems, which were described in the previous section of this plan.

Many transportation modes and activities are not under the authority of the ALDOT, or even the state government or public sector. The goals and objectives, nevertheless, are presented for the state as a whole without regard for which agency, organization, or industry is actually responsible for which aspect of the transportation system. A table showing modal responsibilities is presented in Section 3.

Overall Transportation Goals

1. Provide safe transportation for people and goods.

2. Protect the public and private investment in transportation.

3. Maximize the return on public investment in transportation.

4. Provide an interconnected statewide transportation system that supports economic development objectives.

5. Provide a transportation system that preserves the quality of the environment and enhances the quality of life.

6. Provide adequate funding to meet transportation needs in the state.

General objectives can be defined for each of these long-range goals. These provide the policy framework for the state's transportation activities within which more detailed planning activities, such as development of the management systems, will identify more specific objectives, strategies, criteria, and measures. It is the role of the STP to present this policy overview, which will become more detailed with subsequent plans and input from transportation-related agencies, organizations, the general business community and the public.

Goal 1: Provide safe transportation for people and goods.

Objective 1A: Reduce the rate of motor vehicle, bicycle, and pedestrian accidents, injuries, and fatalities on the state's roadways.

Objective 1B: Improve the safety of commercial vehicles, rail facilities, public transit vehicles and facilities, and airports.

Objective 1C: Improve the safety of intermodal connections and crossings, such as highway and railroad bridges over waterways, rail/highway crossings, and intermodal terminals.

Objective 1D: Improve transportation facilities for emergency management, including natural disasters, hazardous materials emergencies, and other public emergencies.

Objective 1E: Address safety issues in the design of facilities, establishment of programs, construction, operations, maintenance, and all phases of development and use of transportation.

Goal 2: Protect the public and private investment in transportation.

Objective 2A. Maintain existing roads and bridges to maximize their service life and provide an adequate level of service.

Objective 2B. Protect the public investment in aviation, transit, waterway, and rail facilities through adequate maintenance programs, monitoring the age and condition of equipment and facilities, and preserving rights-of-way for future needs.

Objective 2C. Assure that commercial vehicles are held to legal weight limits to prevent excessive wear and tear on the state's roads and bridges.

Goal 3: Maximize the return on public investment in transportation.

Objective 3A: Maximize the efficiency of existing roads through traffic and congestion management measures, including new technologies.

Objective 3B: Promote coordination and cooperation among transportation providers, such as public transit systems, railroads, waterway facility operators, and airports, for maximum efficiency in providing services.

Objective 3C: Maintain and enhance existing and develop new intermodal connections where intermodal connections would improve the efficiency of moving goods and people.

Goal 4: Provide an interconnected statewide transportation system that enhances economic development.

Objective 4A. Provide road and bridge improvements, maintenance funds, and new construction projects based on need with geographic and urban/rural balance throughout the state.

Objective 4B. Improve access to major arterial highways where needed in order to serve existing and stimulate new business and industry.

Objective 4C. Maintain and improve major airports, sea and inland ports, rail and trucking facilities to strengthen Alabama's position in the global economy.

Objective 4D. Improve the interconnections between modes to reduce delays and costs in transferring goods or people, and provide a supportive environment for private intermodal freight ventures.

Objective 4E. Maintain the flexibility to be able to meet the specific needs of individual major economic development projects.

Objective 4F. Support the completion of all previously planned and programmed major highway improvement projects.

Goal 5: Provide a transportation system that preserves the quality of the environment and the quality of life.

Objective 5A. Provide transportation facilities and services to meet the needs of all Alabama citizens, visitors, and businesses, including the elderly and disabled as well as those that may have been disadvantaged due to economic, geographic, cultural, or historical factors.

Objective 5B. Provide accommodation for transit vehicles, bicycles, and pedestrians wherever appropriate on state roadways.

Objective 5C. Increase public transit ridership, including participation in private-sector initiatives such as carpooling and vanpooling, in locations where warranted by population density and other characteristics.

Objective 5D. In urbanized areas with existing or potential air quality issues, minimize the impact of transportation activities on air quality by encouraging the use of alternative "clean" fuel vehicles.

Objective 5E. Assure that all transportation facilities construction, maintenance, and operations activities meet or exceed national standards for preservation of the natural and cultural environment.

Objective 5F. As projects are planned and designed, achieve maximum avoidance of environmentally sensitive areas, especially coastal wetlands and bottomland hardwood forests.

Goal 6: Provide adequate funding to meet transportation needs in the state.

Objective 6A. Identify appropriate funding sources for all needed transportation improvements.

Objective 6B. Utilize all available federal funding programs to the maximum extent feasible.

Objective 6C. Encourage public/private financing arrangements where appropriate for transportation projects.

Objective 6D. Where feasible, structure user fees and transportation taxes so that revenues will meet increases in the cost of constructing facilities or providing services.

SECTION 3
TRANSPORTATION MODE PROFILES

INTRODUCTION

The state's transportation system serves many needs: home to work commuting, the movement of freight and goods throughout the state, intercity and interstate travel, and recreational travel. The system includes land, rail, air, and water modes of travel and their interconnections. Major features of the state's transportation network include:

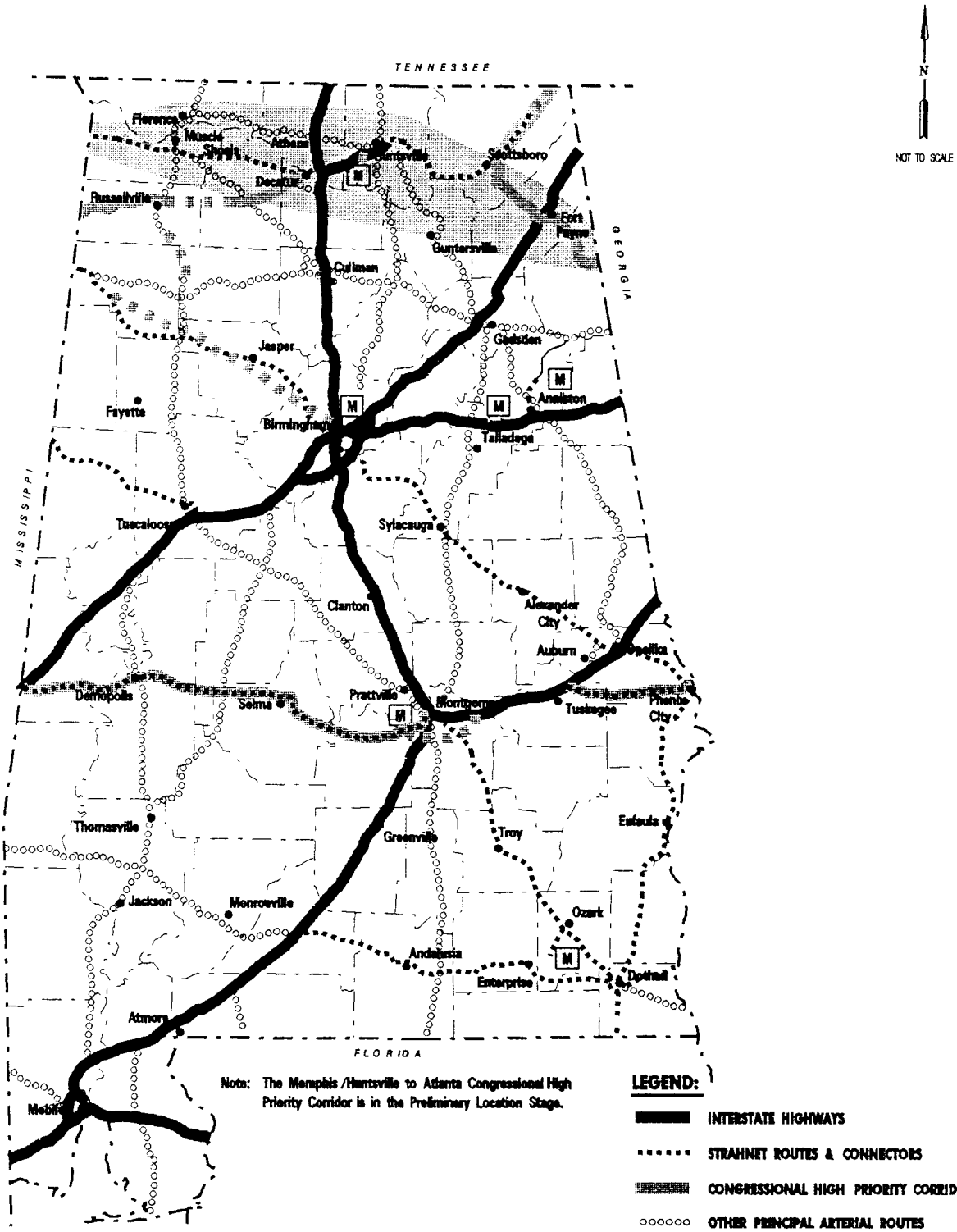
- five major interstate highways;
- five class I railroads;
- the longest inland waterway system in the nation;
- a deep-water port; and
- eight commercial airports.

This section provides an overview of each of the mode elements of the existing transportation system. These include: roads and bridges, transit, railroads, aviation, ports and waterways, and bicycles and pedestrians. It summarizes previous and current plans for the various modes, and major issues, projects, or programs that are important to the long-range ASTP.

THE HIGHWAY SYSTEM: ROADS AND BRIDGES

Roads and bridges together comprise the highway system, which is the backbone of the transportation system. The highway network, including roads from interstates down to local neighborhood streets, provides complete access throughout the state and serves as the link between other modes such as rail, water, and air.

A network of certain roads in Alabama is designated as the **National Highway System (NHS)** in the state. Figure 3.1 shows the proposed NHS in Alabama. This network includes several types of roads: the Interstate Highway System, Strategic Highway Network (STRAHNET) Routes, major STRAHNET connectors, Congressional High Priority Corridors, and other principal arterial routes. Other state-maintained roads are added to the NHS system roads to make up the **State Highway System**. State system routes not on the NHS include minor arterials, collectors, and a few local roads that are state maintained. The state highway system, county roads, local city streets, and federal lands roads combine to form Alabama's highway network.



PROPOSED NATIONAL HIGHWAY SYSTEM

FIGURE 3.1

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The National Highway System

The Interstate System. There are approximately 900 miles of interstate highway along five major interstate routes within Alabama. These are as follows:

- **I-65**, beginning in Mobile and extending northeast to Montgomery then north through Birmingham, Decatur, and Athens to Tennessee;
- **I-20**, extending through central Alabama in a northeast direction connecting the cities of Tuscaloosa, Birmingham, and Anniston;
- **I-59**, concurrent with I-20 to Birmingham, where it extends northeast to Gadsden and Fort Payne and into northwest Georgia;
- **I-85**, beginning in Montgomery and extending east with access to Auburn, Opelika, and central Georgia; and
- **I-10**, extending from New Orleans, Louisiana through Mobile and the southern tip of Alabama to Tallahassee and Jacksonville, Florida.

In addition, there are five perimeter or spur interstates associated with metropolitan areas:

- **I-165** connects I-65 with downtown Mobile;
- **I-359** is a spur from I-59 to Tuscaloosa;
- **I-459** is a Birmingham outer loop located south of the city;
- **I-565** is a spur from I-65 to Huntsville; and
- **I-759** is a spur from I-59 to Gadsden.

The interstate system in Alabama is completed. Although additional multi-lane, expressway-type roads are planned or under construction, they are not part of the interstate highway system.

STRAHNET Routes. The Strategic Highway Network (see Figure 3.1) includes those roads that would be used for rapid mobilization and deployment of U. S. armed forces. These designated routes connect military bases and provide key routes on 15,000 miles of road throughout the country. In Alabama, STRAHNET routes connect military bases with the interstate system, which is also part of the national strategic defense system.

Congressional High Priority Corridors. Several corridors in the country were designated as Congressional High Priority Corridors by the ISTEA. These corridors serve regions not adequately served by the interstate system, and the highway improvements are intended to address travel and economic development needs. High priority corridors may be given priority in funding for planning and construction, and additional federal funds are available for construction of designated segments of the corridors. Four corridors in Alabama were designated as high priority corridors: (1) an east-west corridor from Memphis to Atlanta through Huntsville, (2) Appalachian Corridor V, (3) Appalachian Corridor X, and (4) US 80 across the state, through Demopolis and Phenix City.

Other principal arterial routes on the NHS include both state-numbered and US-numbered routes, and are shown in Figure 3.1.

County Roads and Local Streets

The counties are responsible for maintaining some 59,000 miles of county numbered routes and local roads. About two-thirds of these are paved. Funding for county road construction and maintenance comes primarily from the counties' share of the state gasoline tax revenue and from county-matched Federal Aid Highway and Bridge Replacement funds. The majority of the counties' paved roads were constructed under the State Farm-to-Market Road Program from 1944 to 1969. State grants to the counties funded by oil exploration leases provided major funding for road improvements from 1982 until 1985. Some additional discretionary state grants have provided assistance to some counties in recent years. Roads and streets within urban areas, especially those not on the NHS, are generally city or county maintained.

Federal Lands Roads

The federal government maintains roads which serve federal lands and Indian reservations and are not part of the state or local government road system. Federal roads and selected state or local system roads that provide access to federal lands areas are known as federal lands roads. There are several categories of federal lands roads in Alabama including forest roads, forest highways, Indian reservation roads, and federal parkways.

Forest Roads. Four national forests are located in Alabama. National forests are owned by the United States government and maintained by the Forest Service, an agency of the Department of Agriculture (USDA). Located within the boundaries of a national forest, forest roads are owned by the federal government and provide direct access to forest lands for recreation, hunting, logging, or other activities as permitted. The Forest Service maintains forest roads using funds appropriated in the USDA budget. Forest roads projects involving new construction and enhancements are eligible to be funded by ISTEA through the Federal Lands Highway Program or the public highways discretionary funding programs. In the case of discretionary funding for forest roads, the project must be sponsored by an outside agency, namely, a state or local government.

Forest Highways. Forest highways are specially designated state or local system roads that provide access to national forest areas from other higher capacity roads. Forest highways are eligible for funding through the Federal Lands Highway Program. Forest highways are selected by the state governments in partnership with the Federal Lands Highway Office of the Federal Highway Administration.

Federal Parkways. The Natchez-Trace Parkway is a scenic highway that runs from Nashville, Tennessee to Natchez, Mississippi passing through Lauderdale and Colbert Counties. Alabama's only federal parkway, the Natchez-Trace is owned by the United States government and maintained by the National Park Service which is part of the Department of the Interior. Maintenance funds for federal parkways are appropriated in the Interior Department budget. Federal parkway projects involving new construction or enhancement are eligible to be funded by ISTEA through the Federal

Lands Highway Program or, with sponsorship by a state or local government, through the public highways discretionary funding programs.

Indian Reservation Roads. The Poarch Band of Creek Indians in Escambia and Monroe Counties is a federally recognized Indian tribe. The Poarch Band reservation lands are solely the property of the tribe but the public roads which serve the reservation lands and are not part of the state or a local road system are Bureau of Indian Affairs (BIA) roads. BIA roads are maintained by the Poarch Band through contract with the BIA which is an agency of the Department of the Interior. There are approximately two miles of BIA roads maintained by the Poarch Band. ISTEA appropriates set-aside funds for new construction and major rehabilitation BIA roads projects through the Federal Lands Highway Program. BIA roads projects sponsored jointly by tribal and state or local governments are eligible to be funded through ISTEA's public highways discretionary funding programs. In addition to BIA roads, Indian reservation roads include Indian reservation access roads which are state or local system roads that provide access to Indian reservation lands. Federal Lands Highway Program ISTEA funds can be used for new construction or major rehabilitation projects involving Indian reservation access roads.

Previous Transportation Plans

In 1990, the ALDOT (then the Alabama Highway Department) completed a twenty-year plan for Highways and Bridges. A number of objectives were set forth, and a list of projects was identified. These fell into three categories: developmental highway needs, capacity improvement needs, and other needs identified by the public (at public meetings) or by ALDOT Division Engineers.

Developmental Highways. This plan proposed a network of multi-lane highways connecting all urban areas uniformly throughout the state. The new highways or multi-lane improvement of existing highways proposed would put a multi-lane highway within twenty miles of 97% of the state's population. These would include some minor interstate highway additions, but mostly would be state-maintained, four-lane divided highways. The estimated cost of constructing these highways was $2.7 billion (1990 dollars).

Capacity Improvements. The plan established criteria for a minimum level of service desirable on urban and rural roads. Roads that could not meet projected long-range (2010) traffic demands were identified as needing to be widened to increase capacity. The cost of these improvements was estimated to be $1.14 billion (1990 dollars).

Other Needed Improvements. Other highway improvements were proposed based on comments at public meetings or suggestions of the Division Engineers. These amounted to another $402 million in improvements.

These projects come out of the 1990 plan as well as from ISTEA. Some are in the planning stages, including corridor identification and environmental analysis; others are in design or construction. The relative priorities of specific projects are subject to change.

- The Memphis-to-Huntsville-to-Atlanta Highway: Corridor studies are underway for this route, which is a Congressional High Priority Corridor identified in ISTEA.

- Appalachian Corridor X: Planning studies are also underway for this route, and some sections are under construction. It is more or less parallel with US 78 from Birmingham northwest to Hamilton towards Memphis.

- Appalachian Corridor V: This route runs northeast from Mississippi into Tennessee.

- Birmingham Beltline Highway: This completion of the beltway formed by I-459 to the south will extend around the north of the city. It is now in the corridor study stage.

- Bypasses in Montgomery, Anniston, and Tuscaloosa: Bypasses around these three cities are now under planning study.

- US 80: Planning is underway for an improvement of this road, a Congressional High Priority Corridor. It will be a multi-lane highway extending from the Mississippi line to west of Montgomery and from I-85 south of Auburn to Phenix City.

- Other projects: Improvements to several US and state routes, widening to four-lane divided highways under the developmental highway program or for capacity reasons, are in various stages.

Bridges

Safe and adequate bridges are a necessary part of the highway system. New bridges must be constructed as part of highway projects, and existing bridges must be maintained, rehabilitated, and replaced as necessary. Bridges may become structurally deficient or unsound with age, normal wear-and-tear, or inadequate maintenance. They may become functionally obsolete when they are too narrow, for example, to meet current traffic volume.

All bridges within the state, both state-owned and locally-owned, are inspected regularly under the provisions of the National Bridge Inspection Standards (NBIS). Information gathered from these inspections, combined with other bridge-related data, is collected and contained in the Alabama Bridge Information Management System (ABIMS). Sufficiency and deficiency ratings are calculated based on data from the most recent inspection, resulting in a numeric score reflecting each bridge's ability to provide adequate service. The bridges are then classified based on structural integrity and functional characteristics. A bridge with a sufficiency rating under 50 and classified as either structurally deficient or functionally obsolete is eligible for replacement. With a sufficiency rating between 50 and 80 and classification as structurally deficient or functionally obsolete, a bridge is eligible for rehabilitation.

There are over 125 posted bridges on state highways; that is, bridges that cannot safely handle the legal load limits. Replacement of these bridges was noted to be a critical problem in the 1990 Long-

Range Highway Improvement Program because a bridge with load limitations causes economic hardship and safety concerns. For example, school buses may not safely travel on some posted bridges, and trucks may be required to take circuitous routes or carry lighter loads.

Finally, functionally obsolete bridges create operational and safety problems. Examples include but are not limited to cases where the number of lanes, lane width, or shoulder width is inadequate.

The 1990 plan identified over 350 bridges that were functionally obsolete or structurally deficient with a sufficiency rating of less than 50. It identified another 1,000 bridges that were functionally obsolete or structurally deficient with a sufficiency rating between 50 and 80. The estimated cost to replace or rehabilitate these bridges was $1.48 billion (1990 dollars). In addition, $200 million was identified as needed to replace bridges for which load limits were posted.

Truck Routes

Vital to Alabama's economy is the portion of the highway system designated for truck travel. In response to the Surface Transportation Assistance Act of 1984 (STAA), Alabama designated a network of Approved Twin Trailer Routes to facilitate the inter- and intrastate movement of goods. The five major interstates within Alabama, which are federally designated as the national oversized truck route, form the backbone of the truck route system. In addition to the interstates, the designated truck network includes 13 US routes and 21 State routes. Together these roads provide over 2,400 miles of truck routes in the state.

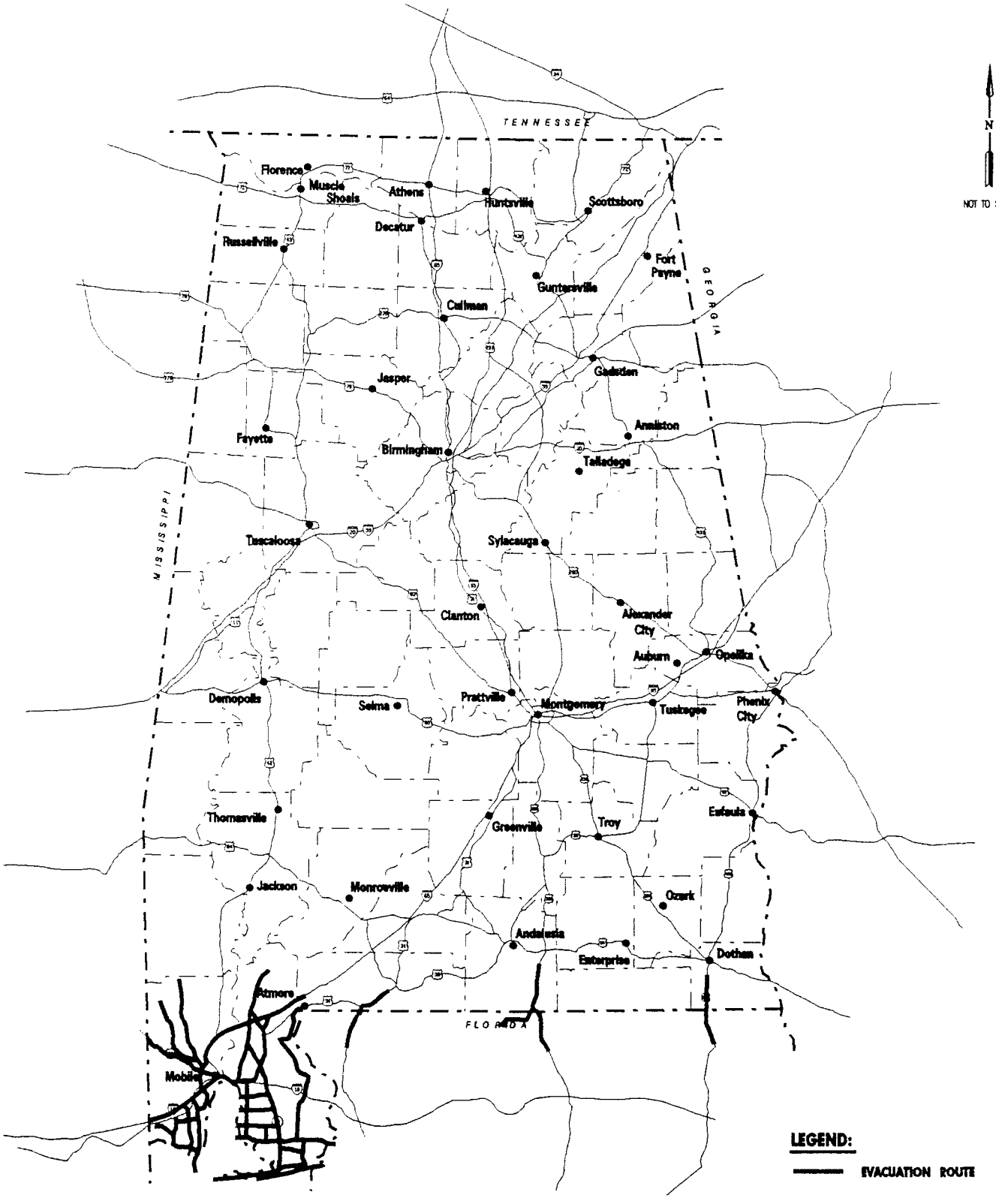
Emergency Evacuation Routes

The Alabama Emergency Management Agency (ALEMA) has developed a plan for response to severe weather and other civil emergencies. The evacuation plan developed by that agency for the coastal areas, in case of a hurricane, depends on adequate, well-maintained roadways and bridges along all routes. Figure 3.2 shows the major evacuation routes from Alabama's coastal areas. Also shown in this figure are the Florida Division of Emergency Management routes for evacuating the western Panhandle area of Florida, which cross into Alabama at three locations. Evacuation plans also have been prepared for the areas surrounding nuclear power facilities and for other events, such as toxic chemical spills, which could happen anywhere in the state.

An emergency preparedness issue that is being studied by ALEMA involves evacuation routes from the barrier island at Orange Beach on the coast in Baldwin County. ALEMA is considering whether to recommend a new bridge from the east end of the island to the mainland.

Tourist and Recreation Areas

An important function of the highway system is providing access to an abundance of recreational and tourist attractions located throughout the state. Alabama is home to four national forests and more than twenty state parks offering scenic beauty and opportunities for hiking, swimming, camping, and hunting and fishing, where permitted. Figure 3.3 shows the locations of national forests, state parks, and some other popular Alabama tourist attractions such as the Alabama Space



COASTAL EVACUATION ROUTES

FIGURE 3.2

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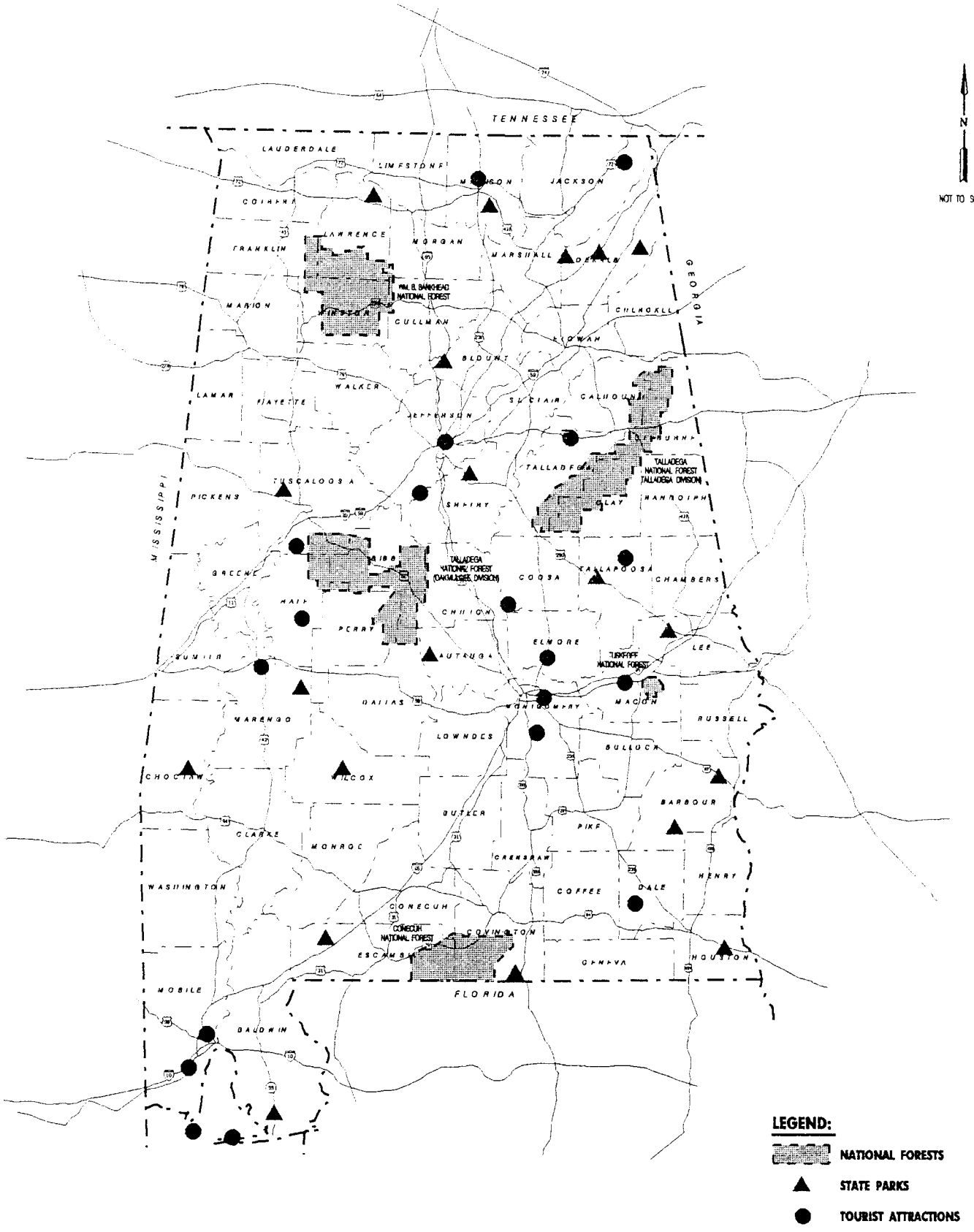

PARKS AND RECREATION AREAS

FIGURE 3.3

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and Rocket Center in Huntsville, Bellingrath House and Gardens in Mobile County, and the Gulf Coast Beaches.

PUBLIC TRANSIT

In Alabama, public transportation is available in both urban and rural areas. This includes all twelve urban areas and 46 of the 67 counties. Different modes of service include regular fixed-route, demand response and subscription service. Alternative services including demand response and subscription service are generally used instead of fixed route service where population densities are relatively low.

In the urbanized areas, traditional fixed-route service can be found in Birmingham, Mobile, Montgomery, Tuscaloosa, Anniston, Phenix City, Huntsville, and the Auburn-Opelika area. Urbanized areas that provide demand response service as their basic system include Florence, Decatur, Dothan, and Gadsden.

All systems provide transportation to disabled persons as per the Americans with Disabilities Act (ADA). Full compliance with the ADA has not yet been achieved, but is not required until January 1997. Fixed-route systems provide some accessible vehicles on regular routes in addition to a complementary paratransit service. The demand response systems provide equivalent service with accessible vehicles. These vehicles are a variety and combination of sizes of vans and buses that meet ADA accessibility requirements. Existing urban and rural transit systems are shown in Figure 3.4.

RAILROADS

The State has an extensive network of railroad lines operated by 24 different private rail companies. Five major (Class I) railroads provide most of the mainline service, while the Class III branch lines link smaller communities to the main lines.[2] The major railroads are Burlington Northern Railroad, CSX Transportation, Illinois Central Railroad, Norfolk Southern Corporation and Kansas City Southern. Burlington Northern and Kansas City Southern serve western Alabama, Illinois Central operates near Mobile in the southwestern part of the state, and Norfolk Southern and CSX serve throughout the state. Four of the Classe I rail lines serve the Mobile area, especially the Port of Mobile. Rail lines in the state are shown in Figure 3.5. The approximate mileage of track operated by each of the major systems is shown in Table 3.1.

The Alabama Rail Plan

A statewide rail plan completed in 1992 by the Alabama Highway Department (now the Alabama Department of Transportation) should be considered the railroad element for the current Statewide Transportation Plan. The 1992 plan was prepared to comply with federal regulations pursuant to the

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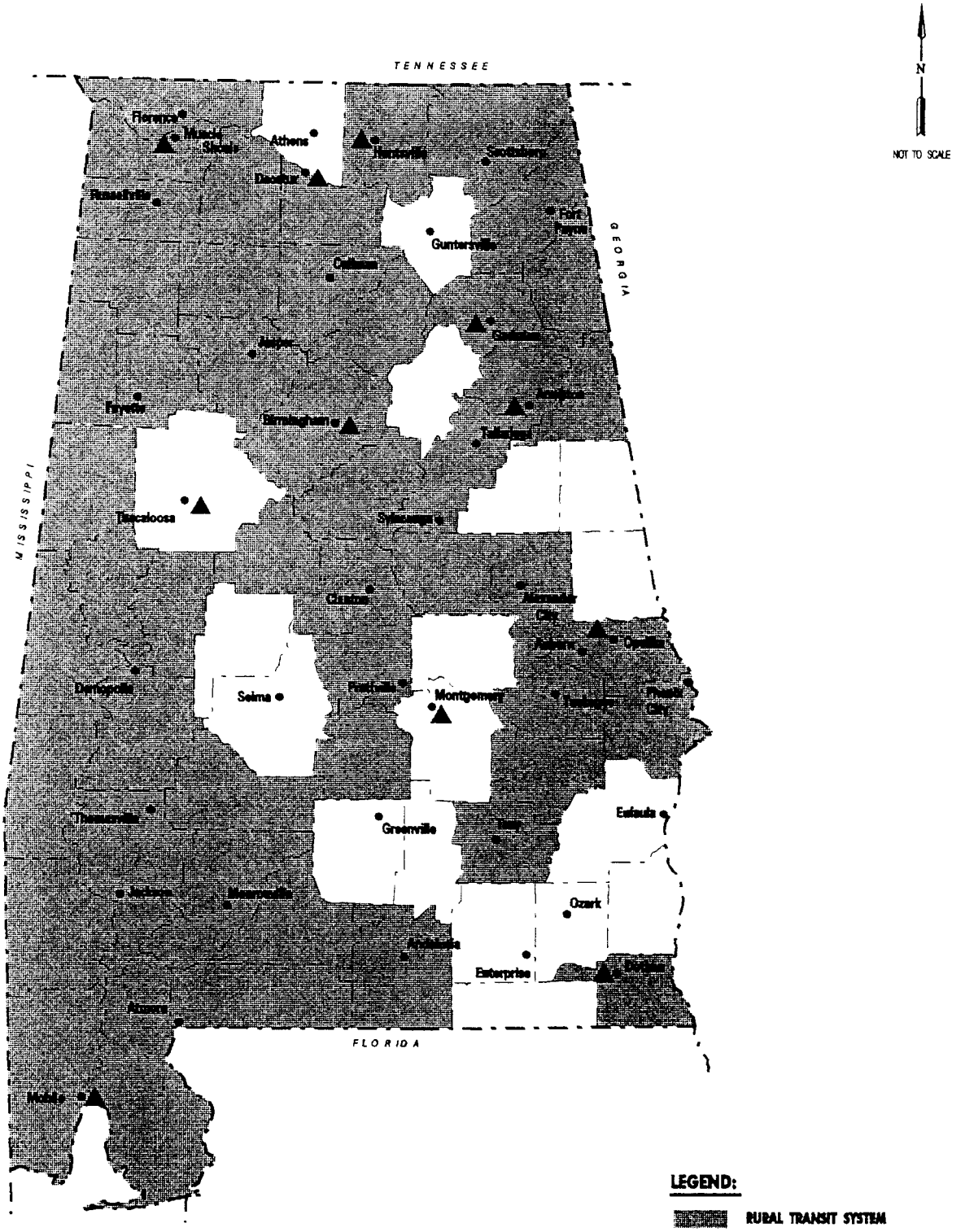
[2] Railroads are classified as Class I, II, or III based on their annual gross operating revenues: Class I, over $50 million; Class II, $10 - $50 million; and Class III, under $10 million.



TRANSIT SYSTEMS

FIGURE 3.4

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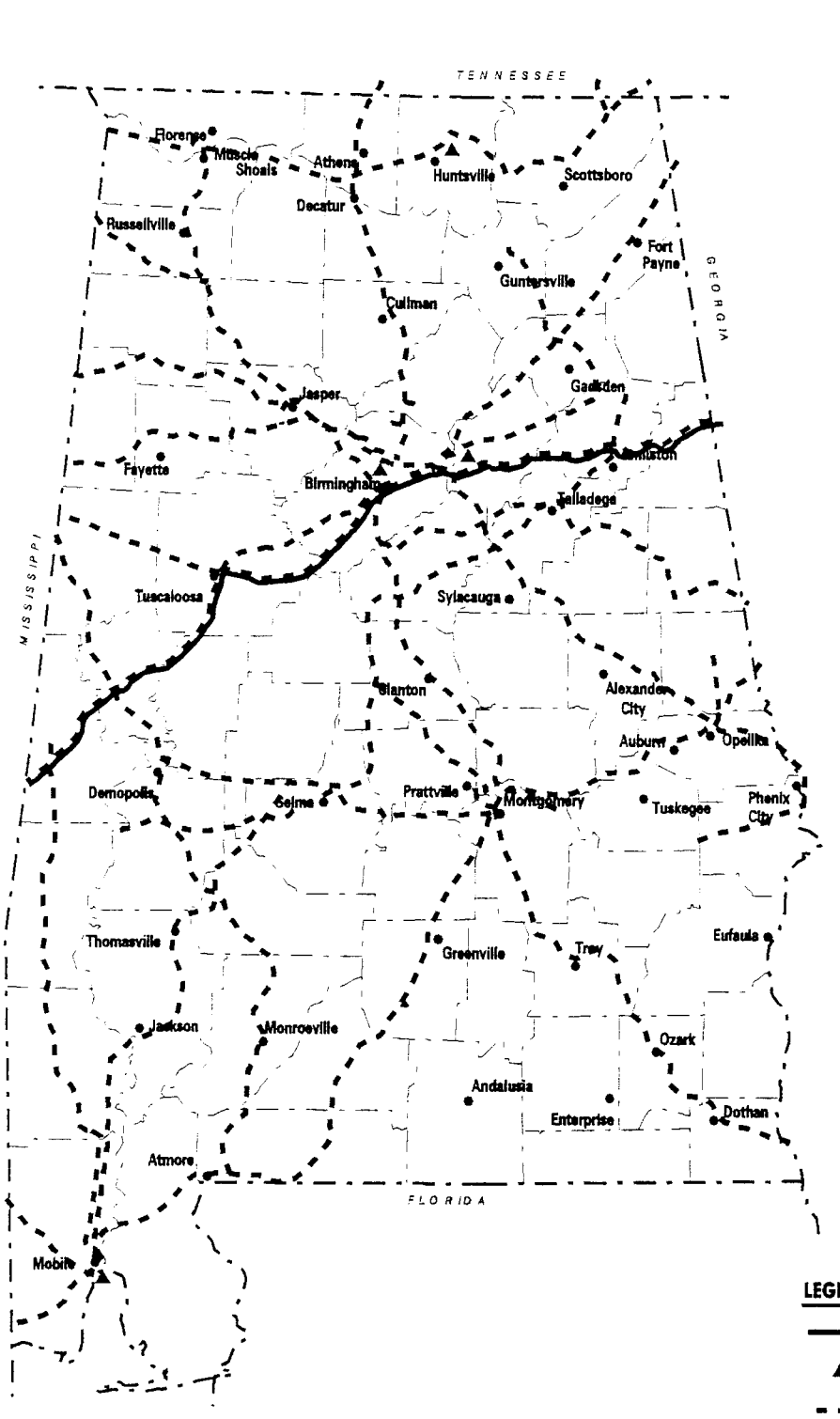

Sources: Alabama County Data Book 1992 - 93, Alabama Rail Plan 1990, and Alabama Rail Map 1995

RAIL SYSTEM

FIGURE 3.5

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Railroad Revitalization and Regulatory Reform Act of 1976 and the Local Rail Service Assistance Act of 1978.[3]

Table 3.1

Railroad Track Mileage in Alabama[4]

Class	Company	Miles of Track
I	Burlington Northern Railroad	618
I	CSX Transportation, Inc.	1724
I	Illinois Central	78
I	Norfolk Southern Corp. & Subsidiaries	2107
I	Kansas City Southern Railway	84
III	various (18 companies)	526
	Terminal Railway, Alabama State Docks	75
	Total	5212

That plan reached a number of conclusions concerning the role of the state versus the private rail sector, the rail system, and the rail planning process. The conclusions of the 1992 plan were as follows:

1. The State of Alabama recognizes the importance of privately owned and operated railroads, and will maintain a continuing rail planning program to assist in the maintenance of this efficient mode of transportation;

2. Both rail freight and rail passenger services are important to the state;

3. The state will utilize federal funds in those places and for those purposes which tend to comply with the state's rail planning goals and principles;

4. Compared to many other states, the railroad companies and rail trackage of Alabama are in reasonably good financial and physical condition;

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[3] *Alabama Rail Plan*, Alabama Highway Department, 1992.

[4] Sources: *Alabama Rail Plan*, Alabama Highway Department, 1992 and *Alabama Rail Map*, Alabama Department of Transportation, 1995.

5. Alabama's rail system is largely in place and major additions or deletions are not anticipated;

6. The development of Alabama's coal reserves requires direct rail service, and coal transport requirements shall be a priority element in the Alabama continuing rail planning process;

7. Safe and sufficient rail roadbed and track are necessary for the public safety, especially regarding hazardous materials. Hazardous materials and railroad safety shall also be items in the Alabama continuing rail planning process;

8. The Alabama Highway Department [now the Department of Transportation] is the designated Rail Planning Agency in Alabama. This agency conducted this rail plan update, has experienced personnel and will continue to be the Alabama rail planning and implementation agency; and

9. The railroad planning and regulatory functions must serve in a coordinated and cooperative manner. In this sense, it is desirable that the Alabama Highway Department [ALDOT] and the Alabama Public Service Commission continue their close working relationships.

Existing Freight Services

Alabama has not experienced some of the severe problems that other states have had with railroad bankruptcies, line abandonments, and deterioration of rail facilities. However, abandonment of unprofitable or marginal rail lines has been a concern due to the importance of rail transportation to shipping certain products. Alabama's most important industry - wood products - depends heavily on rail transportation, as do other industrial and agricultural products. Therefore, Alabama's rail planning efforts have concentrated on preserving branch lines that are vital to continued rail service to urban and rural communities.

Since 1971, 80 lines totaling 1,254 miles were abandoned in the state. This represents 24 percent of the rail lines in service in 1991. The 1992 rail plan analyzed the operating statistics, needs, and potentials of the light density (Class III, rural branch lines) rail lines within the state. It also examined 102 light density lines and made recommendations to provide some public rehabilitation assistance to eight of the lines.

Multimodal Service[5]

Rail transportation as part of a multimodal transportation service is becoming increasingly important. Both trailers on flat cars (TOFC) and containers on flat cars (COFC) provide a way to combine the cost-effectiveness of long-distance rail with the flexibility of truck pick up and delivery. Overseas containers make possible international shipments using truck pick up and delivery at each end, ocean crossing by ship, and interstate shipment by rail. Three cities in the

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[5]Multimodal and intermodal are terms often used interchangeably to refer to transportation using more than one mode (i.e. rail, water, highway). Intermodal refers more to the transfer between modes, and multimodal means more than one mode is utilized or refers to modes other than highways.

state have terminals that can handle TOFC and COFC shipments. Most intermodal rail transfers are made at the Port of Mobile.

As shown in Table 3.2, intermodal transfer terminals are located in Birmingham, Huntsville, and Mobile. The International Intermodal Center (IIC) at Huntsville is owned and operated by the Airport Authority as part of the Huntsville International Airport facility. Served by Norfolk Southern, it can handle TOFC and COFC shipments by truck, rail, or air. It is located in a Foreign Trade Zone and has US Customs and brokers on site.

Table 3.2

Intermodal Rail Transfer Terminals[6]

City	Company	Facility	Container	Trailer
Birmingham	Burlington Northern	B-N Hub Center	x	x
	Norfolk Southern	Norris Yard	x	x
Mobile	Burlington Northern	B-N Hub Center	x	x
	Illinois Central	Alabama State Docks		x
	CSX Transportation	Mobile Ramp		x
	Terminal Railway	Alabama State Docks	x	x
Huntsville	Airport Authority/Norfolk Southern	International Intermodal Center	x	x

Passenger Rail Service

Intercity rail passenger service is provided by AMTRAK. The *Crescent*, operating between New York City and New Orleans via Atlanta, stops in Anniston, Birmingham, and Tuscaloosa between mid-morning and mid-afternoon. In 1995, this train was reduced in schedule from daily to three days a week due to low ridership and excessive operating losses. AMTRAK has proposed eliminating this service, and its future remains uncertain at this time.

The *Sunset Limited*, which began in 1993, runs between Miami and Los Angeles via Jacksonville, Pensacola, and New Orleans. It operates three days a week on CSX track and stops in Mobile and Atmore.

AMTRAK also provides intercity bus service replacing the *Gulf Breeze* which formerly provided service between Birmingham and Mobile via Montgomery. This bus, which also stops in Atmore and Montgomery, provides a connection with the *Crescent* for passengers from those cities.

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[6]*Alabama Rail Plan*, Alabama Highway Department, 1992.

AVIATION

Aviation is critically important to the future economic development of the state, as the most important mode of long-distance passenger travel and a key component of goods shipment. Planning for aviation facilities is directed by the Federal Aviation Administration (FAA), which regulates and funds aviation activities and facilities. The Alabama Aeronautics Commission (AAC) has responsibilities for aviation within the state and provides some funding for publicly-owned airports.

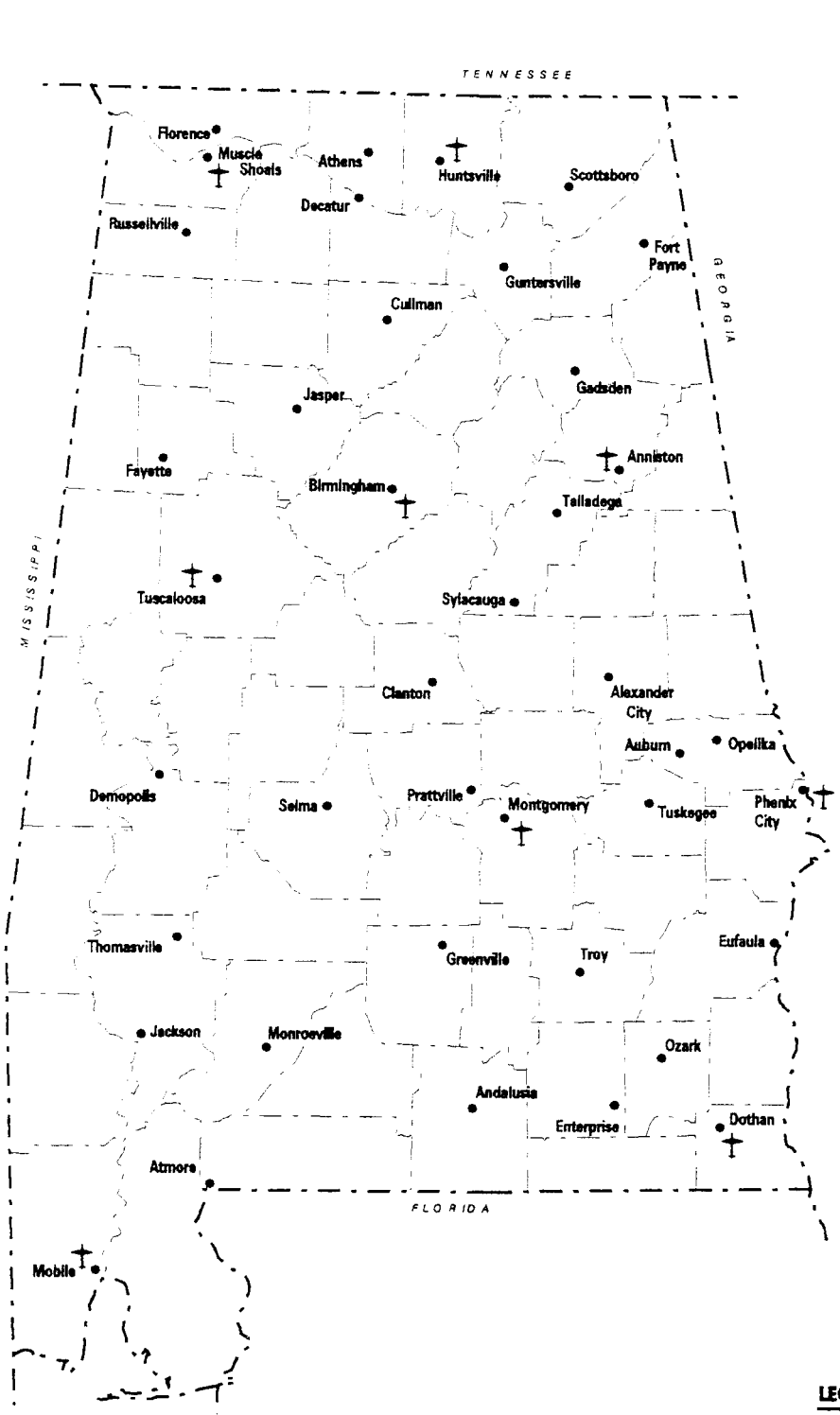
Nationally, the FAA has developed a *National Plan of Integrated Airport Systems* (NPIAS), which is revised every two years. Sixty-nine of the public use airports in Alabama are included in the national system. The *Alabama State Airport System Plan 2010* was prepared in 1988 to inventory existing facilities, project future needs, and recommend a future aviation system to guide investment decisions. This multi-volume document, part of a continuing planning process required by the FAA, should be considered the official transportation plan element for aviation. Updated information will be included in the ASTP as the next aviation planning cycle is completed.

There are 103 public use airports in the state, as well as another 85 facilities that are either private-use or for other types of aircraft, such as helicopters, seaplanes, or ultra-light planes. Airports are of three general types: commercial, general aviation, and military. Military airports are outside the scope of the plan. Commercial airports are those with scheduled passenger service. General aviation airports, which may be public-use or private-use, encompass a wide range of facilities and levels of improvement. Figure 3.6 shows the locations of the commercial airports and general aviation airports on the NPIAS system.

There are eight commercial airports in Alabama, and nine cities in the state have regularly-scheduled air carrier service: Birmingham, Huntsville, Mobile, Montgomery, and Phenix City (Columbus, Georgia) are served by major carriers while the others are served by commuter airlines. Table 3.3 shows the commercial airline service in the state.

The Airport System Plan inventoried all airport facilities in the state and evaluated six alternate airport systems for the planning period. The recommended airport system was designed to serve the maximum number of Alabama residents with the minimum number of facilities. The recommended system comprises 72 facilities. It would include a commercial service airport within 60 minutes driving time of the vast majority of state residents, and general aviation airports within 30 minutes driving time of all towns of 2,500 or more. All airports would meet minimum standards (runway length, lighting, instrumentation, service, etc.) for their respective class of airport.

The plan recommended new utility (small, general aviation) airports in Calhoun, Lauderdale, and Madison Counties and a basic transport (larger general aviation) airport in Shelby County. In



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NOT TO SCALE

LEGEND:

COMMERCIAL AIRPORTS

Source: Alabama County Data Book 1992 - 93 and PBS&J Survey

AIRPORTS

FIGURE 3.6

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Table 3.3
Alabama Commercial Airline Service

City	Airline
Anniston	GP Express
Birmingham	American, Delta, Northwest Airlink, Southwest, Trans World Express, United, USAir
Dothan	ASA, Northwest Airlink
Huntsville	American Eagle, Atlantic Southeast, Delta, Northwest Airlink, USAir
Mobile	American Eagle, Delta, Northwest Airlink
Montgomery	American Eagle, Atlantic Southeast, Delta, Northwest Airlink, USAir
Muscle Shoals (Quad Cities)	Northwest Airlink
Phenix City (Columbus, Georgia)	American Eagle, Atlantic Southeast, Delta, Northwest Airlink
Tuscaloosa	American Eagle

Source: PBS&J survey of individual airports, September 1994.

addition, improvements necessary to bring other airports up to minimum standards for their respective classes were identified.

Financial resources may not be adequate to implement the airport system described in the Airport System Plan 2010, particularly at the state and local level. The improvements recommended would cost $104 million, of which state and local governments would each need to contribute $5 million. The plan includes recommendations for closing this financing gap.

A new international airport was the subject of a 1989 Governor's Office study. This study was undertaken to determine if the development of a new international airport in the Birmingham - North Central Alabama region would be justified. The need was established for a major airport offering domestic and international passenger and freight service. A site for the proposed airport was chosen approximately 45 miles northeast of downtown Birmingham in St. Clair and Etowah Counties. Public hearings have been held and the Environmental Assessment (EA) phase of the proposed airport project is expected to be completed in the spring of 1995. Subsequently, if approved by the FAA, preparation of an Environment Impact Statement (EIS) will begin. If the project is approved at all levels by the federal, state, and local governments and the necessary funds are appropriated, the proposed international airport would open for business in approximately 2000. Financial feasibility studies for construction and operations of the airport are currently being developed.

PORTS AND WATERWAYS

Water transportation in the state includes a sea port at Mobile and 1,300 miles of navigable waterways, including inland ports, throughout the state.[7] Figure 3.7 shows the locations of the waterways and dock facilities in the state.

Port of Mobile

The Port of Mobile is the tenth largest deep-water port in the country. It is served by nearly 200 shipping lines with interconnections to every major world port. The Alabama State Docks, which are administered by the Alabama State Docks Department, are the principal facilities at the Port. The State Docks, together with the other privately-owned docks, provide 33 berths for ocean-going vessels. The State Docks have recently undergone a major expansion and modernization program for bulk handling and general cargo facilities.

The shipping channel is one of the deepest in the south (40-foot minimum), and the channel length is approximately 36 miles wide. The channel serving the McDuffie Coal Terminal at the Alabama State Docks is 45 feet deep and 400 feet wide. Several towing companies have offices at the Port, providing barge service along the inland and intracoastal waterways.

The port is served by four major railroads that feed into the Alabama State Docks Terminal Railway facility. The Terminal Railway sends the various rail cars to the appropriate "berth" warehouse or shipside loading facility. The same distribution process is repeated in reverse for transfer of incoming goods from ship to rail.

The Waterway System

Waterways are important in transporting raw materials and bulk agricultural and industrial products. Six waterways interconnect to provide Alabama with an extensive inland waterway system. Alabama has more navigable waters with a minimum nine-foot depth than any other state in the union. Ten Inland Docks owned by the Alabama State Docks and eight private or local government-owned docks are located along the waterways. The waterways and docks are listed below. The inland waterways, including over two dozen locks, are operated by the US Army Corps of Engineers (ACOE).

The Alabama-Coosa-Waterway links Mobile Bay and Montgomery via the Alabama River, and serves the Selma area and southwestern Alabama. State Docks are located at Montgomery, Selma, and Claiborne.

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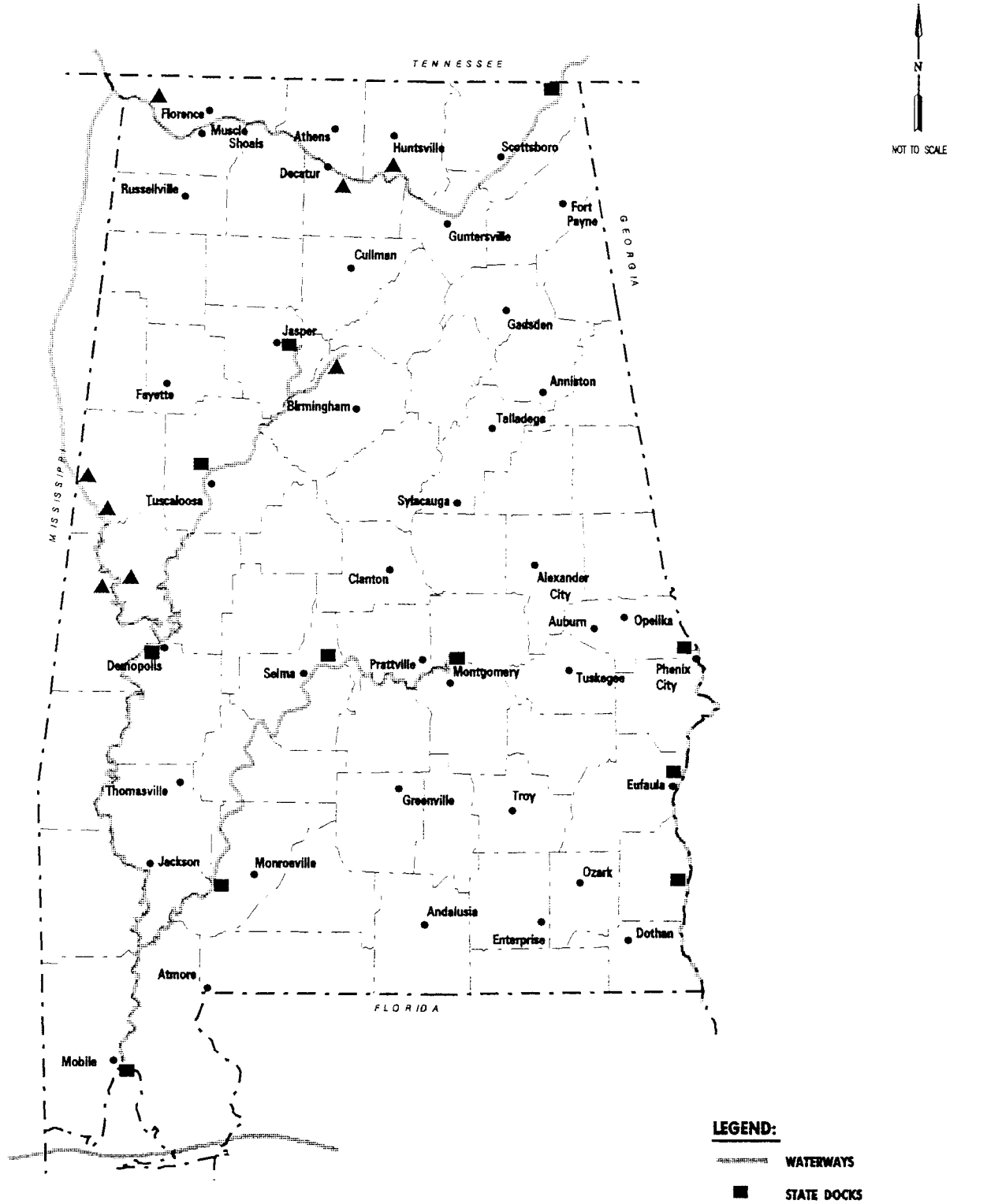
[7]The following information draws on *Alabama Markets and Transportation*, Alabama Development Office, Alabama Center for Commerce, 1991; and the *Alabama County Data Book*, 1992-93, Alabama Department of Economic and Community Affairs, 1992.



PORTS & WATERWAYS

FIGURE 3.7

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The Chattahoochee-Apalachicola Waterway connects Phenix City with the Gulf Intracoastal Waterway at Apalachicola, Florida, and services Eufala, Dothan, and southeastern Alabama. State Docks on this waterway include Phenix City, Eufala, and Columbia.

The Tennessee Waterway crosses the northern part of the state, connecting Knoxville, Tennessee with the Ohio and Mississippi Rivers. It serves the Alabama cities of Huntsville, Decatur, Guntersville, Scottsboro, and the Quad-Cities (Muscle Shoals/Florence area). There is a State Dock at Bridgeport, and private docks are located at Huntsville, Decatur, and Florence.

The Warrior-Tombigbee Waterway serves western and central parts of the state including Cordova, Tuscaloosa, Port Birmingham, Jackson, and Demopolis. State Docks are located at Cordova, Northport, and Demopolis. A private dock at Port Birmingham provides access to industries in that city.

The Tennessee-Tombigbee Waterway starts at the Tennessee River, connecting all of Alabama's waterways and the Port of Mobile with more than 16,000 miles of navigable waters east of the Mississippi. Dock facilities along this route include ports at Pickensville, Aliceville, and Port Epps. It provides an alternative to the Mississippi River that is often shorter and more economical, especially for northbound shipments.

The Gulf Intracoastal Waterway crosses the entire length of the Alabama coast. This canal extends along the entire Gulf coast and connects with the intracoastal waterway serving the Atlantic coast of the United States.

BICYCLE AND PEDESTRIAN SYSTEMS

Throughout the state, people ride bicycles and walk either for transportation or exercise or both. To date, there has been no coordinated planning effort statewide to address these modes of travel. The Statewide Bicycle Plan is being prepared concurrently with the Statewide Transportation Plan, and when completed will be the bicycle element of this plan. Each metropolitan area long-range plan addresses bikeways and pedestrian facilities, and each of these plans should be considered the official plan in its respective geographic area.

INTERMODAL SYSTEMS AND FACILITIES

Intercity Bus Transportation

Intercity bus service is an important transportation mode especially for those without access to private automobiles. Traditionally, it has been an important mode of long-distance transportation for young people, older people, and those on limited income.

Intercity bus service is provided by private carriers to all of the medium to large-sized cities and small towns in the state. Bus lines serving major cities in Alabama connect with all major cities in surrounding states and with the national Greyhound/Trailways network. AMTRAK also operates

an intercity bus to replace the *Gulf Breeze* passenger train which operated between Mobile and Birmingham until this year..

The State of Alabama is undertaking an Intercity Bus Study to identify needs and evaluate alternatives for this mode of transportation. When that study is complete, its findings will be incorporated into the statewide transportation planning process.

Commercial Trucking

While rail and waterway transportation is critical for some bulk industrial goods, raw materials, and agricultural products, most of the products manufactured, sold, and purchased in Alabama are transported by truck. Sixty-three percent of all manufactured goods moved into and out of Alabama are shipped by truck.[8] There are many firms involved in trucking within the state, including common carriers, those owned by businesses for their own use, and those owned by independent truck owner/operators. Of the over 280,000 commercial trucks registered in the state, 20% are for hire and the rest are operated by firms for their own use. Trucks operate on nearly all public roads, but long-haul trucking is concentrated on the interstate system and on the designated truck route system in the state.

Trucking is involved in many intermodal transfers, as described previously in the section on intermodal rail service. There are also intermodal transfers not involving rail, such as truck/waterborne and truck/air combinations. These take place at airports, inland water ports, and at the Port of Mobile. The Huntsville Airport's International Intermodal Center is one of these intermodal terminals, serving rail and other transportation modes.

Pipelines

There is an extensive network of pipelines throughout the state to deliver natural gas, crude oil, and petroleum products. Four large interstate natural gas pipelines traverse the state, generally from west to east. Other pipelines transport crude oil from Alabama oil fields to refineries, refined petroleum products, and natural gas to residential and commercial customers.

SUMMARY

Table 3.4 summarizes the various transportation modes according to which agency (if any) is responsible for construction, maintenance, regulation, or funding. Many different public and private organizations have responsibilities in transportation within the state. The ALDOT, although it must produce a long-range transportation plan, will have no direct responsibility over the future of many aspects of the transportation system.

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[8]Source of trucking data: *Trucking in Alabama*, Alabama Trucking Association, 1991.

Table 3.4
Transportation System: Modes and Responsibilities

Mode	Construction	Maintenance	Funding	Oversight
Highways & Bridges	ALDOT; Counties; Municipalities	ALDOT; Counties; Municipalities	ALDOT; FHWA; Counties; Municipalities	FHWA; ALDOT
Transit	Municipalities; Counties; Public Authorities; Private Sector	Municipalities; Counties; Public Authorities; Private Sector	FTA; Municipalities; Counties; Public Authorities; Private Sector	FTA; PSC
Railroads	Private Sector; Local IDAs; State Docks; Public Authorities	Private Sector; State Docks; Public Authorities	Private Sector; CONRAIL; AMTRAK; State; State Docks; Local IDAs; Public Authorities	PSC; US DOT
Airports	FAA; Local Authorities; Counties; Municipalities	Local Authorities; Counties; Municipalities	FAA; Local Authorities; Counties; Municipalities; AAC	FAA; ALDA
Ports and Waterways	State Docks; Local Port Authorities; ACOE; TVA	State Docks; Local Port Authorities; ACOE; TVA	State Docks; Local Port Authorities; ACOE; TVA	ACOE; TVA
Bicycles & Pedestrians	Local governments; private sector; ALDOT	Local governments; private sector; ALDOT	FHWA; FTA; ALDOT; private sector; local governments	FHWA; FTA; ALDOT; local governments
Intermodal Facilities	Varies by type of facility; all of the above	Varies by type of facility; all of the above	Varies by type of facility; all of the above	Varies by type of facility; all of the above
Pipelines	Private sector	Private sector	Private sector	US DOT; ICC

Abbreviations: AAC: Alabama Aeronautics Commission; ALDA: Alabama Department of Aeronautics; ALDOT: Alabama Department of Transportation; IDA: Industrial Development Authority; FHWA: Federal Highway Administration; FTA: Federal Transit Administration; ICC: Interstate Commerce Commission; PSC: Public Service Commission; TVA: Tennessee Valley Authority; ACOE: U. S. Army Corps of Engineers; US DOT: U. S. Department of Transportation.

SECTION 4
METROPOLITAN AREA PROFILES

A metropolitan area transportation plan is prepared for each of the urbanized areas in the state by the Metropolitan Planning Organization (MPO). Figure 4.1 shows where the 12 urbanized areas are located. Each of these is in the process of preparing a new long-range plan under the new ISTEA guidelines. In the interim, brief profiles of the major transportation issues and concerns in each urbanized area are presented in this section.

AUBURN-OPELIKA AREA
AUBURN-OPELIKA URBANIZED AREA TRANSPORTATION STUDY

The Auburn-Opelika area is located in Lee County approximately fifteen miles west of the Alabama-Georgia border. The cities of Auburn, Opelika, and Lee County form the MPO membership. Notably, the Auburn-Opelika area is the home of the main campus of Auburn University.

The Auburn-Opelika MPO will complete a new long-range transportation plan in 1995 as required by the ISTEA. The MPO's previous long-range plan was prepared in 1985. The new long-range plan will be fiscally constrained meaning that funding sources will be identified for all projects. The Auburn-Opelika Fiscal Year 1994 Transportation Improvement Program (TIP) addresses funding of planned transportation projects from fiscal year 1994 through fiscal year 1999.

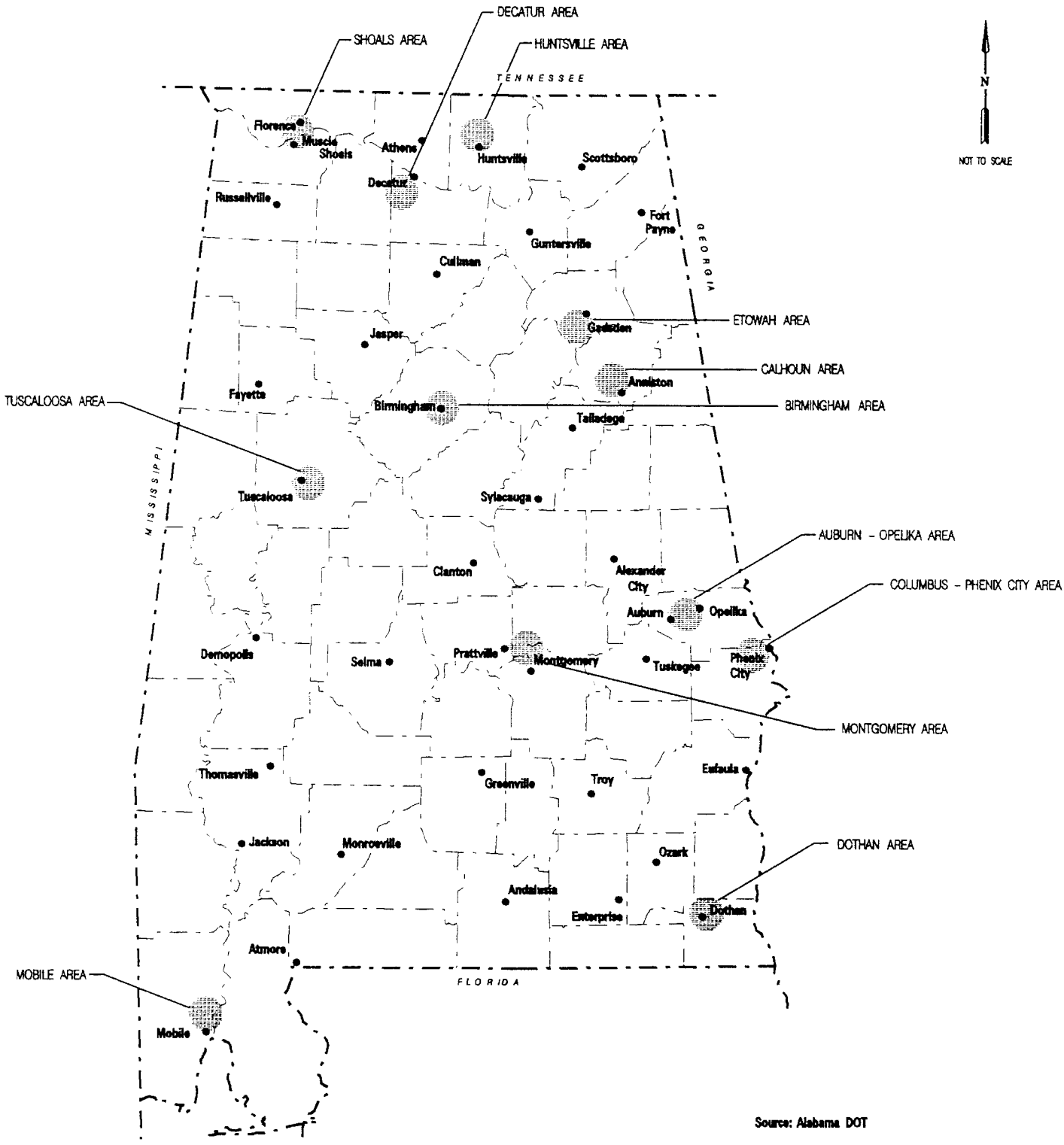
Highways

The Auburn-Opelika area is located along I-85 approximately sixty miles east of Montgomery. In addition to I-85, the area is served by other proposed National Highway System (NHS) routes. US 431 is a north-south principal arterial that links the Auburn-Opelika area to I-20 and the Anniston area. US 280, a Strategic Highway Network (STRAHNET) route, links Auburn with Birmingham to the northwest and the Columbus-Phenix City area less than twenty miles to the southeast.

The Auburn-Opelika MPO plans two major projects involving the US 280 corridor. The fiscal year 1994 Auburn-Opelika TIP contains funding to build a new interchange and connector road from I-85 to the junction of US 280 at US 29. Also, the TIP contains construction funding for widening existing two-lane sections of US 280.

Public Transportation

Public transportation in Auburn and Opelika is provided by the Lee County Transit Agency (LETA). LETA operates fixed route as well as demand responsive service. LETA's two fixed bus routes



Source: Alabama DOT

URBANIZED AREAS

FIGURE 4.1

operate back and forth from Auburn to Opelika and cross seven times. LETA also offers special service for the elderly and disabled riders.

Bicycle and Pedestrian

Bicycle and pedestrian transportation is a favorite mode of travel for university students and others in the Auburn-Opelika area. Planning for new bicycle and pedestrian facilities is, therefore, an important part of the Auburn-Opelika MPO's program. In 1995, the Auburn-Opelika MPO TIP includes funding to build seven miles of new bicycle paths including one that will connect the Auburn campus with Chewacla State Park and a number of major roads. Additionally, the TIP includes funding to build several new sidewalks in 1995.

Other Transportation Facilities and Services

CSX Transportation and Norfolk Southern Corporation own and operate railroad lines that serve the Auburn-Opelika area. The Auburn-Opelika R.G. Pitts Airport provides general aviation services and is located just north of I-85 on the shared city limit between Auburn and Opelika. Commercial air service is available nearby in the Columbus-Phenix City area. In 1996, it is planned that the R.G. Pitts Airport will be expanded when two new runways are built. The fiscal year 1994 Auburn-Opelika TIP contains construction funding to relocate approximately 0.5 miles of Glenn Avenue so that the airport expansion can take place.

BIRMINGHAM AREA
BIRMINGHAM METROPOLITAN AREA
LONG RANGE TRANSPORTATION PLAN

The Birmingham area is Alabama's largest and most populated urbanized area. The Birmingham area encompasses most of eastern Jefferson County where the city of Birmingham is located and a smaller area in northwestern Shelby County.

Representation on the Birmingham MPO Board is assigned proportionally based on population. Of the 40 MPO Board members, 15 representatives are from the city of Birmingham, 15 are from Jefferson County municipalities other than Birmingham, seven are from unincorporated Jefferson County, and three are from Shelby County.

The Birmingham MPO will complete a new long-range transportation plan in 1995 as required by the ISTEA. The MPO's previous long range plan was updated in 1993. The new long-range plan will be fiscally constrained meaning that funding sources will be identified for all projects. The Birmingham Metropolitan Planning Area TIP addresses funding of planned transportation projects from fiscal year 1994 through fiscal year 1998.

Highways and Bridges

The Birmingham area is served by an extensive highway network. Three interstate highways meet in downtown Birmingham: I-65 links Birmingham to Montgomery and Nashville, Tennessee; I-59 links Birmingham to Chattanooga, Tennessee and New Orleans, Louisiana; and I-20 connects Birmingham and Atlanta, Georgia. The southern portion of Birmingham's planned circumferential bypass facility, I-459, is in place. Another important highway in the Birmingham area is US 280, a proposed NHS STRAHNET route, that links downtown Birmingham to the rapidly growing suburbs in eastern Jefferson County and northwestern Shelby County.

The Birmingham area has been designated a marginal non-attainment area for ozone under the provisions of the Clean Air Act Amendments (CAAA) of 1990. This means that levels of ozone concentration were found to exceed the National Ambient Air Quality Standards. Federal law requires that the Birmingham area take the steps necessary to reduce ozone concentration to acceptable levels or pay fines to the government. As a result, a major focus of transportation planning for the Birmingham MPO is to implement projects that will reduce single occupant vehicle (SOV) trips and improve vehicle speeds in order to reduce vehicle emissions that lead to ozone formation.

The Birmingham MPO Fiscal Year 1994-1998 TIP contains funding to study and/or implement a number of transportation control measures that, in addition to increasing capacity and eliminating traffic congestion, are intended to reduce vehicle emissions. As of 1998, it is programmed that 15 park-and-ride lots will be purchased or constructed at locations around the Birmingham area where commuters can park their cars and change to shared ride vehicles for the remainder of their trip. Successful park-and-ride lots would improve air quality by taking trips off of the road; other TIP projects, called traffic flow improvements, seek to improve air quality by raising vehicle speeds and eliminating vehicle stopped-delay. The TIP contains construction funding for several major traffic flow improvements including computerized traffic control systems for ten signalized arterials on the state highway system and nine City of Birmingham signalized arterials.

Public Transportation

Public transportation in the Birmingham area is provided by Metro Area Express (MAX). MAX offers six day a week, fixed route bus service throughout the Birmingham area. In September 1995 service will be reduced to five days a week. The MPO views increasing public transportation services and ridership levels as an important part of the effort to reduce traffic congestion and improve air quality in the Birmingham area. The Fiscal Year 1994-1998 TIP includes funding aimed at expanding future public transit services. The TIP contains funding for the MAX Vanpool Program to purchase 13 new vans which will be leased to participating companies for use by groups of employees that wish to carpool. Also, the TIP contains funding to evaluate the feasibility of a light rail transit system for the Birmingham area to be implemented for 2010 or later.

Railroads

Birmingham is an important railroad transportation center for Alabama and the Southeast. Three Class I railroads -- Burlington Northern, Norfolk Southern, and CSX Transportation serve the Birmingham area. Burlington Northern and Norfolk Southern operate intermodal transfer terminals in Birmingham. There is AMTRAK passenger service: the *Crescent* stops in Birmingham, Anniston, and Tuscaloosa in its service between New York and New Orleans. AMTRAK bus service connects Birmingham with the *Sunset Limited* which provides coast to coast service between Miami and Los Angeles.

Aviation

Birmingham Municipal Airport is located northeast of downtown Birmingham with ready access to the interstate system. The airport is served by major carriers including USAir, Trans World Express, American, Delta, and United Airlines.

Ports and Waterways

The Black Warrior River flows out of Walker County northwest of Birmingham and forms part of Jefferson County's western border. The Warrior-Tombigbee Waterway provides a navigable transportation route from the Birmingham area to Mobile Bay. CSX Transportation owns and operates a private dock facility, used by several other companies as well, on the Black Warrior River approximately 25 miles northwest of downtown Birmingham.

Bicycle and Pedestrian

The Birmingham MPO is active in planning for bicycle and pedestrian transportation as an alternative to SOV transportation, and thus an air quality benefit, and to provide improved quality of life for area residents. The current Birmingham TIP includes several bicycle and pedestrian projects. Funding is included to purchase and install bicycle racks at locations such as college campuses where it is hoped that SOV commuters can be encouraged to cycle instead of driving their automobile. Funding also is included to prepare a bicycle and pedestrian transportation master plan.

CALHOUN AREA
CALHOUN AREA TRANSPORTATION STUDY

The Calhoun area MPO is located in eastern Alabama and includes portions of Calhoun and Talladega counties. Anniston, the largest city in the Calhoun MPO, is located approximately in the center of the urbanized area. In addition to Calhoun County and Anniston, the Calhoun County cities of Weaver, Jacksonville, and Hobson City and the Talladega County city of Oxford are MPO member municipalities. In 1995, Talladega County is scheduled to become an official member of the MPO as well. The Calhoun Area Transportation Study (CATS) is prepared by the East Alabama Regional Planning and Development Commission for the MPO.

The Calhoun area is the home of Fort McClellan and the Anniston Army Depot. Along with these important military installations, transportation has played a role in the growth and economic development of the Calhoun area. Interstate 20 passes just south of Anniston and links Birmingham approximately 50 miles to the west and Atlanta, Georgia approximately 100 miles to the east. In addition, US 78, US 431, and a number of railroad lines traverse the Calhoun area.

The Calhoun MPO will complete a new long-range transportation plan in the winter of 1995 as required by the ISTEA. The MPO's previous long range plan was prepared in 1986. The new long-range plan will be fiscally constrained meaning that funding sources will be identified for all projects. The CATS Fiscal Year 1994 - Fiscal Year 1998 Transportation Improvement Program (TIP) addresses funding of planned transportation projects for those years.

Highways and Bridges

A major transportation planning focus for the Calhoun MPO is to relieve traffic congestion in the Anniston downtown area. Quintard Avenue is a heavily traveled north-south road that runs through the Anniston city center and is designated as US 431. The implementation of two projects in the CATS 1994-1998 TIP will complete an eastern bypass for the Quintard Avenue/Downtown corridor: 1) the widening of an existing two-mile segment from two to five lanes, and 2) the construction of a new five-mile segment pending alternatives analysis and environmental impact assessment. Also, a number of minor improvements are planned for Quintard Avenue including improved traffic signalization and addition of intersection turn lanes.

Public Transportation

Anniston contracts with a private organization, Alabama Limousine, to provide urban bus services. Within the Anniston corporate limits, three fixed routes serve approximately 5000 persons per month. Outside of Anniston, Calhoun County operates a rural transit system offering demand responsive and subscription service.

Railroads

The Calhoun area's railroad network helps to make it an important multimodal transportation center in northeast and central Alabama for the movement of both people and goods. The Amtrak *Southern Crescent* which provides service between New York and New Orleans stops in Anniston. Looking to the future, the CATS 1994-1998 TIP contains funding to study the feasibility of implementing a major multimodal facility in downtown Anniston that would include renovation of the existing rail station and improved rail connections to auto, taxi, and bus transportation. In addition, the feasibility of express rail service between Birmingham and Atlanta with a stop in Anniston is being considered by the ALDOT.

Aviation

The Anniston Municipal Airport, which is just south of I-20 near Oxford, features commercial air service for passengers and freight. Additionally, Anniston Municipal Airport serves as an air traffic control center for northeastern and central Alabama. There are smaller airports in the Calhoun area and the Alabama Airport System Plan has recommended an additional general aviation airport for this area.

Bicycle and Pedestrian

A number of planning programs are underway to enhance the viability of bicycle and pedestrian transportation in the Calhoun area. A rails-to-trails committee has been established and currently is focusing on developing an abandoned railway for bicycle and pedestrian use from Cedartown in northwestern Georgia to Jacksonville State University in Jacksonville and eventually terminating in Anniston. The upcoming CATS long range plan will contain a bicycle and pedestrian transportation element with goals and objectives and plans for an areawide network of shared and bicycle/pedestrian routes.

COLUMBUS, GA-PHENIX CITY, AL AREA
COLUMBUS-PHENIX CITY TRANSPORTATION STUDY

The Columbus-Phenix City MPO is unique among Alabama's urbanized areas in that planning and jurisdictional responsibilities are shared by government organizations across state lines. The Alabama and Georgia communities that make up the Columbus-Phenix City area are separated by the Chattahoochee River but joined by a modern street and highway network that includes four bridge crossings. Phenix City, Russell County, and Lee County are the Alabama members of the MPO along with Columbus-Muscogee County and Bibb City in Georgia. Important facilities in the Columbus-Phenix City area include the Alabama state docks on the Chattahoochee, Columbus Metropolitan Airport, and Fort Benning in Georgia at the end of Interstate 185.

The Columbus-Phenix City MPO will complete a new long-range transportation plan in 1995 as required by the ISTEA. The MPO's previous long range plan was updated in 1986. The new long-range plan will be fiscally constrained meaning that funding sources will be identified for all projects. The Columbus-Phenix City 1995-1997 TIP addresses funding of planned transportation projects from fiscal year 1995 through fiscal year 1997.

Highways and Bridges

The Columbus-Phenix City highway network is a transportation asset that has enabled the area to develop and grow in the last decade. During that time, major improvements of US 80 and US 431 in Alabama were carried out completing an area wide bypass facility. Both US 80 and US 431 are classified as STRAHNET routes and include major bridge crossings of the Chattahoochee River.

In 1997, construction is scheduled to begin in the Columbus-Phenix City downtown area on an important transportation improvement planned by the MPO in the 1980's. A new four lane bridge

will be constructed across the Chattahoochee River at 13th Street to replace the existing two lane bridge at 14th Street.

Public Transportation

Public Transportation in Phenix City is provided by Phenix City Express (PEX). PEX's bus service is based on one fixed route with hourly stops Monday through Saturday throughout Phenix City. In Columbus, the city's transit agency, METRA, offers multi route service with buses operating on all major roads at a minimum of five days a week and twelve hours a day.

Railroads

The Columbus-Phenix City area is served by two Class I railroads -- Norfolk Southern Corporation and CSX Transportation. A study of rail activity in the Columbus-Phenix City area is being carried out by a consultant for the MPO. The study will address current levels of rail service, expected future demand, and changes or improvements that may be necessary to sustain economic and industrial growth. Additionally, the study will consider the possibility of relocating the existing rail switching yards from the downtown area to other locations.

Aviation

In 1991, construction was completed on the state of the art control tower and terminal at the Columbus Municipal Airport. Located northeast of the Columbus-Phenix City downtown area along I-185, the airport provides major air carrier service for southeastern Alabama and southwestern Georgia. Delta, Northwest, and the commuter carriers American Eagle and Atlantic Southeast are among the airlines that fly from the Columbus Municipal Airport.

Ports and Waterways

The Chattahoochee-Apalachicola Waterway connects the Columbus-Phenix City area with the Gulf Intracoastal Waterway at Apalachicola, Florida. State Docks are located on the Chattahoochee in Phenix City.

Bicycle and Pedestrian

The Columbus-Phenix City MPO incorporates bicycle and pedestrian facilities into the planning process in its "alternative transportation plan". Both the MPO's short and long range plans contain alternative transportation plans. A river walk on both the Alabama and Georgia banks of the Chattahoochee River is an example of the projects that have come from the alternative transportation plan. In 1996, the Columbus-Phenix City 1995-1997 TIP contains construction funding to add nearly eight miles to the river walk. Among the goals of the alternative transportation plan is that abandoned rail lines in the area be reused for bicycling, hiking, jogging, and other related activities.

DECATUR AREA
DECATUR AREA TRANSPORTATION STUDY

The Decatur area is located along the Tennessee River in north-central Alabama. The Decatur urbanized area includes northwestern Morgan County and the City of Decatur on the Tennessee's south bank and a portion of Limestone County on the north bank. In addition to Morgan and Limestone Counties, the Morgan County Cities of Decatur, Hartselle, Priceville, and the Town of Trinity are members of the Decatur area MPO. The Tennessee River and I-565 link the Decatur area to the growing Huntsville area less than twenty miles east of downtown Decatur. Like Huntsville, the Decatur area is positioned to grow as an important transportation center combining highway, rail, and waterborne transportation.

The Decatur area MPO will complete a new long-range transportation plan in 1995 as required by the ISTEA. The MPO's previous long range plan was prepared in 1985. The new long-range plan will be fiscally constrained meaning that funding sources will be identified for all projects. The Decatur Area Fiscal Year 1994 - Fiscal Year 1998 TIP addresses funding of planned transportation projects for those years.

Highways and Bridges

The interstate highway system has played a significant role in the economic growth and development of the Decatur area. Decatur is located just west of I-65 approximately sixty miles north of Birmingham and ninety miles south of Nashville, Tennessee. I-565 was opened in the 1980s as a spur interstate connecting the Decatur area and Huntsville. Highways may provide further opportunity for growth in the Decatur area in the future. The corridor studies that are underway for the Memphis-to-Atlanta Highway include two proposed routes that would traverse the Decatur area. Among the three corridor alternatives being studied for the Decatur-Athens vicinity, a southern route would pass south of Decatur near Hartselle while another route would pass north of downtown Decatur near Whiteside.

Public Transportation

Public transportation in the Decatur area is provided by Morgan County and the North Alabama Community Action Agency. The services offered are typical of many rural transit systems across the state. Demand responsive and subscription service arrangements are available as well as contract service for human service agencies and large employers.

Railroads

At the present time, the railroad system is an important focus of transportation planning efforts in the Decatur area. Two Class I railroads, CSX Transportation and Norfolk Southern Corporation, provide service to the Decatur area. The services at the Huntsville International Intermodal Center are available approximately 10 miles from Decatur. CSX currently is working with the Decatur area MPO and the local government and business communities in order to select a location for a new switching and intermodal transfer facility. The existing CSX switching facility in downtown

Decatur would be relocated to the new site allowing operations and services to be expanded. CSX and the MPO have established that improved access to the highway system will be a priority in choosing a site for the new transfer terminal.

Aviation

Although there are no commercial airports in the Decatur area, Huntsville International Airport is located approximately ten miles away to the east along I-565. Huntsville International Airport offers commercial service by Delta Airlines, American Airlines, USAir, and a number of commuter airlines. Pryor Field in Limestone County is a general aviation airport within the Decatur area.

Ports and Waterways

The Tennessee Waterway connects the Decatur area with the Ohio and Mississippi Rivers and such cities as Huntsville and Knoxville, Tennessee. The Decatur area's private dock facilities located on the Tennessee River provide ready access to three NHS routes.

Bicycle and Pedestrian

The Decatur area MPO has an active bicycle and pedestrian transportation planning program. Currently, there are approximately fifteen miles of bicycle/pedestrian routes in the Decatur area. Most of these routes have been constructed alongside the Tennessee River and are used primarily for recreational purposes. Also, a rails-to-trails committee will be formed to identify abandoned rights-of-way that potentially could be developed as bicycle/pedestrian transportation facilities.

ETOWAH AREA
ETOWAH AREA TRANSPORTATION STUDY

The Etowah area MPO is located in northeastern Alabama in Etowah and Calhoun Counties. The City of Gadsden in Etowah County is the largest city in the MPO. The Etowah County cities of Attalla, Glencoe, Southside, Rainbow City, and Hokes Bluff are also members of the MPO.

The Etowah area MPO will complete a new long-range transportation plan in 1995 as required by the ISTEA. The MPO's previous long range plan was updated in 1988. The new long-range plan will be fiscally constrained meaning that funding sources will be identified for all projects. The Gadsden MPO 1994-1998 TIP addresses funding of planned Etowah area transportation projects from fiscal year 1994 through fiscal year 1998.

Highways and Bridges

The Etowah area is well served by US and Alabama state highways including several proposed NHS routes. The MPO's TIP includes projects to increase capacity on existing NHS facilities and construct new highway segments that will complete and enhance the Etowah area transportation system.

Interstate 59 passes through the Etowah area to the north and west of Gadsden. Interstate 759 is a spur that connects US 411 just south of downtown Gadsden to I-59. A major transportation planning objective for the Etowah area MPO concerns extending I-759 from I-59 to US 431 on the west side of Gadsden and from US 411 to US 431 on the east side of Gadsden. The I-759 extensions will complete a southern bypass allowing through traffic and heavy trucks bound for the Etowah area's numerous industrial and trucking centers to avoid the more congested parts of the city. Preliminary engineering for the I-759 extensions began in 1994.

SR 77 is a north-south NHS principal arterial route that connects I-59 in Rainbow City to I-20 in Talladega County. The existing SR 77 two-lane cross section in the Etowah area will be widened to six lanes because of traffic capacity deficiencies identified in the Etowah Area 2010 Transportation Plan. According to the Gadsden MPO TIP, construction of the first phase of the SR 77 project will begin in 1996. Construction is scheduled to begin in 1995 for another important improvement to the Gadsden-Etowah area transportation network when existing two-lane segments of SR 211 in Gadsden will be widened. When completed, SR 211 will be a multilane connector from US 278 in downtown Gadsden to I-59 at the northern tip of the urbanized area.

Public Transportation

Public transportation in the Etowah area currently consists of demand responsive service. However, planning studies are underway to begin operating fixed route public transportation service in 1995 within the corporate limits of Gadsden, Attalla, and Rainbow City.

Other Transportation Facilities and Services

The Norfolk Southern Corporation and CSX Transportation own and operate railroad lines in the Etowah area. The Gadsden Municipal Airport, located near the I-59/SR 77 interchange, has in the past provided commercial service but currently operates as a general aviation airport only.

HUNTSVILLE AREA
HUNTSVILLE AREA TRANSPORTATION STUDY

The Huntsville area in northern Alabama is a major transportation and high technology center. Huntsville is home to the US Space and Rocket Center, Redstone Arsenal, and the Huntsville-Madison County Jetplex Industrial Park foreign trade zone. The Huntsville area's transportation assets include Huntsville International Airport, the International Intermodal Center (IIC), and the Tennessee River.

The Huntsville area MPO member governing bodies are Madison County and the cities of Huntsville, Madison, Triana, and Owens Crossroads. The Huntsville Area Transportation Study (HATS) is prepared by the City of Huntsville Planning Department for the MPO.

The Huntsville MPO will complete a new long-range transportation plan in 1995 as required by the ISTEA. The MPO's previous long range plan was prepared in 1991. The new long-range plan will

be fiscally constrained meaning that funding sources will be identified for all projects. The HATS Fiscal Year 1994 - 1998 TIP addresses funding of planned transportation projects for those years.

Highways and Bridges

Rapid population growth and development during the last two decades have placed considerable stress on the Huntsville area's street and highway network. As a result, a number of new roads have been built and improvements have been made to existing roads. Presently, the Huntsville area is in the process of building facilities identified by the MPO as necessary from an areawide perspective to provide capacity for future growth and eliminate current major problems.

The HATS long-range transportation plan identifies the need for three new expressway-type roads that will function as bypass facilities for overburdened arterial and collector streets and augment the existing street network by providing continuity and better mobility. The TIP contains construction funding to build the "southern bypass" connecting I-565 and US 231. Both US 231 and the future southern bypass are classified as principal arterial routes in the proposed NHS. Following the southern bypass, the Huntsville area plans to build an eastern bypass and a northern bypass.

In addition to the bypass facilities, the Huntsville MPO has placed priority on providing additional capacity for north-south traffic in the US 231 corridor. The TIP contains funding to begin design and construction to upgrade US 231 (Memorial Parkway) from an arterial facility to a controlled-access expressway.

In the corridor studies that are underway, it is planned that the Huntsville area will be served by the proposed Memphis-to-Atlanta Highway. Basically, three highway alignments are being considered for the Huntsville area: a southern route passing near Triana just below the urbanized area, a northern route passing just above the urbanized area, and a central route that would pass somewhere through the middle of the Huntsville area possibly using one or more existing highway alignments.

Public Transportation

Huntsville Shuttle provides public transportation in the city of Huntsville. Huntsville Shuttle's service consists of nine fixed routes operated Monday through Friday. For persons with disabilities, Huntsville Shuttle provides fully accessible transit service based on one-hour advanced notice.

Railroads

National and global access to the Alabama railroad transportation network is a major feature of the Huntsville area's IIC. The IIC rail terminal features both TOFC (trailers on flat cars) and COFC (containers on flat cars) transfer facilities joining the rail system directly with air and truck modes of transport.

Aviation

Located along I-565 in southeastern Madison County, Huntsville International Airport provides ready access to major airline passenger and freight service for the Huntsville area and much of the rest of northern Alabama. Delta Airlines, American Airlines, and USAir offer domestic and international service from Huntsville International Airport while a number of commuter airlines offer connecting flights to other cities in Alabama and the United States. The Alabama Airport System Plan has recommended an additional general aviation airport for this area.

Ports and Waterways

The Tennessee River forms the southern boundary of Madison County and the Huntsville area. The Tennessee Waterway flows across all of northern Alabama connecting the Huntsville area with dock facilities in Bridgeport, Decatur, and Florence. In all, the Tennessee waterway provides a navigable transportation route from Knoxville, Tennessee to the Ohio and Mississippi Rivers. The Huntsville area's private dock facilities make it possible to transfer waterborne shipments to truck transport.

Bicycle and Pedestrian

Bicycle and pedestrian transportation is an important part of the Huntsville area's planning program. In 1992 the City of Huntsville Planning Commission adopted the *City of Huntsville Bikeway Plan: Routes and Priorities*. The plan was prepared by the City of Huntsville Planning Department under the supervision of the Bicycle Advisory Committee composed of official staff representing Huntsville and Madison County, Redstone Arsenal, Alabama A & M University, and cycling interest groups. The plan delineates Huntsville's existing bicycle facilities, establishes a program for implementing future sidewalks and bikeway facilities, and sets forth bicycle and pedestrian transportation goals, objectives, and policies.

MOBILE AREA
MOBILE AREA TRANSPORTATION STUDY

The Mobile area is located in southwestern Alabama in coastal Mobile County. The Mobile area MPO member municipalities are the cities of Mobile, Prichard, Chickasaw, Saraland, Satsuma, and Creola and Mobile County. The Mobile Area Transportation Study (MATS) is prepared for the MPO by the South Alabama Regional Planning Commission.

Approximately thirty miles north of the Gulf of Mexico in Mobile Bay, the Port of Mobile is the tenth largest deep-water port in the United States. The Alabama State Docks terminal located at the Port of Mobile is the key part of a transportation infrastructure that makes Mobile an important intermodal transportation hub. Inland and intracoastal waterways, railroads, highways, and nearby airports connect the State Docks and the Mobile area to a global transportation network.

The Mobile area MPO will complete a new long-range transportation plan in the winter of 1995 as required by the ISTEA. The MPO's previous long range plan was prepared in 1992. The new long-

range plan will be fiscally constrained meaning that funding sources will be identified for all projects. The MATS Fiscal Year 1994 - 1998 Transportation Improvement Program (TIP) addresses funding of planned transportation projects for those years.

Highways and Bridges

The interstate highway system links the Mobile area with other important cities in the southeastern United States. Montgomery is 175 miles northeast of Mobile along I-65. Via I-10, Mobile is approximately 140 miles east of New Orleans and about 250 miles west of Tallahassee, Florida. The spur interstate I-165 was completed in 1994 linking the downtown Mobile area to I-65.

A major MATS project now in the early construction stage will improve interstate highway access for truck shipments to and from the Alabama State Docks. Currently, many trucks must access the State Docks area via US 90 Alt./SR 16 and the newly built Cochrane Bridge. However, there are no major routes accessing I-165 from the Cochrane Bridge vicinity. Therefore, a new interchange facility directly linking the Cochrane Bridge and I-165 is being constructed.

Public Transportation

Public transportation is provided by the Mobile Transit Authority (MTA) for the cities of Mobile, Prichard, and Chickasaw. MTA's fixed route bus system operates six days per week serving most major streets, residential areas, and employment centers.

Railroads

The Mobile area is served by all four Class I Railroads that operate in Alabama. Of the cities in Alabama where intermodal rail transfer terminals are located, the largest number of intermodal transfers takes place in Mobile. The State Docks Terminal Railway operates 24 hours a day switching rail cars and containers from the four major railroads into and out of the port facilities.

The Mobile area is served directly or indirectly by two passenger rail lines. The *Sunset Limited* stops three days a week in Mobile as part of its Miami to Los Angeles service. In addition, AMTRAK bus service is provided four days a week to Birmingham to connect with the *Crescent* which runs between Washington, D.C. and New Orleans.

Aviation

The two major airports that serve the Mobile area offer different services but together contribute to making Mobile an important multimodal center for the movement of both people and goods. Mobile Regional Airport located west of the downtown area along Airport Boulevard (CR 56) offers air freight services as well as commercial passenger service by Delta, American Eagle, and Northwest Airlink. Brookley Airport and Industrial Complex is located just south of the State Docks terminal and specializes in air cargo shipment and major aircraft maintenance and reconstruction.

Ports and Waterways

The Port of Mobile connects the international sea lanes of the Gulf of Mexico, the Intracoastal Waterway, and five of the six navigable inland waterways that serve the state. The State Docks' 36 berths at the Port of Mobile are equipped with state of the art loading and unloading equipment to receive and ship all types of cargo with special facilities for handling coal, grain, forest products, weather-sensitive goods, and many other materials. Additionally, the State Docks terminal is specially equipped for intermodal shipments joining waterborne transport with rail, truck, and air modes.

Bicycle and Pedestrian

The Mobile area MPO is in the process of developing an areawide bicycle and pedestrian transportation plan. It is the MPO's goal to establish a continuous network of facilities using existing rights of way where bicycle/pedestrian traffic can safely share existing roadways with automobile traffic and separate bicycle/pedestrian facilities elsewhere.

MONTGOMERY AREA
MONTGOMERY URBANIZED AREA TRANSPORTATION PLAN

Montgomery, Alabama's capital city, is a multimodal transportation center combining highway, rail, air, and waterborne modes of transport. The Montgomery area includes portions of Montgomery, Autauga, and Elmore Counties. The Montgomery MPO membership includes the three counties plus the Cities of Montgomery, Wetumpka, Millbrook, and Prattville, and the Town of Coosada. In addition to the state government headquarters, Alabama State University, Auburn University at Montgomery, Faulkner State University, Huntingdon College, Maxwell Air Force Base and Gunter Annex are located in the Montgomery area.

The Montgomery area MPO will complete a new long-range transportation plan in 1995 as required by the ISTEA. The MPO's previous long-range plan was prepared in 1986. The new long-range plan will be fiscally constrained meaning that funding sources will be identified for all projects. The Montgomery Area Fiscal Year 1994 - 1996 TIP addresses funding of planned transportation projects for those years.

Highways and Bridges

Two interstate highways and five US highways serve the Montgomery area. With its central location, the Montgomery area has ready access via these major highways to all other parts of the state. A major transportation planning focus for the Montgomery MPO is to construct a limited access outer loop bypass that will relieve traffic congestion on Montgomery's existing arterial type bypass.

Public Transportation

Montgomery Area Transit System (MATS) provides public transportation within the city. MATS bus service is operated daily with seventeen fixed routes and two downtown shuttle routes. Paratransit service is available for the disabled population. Autauga County provides transit service for the residents of that county.

Railroads

Railroads are a significant part of the Montgomery area's transportation infrastructure. CSX Transportation and Norfolk Southern Corporation own and operate rail lines that serve Montgomery including service from such cities as Birmingham, Mobile, and Atlanta, Georgia. Currently, Montgomery is conducting a study of rail and truck shipping activity in the area in order to assess the feasibility of implementing an intermodal transfer terminal. AMTRAK bus service connects Montgomery with passenger rail service provided by the *Crescent* which serves Birmingham three days a week.

Aviation

Montgomery Airport is located southwest of downtown Montgomery along US 80. Major carrier service from Montgomery Airport is provided by Delta and USAir. Additionally, Montgomery airport is served by commuter airlines American Eagle, Atlantic Southeast, and Northwest Airlink.

Ports and Waterways

The Alabama River flows through the Montgomery area. The Alabama-Coosa Waterway provides a navigable transportation route between Montgomery and Mobile Bay. In its path through southwestern Alabama, the Alabama-Coosa serves other cities including Selma and Claiborne. A State Docks terminal is located on the Alabama River in Montgomery with ready access to the interstate highway system.

SHOALS AREA
SHOALS AREA TRANSPORTATION STUDY

The Shoals area, often referred to as the Quad Cities, is located in northwestern Alabama in Lauderdale and Colbert Counties. Along with Lauderdale County and Colbert County, the Shoals area MPO member municipalities are Florence, Muscle Shoals, Sheffield, and Tuscumbia. The Tennessee River flows through the Shoals area with Florence on the north bank and Sheffield, Muscle Shoals, and Tuscumbia on the south bank. The Shoals Area Transportation Study (SATS) is prepared by the Northwest Alabama Council of Local Governments for the MPO.

The Shoals area MPO will complete a new long-range transportation plan in 1995 as required by the ISTEA. The MPO's previous long range plan was prepared in 1989. The new long-range plan will be fiscally constrained meaning that funding sources will be identified for all projects. The Shoals

Area Fiscal Year 1994 - 1998 TIP addresses funding of planned transportation projects for those years.

Highways and Bridges

The Shoals area is served by two proposed NHS Routes. The junction of these routes occurs where US 72 joins US 43 in the southernmost portion of the Shoals area. US 43/US 72 is classified as an NHS principal arterial route from south of the Shoals area as it continues northward across the Tennessee River and then veers northeasterly leading eventually to Athens. The east-west facility consisting of US 72 Alt. and US 72 west of the US 43 junction is classified as an NHS STRAHNET Route.

Two major SATS projects will be carried out in order to provide needed additional traffic capacity in the US 43/ US 72 corridor. The 1994-1998 SATS TIP contains construction funding to widen US 43/ US 72, Florence Boulevard, from four to seven lanes north of the Tennessee River. Construction funds also are programmed for a new six-lane bridge across the Tennessee River at Patton Island connecting Wilson Dam Highway (SR 133) on the south bank to Florence Boulevard on the north bank.

In corridor studies that are underway, the Memphis-to-Atlanta Highway, a High Priority Congressional Corridor, is planned to traverse the Shoals area. A northern alignment is being considered in which the new highway would cross the Shoals area north of downtown Florence. In several southern alignments that are being considered, the new highway follows the alignment of US 72 and US 72 Alt from west to east across the Shoals area.

Public Transportation

Public transportation in the Shoals area is provided by the North Alabama Transit Authority (NATA). The types of service include demand responsive service with 24-hour advance reservations and contract service for a number of human service organizations. Specially equipped NATA vehicles are used to provide service for disabled and elderly passengers.

Railroads

Railroads in the Shoals area provide a multimodal transportation connection for goods being transported by highway, air, or waterway. The Norfolk-Southern and Tennessee Southern companies operate railroad lines in the Shoals area. The City of Sheffield is conducting a relocation study to consider relocating part of the rail network in order to reduce the number of at-grade crossings in traffic congested areas. Relocation of the rail lines could potentially improve both auto and rail efficiency in the Shoals area.

Aviation

Muscle Shoals Airport is located just north of US 72 (Alternate) in the southeastern corner of the Shoals area. Northwest Airlink operates commercial service to the Muscle Shoals Airport. From

Muscle Shoals, connecting flights are available to the major air carriers at Birmingham, Memphis, and Atlanta. The Alabama Airport System Plan has recommended an additional general aviation airport for the Shoals area.

Ports and Waterways

The Tennessee River passes through the middle of the Shoals area linking the Quad Cities to such cities as Huntsville and Knoxville, Tennessee and to the Tennessee-Tombigbee Waterway. Private docks are located along the Tennessee River providing the intermodal transportation connection between waterway transportation and highway, air, and rail transportation.

SOUTHEAST WIREGRASS AREA
SOUTHEAST WIREGRASS AREA TRANSPORTATION STUDY

The Southeast Wiregrass area is located in southeastern Alabama in Houston, Henry, and Dale Counties. The Alabama-Georgia border is approximately fifteen miles east of the Southeast Wiregrass area while the Alabama-Florida border is approximately fifteen miles to the south. Dothan, in Houston County, is the largest city in the Southeast Wiregrass area MPO. In addition to Dothan and the three counties, eleven cities including Headland, Ashford, and Midland City are members of the Southeast Wiregrass area MPO.

The Southeast Wiregrass area MPO will complete a new long-range transportation plan in 1995 as required by the ISTEA. The MPO's previous long range plan was prepared in 1986. The new long-range plan will be fiscally constrained meaning that funding sources will be identified for all projects. The Southeast Wiregrass Fiscal Year 1994 TIP addresses funding of planned transportation projects from fiscal years 1994 through 1998.

Highways and Bridges

The Southeast Wiregrass area is served by a radial-spoke highway network in which several NHS routes are connected by a perimeter road that surrounds the city of Dothan. The Dothan perimeter, or bypass, is the Ross Clarke Circle which is classified as a STRAHNET route.

The Ross Clarke Circle is a critical element in the Southeast Wiregrass area's transportation network and is central to the MPO's highway transportation planning efforts. In part because the Southeast Wiregrass area is not served by the interstate highway network, the Ross Clarke Circle is required to meet the demands of both local and through traffic, including many heavy trucks.

The Southeast Wiregrass Area Transportation Study sets forth as a goal the construction of grade-separated interchanges and service roads along the length of the Ross Clarke Circle so that it will become a controlled access facility. The 1994 Southeast Wiregrass Area MPO TIP includes funding for the construction of an overpass at the existing at-grade intersection of Ross Clarke Circle and US 84 West, an NHS STRAHNET route. Next, it is planned that an overpass will be built at the Ross Clarke Circle existing at-grade intersection with US 231 North, also classified as an NHS

STRAHNET route. The MPO long-range plan also includes consideration of a limited access facility between Dothan and I-10.

Public Transportation

Public Transportation service in the Southeast Wiregrass area is managed by the Southeast Alabama Regional Planning Commission and financially backed by the City of Dothan and Houston County. Transit service in the Southeast Wiregrass area consists of fixed route service based on contracts with several social service agencies as well as demand responsive service.

Railroads

The Southeast Wiregrass area railroad transportation network plays a role in goods movement and transportation in southeastern Alabama. The Southeast Wiregrass area is served by several different rail lines including two major, or Class I, railroads: CSX Transportation and Norfolk-Southern Corporation.

Aviation

The Dothan Municipal Airport is located north of Dothan within the city limits of Grimes. ASA and Northwest Airlink provide regularly scheduled service to the Southeast Wiregrass area via Dothan Municipal Airport. The airport is located just 3 miles west of SR 134 which provides ready access by the highway network to the rest of the Southeast Wiregrass area.

TUSCALOOSA AREA
TUSCALOOSA AREA LONG RANGE TRANSPORTATION PLAN

The Tuscaloosa area is located in Western Alabama approximately fifty miles southwest of Birmingham. The Tuscaloosa MPO member municipalities are the cities of Tuscaloosa and Northport and Tuscaloosa County. The Tuscaloosa urbanized area is home to the University of Alabama, Lake Tuscaloosa, and a multimodal transportation system that combines highway, rail, air, and waterway transportation.

The Tuscaloosa area MPO will complete a new long-range transportation plan in 1995 as required by the ISTEA. The MPO's previous long range plan was prepared in 1988. The new long-range plan will be fiscally constrained meaning that funding sources will be identified for all projects. The Tuscaloosa Urban Area Fiscal Year 1994 - 1998 TIP addresses funding of planned transportation projects for fiscal years 1994 through 1998. A new TIP will be completed in the Fall of 1995 covering fiscal years 1996 through 1998.

Highways and Bridges

The Tuscaloosa area transportation network includes several proposed NHS routes. Interstate 59/20 out of Birmingham crosses the southern part of the Tuscaloosa area below the University of Alabama. I-359 is a spur interstate connecting downtown Tuscaloosa and I-59/20. US 82, which

serves the Tuscaloosa area, is classified as a STRAHNET route north of its junction with I-59/20 and as a principal arterial route south of I-59. US 43 is an NHS principal arterial route north of its junction with US 82 in Northport.

In 1994, construction began on two critical projects first identified a number of years ago by the Tuscaloosa MPO through the long range transportation planning process. US 82 which crosses the Black Warrior River and joins Northport and Tuscaloosa is being widened from four lanes to six lanes. Additionally, work has begun on a segment of the planned "outer loop", or bypass, around Tuscaloosa and Northport. Phase I of the outer loop now underway from River Road to Rice Mine Road will include the Tuscaloosa area's third major bridge across the Black Warrior River.

Public Transportation

Public Transportation in the Tuscaloosa area is provided by the Tuscaloosa County Parking and Transit Authority (TCPATA). TCPATA operates an urban transit system based on five fixed routes and provides special transit services for the elderly and disabled.

Railroads

Railroads are a key part of the transportation network that makes the Tuscaloosa area a major multimodal transportation center for western Alabama. Three Class I railroads serve the Tuscaloosa area: Norfolk-Southern, CSX Transportation, and Kansas City Southern. Passenger rail service is provided by the AMTRAK *Crescent* which stops in Tuscaloosa in its service between New York and New Orleans. Additionally, a Tuscaloosa stop is being considered in the ALDOT feasibility studies underway for express rail service.

Aviation

The Tuscaloosa Municipal Airport is located along US 82 west of downtown Tuscaloosa and Northport. Regularly scheduled freight service and commercial passenger service is provided by American Eagle.

Ports and Waterways

The Black Warrior River flows east to west through the middle of the Tuscaloosa area. The Warrior-Tombigbee Waterway serves western and central Alabama providing a navigable transportation route from Cordova in Walker County above Birmingham to the Port of Mobile. The State Docks terminal in Northport provides for the intermodal transfer between waterborne and other transport modes.

Bicycle and Pedestrian

The Tuscaloosa area MPO adopted a bicycle and pedestrian transportation plan in 1995. The River Road Enhancement Project to be completed in 1995 in the City of Tuscaloosa will include, along

with a new marina, a river walk, a bicycle trail, and a pedestrian trail. In addition, the University of Alabama plans to build three new bike paths on the campus in 1995.

SECTION 5
SOCIAL, ECONOMIC, AND GOVERNMENTAL ISSUES

Planning for future transportation needs must take into account the existing and projected population, industry, and economic conditions on a statewide basis. Transportation is closely related to other activities and should be considered in coordination with other state and national policies, objectives, and activities. Among these are statewide efforts related to economic development, energy policy, and environmental protection.

POPULATION TRENDS

Statewide, population is expected to increase by 5.4 percent between years 1995 and 2015. Projected changes in population are not uniform throughout the state. Figure 5.1 shows the projected population changes for each county. According to Alabama State Data Center projections, some counties can expect significant growth.[9] These include Shelby (51 %), Baldwin (29 %), Madison (28 %), and St. Clair (26 %) counties. Other counties with projected growth of over 10% include Blount, Cullman, Elmore, Houston, Lawrence, Lee, Limestone, and Montgomery. However, county level population projections indicate that more counties will experience a decrease in population than an increase in population. The largest decreases (greater than 10 %) are projected to occur in the following counties: Colbert, Conecuh, Dallas, Escambia, Jackson, Perry, and Wilcox.

Those counties experiencing more growth will need additional transportation facilities to serve the increased population. Counties with no population increase or a projected decline are most likely to be declining because of a lack of economic opportunity in those counties. These are locations where inadequate transportation facilities (for example, no interstate or four-lane highway) may hamper economic growth. Therefore, they may be likely locations for economic development transportation projects, intended to turn around declining trends.

The population of Alabama, like that of the nation, has been aging with a larger elderly population expected in the coming years. This presents particular challenges for the transportation system, since the elderly are most likely to be in need of public transit or other alternatives to driving their own automobiles. In both rural and urban areas, the demand for transportation for the elderly and others in need continues to challenge and in some cases exceed the availability of services and facilities. In part due to ISTEA requirements, the needs of the elderly, disabled, minorities, and economically disadvantaged must be specially considered in planning the transportation system.

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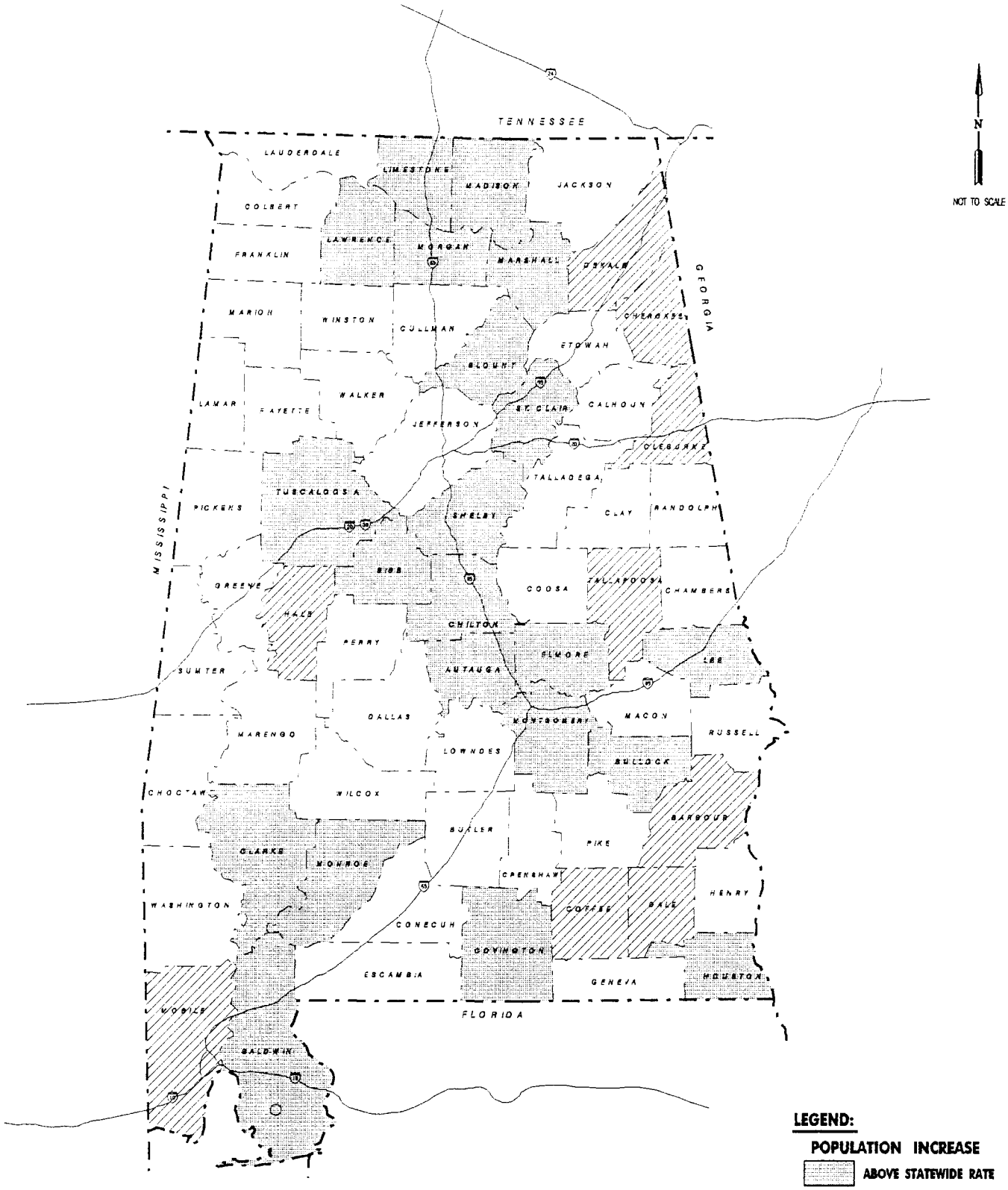
[9] Note: The U.S. Census Bureau recently released 1994 county population estimates that indicate a greater increase in population is actually occurring than what was projected by the University of Alabama Center for Business and Economic Research (CBER). The CBER will revise their population projections once they have population estimates through 1995. Until that time the population projections used in this document are considered current.



LEGEND:

POPULATION INCREASE

ABOVE STATEWIDE RATE

BELOW STATEWIDE RATE

POPULATION DECREASE

Note: Statewide Population Increase is 5.4%

Source: U.S. Department of Commerce; Bureau of the Census; and Alabama State Data Center, Center for Business and Economic Research, The University of Alabama

POPULATION PROJECTIONS

FIGURE 5.1

PBS&J POST, BUCKLEY, SCHUH & JERNIGAN, INC.

ECONOMIC DEVELOPMENT

A transportation system that enhances economic development statewide is essential for Alabama to compete in a global economy. In addition, statewide growth typically leads to increased revenue, which can be used to fund needed projects and programs. In 1994, a report entitled *Vision Alabama, A Plan For Quality Growth* was jointly published by the Economic Development Partnership of Alabama and the Economic Development Association of Alabama. These two organizations worked together to establish a vision and clear direction to promote economic growth in Alabama. Other key organizations that provided resources and support included the following: Public Affairs Research Council of Alabama, The University of Alabama's Center for Business and Economic Research, the Alabama Development Office, and the Alabama Department of Economic and Community Affairs (ADECA). In addition, a 47-member task force comprised of business, education, and government representatives was created to provide input on the project.

Vision Alabama outlines strategic initiatives in the areas of human resources, government and regulatory issues, infrastructure, and quality of life. These strategic initiatives were developed to address several goals aimed at promoting economic growth throughout the state. A transportation-related initiative includes: *Develop state-of-the-art telecommunication and intermodal transportation networks*. Key performance indicators (KPIs) were chosen to measure Alabama's performance in the areas of economic vitality, economic capacity, and quality of life. Infrastructure falls under the area of economic capacity and includes highways, roads, and streets; mass transit; airports; water transport and terminals; municipal and industrial water systems; and sewage. A KPI of Alabama's economic capacity is statewide infrastructure, specifically highway and bridge deficiencies. *Vision Alabama* has an objective to reduce the percent of deficient highways and bridges by 10 percent per year.

Vision Alabama promotes a cluster-based economic strategy designed to:

- recognize the extent to which key industry clusters drive the Alabama economy;
- create support systems for cluster industries, which can help identify and overcome obstacles to future growth;
- build strategies to develop needed infrastructure, information, and technology of each cluster; and
- enhance performance of existing companies, the start-up of related support businesses, and attract outside companies.

Vision Alabama identifies the following industry clusters, all of which require sound physical infrastructure to succeed:

- forestry/wood products
- textiles
- apparel
- plastics
- food
- electronics
- auto parts
- biomedical

For the years 1983 to 2000, *Vision Alabama* estimates a revenue shortfall, or unmet need, of $3.84 billion for trafficways, $100 million for water transport and terminals, and $7.6 million for rail facilities. A future revenue estimate was not provided for mass transit. An excess of $60.9 million in revenue was estimated for airports.

Recommendations and strategies to address transportation issues developed by the *Vision Alabama* plan are outlined as follows:

Recommendations

- Provide the appropriate infrastructure to improve Alabama's ability to offer competitive transportation services.
  - By September 30, 1996 develop funding methods to ensure that adequate facilities are constructed at the Alabama State Docks with specialized facilities to include additional covered warehousing (of a minimum of 1 million square feet), specialized berths, and equipment.
  - Starting after September 30, 1997, increase the import-export traffic through the state's ocean port facilities and regional air facilities by a minimum of 15 percent per year.

- Promote Alabama's existing transportation facilities as tools to expand foreign investment and international trade.
  - By September 30, 1995 encourage the expansion and growth of the state's regional airports for international passenger and air cargo services and the Alabama State Docks container terminal for value-added cargo.
  - By September 30, 1995, ensure that the state's economic development efforts include the promotion of Alabama's foreign trade zones and sub-zones in its domestic and international marketing programs.

- Establish an interagency planning committee headed by the Department of Transportation to identify and coordinate projects between the different transportation authorities - ocean, air, highway, and rail.
  - By September 30, 1995, establish the planning committee under the Department of Transportation to study and identify joint transportation projects to stimulate economic development in Alabama.
  - By September 30, 1996, complete action to encourage the establishment and utilization of intermodal transportation facilities in Alabama at feasible locations.

- Conduct a comprehensive analysis of Alabama's transportation needs and a long-range strategy, including financing of future transportation for addressing the needs.

Strategies

- Develop, expand, and maintain mechanisms for adequate financing for construction of highways, airports, ports, and mass transit.
- Increase transportation alternatives for general public and special population groups.
- Work with the airline industry to increase the number of direct flights to major cities.
- Develop pilot public transportation projects to provide the rural unemployed access to the employment and education opportunities in urban areas.

The economic strategy plan outlined in *Vision Alabama* addresses transportation only in terms of economic growth. Many factors, including economic growth, must be considered in the development of a statewide transportation system. The recommendations and strategies provided in the *Vision Alabama* plan will be considered as potential measures to sustain and promote economic development through transportation.

ENERGY POLICY

State and federal energy policies have a bearing on transportation planning in the state. The State of Alabama promotes energy conservation and plans for the State's energy needs through the ADECA, Division of Science, Technology, and Energy Development. In addition, the national Energy Policy Act of 1992 has set goals to reduce the nation's dependence on oil, particularly for transportation.

Alternative Fuel Vehicle Conversion

As a result of the Energy Policy Act of 1992, all federally- or state-owned vehicle fleets and energy providers (such as power companies) vehicle fleets must begin to convert their vehicles to alternative, non-petroleum fuels such as compressed natural gas, liquid petroleum gas, or electricity. Twenty-five percent of all new vehicles will have to be dual fuel or alternative fuel-powered.

Alabama has been active in converting vehicles to dual fuel operation, particularly using compressed natural gas (CNG). Conversion to CNG requires installing equipment (primarily tanks) on conventional vehicles, at a cost of approximately $2,000 per vehicle. The vehicles run off CNG, with automatic conversion to conventional fuel when the CNG is exhausted. The State motor pool has a natural gas compression station on site for refueling, and CNG is also available at stations along the interstate in Mobile and Birmingham. CNG stations are now being constructed in Huntsville and Montgomery, to make it more convenient to use this fuel throughout the state. Some fleets have converted to other alternative fuels such as liquid petroleum gas (LPG), but CNG has been used more frequently in the state.

Alternative fuels are not subject to the same taxes as gasoline and diesel. The Alabama LP Gas Board issues a permit to vehicles that use LPG or CNG. The annual permit cost ranges from $85 for cars and pickup trucks to $180 for the largest trucks. As more vehicles are powered by alternative fuels, it is possible that less gasoline and diesel fuel will be sold and therefore gas tax

revenues will decrease. While the initial costs for conversion are relatively high and the annual permit fee is more apparent than paying tax on each gallon of gas, the cost per mile for CNG fuel is about half that of gasoline, and wear and tear on the engine should be less with the cleaner combustion. One of the major objectives of ADECA's energy efforts is to inform the public about alternative fuels and their advantages.

Transportation of Energy Resources

Another side of the energy/transportation relationship is the transportation of energy-related resources. Alabama has an abundance of energy resources: oil and natural gas wells, electrical generating stations, and coal fields producing both coal and gas.

The natural gas and petroleum fields are located offshore in Mobile Bay and on land. Most of the on-shore oil wells are located north of Mobile, while a few are located in Escambia County and in the northwest part of the state. Most of the natural gas is located offshore, but some natural gas (methane) is taken from coal beds located northwest of Birmingham and Tuscaloosa. After processing, natural gas is shipped by pipeline to Florida and the Northeast. Most of the petroleum is shipped by pipeline to refineries in Louisiana, although there is also a small refinery in Mobile.

Coal mined in Alabama is transported by truck to coal terminals on the Tennessee-Tombigbee waterway, and travels by barge to the Coal Handling Facility at the State Docks in Mobile (for export) or upriver to Tennessee and Kentucky and the Ohio River.

NATURAL RESOURCES

Alabama's natural resources contribute significantly to the economy and the quality of life for its citizens. The primary natural resources within the state are as follows:

Farmland. In 1993, approximately 27% of the land in Alabama was held in agricultural land use, including 43,318 individual farms. Major farm products include: poultry, cattle and calves, greenhouse, sod and nursery, peanuts, eggs, cotton, farm-forest products, dairy, and hogs.

Forestry. Forest products is a leading industry for Alabama's economy, comprising a large part of the gross state product and a substantial number of jobs. In 1987, over 66% of the land in Alabama was held in forest land use. In addition, four National Forests are located in Alabama: William B. Bankhead, Talladega, Tuskegee, and Conecuh. These areas are managed not only for timber, but also provide important recreational opportunities.

Minerals. Fuel minerals, including oil, gas, and coal and non-fuel minerals, including sand and gravel, clay, and bauxite are mined throughout the state.

Rivers. Alabama's rivers include: Tennessee, Elk, Coosa, Tombigbee, Alabama, Black Warrior, Tallapoosa, Conecuh, Pea, and Chattahoochee.

Lakes and Reservoirs. Major lakes and reservoirs located in Alabama include: Weiss, Pickwick, Wilson, Wheeler, Guntersville, Lewis Smith, West Point, Eufaula, Logan, Martin, R. L. Harris Reservoir and William Dannelly Reservoir.

ENVIRONMENTAL ISSUES

Part of the national transportation policy as stated in the ISTEA is to develop a transportation system that is "environmentally sound". Environmental legislation concerning project-related noise, air quality, cultural resources, water resources, and overall land development must be addressed as transportation programs are developed. Waiting until the project implementation stage is often too late to begin considering possible environmental impacts. Measures to avoid or minimize adverse impacts need to be identified during project planning, not only for the benefit of the environment, but in most instances, compliance is necessary to be eligible to receive federal funding.

The development of Alabama's transportation system is guided by the current set of federal and state environmental laws and regulations. The following summarizes key environmental issues and associated legislation.

National Environmental Policy Act of 1969 (NEPA)

NEPA sets forth a national policy that federal agencies interpret our laws, regulations, and procedures in a manner consistent with environmental protection objectives to the greatest extent possible. It requires that all federal agencies consider the environmental impacts of their actions. A systematic, interdisciplinary approach with increased public involvement and interagency cooperation should be used in the decision-making process. All major federal actions, including funding and permit issuance, are required to comply with NEPA. The Alabama DOT is responsible for preparing environmental documents under NEPA guidelines for all projects utilizing federal funds.

Noise

US Department of Transportation (US DOT) Title 23 CFR Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise, provides procedures for noise studies and abatement measures to help protect the public health and welfare, supply noise abatement criteria, and establishes other requirements for the planning and design of highways. All highway projects must be developed in conformance with this regulation.

Clean Air Act Amendments (CAAA) of 1990

As population continues to grow and the use of single-occupancy vehicles increases, the ability to comply with federal air quality standards becomes more difficult. In order to maintain eligibility for federal funds, the state's and MPOs' planning processes must be in conformance with the CAAA. In other words, projects cannot be planned or programmed if they would result in violations of current clean-air standards. The net impact of all planned projects must be assessed.

Currently, the Birmingham metropolitan area is designated a marginal non-attainment area for ozone under the provision of the CAAA. An area is designated ozone non-attainment when allowable concentration levels are exceeded more than three days at one monitoring station over a three-year period. The Birmingham Non-Attainment area includes Jefferson and Shelby counties. It is anticipated that Birmingham will be designated attainment for ozone in the near future. The ALDOT and the Birmingham Air Quality Task Force is preparing a congestion management plan which will recommend transportation control measures that contribute to the maintenance of the air quality, but that do not impose high costs or strict legislative requirements on the Birmingham area.

Cultural Resources

Two primary laws are concerned with our nation's cultural resources: Section 106 of the National Historic Preservation Act of 1966 (NHPA) and the US DOT Act of 1966 (49 U.S.C. Section 303 and 23 U.S.C. 138), referred to as the Section 4 (f) process. The NHPA applies to actions of all federal agencies and covers only historic and archaeological resources listed or eligible for listing on the National Register of Historic Places (NRHP). Section 4 (f) applies only to agencies with the US DOT and covers public park and recreation lands, wildlife and waterfowl refuges, and historic sites.

These laws established the federal policy that (1) prohibits the use of identified protected resources by federal actions unless there is no prudent and feasible alternative to using that land and (2) requires that projects include all possible planning to minimize harm to such resources. The ALDOT works closely with the State Historic Preservation Officer during the planning of all projects that have a potential impact on cultural resources.

Water Resources

Water resources are carefully regulated by the federal and state government. Key legislation includes the Clean Water Act and the Federal Water Pollution Control Act. Section 404 of the Clean Water Act is administered by the US Army Corps of Engineers (ACOE) and regulates activities within waters of the United States, including wetlands. The ACOE issues permits for certain activities to occur and typically requires some type of mitigation for adverse impacts. Executive Order 11990 requires action be taken to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands. When activities have the potential to impact wetlands, current government regulations and policies require a three-step process to achieve the federal policy of "no net loss" of wetlands. This process includes avoidance, minimization, and compensation for wetland impacts. Avoidance is the practice of planning and designing projects to avoid wetlands involvement. Minimization involves the incorporation of measures which reduce the impact to wetlands. Mitigation is any activity which compensates for wetland values and functions impacted by development. Mitigation may include preservation of high quality wetlands, enhancement of degraded or low quality wetlands, and creation of new wetlands. Compensatory mitigation is considered only after impacts on wetlands have been avoided and minimized to the maximum extent practicable. Mitigation banking is an acceptable form of compensatory mitigation under specific criteria designed to ensure an environmentally successful bank.

The Federal Water Pollution Control Act of 1972 sets forth a national system for the issuance of National Pollutant Discharge Elimination System (NPDES) permits aimed directly at protecting water quality.

Endangered Species Act

Section 7 of the Endangered Species Act of 1973 gave the US Fish and Wildlife Service (US FWS) broad powers to protect the continued existence of plants and animals whose populations are threatened or endangered from adverse effects resulting from federal actions. Section 7a1 states that federal agencies shall "*utilize their authorities in furthering the purposes of the Endangered Species Act by carrying out programs for the conservation of endangered species and threatened species...*". Essentially, conservation of protected species should be a goal of long-range plans and programs. Section 7a2 requires federal agencies to consult with the US FWS to insure that their actions are not likely to jeopardize the continued existence of any listed endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. This Section 7 consultation is typically conducted on a project by project basis. The development of transportation facilities must consider potential impacts to protected species. Involvement with protected species is most common when the acquisition of undeveloped right-of-way is proposed.

SECTION 6
FINANCING TRANSPORTATION

The transportation needs that are ultimately identified in the long-range planning process cannot be met without adequate funding. In this document, current and potential future funding sources are addressed. In the next phase of the planning process, funding needs will be more specific as needs are quantified. The ISTEA legislation requires that states identify funding sources for all of the projects included in their plans and programs.

Funding for the construction and maintenance of transportation facilities comes from public sources at all levels of government and from a variety of private sources. Different transportation modes have different funding needs and sources, so each mode will be discussed separately.

HIGHWAYS AND BRIDGES

Current Funding

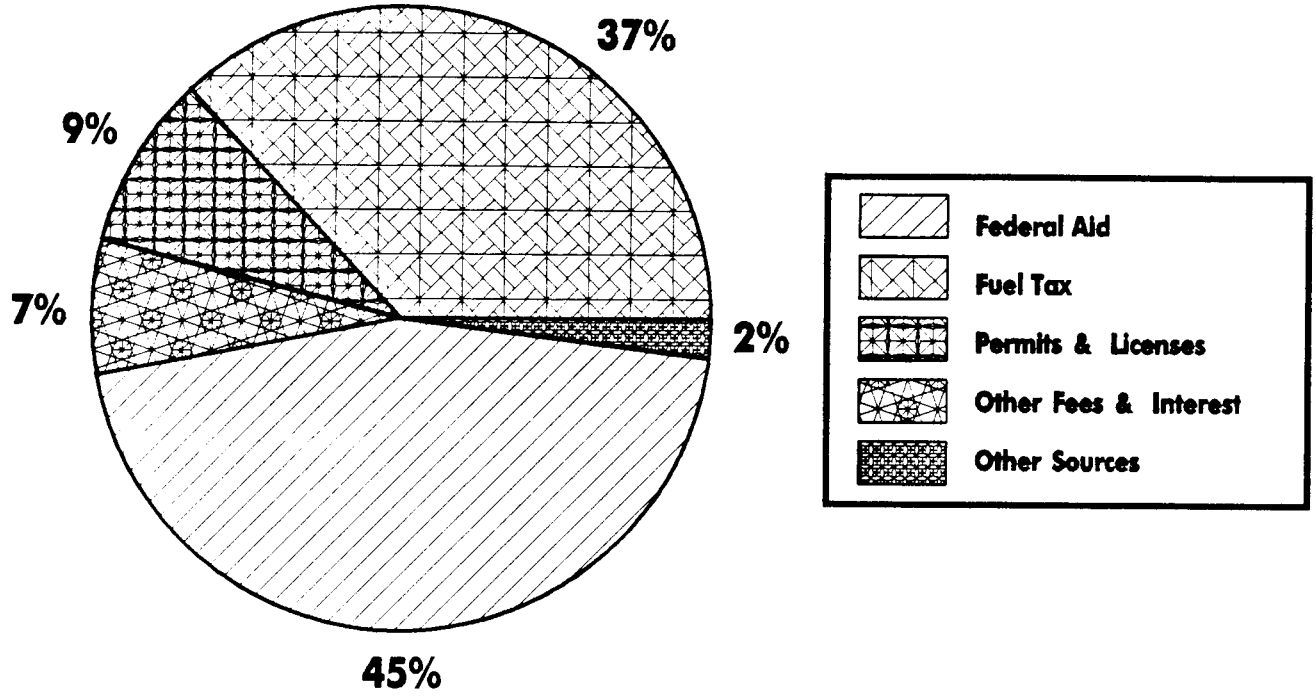
Funding for state highways and bridges is administered by the ALDOT, and comes from federal and state sources. Table 6.1 and Figure 6.1 summarize highway and bridge funding sources for a typical year. To summarize, nearly half, 45%, of the ALDOT's budget comes from federal ISTEA funding.

Table 6.1
Source of Funds: Fiscal Year 1992-93
Alabama Department of Transportation

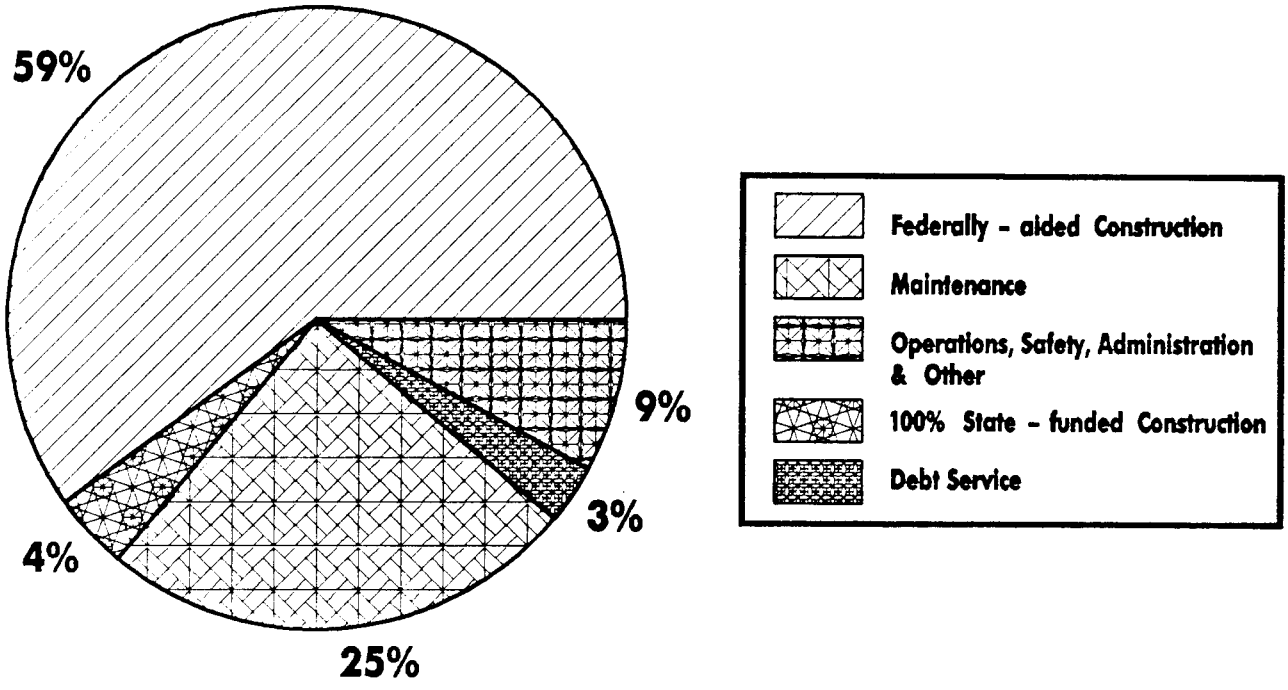
Source	Revenues	Percent of Total
Fuel Tax	$269,510,000	37%
Permits & Licenses	$69,735,000	9%
Other Fees & Interest	$49,667,000	7%
Federal Aid	$329,682,000	45%
Other Sources	$17,433,000	2%
Total	$736,027,000	100%

Source: Eighty-second Annual Report, Alabama Department of Transportation

SOURCE OF FUNDS: FISCAL YEAR 1992 - 93
ALABAMA DEPARTMENT OF TRANSPORTATION



EXPENDITURES: FISCAL YEAR 1993 - 94
ALABAMA DEPARTMENT OF TRANSPORTATION



State gasoline tax revenues, which have increased substantially since an additional five cent per gallon tax became effective in 1992, account for 37% of the total. Together these represented most of the available highway and bridge funds.

The remaining 18% was provided by fees, permits and licenses, and other sources. State general obligation bonds also provide funding for specific projects and purposes, but they are repaid through fuel taxes and other revenues so are not actually a revenue source.

Federal highway and bridge dollars are distributed to the states based on allocation formulas, plus individual special projects that may be funded by Congress. The challenge for Alabama has been to raise sufficient state funds to match all the federal funds to which the state is entitled (in most cases, a 20% state match is required for federal aid projects), and to perform maintenance and other necessary functions. Most of the state funds are spent on the matching requirements for federal aid projects. There is little funding available for fully state-funded construction projects.

There are several categories of federal funding, directed at different types of roads and activities. The most important of these and the funds available in fiscal year 1995 are shown in Table 6.2.

Table 6.2
Federal Funding by Category: Fiscal Year 1995
State of Alabama

Category	Amount
Interstate Construction	$11,352,320
Interstate Maintenance	$51,551,386
National Highway System	$62,690,080
Bridge Rehabilitation & Replacement	$39,670,496
Surface Transportation Program	$82,279,987
Other Highway Funds	$60,592,595
Planning & Research	$6,631,874
Special Projects	$29,097,392
Total	$343,866,130

Source: Alabama Department of Transportation

Expenditures for highways and bridges reflect the sources of funds and therefore the ways in which those funds can be spent. Table 6.3 and Figure 6.1 show how highway and bridge funds are

distributed by the ALDOT in a typical year. As shown, approximately 59% of expenditures were in the federal aid construction program, which includes the state match of federal funds. Some 25% was spent on maintenance, and 4% on state-funded construction. Expenditures don't exactly match revenues each year since transportation projects typically extend over several years, and funds obligated in one year may not be actually paid until the next year.

Table 6.3
Expenditures: Fiscal Year 1993-94
Alabama Department of Transportation

Type of Expenditure	Budgeted Amount	Percent of Total
Federally-aided Construction	$444,659,097	59%
100% State-funded Construction	$27,792,308	4%
Maintenance	$184,787,515	25%
Debt Service	$18,951,504	3%
Operations, Safety, Administration, Other	$73,175,251	9%
Department Total	$749,365,675	100%

Source: Alabama Department of Transportation Fiscal Year 1995 Budget Request

Potential Future Funding

Potential future funding sources include federal aid, state taxes, fees and permits, and private sector financing.

Federal Sources. Although there is no assurance that future federal funding will continue at current levels beyond the limits of the ISTEA (fiscal year 1997), it is a reasonable assumption. It is also assumed that funding will increase slightly each year, but will not meet inflation levels, which are estimated to be 3 to 4% annually over the next 20 years.

Fuel Taxes. If the total annual vehicle miles traveled in the state continues to increase at current rates, it will increase 6.4% per year or 130% in the 20-year life span of this plan. This increase would result in a corresponding increase in fuel tax revenues, which would be partially offset by the retirement of older, "gas-guzzling" automobiles and an increase in alternative fuel vehicles that pay no fuel tax. For revenues to increase at rates to meet the likely inflation in construction costs, fuel tax rates may need to be adjusted and similar taxes may need to be levied on alternative fuel vehicles (such as electric or natural gas). Although tax increases are never popular, the actual cost to individual drivers is usually rather small: for an average automobile, the cost of a four cent per gallon gas tax is approximately $2 per month.

Truck Fees and Permits. Commercial vehicles, such as large tractor-trailer rigs, comprise much of the traffic on major roads, especially interstate highways. These vehicles pay special fees and taxes in part because their weight causes much more wear and tear on roads and bridges than automobiles or small trucks. In recent years, truck traffic has increased in both volume and average size/weight of vehicles. At the same time, enforcement of legal truck weights has declined due to declining public budgets. Enforcement of weight limits is a necessary part of highway system maintenance, and a study may be needed to determine whether commercial vehicles are paying their fair share. This may be particularly important if new transport arrangements such as triple-trailers are permitted on Alabama's roadways. Representatives from the trucking industry should participate in any such study, if feasible.

Toll Facilities. Financing methods that have not been used in the past may be needed to meet the shortfall between needs and resources. In other states, toll roads and toll bridges have been a key part of the highway systems. Typically, these facilities are constructed by an independent authority which sells revenue bonds to be repaid from tolls to be collected over the life of the bonds. Under ISTEA funding, the states may choose to use a portion of their available federal funds to finance up to 50% of the construction cost of toll roads and 80% of the construction cost of toll bridges, reducing the amount of toll that would have to be charged. Toll roads are appropriate for limited access multi-lane roads in highly traveled corridors. They are particularly successful in tourist-oriented areas with a high proportion of travelers from out-of-state who may not otherwise contribute a fair share to transportation costs.

Innovative Funding. Other innovative financing methods may need to be researched to determine if they may have applications in Alabama. However, many of these are more suitable in high-growth areas and not in areas where economic growth is to be encouraged. Examples of these are: (1) value-capture financing, where the increased value of the land that is served by a new facility is used to pay for that facility, (2) special assessment districts, where properties benefiting from a project in a defined geographic area are assessed a special tax to pay for improvements, and (3) transportation impact fees, where new developments pay a fee based on square footage or dwelling unit to pay for new facilities needed to serve them.

TRANSIT

Current Funding

Public funds are needed to subsidize transit because passenger fares cannot entirely cover the cost of capital investments and the operation of these services. In most areas of Alabama, population densities are not sufficient to justify investment in transit systems as an alternative to highway investments.

Public transit is funded by a combination of sources, including fares paid by users, local public funds, and federal funds.

The federal transit funding programs are administered by the Federal Transit Authority (FTA) and named for the section of regulations that provides their authorization. Key funding programs are Sections 8, 9, 16, 18, and 26(a)(2). Sections 9, 16, and 18 provide capital and operating funds, while Sections 8 and 26(a)(2) are research and planning funds. Funds are allocated to local systems according to a formula based on population, population density, and transportation factors.

Over $16 million of federal transit funding was provided annually for fiscal years 1994 and 1995. Between 1991 and 1995, transit funding increased by 42%. The largest percentage increase, 89%, came in rural (Section 18) transit funding, with a substantial increase of 64% in elderly and disabled transportation (Section 16) over the same period. Table 6-4 summarizes these federal contributions and shows the trends over the last five years. A general description of these funding sources is included in the following paragraphs.

Section 8. This section provides funds for transit planning by MPOs. Statewide funding for this activity has been steady or declining over the past seven years, with approximately $363,000 allocated for each of fiscal years 1994 and 1995.

Section 9. This section provides funds for transit systems in urban areas (over 50,000 population), for both capital investment including acquisition of vehicles and for operating and maintenance costs. The federal funds pay 80% of capital costs and 50% of operating deficits, with local governments paying the matching share. Cities in Alabama received a total of approximately $12.2 million in fiscal year 1995 in Section 9 funds. Of this amount, Birmingham received approximately $4.6 million, Mobile $2 million, and Montgomery $1.3 million with smaller cities receiving the balance. Funding increased substantially in fiscal year 1994 but increased only 2% between 1994 and 1995. Over the past five years, these funds have increased 32%, as indicated in Table 6.4.

Section 16. This section funds transportation services for the elderly and disabled. Under the ADA, all transit systems are required to provide services to the disabled or elderly that are parallel to those provided to the general public. In most places, this is done by providing van service by reservation or subscription. Section 16 funding in the state has been relatively steady at about $1 million per year since 1992.

Section 18. This section funds transportation systems that serve rural areas. Funding for rural transit has nearly doubled since 1991, but has remained stable for 1994 and 1995 at approximately $3.2 million statewide. Just under $100,000 per year is allotted for technical assistance to rural transit programs (RTAP), which is carried out by the ALDOT staff.

Section 26(a)(2). Approximately $93,000 a year is provided for state planning and research in transit under this section.

Table 6.4
Federal Transit Funding
State of Alabama

Category	Fiscal Year 1991	1992	1993	1994	1995
Section 8					
MPO Planning	$385,100	$382,550	$331,483	$362,551	$362,711
Section 9					
Urbanized					
Birmingham	$3,404,132	$3,365,023	$3,148,514	$4,615,879	$4,646,189
Mobile	$1,583,218	$1,657,378	$1,422,167	$2,030,495	$2,030,694
Montgomery	*	$1,048,864	$891,356	$1,287,275	$1,323,616
Others	$4,193,220	$3,285,716	$2,812,472	$4,023,845	$4,152,194
Total Section 9	$9,180,570	$9,356,981	$8,274,509	$11,957,494	$12,152,693
% Increase		**2%**	**-13%**	**31%**	**2%**
Section 16					
Elderly & Disabled	$626,385	$952,765	$844,065	$1,021,761	$1,024,992
% Increase		**34%**	**-13%**	**17%**	**0%**
Section 18					
Rural	$1,636,680	$2,553,387	$2,182,659	$3,095,492	$3,171,063
RTAP	$89,940	$89,672	$89,977	$98,356	$98,311
Total Section 18	$1,726,620	$2,643,059	$2,272,636	$3,193,848	$3,269,374
% Increase		**35%**	**-16%**	**29%**	**2%**
Section 26(a)(2)					
Planning/Research	**	$98,113	$84,852	$92,790	$92,790
			-16%	**9%**	**0%**
TOTALS	$11,918,675	$13,433,468	$11,807,545	$16,628,444	$16,902,560
% Increase		**11%**	**-14%**	**29%**	**2%**

*Included with "Others"
**Included with Section 8

Source: Alabama Department of Transportation

The ISTEA established more flexibility in the use of federal dollars which would allow states to transfer part of some highway funds to transit projects and vice versa. However, without adequate funding levels for all transportation modes such flexibility is not a great advantage.

Potential Future Funding

It is difficult to predict the future of federal transit funding: at the present time, proposed federal budget cuts would reduce the amount of funds available for transit. ISTEA legislation authorizes current programs through fiscal year 1997, for the most part adjusted for inflation. For planning purposes, a reasonable assumption is that current levels of support will continue beyond that date, but this is by no means assured.

To compare the total public expenditure on transit with highways, for example, federal transit funding statewide is approximately one percent of federal highway funding statewide. Since transit funds are allocated on a population-based formula nationally, it is unlikely whether the amount of funds available within the state will increase unless federal policies change dramatically. For additional transit services to be provided, new funding sources would have to be identified. This might include state government participation in transit funding.

In order to meet the goal of maximizing the return on public investment in transportation, public funds should be directed at transit only in the limited number of corridors with high transit ridership potential. Providing appropriate services for the elderly, disabled and other transportation disadvantaged individuals such as through the rural transit systems would be a possible exception to this population-based feasibility standard.

RAILROADS

Freight railroads are funded as a for-profit business in the private sector, with the exception of certain short-line, local railroad lines that are subsidized by the state with economic development funds. No transportation dollars from the public sector go to freight systems. It is assumed that this arrangement will continue into the future.

Intermodal freight transfer facilities, such as dock facilities or airports, are often constructed with local or state government participation. Normally, the public monies are in the form of bond issues, which are ultimately refunded through fees paid by the users.

Passenger rail within Alabama, provided by AMTRAK, has been a money-losing operation. The *Gulf Breeze* was recently discontinued after being subsidized by the state for several years at a rate of approximately $1 million per year.

AIRPORTS

Commercial airports with cargo and passenger service are allocated federal public funds directly from the FAA under entitlement formulas based on the number of passengers and cargo tonnage.

Current proposals in Washington to restructure the US DOT would privatize certain airport functions, such as air traffic control, and could drastically change current funding mechanisms. Only a small portion of the funds requested by Alabama commercial airports are appropriated: in 1994, out of $47 million in requests, just $5 million was awarded to airports in the state. These funds are matched locally with a 90% federal/10% local match. State funding of commercial airports has been extremely limited, and the state is not involved in their administration.

The Alabama Department of Aeronautics (ALDA), a state agency, provides funding for general aviation airports, which generally are money-losing operations, often subsidized by local economic development authorities. Funds come from jet fuel and aviation gas taxes, and are capped by legislation at $600,000 annually. Therefore, if fuel usage increases with more air traffic, the tax rate decreases and total revenues remain constant. The Alabama Aeronautics Commission (AAC) gives grants to local general aviation airports from these funds. The amounts requested by the airports greatly exceed the amount of funding available. In the future, it may be desirable to establish a flat tax rate so that funds would increase with increased airport usage. Both commercial and general aviation officials have indicated the need for additional funds for improvements to meet present and future needs.

PORTS AND WATERWAYS

Funding for waterborne transportation facilities varies according to the organization responsible for the particular facility.

The Alabama State Docks, including the Port of Mobile and the ten inland ports, are primarily funded from revenues generated by the users. Annual revenues are approximately $47 million, which provides a modest profit after expenses. Capital improvements have been made through revenue bonds (repaid from port revenues) and general obligation bonds, which are repaid through general state tax revenues. Of $85 million invested in improvements between 1987 and 1993, $14 million was generated from a general obligation bond and the rest from revenue bonds and/or operating revenues. The Alabama State Docks continues to expand and update facilities, and tonnage continues to increase each year. It is anticipated that these facilities will continue to be self-supporting at higher levels of revenue.

Other publicly-owned docks, such as those of local development authorities, counties, or municipalities, are generally funded through local authority or government revenue bonds or economic development funds. Private docks are of course privately funded. No figures are available for either of these types of facilities.

Most of the state's waterway systems are operated and funded by U. S. Army Corps of Engineers (ACOE) funding, which is appropriated by Congress every year. Within the Tennessee River System, the ACOE operates and maintains the locks and navigation channels under agreement with the Tennessee Valley Authority (TVA), which is responsible for this system. The cost of capital improvements on the waterways is shared by federal and local entities, with the proportion of local match varying with the location and the project. Federal monies come in part from waterway fuel

taxes via the Inland Waterway Trust Fund. In fiscal year 1993, approximately $88 million was expended on navigation improvements and maintenance projects serving Alabama. This total includes projects serving more than one state (for example, the Intracoastal Waterway) and some local sponsor contributions.

INTERMODAL SYSTEMS AND FACILITIES

Funding for the various types of intermodal facilities varies depending on which modes and responsible organizations are involved. Ports and airports are important intermodal facilities discussed above. Train stations and bus stations are funded as part of AMTRAK and the private intercity bus carriers, respectively.

Facilities for bicycles and pedestrians are funded locally and by the state and federal governments as part of roadway projects. Bikeways and pedestrian facilities are also eligible for funding as Enhancement Projects, which are selected by the Director of the ALDOT. The ISTEA requires states to spend 10 percent of Surface Transportation Program (one category of highway aid) funds on Enhancement projects, which may also include transportation-related historic preservation, landscaping and beautification, and related activities.

SECTION 7
RECOMMENDATIONS

The guidance provided by the Alabama Statewide Transportation Plan has two components: (1) an identified system of major transportation corridors and facilities and (2) a set of guidelines to be followed in order to achieve the expressed goals and objectives of the plan.

The preparation of this plan has initiated a new planning process, carried out with public involvement and the participation of many agencies and organizations. It has identified the systems and facilities of the transportation modes that now exist within the state, clarified the major social and governmental issues which affect transportation and provided an overview of metropolitan issues addressed by various MPO plans. In this section, the major corridors are identified and the recommended guidelines are stated.

MAJOR TRANSPORTATION CORRIDORS

The corridors of key importance in the state are identified in Figure 7.1. These include the proposed NHS routes as well as major rail lines and waterways. Important intermodal facilities such as the commercial airports and ports are also shown on this map.

Identification of major corridors does not mean that other facilities are not important or will not be funded or maintained; however, these corridors reflect particularly important connections between urban centers or major goods movement routes.

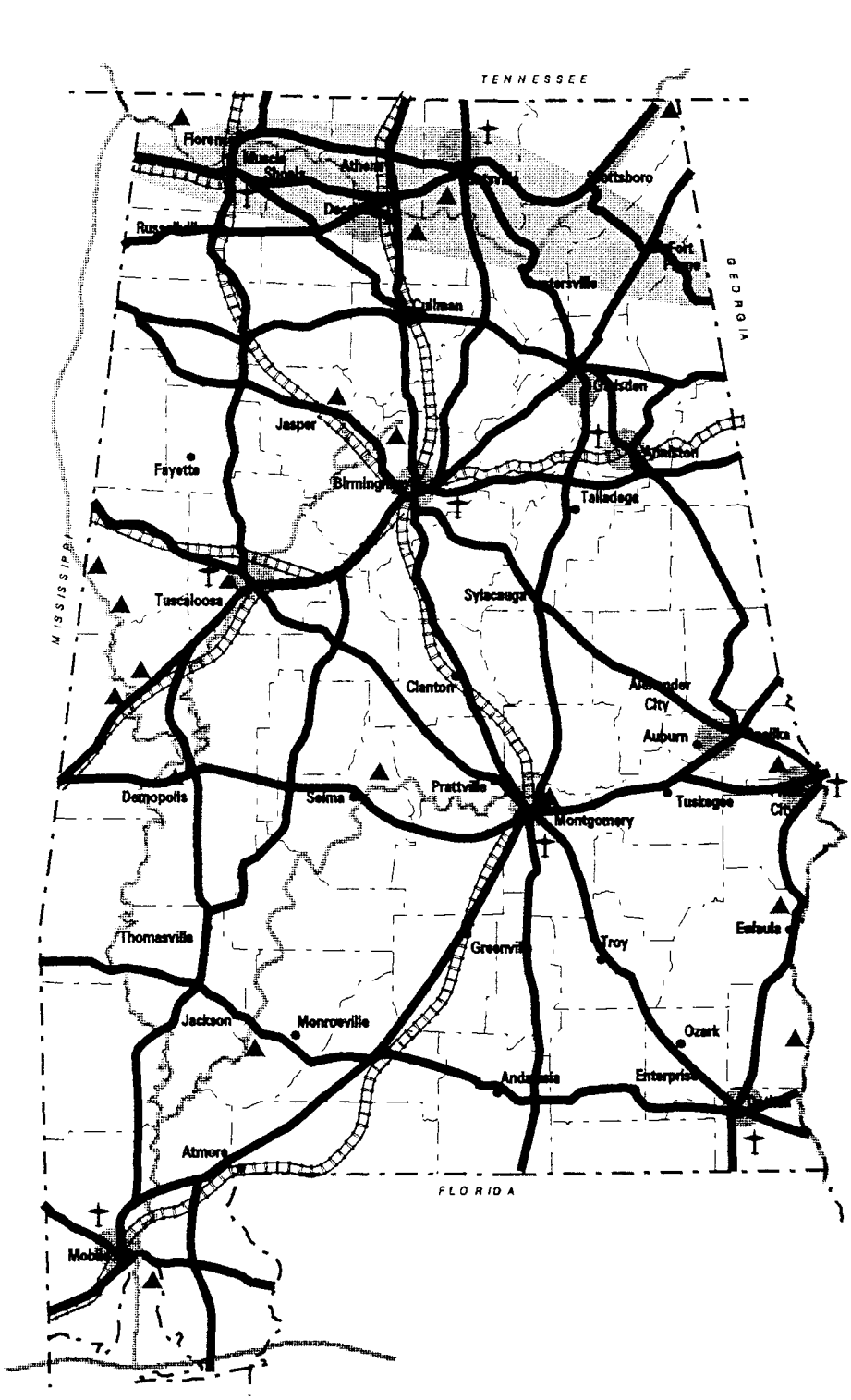
TRANSPORTATION GUIDELINES

Guidelines help direct actions for regulatory decisions of the ALDOT in order to achieve the goals and objectives of the plan. The guidelines are organized under each of the five goals stated in Section 2 of this plan. There will be some overlap, as guidelines may address more than one goal or objective. In summary, these recommended guidelines direct the actions of the ALDOT so that the goals can be achieved. Guidelines for carrying out the planning process are described along with those for achieving each of the five plan goals.

The Planning Process

Guidelines: Transportation programs and projects will be developed using a planning process that meets the current regulations for statewide transportation planning.

The Statewide Transportation Improvement Program will be based on the long-range Statewide Transportation Plan.



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NOT TO SCALE

LEGEND:

- MAJOR HIGHWAY CORRIDORS
- MEMPHIS /HUNTSVILLE TO ATLANTA CORRIDOR
- MAJOR RAIL CORRIDORS
- WATERWAYS
- COMMERCIAL AIRPORTS
- PORTS
- URBAN CENTER

MAJOR TRANSPORTATION CORRIDORS

FIGURE 7.1

PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.

The management systems will be used in the planning process to identify and evaluate potential and implemented projects.

The transportation planning and programming process will be carried out with early and continuing public involvement.

Projects will be evaluated based on their relative ability to meet the goals of the STP, including factors such as travel demand, safety, and economic development potential.

Goal 1. Provide safe transportation for people and goods.

Guidelines: Safety requirements will be enforced on vehicles using state transportation facilities.

As part of the Safety Management System, an interagency steering committee will coordinate the development of programs and projects to improve all aspects of transportation safety.

The Department[10] will emphasize eliminating hazards on highways and bridges.

Goal 2. Protect the public and private investment in transportation.

Guidelines: The Department will place a priority on maintaining the National Highway System routes within the state.

Maintenance of other existing facilities will be a priority.

The Department will encourage the enforcement of legal load limits on vehicles using state transportation facilities.

The Department will support efforts to convert abandoned rail lines for other transportation purposes.

In granting access permits on state system roads, the Department will consider the potential for adverse impacts on traffic operation and safety and will encourage developer assistance in impact mitigation and/or access management improvements.

[10]The "Department" is the Alabama Department of Transportation.

Goal 3. Maximize the return on public investment in transportation.

Guidelines: The Department's policy shall be to purchase sufficient right-of-way where feasible to accommodate future improvements.

The Department will use cost/benefit analysis and life cycle cost analysis where appropriate to evaluate alternatives.

The Department will use the management systems as a tool to help identify the most efficient use of available resources.

Priority in awarding Transportation Enhancement funds will be given to those projects that are transportation related.

Traffic signal, intersection, and similar improvements will be considered before road widening improvements on congested urban roads.

Goal 4. Provide an interconnected statewide transportation system that enhances economic development.

Guidelines: As part of the Intermodal Management System, an interagency steering committee will coordinate the study and identification of joint transportation projects and programs to facilitate economic development.

The Department will develop a transportation system that will foster economic growth throughout the state.

The Department will, to the extent feasible, maintain the existing transportation system to a standard that meets the mobility needs of Alabama's major industries.

Goal 5. Provide a transportation system that preserves the quality of the environment and quality of life.

Guidelines: The Department will encourage public transit investment where specific corridors have been identified as having high transit feasibility.

Public transit will be encouraged where feasible to serve the transportation disadvantaged public such as the elderly, disabled, and economically disadvantaged.

The Department will comply with state and federal standards of environmental quality when implementing transportation projects.

The Department will comply with the requirements of the National Energy Policy Act of 1992.

The Department will participate in wetlands mitigation banking projects to efficiently and effectively mitigate unavoidable environmental impacts of transportation projects.

The Department will consider including facilities for nonmotorized transportation facilities in new construction and road widenings where warranted by population or employment density or by potential recreational demand.

Goal 6. Provide adequate funding to meet transportation needs in the state.

Guidelines: The Department will allocate funds to maintain the existing system, to match all available federal assistance, and to fund other improvement projects.

The Department will strive to provide the required matching funds for all available federal transportation dollars.

Federal funds for urbanized areas under 200,000 population will be allocated according to a population-based formula similar to that used by the Federal Highway Administration for the larger urbanized areas.

The Department will distribute federal funds equitably for county roads programs throughout the state.

APPENDIX A

PUBLIC INVOLVEMENT PROCESS

ACTION PROGRAM

ALABAMA STATEWIDE TRANSPORTATION PLANNING

PUBLIC INVOLVEMENT PROCESS ACTION PROGRAM

The Alabama Department of Transportation (ALDOT) has developed a process to inform and obtain input from the citizens of the state of Alabama pertaining to its statewide transportation planning and programming process. The public involvement program will be used in the statewide transportation planning process, the preparation of the **Alabama Statewide Transportation Plan (ASTP)**, and **Statewide Transportation Improvement Program (STIP)**.

PURPOSE

The public involvement process is aimed at assuring that all Alabamians have the opportunity to help identify transportation issues, needs, and priorities; and to comment on guidelines and programs that will address those needs over the next twenty years. In order to achieve this purpose, the following principles are established for the public involvement process:

- Information and opportunities for public involvement will be provided early and continuously throughout the planning process.
- Information will be widely distributed and accessible to the general public.
- The widest range of potential participants will be encouraged to participate, including the general public, interest groups, and those with an official or professional involvement in activities related to transportation.
- Public input will be welcomed and considered when decisions are made in the planning and programming processes.

PUBLIC INVOLVEMENT PROCESS

This public involvement process was utilized in the initial development of the ASTP and will be utilized in the adoption of the STIP, major amendments or revisions to the ASTP/STIP, and other actions as necessary. Public involvement for development of the planning documents includes seven steps. The process is repeated when significant revisions or amendments are proposed. The steps are:

1. Develop public notification and information program. This will be initiated early and will continue throughout each planning process. The methods of notification will reflect the wide range of participants involved and will include the following: public notices; advertisements in major

newspapers; radio press releases; a mailing list of interested individuals; newsletters; and citizen comment forms.

2. Establish an Advisory Group. An Advisory Group, comprised of representatives of various transportation modes and user groups will be established. Advisory Group members will be appointed by the Director to serve on an as needed-basis throughout the planning process. The Transportation Planning Bureau will make recommendations to the Director as to potential members. Selection of Advisory Group members will attempt to include representatives from around the state, the transportation disadvantaged, and other groups with special interest or expertise in transportation issues. The members will serve at the pleasure of the Director and will continue as members until they are replaced. The Advisory Group, directed by the Transportation Planning Bureau, will provide input to the ALDOT on relevant transportation issues and serve as a liaison to citizens throughout the state.

3. Hold regional public input meetings. Meetings will be held as appropriate throughout the planning process to receive public input. The meetings will be an informal "open house" format, whereby ALDOT staff are available to answer questions and receive comments. All meeting locations will meet Americans with Disabilities Act (ADA) accessibility standards. All public notices will identify a person to notify at least one week prior to the meeting to request that accommodations be made available for persons with disabilities, including the deaf or blind, who may need special assistance at the meeting. Comment forms will be available for attendees who wish to submit their comments in writing and for those who wish to submit their comments after the meeting during a designated comment period.

Public meetings may not be conducted for minor amendments or changes to an officially adopted ASTP or STIP. Minor changes include but are not limited to the addition of work scopes not anticipated in the original document, changes in funding categories, changes in estimated costs, addition of projects that do not increase the STIP by over 10 percent. Minor changes will be available for public review as indicated in Step 5.

4. Respond to public comments. Comments received at the public meetings will be collected, summarized, and distributed to appropriate ALDOT staff. A published summary of the public comments and responses will be made available at the time the ASTP/STIP draft document is distributed for public review.

5. Distribute draft document for review; notify public. The ASTP/STIP draft documents will be made available for a twenty-one day public review and comment period prior to submittal to the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) for approval. Notification of the documents availability will be accomplished by official public notices in newspapers; notification to citizens on the mailing list; and/or announcements in newsletters. Copies of the ASTP/STIP draft documents will be available for review at ALDOT Division offices, Metropolitan Planning Organizations, and other locations as appropriate.

6. Publish and distribute the final document. The final Official ASTP and the final STIP will be submitted to the FHWA and FTA as required by federal regulations. The published ASTP/STIP will also be made available to interested groups and individuals. Copies of the ASTP/STIP will be distributed to ALDOT Division offices, Metropolitan Planning Organizations, and other locations as appropriate.

7. Review and revise public involvement process. After review of the public involvement process, if major revisions are proposed, the public will be informed and a 45-day public review period will be provided to receive public comment on any proposed revisions.

Comments and/or questions about the program should be directed to ALDOT, Transportation Planning Bureau, Statewide Planning Engineer, 1409 Coliseum Boulevard, Montgomery, Alabama 36130-3050; (334)242-6121.

APPENDIX B

GLOSSARY OF ACRONYMS

GLOSSARY OF ACRONYMS

AAC	Alabama Aeronautics Commission
ABIMS	Alabama Bridge Information Management System
ACOE	United States Army Corps of Engineers
ADA	Americans with Disabilities Act
ADECA	Alabama Department of Economic and Community Affairs
ALDA	Alabama Department of Aeronautics
ALDOT	Alabama Department of Transportation
ALEMA	Alabama Emergency Management Agency
ASTP	Alabama Statewide Transportation Plan
BIA	Bureau of Indian Affairs
CAAA	Clean Air Act Amendments of 1990
CNG	Compressed Natural Gas
COFC	Containers on Flat Cars
EA	Environmental Assessment
EIS	Environmental Impact Statement
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
ICC	Interstate Commerce Commission
IDA	Industrial Development Authority
IIC	International Intermodal Center
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
KPI	Key Performance Indicators
LPG	Liquified Petroleum Gas
MPO	Metropolitan Planning Organization
NBIS	National Bridge Inspection Standards
NEPA	National Environmental Policy Act of 1969
NHS	National Highway System
NPDES	National Pollutant Discharge Elimination System
NPIAS	National Plan of Integrated Airport Systems
PIP	Public Involvement Process
PSC	Public Service Commission
ROW	Right of Way
RTAP	Rural Transit Assistance Program
SOV	Single Occupant Vehicle

STAA	Surface Transportation Assistance Act of 1984
STIP	Statewide Transportation Improvement Program
STP	Statewide Transportation Plan
STRAHNET	Strategic Highway Network
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TOFC	Trailers on Flat Cars
TVA	Tennessee Valley Authority
US	United States
USDA	United States Department of Agriculture
US DOT	United States Department of Transportation
US FWS	United States Fish and Wildlife Service