

CHAPTER TWO

DATA COLLECTION / INVENTORY

CHAPTER TWO DATA COLLECTION / INVENTORY

A. Introduction

Before defining what the aviation system should be, we must first understand what it is currently. The Alabama Department of Transportation (ALDOT) Aeronautics Bureau selected 84 publicly owned, public use airports for inclusion in the existing Alabama airport system. This chapter presents an inventory of the current aviation facilities at each of these airports. Based on their locations, these airports were divided amongst Alabama's Economic Development Regions/Regional Council Districts. These regions are as follows:

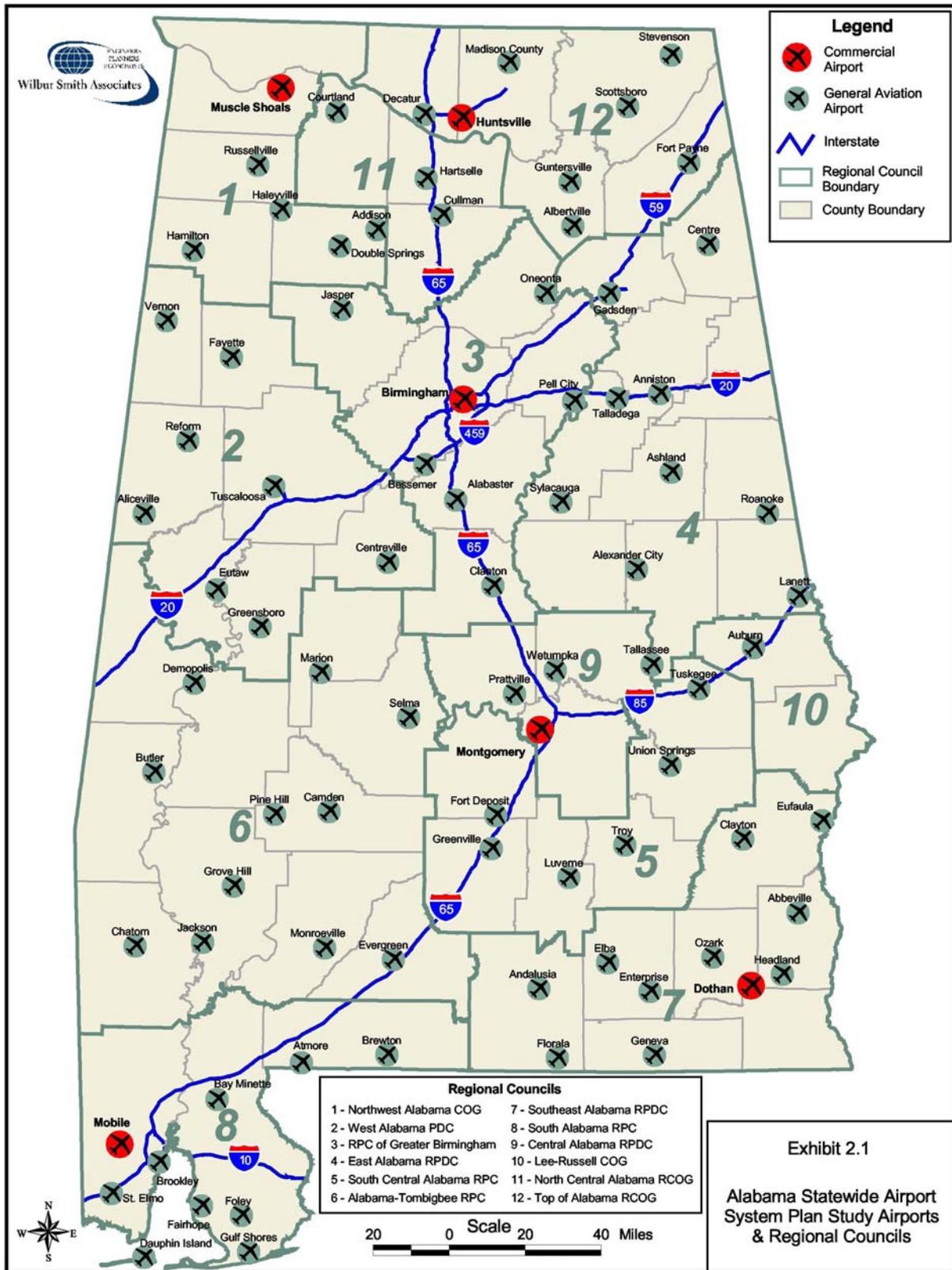
- ❑ Region 1 – Northwest Alabama Council of Governments
- ❑ Region 2 – West Alabama Planning and Development Council
- ❑ Region 3 – Regional Planning Commission of Greater Birmingham
- ❑ Region 4 – East Alabama Regional Planning and Development Commission
- ❑ Region 5 – South Central Alabama Development Commission
- ❑ Region 6 – Alabama-Tombigbee Regional Planning Commission
- ❑ Region 7 – Southeast Alabama Regional Planning and Development Commission
- ❑ Region 8 – South Alabama Regional Planning Commission
- ❑ Region 9 – Central Alabama Regional Planning and Development Commission
- ❑ Region 10 – Lee-Russell Council of Governments
- ❑ Region 11 – North Central Alabama Regional Council of Governments
- ❑ Region 12 – Top of Alabama Regional Council of Governments

Exhibit 2.1 shows the study airports within these regions. The airports range in size from small, general aviation to large, commercial service facilities. As discussed in Chapter One, the adequacy of the aviation system in Alabama is largely determined based on the facilities that are provided to the public and to airport users. Therefore, it is extremely important to determine the physical attributes and services available at each airport.

This chapter of the SASP documents the facility details for each study airport included in Alabama's system. This information is provided primarily in the form of tables that present the information in a logical form for later use in the analysis.

B. Inventory Process

The ALDOT Aeronautics Bureau, Federal Aviation Administration, and airports themselves provided a large volume of data about airports in Alabama. In order to organize this information in a consistent manner, an inventory process was developed.



The first step in the inventory process was to develop a survey form that could be used for every airport, regardless of size or facilities. Based on forms utilized in previous studies and input from ALDOT, a 10-page Airport Inventory and Data Survey document was developed for utilization during the inventory process. For each airport, this form was completed to the extent possible using information from the following sources:

- ❑ FAA 5010 Airport Master Record
- ❑ AirNAV Airport Information
- ❑ Southeast U.S. Airport/Facility Directory
- ❑ U.S. Terminal Procedures (Approach Plates)

These partially completed forms were then distributed to the airport manager or sponsor for each airport for verification and further completion. In February and March 2001, an on-site visit was conducted at each airport. During this on-site visit, the completed forms were collected and the information provided was reviewed with the airport staff for clarification. Information from the completed forms was input into a database for further use in subsequent analyses.

C. Facilities

The first section of the Airport Inventory and Data Survey requested information on planning studies and physical features of the airports. **Table 2.1** (presented at end of chapter) presents general airport data. It also shows the airport identifier at the time of the preparation of this document, the listed airport sponsor, and current standing of the airport in the National Plan of Integrated Airport Systems (NPIAS).

Table 2.2 (presented at end of chapter) is organized to present the existence of airport plans and, if available, the year the plan was developed. The airport plans that were identified are Airport Master/Action Plan, Airport Layout Plan, Economic Impact Study, Environmental Analysis, Marketing Brochures, Annual Budget Plan, and Capital Improvement Plan.

Table 2.3 (presented at end of chapter) summarizes the airside facilities that exist at each airport. The facilities that are identified include elevation above Mean Sea Level, primary runway designation, length, width, surface type, strength and lighting type, the existence of a parallel taxiway, taxiway width, and type of lighting for the parallel taxiway.

Table 2.4 (presented at end of chapter) contains information on the buildings that currently exist on each airport. The information that is shown includes the square-foot area of the air carrier terminal, general aviation terminal and administration building, the number of T-hangar units, the square-foot area of conventional hangar space, and the square-foot area of additional building space.

Table 2.5 (presented at end of chapter) summarizes the parking facilities that currently exist at each airport for based and itinerant aircraft and for automobiles. The information includes the apron size in square-yards, surface type and use, the number of paved and unpaved aircraft tie-downs, and the number of automobile parking spaces.

Table 2.6 (presented at end of chapter) is organized to present information on the fuel facilities that currently exist at each airport, and includes a listing for AvGas (80 and 100), Jet A, and MoGas. The information that is provided for each fuel type includes the number of tanks, type of tanks, total available fuel capacity (in US Gallons), and the type of distribution.

D. Airspace and NAVAIDS

Various types of navigational aids (NAVAIDs) and approaches are available at the 84 airports included in Alabama's airport system. This portion of the SASP inventory is intended to provide information concerning the types of navigational aids, approaches, weather reporting capabilities, and air traffic control available to the flying public at each facility.

Table 2.7 (presented at end of chapter) depicts the availability of each type of navigational aid, approach, weather reporting system, or air traffic control at each of the airport facilities. The number and location of each facility are not shown. Among the information that is depicted includes the existence of Generic Visual Glideslope Indicators (GVGIs) such as Precision Approach Path Indicators (PAPIs) and Visual Approach Slope Indicators (VASIs). Also depicted are the existence of Runway End Identifier Lights (REILs), airport beacon, wind cone, segmented circle, Instrument Landing System (ILS), localizer, Approach Lighting System (ALS) with or without Runway Alignment Indicator Lights (RAILs), Distance Measuring Equipment (DME), very high omnidirectional approach (VOR), Global Positioning System approach (GPS), Nondirectional Beacon approach (NDB), circling approach, weather reporting system, and air traffic control tower.

The presence of a full ILS system (including glide slope and localizer) indicates a precision approach to the airport. The presence of only a localizer, NDB, VOR, or GPS indicates a nonprecision approach to the airport. The presence of none of these NAVAIDs indicates that there is only a visual approach to the airport.

E. Activity Statistics

The aviation activity at Alabama's airports provides one of the most important factors in determining the airport's role within the Statewide Airport System. Activity information indicates which airports are currently being used to their capacity and which are being underutilized.

Table 2.8 (presented at end of chapter) depicts the airport activity statistics that either are included in the most recent 5010 Airport Master Record or were provided by the airport management. Table 2.8 shows an estimate of based aircraft, 2000 operations, the busiest month for aviation activity, an estimate of the number of peak-hour operations, the percentage of flight training operations that is included in the total number of operations, and 2000 enplanements for the scheduled service airports.

F. Land Use

Among the most important issues facing airports in Alabama today is the effect of urban sprawl on their continued development. As population bases move further from cities, development around

active airports is increasing at an alarming rate. This development can inhibit the airport's activity and growth due to incompatible land uses, enactment of ordinances limiting airport development, and, perhaps most importantly, development of structures, trees, or towers, which pose a hazard to the continued safe operation of the airport.

Land adjacent to many of the study airports includes agricultural, residential, and industrial land areas. Very few of these study airports are located adjacent to commercial land areas. With development rapidly occurring around the airports, an increasing amount of airport-impacted municipalities are adopting land use/height/hazard zoning. Data on land use in the airport environs was collected as part of the inventory visit for use in subsequent analyses.

G. Airport/Aviation Services

Table 2.9 (presented at end of chapter) depicts the services available at each airport in Alabama. These services are important to the pilots and flying public that utilize the airport, as well as to the general public. The services that are listed are as follows:

- | | | |
|-----------------------|--------------------|---------------------------|
| - Air Carrier Service | - Commuter Service | - Air Charter Service |
| - Air Taxi Service | - Hangar Rental | - Tie-downs |
| - Aircraft Rental | - Aircraft Sales | - Flight Instruction |
| - Jet Fuel | - AvGas | - Aircraft Repair |
| - Avionics Repair | - Avionics Sales | - U.S. Customs |
| - Public Telephone | - Restaurant | - Vending |
| - Car Rental | - Skydiving | - Loaner Car |
| - Foreign Trade Zone | - Industrial Park | - FAA Written Test Center |

Table 2.10 (presented at end of chapter) depicts the aviation activities that take place at each airport. These activities include the following:

- | | |
|--------------------------------------|---------------------------------|
| - Recreational Flying | - Agricultural Spraying |
| - Corporate/Business Activity | - Aerial Inspections |
| - Just-in-Time Shipping | - Gateway for Resort Visitors |
| - Community Events | - Police/Law Enforcement |
| - Prisoner Transport | - Community Facilities |
| - Flight Instruction/Education | - Civil Air Patrol (CAP) |
| - Environmental Patrol | - Emergency Medical Evacuations |
| - Medical Shipments/Patient Transfer | - Forest Fire Fighting |
| - Aerial Photography/Surveying | - Real Estate Tours |
| - Banner Towing | - Traffic/News |
| - Air Shows | - Fly-ins |

H. Community Meetings

As part of the Alabama SASP, an effort was initiated to conduct community meetings for each of the

84 publicly owned, public-use airports included in the study. The primary goals of the community meetings were to:

- ❑ Initiate public involvement in the SASP throughout the State of Alabama
- ❑ Gather community-specific input related to airport issues
- ❑ Establish contacts in local communities for follow-up data needs

The consultant team developed a schedule in conjunction with the on-site airport visits that allowed community meetings to be held for each of the airports during February and March 2001. Based on this schedule, airports were notified of an intended date and time for their meeting. Local airport contacts were then asked to notify local representatives of the upcoming meeting. Many meetings were held in airport conference rooms or lounge areas, while other meetings were held in local meeting places including municipal buildings and courthouses. Some airport contacts indicated that they had no interest in conducting community meetings for their facilities. Where possible, meetings were held with these airport contacts to discuss airport issues on a one-on-one basis.

The local airport contacts were given examples of the types of local agencies and representatives that should be notified of the community meeting. Examples of the local representatives identified by the consultants included airport managers, local economic development, planning and zoning representatives, and government officials, as well as interested pilots and business owners. It was noted to the airport contacts that the primary goal was to select a group of local individuals that had specific knowledge of airport and community issues that may need to be examined during the SASP process. The resulting number of representatives invited to the community meetings throughout Alabama ranged from one, the airport manager, to over 40 community members, depending on the response from the airport contact.

Community meetings were held Monday through Friday; meeting times were made flexible to fit the schedules of airport managers and other important representatives. Community meetings typically consisted of meeting attendees introducing themselves, followed by a brief description of the project and its schedule by the Wilbur Smith Associates (WSA) representative conducting the meeting. The majority of the meeting was spent discussing current and future airport-related issues. Each meeting concluded with a question and answer period that allowed those in attendance to ask additional questions as part of the meeting or on a one-on-one basis with the WSA representative. Meetings typically ranged in duration from half an hour to an hour.

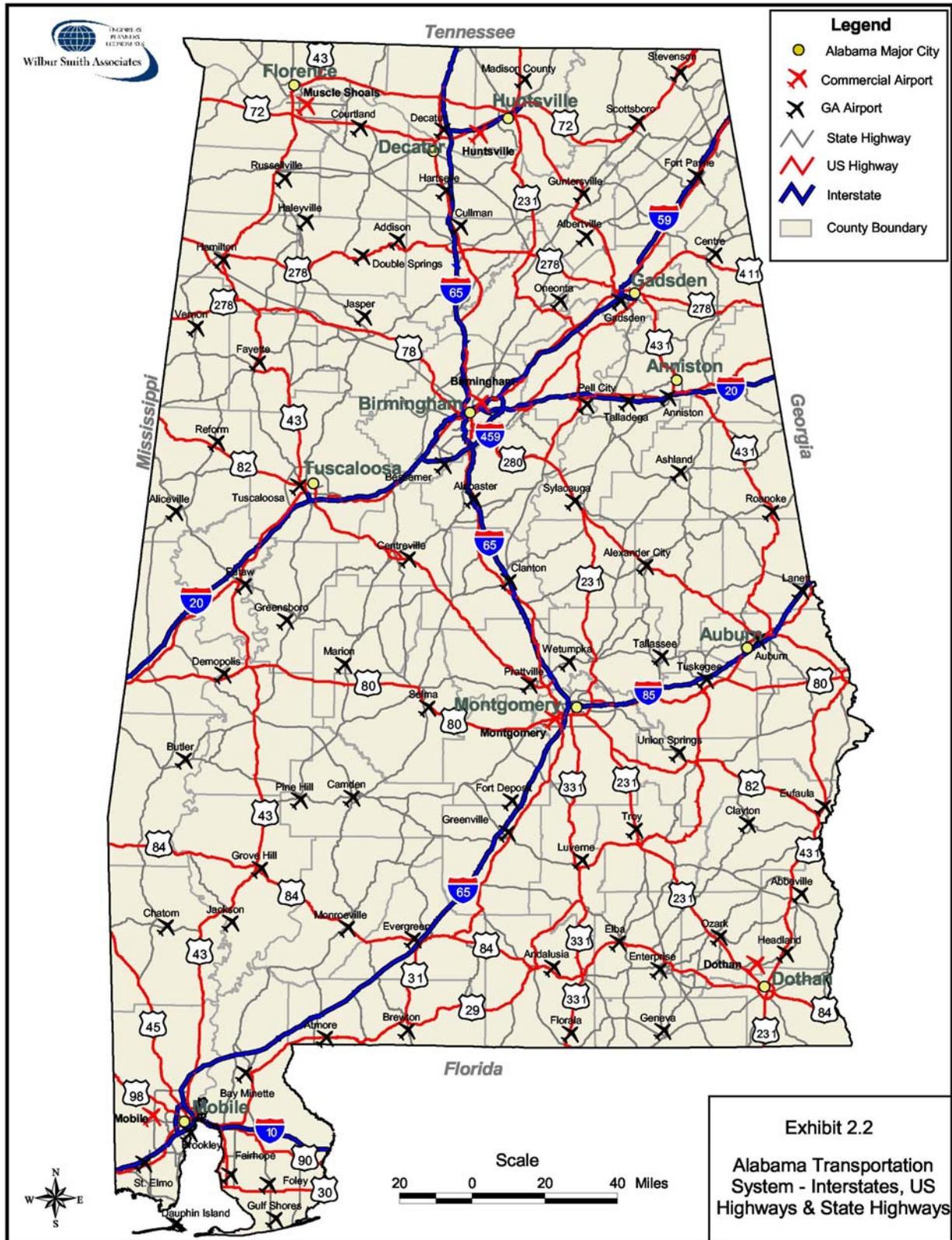
I. Alabama's Transportation System – Other Modes

Airports are only one of Alabama's modes of transportation within its statewide network. This transportation network represents one of the State's most significant contributions to its citizens, for this transportation system facilitates the movement of people and goods throughout the State and the world, enhances the quality of life for its citizens, supports the existing economic base, and lures new economic investment. In addition to an extensive aviation system, Alabama's transportation network includes roadway, railway, and waterways modes.

II. Roadways

Exhibit 2.2 shows Alabama interstates, U.S. highways, and State highways. There are five major interstate corridors in the State. These include Interstate 10 (I-10), I-65, I-20, I-59, and I-85. I-10 travels through the southwestern tip of Alabama and the Mobile metropolitan area.

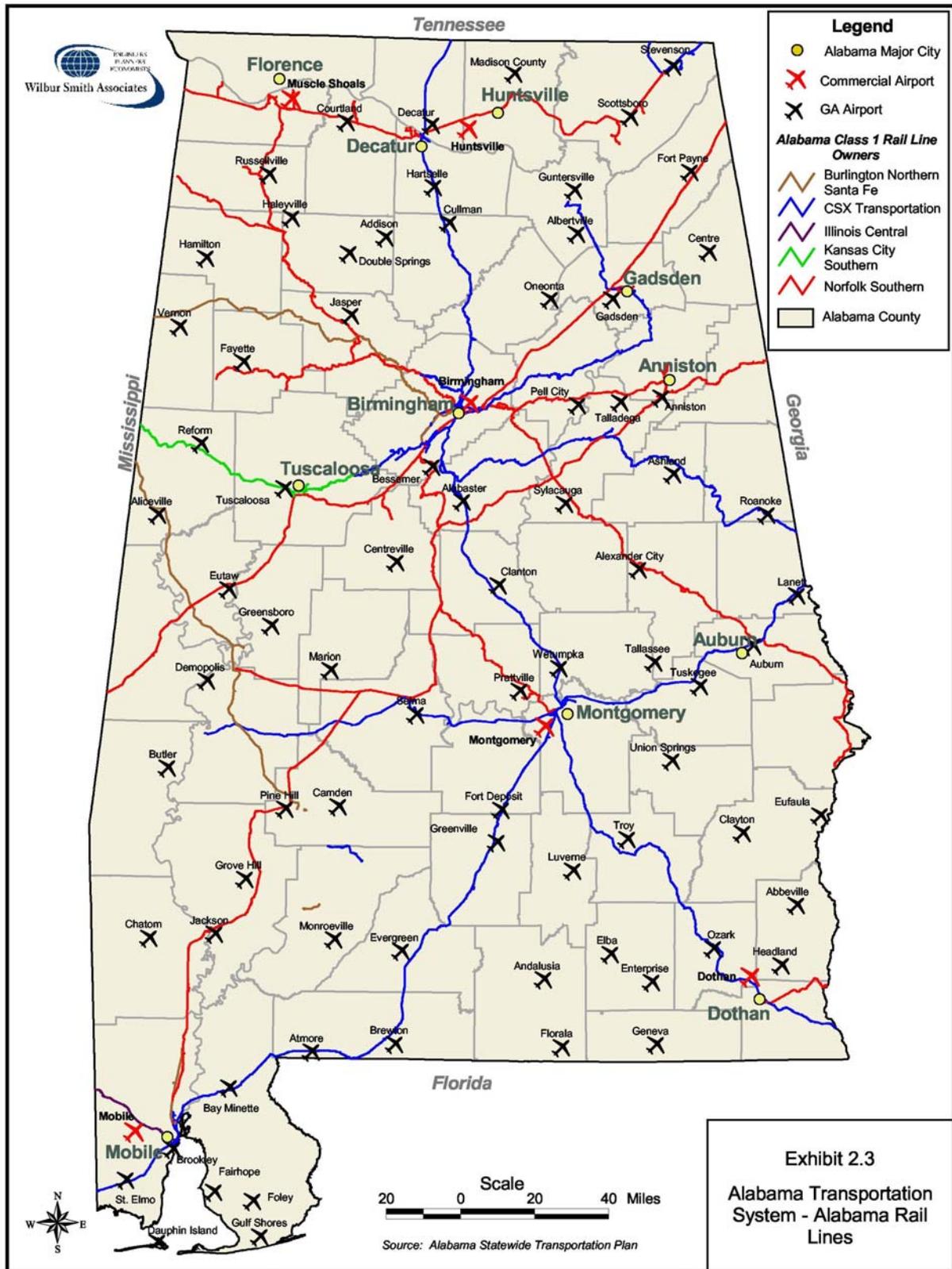
I-10 runs east-west from Jacksonville, Florida, to Los Angeles, California. There is a junction of I-10 and I-65 in Mobile. Traversing north-south through Alabama, I-65 is the central interstate corridor in Alabama and connects many of Alabama's most populated areas including Decatur/Huntsville, Birmingham, Montgomery, and Mobile. In addition to its junction with I-10, I-65 has junctions with I-59, I-85, and I-20. I-20 travels from South Carolina to Texas. It provides Alabama with an east-west connection both internally and externally by traveling through the central part of the State and the cities of Birmingham and Tuscaloosa. I-59 crosses Alabama in the northeast to southwest direction, crossing through Gadsden, Birmingham, and Tuscaloosa. I-59 terminators are Chattanooga, Tennessee, and Alton, Louisiana. I-85 begins in Montgomery and travels in a northeast direction terminating in Petersburg, Virginia, passing through the Alabama cities of Auburn and Opelika.



I2. Railways

Exhibit 2.3 depicts Alabama’s 5,212 miles of railroad track. The majority of these miles are considered Class I railroads. Class I railroads have gross operating revenues exceeding \$50 million dollars. The Class I railroads are:

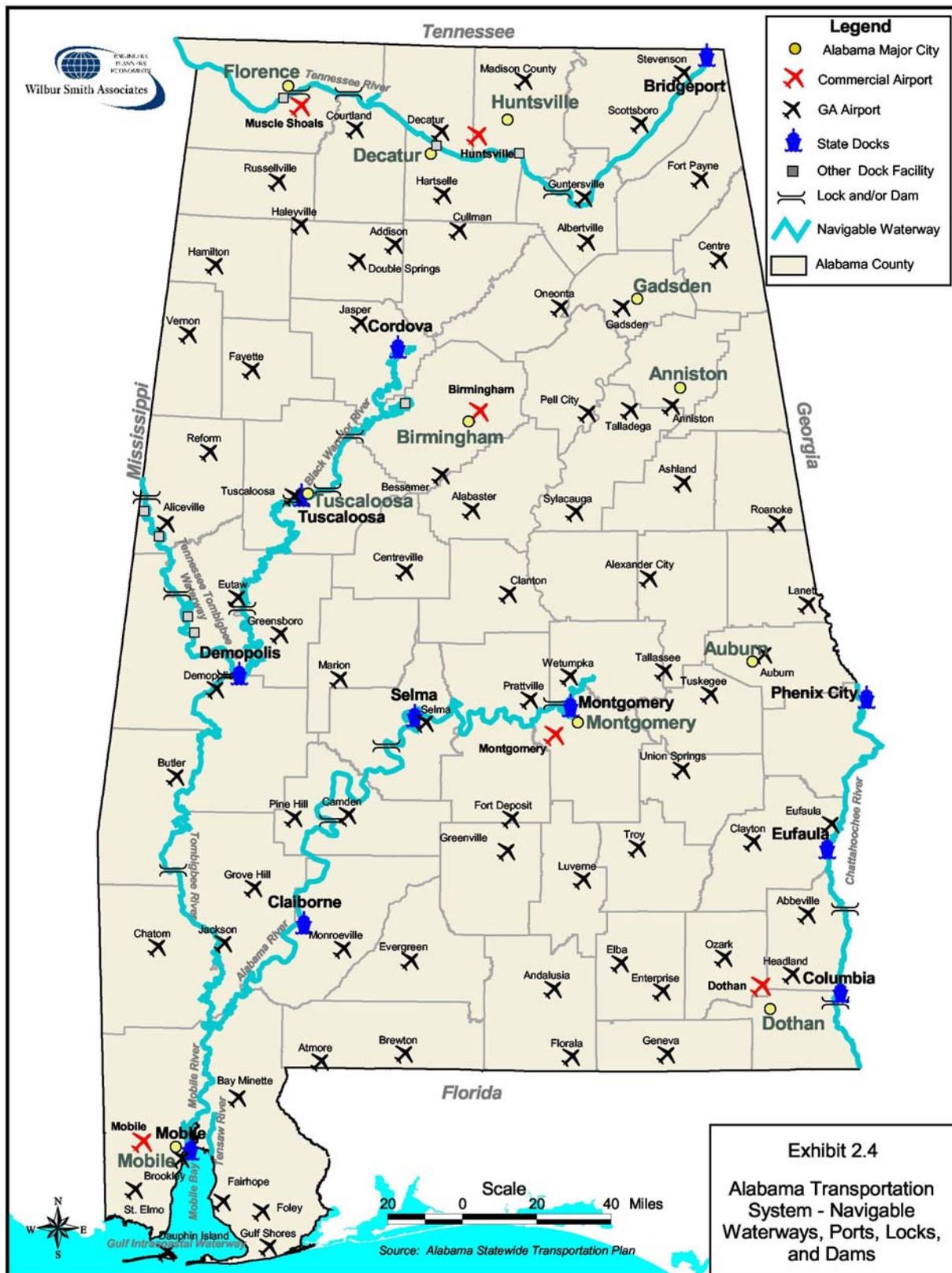
- Burlington Northern Santa Fe Railroad Company
- CSX Transportation, Inc.
- Illinois Central Railroad Company
- The Kansas City Southern Railway
- Norfolk Southern Corporation



I3. Waterways

Alabama has 1,500 miles of navigable waterways ranking second largest in the United States. This waterway system is part of a 23-state waterway system. There are a total of 18 government-operated docks and facilities along these waterways. **Exhibit 2.4** illustrates the State's navigable waterways and State docking facilities.

The Port of Mobile is the State's only deepwater port. Operated by the State Docks Commission, the port operates as a self-supporting government entity. Considered one of the State's gateways to the world, the port has established trading partnerships with countries in Asia, Europe, Central America, and South America.



J. Alabama Statewide Transportation Plan

The Alabama Department of Transportation provides the State with a long-range transportation plan that is used as a tool in the prioritization of the State's transportation needs. This plan includes analysis of all modes and sets goals and objectives for the next 25 years. Alabama's Statewide Transportation Plan (SWTP) was last updated in October of 2000. The SWTP set four primary goals. These are:

- *Goal 1*-Provide safe and efficient transportation for people and goods.
- *Goal 2*-Protect the public and private investment in transportation.
- *Goal 3*-Provide an interconnected transportation system that supports economic development objectives
- *Goal 4*- Provide a transportation system that preserves the quality of the environment and enhances the quality of life for Alabama's citizens.

This Alabama Statewide Airport System Plan (SASP) is produced in support of these goals.

As part of its needs assessment, the SWTP identified 14 non-Interstate roadways that serve north-south and east-west travel. The most significant of these corridors is US 43 that is the Florence to Mobile corridor. These corridors are depicted in **Exhibit 2.5**. These corridors will be considered in subsequent analyses of the adequacy of Alabama's airport system.

K. Summary

The data presented in this chapter is used as the foundation for subsequent analysis of the existing Alabama aviation system and the incorporation of a recommended System Plan.

