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ALABAMA
STATEWIDE AIRPORT SYSTEM PLAN
EXECUTIVE SUMMARY

ALABAMA AIRPORTS: GATEWAY TO ECONOMIC GROWTH

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NEED FOR THE PLAN

Alabama has positioned itself as a state of growth and development. Alabama's State and local governments have actively and effectively recruited industry to the State and have invested in infrastructure improvements to attract and support new industrial growth. Alabama's airports contributed to this growth and are an integral facet of the State's infrastructure.

Most of Alabama's airports were built in the 1950s and 1960s. Since that time, resources on the State and local levels have not been available to keep up with the growing aviation needs of the businesses Alabama has been working hard to attract. With a limited budget for aviation development funded only through an aviation fuel tax that has been capped, Alabama's spending is small. At $600,000, Alabama's aviation spending is three times less than Mississippi's, and is insignificant compared to Florida ($130 million) and Tennessee ($22.5 million). The Statewide Airport System Plan was prepared to evaluate the needs of the system, to assess the system's performance, and to quantify the level of spending necessary for Alabama's airports to successfully support the State's economic activity and transportation infrastructure.

"As aviation continues to grow on Alabama's Gulf Coast, tourism will grow right along with it."

Herb Malone, President/CEO Alabama Gulf Coast Convention & Visitors Bureau

"Most companies will not locate a plant unless there is an airport nearby."

Cary Baker, Shaw Industries, Andalusia, Alabama

THE ECONOMIC IMPACT

Alabama's 84 publically-owned airports are the gateway to the economic growth in the State. They are absolutely critical to industrial and economic recruitments efforts, and to the retention and expansion of businesses.

Total Statewide Impacts	
Output	$4.7 Billion
Payroll	$1.8 Billion
Employment	73,140

1 in 3 People Employed in Alabama Work for a Company that Uses General Aviation. A survey of 2,800 major Alabama companies revealed that 1 out of every 3 people employed in Alabama works for a company that directly uses general aviation in some way in the performance of its business. The study also found that for a recent 12-month period in Alabama, there were 95 locations announced for distributors, manufacturers, headquarters operations, and selected service industries. Each one of these new facilities is located within 17 miles of a general aviation airport, with 1 in 4 located near the larger air carrier airports.

Tourism Impact of Aviation in Alabama is Overwhelming. Tourism generates $6.1 billion for Alabama's economy every year, with both commercial service and general aviation airports bringing in more than 2.5 million visitors. One good example of the economic impact is the Robert Trent Jones Golf Course Trail. Since its inception, this unique Alabama attraction has generated more than $4.1 billion in tourism revenues for the State, with 40% of all people who use these facilities arriving by air. Stated differently, aviation has contributed directly to the generation of $1.6 billion in the Alabama economy through the Robert Trent Jones Golf Course Trail alone, according to representatives of the Retirement Systems of Alabama. Alabama's beautiful Gulf Coast resort areas, the Talladega Super Speedway, the new Tuskegee Airmen Museum and numerous hunting and fishing concerns statewide also rely heavily on Alabama's aviation system as part of their contribution to tourism. And visitors to each of these attractions use Alabama's hotels, resorts, restaurants and retail establishments.

FAA Study Quantifies Impacts. The specific airport impacts were determined in the economic impact study conducted in concert with the System Plan. Each airport was surveyed, with on-airport (direct) and visitor-related (indirect) expenditures measured. The multiplier effect of these benefits was then calculated to determine the total airport-related impacts. For example, when an airport employee buys local goods and services, that spending helps support additional economic activity in the community. The total economic impact is the sum of all direct, indirect, and multiplier impacts.

Investment Returned. The study found that for every dollar that is invested in the aviation system, approximately $163 is returned to Alabama's economy. This return on investment is substantial, and extensive investment in Alabama's airports would result in a high rate of return.

Other Benefits. In addition to economic benefits, Alabama's airports provide a number of critical services for residents including emergency medical flights, police and fire support, traffic reporting, search and rescue operations, wildlife resource management, agricultural operations, military readiness and disaster relief, among others.

"If the airport wasn't here, Briggs & Stratton wouldn't be here."

Dave DeBaets, Vice President & General Manager Large Engine Division, Briggs & Stratton Corporation, Auburn, Alabama

PURPOSE OF THE PLAN

The Alabama Statewide Airport System Plan provides a blueprint for future airport development. The plan created tools and processes to evaluate general aviation airport needs to serve statewide goals. There were three primary goals and objectives for the plan:

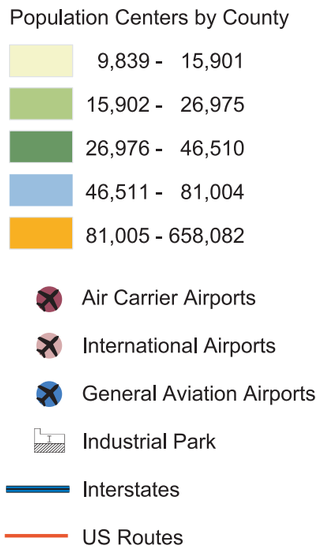
- ***Define the system needed to meet economic development trends and physical needs;***
- ***Identify funding requirements and initiate practical steps to implement them; and***
- ***Identify the economic impact and benefit of investment in the aviation system.***

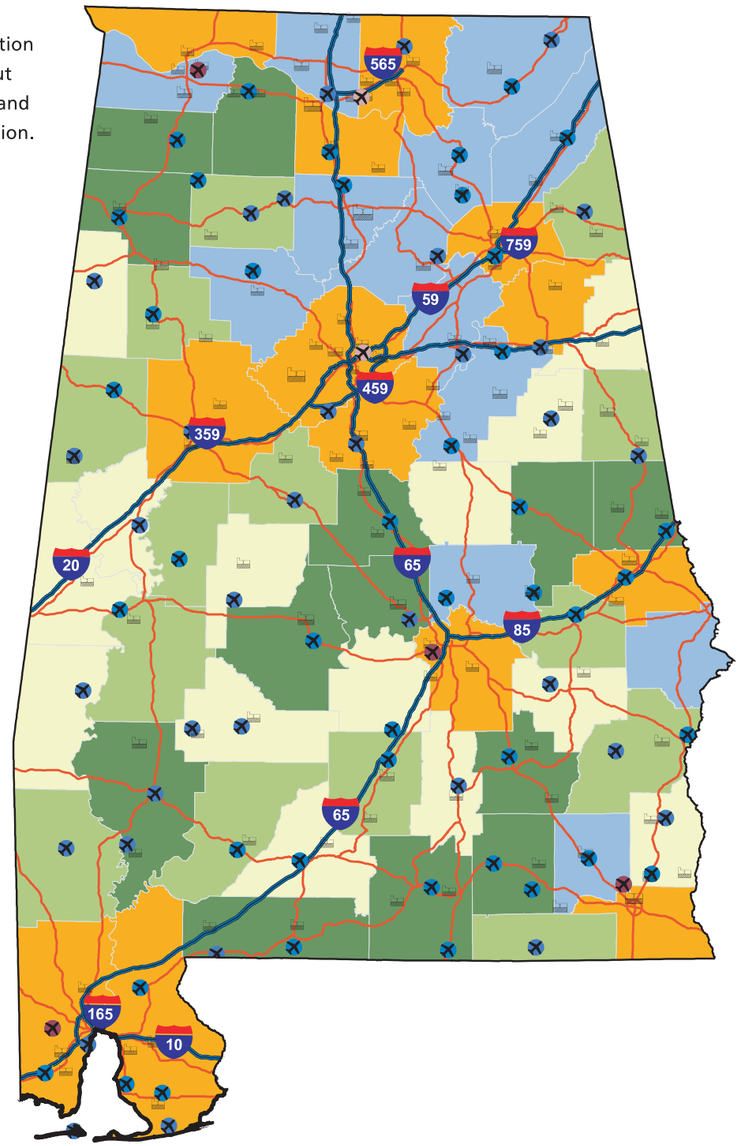
The process used to examine the airport system included a comprehensive inventory, an analysis of national and Alabama-specific aviation and economic trends, forecasts of activity, and an extensive evaluation of existing and future airport roles and facilities. The basis of the evaluation focused on five assessment categories that were used to determine airport roles, as well as facility and service needs, in order to develop a recommended aviation system. The five assessment categories included:

- ***Accessibility***
- ***Facilities***
- ***Economics***
- ***Activity***
- ***Development and Optimization***

THE CURRENT STATE AVIATION SYSTEM

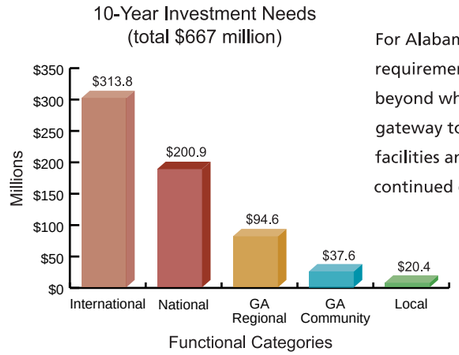
This system plan is unique. The airport system established in this plan is crafted with the system's ability to support and encourage economic development as its cornerstone. An economic impact study of the State's airport system revealed that for every dollar invested in Alabama's airport system as much as $163 is returned to the states economy. It is for this reason that this system of airports seeks to provide a high level of access not only to the State's population centers and interstate industrial corridors, but also focuses on growing population centers and areas that have traditionally supported aviation.





INVESTMENT NEEDS

Alabama's airport system supports economic growth and provides one of the most important transportation modes for the movement of people and goods. The costs associated with maintenance and development of the airport system is substantial, but the rewards of providing a first-class aviation system far exceed these costs. The System Plan identified a baseline cost estimate associated with infrastructure development to meet minimum standards associated with the recommended airport roles. Based on the analysis of the recommended airport system's performance and the demand driven needs of the air carrier and international airports, specific projects have been identified for airports in the Alabama system. To develop the recommended airport system with the facilities and services required, it is estimated that approximately $667 million in capital expenditures will be required over the next ten years, with approximately $493 million of this total eligible for federal funding.



For Alabama's airport system to be developed to meet the economic needs and physical requirements of its users, including some of Alabama's largest employers, investment beyond what is being made today will be needed. Alabama's airports represent a gateway to economic growth and development and must be provided with sufficient facilities and services to fulfill their important role as a facilitator in the State's continued charge for business incubation and retention.

KEY AVIATION POLICIES

Each state operates its aviation agency differently as it is guided by state statute and funding. In 2000, the Aeronautics Bureau was placed under the Alabama Department of Transportation. Act 2000-220 of the Alabama Legislature made this change, as well as provided the Aeronautics Bureau the authority to serve as the "agent" for municipalities, counties, and airport authorities receiving federal funds. This "channeling" authority was the most significant aviation policy change enacted in Alabama. In addition to channeling federal monies, Alabama provides financial assistance to the State's publicly owned airports in the form of the Airport Improvement Funding Assistance Program. Funds distributed through this program are applied to projects such as planning, capital construction, land acquisition, and obstruction control and removal.

Through the System Plan, deficiencies in the existing airport system's ability to meet minimum standards were identified. Due to the significant needs identified and the current priority rating system which evaluates project priorities, many of the proposed airport improvement projects, especially at small airports, will continue to go unfunded. Further consideration of the Aeronautics Bureau's priority rating system and its funding programs is needed if the System Plan's recommendations are to be implemented. Allocating resources among the five airport classifications would ensure that airports compete fairly for limited state funds.

THE SYSTEM ANALYSIS AND FINDINGS

With airport roles identified, the adequacy of the existing system and the initial airport roles were examined. This analysis provided a comprehensive assessment of the system's performance and formed the basis from which options and recommendations were developed. Examples of the analysis for each category are described.

Accessibility
An aviation system must be accessible from the air and ground and should be located in proximity to population and business centers, as well as aviation users. With the recommended airport system, including airports in surrounding states that were accessed by Alabama residents, 98.2% of the State's population and 96.1% of the State's land area was within a 30-minute drive time of an airport. If facilities are improved based on the System Plan's findings to bring airports in compliance with minimum criteria for their recommended system role, 89.2% of the State's population would be within a 30-minute drive of an airport with a 5,000-foot long runway.

Facilities
An adequate airport system needs to have facilities in place to accomplish its mission. The physical performance of the aviation system was evaluated based on the ability of the airport facilities to meet at least minimum standards. Overall, for the recommended system to meet the minimum standards identified in the System Plan, significant improvement is needed in terms of runway length, taxiway development, visual approach aids, services, and aviation support infrastructure, such as hangar development.

Economics
Transportation infrastructure, including airports, is a vital piece of the economic development equation. The Alabama airport system was evaluated to determine its ability to meet economic needs. Through review of the locations of industrial parks, businesses with air cargo needs, significant recreational centers, large economic regions, and planned roadway improvements, recommendations for airport role improvements were made to meet current and anticipated air transportation needs to support economic development in the State.

Activity
A good aviation system should adequately serve its existing and projected demand. Analysis of operational capacity, as well as the capacity of hangars and automobile parking, for the recommended aviation system showed that investment is needed in order to provide sufficient facilities to meet Alabama's projected aviation demand. The existing system was noted to have sufficient operational capacity to meet current needs, but that additional capacity, possibly in the form of additional runways, will likely be needed in the next 20 years.

Development and Optimization
Planning of an aviation system requires that development potential and the ability to optimize the existing facilities be considered in the formulation process. The System Plan evaluated the number of through-the-fence operations, the management structure of the airports, and the currency of the airport's planning documents. By eliminating the through-the-fence operations, providing full-time, non-tenant airport management, and keeping up-to-date plans for an airport, the long-term viability of an airport would be supported.

THE AVIATION DEMAND FORECAST

To develop a recommended aviation system for Alabama, the level of demand expected to use the system was determined. National, regional, and statewide trends provided insight into the development of aviation activity projections for the airports in Alabama's system. In addition, a review of Alabama's demographic and economic development trends was conducted to evaluate where higher than average growth was anticipated. Projections of the following aviation factors were developed:

- *Enplanements – persons boarding scheduled airlines*
- *Based Aircraft – number of aircraft stored at an airport*
- *Operations – number of takeoffs and landings*

The 20-year projections were developed through examination of various FAA-accepted methodologies such as market share, trendline, and regression analysis. The results of these methodologies were compared to forecasts prepared by the FAA, and a preferred forecast was selected for each factor. The preferred forecasts are as follows:

	2000	*2020*
Enplanements	*2.8 million*	*4.5 million*
Based Aircraft	*3,204*	*4,771*
Operations	*2.7 million*	*3.5 million*

AIRPORT SYSTEM ROLES

Varying airport facilities and services are needed throughout Alabama to serve the business, recreational, and pleasure aviation users. In order to determine where and to what extent a community required aviation-related services, demand factors were evaluated. It was recognized that demand for aviation services is influenced by factors that are related to aviation as well as factors that are unrelated. Using the five assessment categories established at the outset of the study, specific factors were selected to determine airport role categories to be used in the System Plan. A few of the 23 factors included:

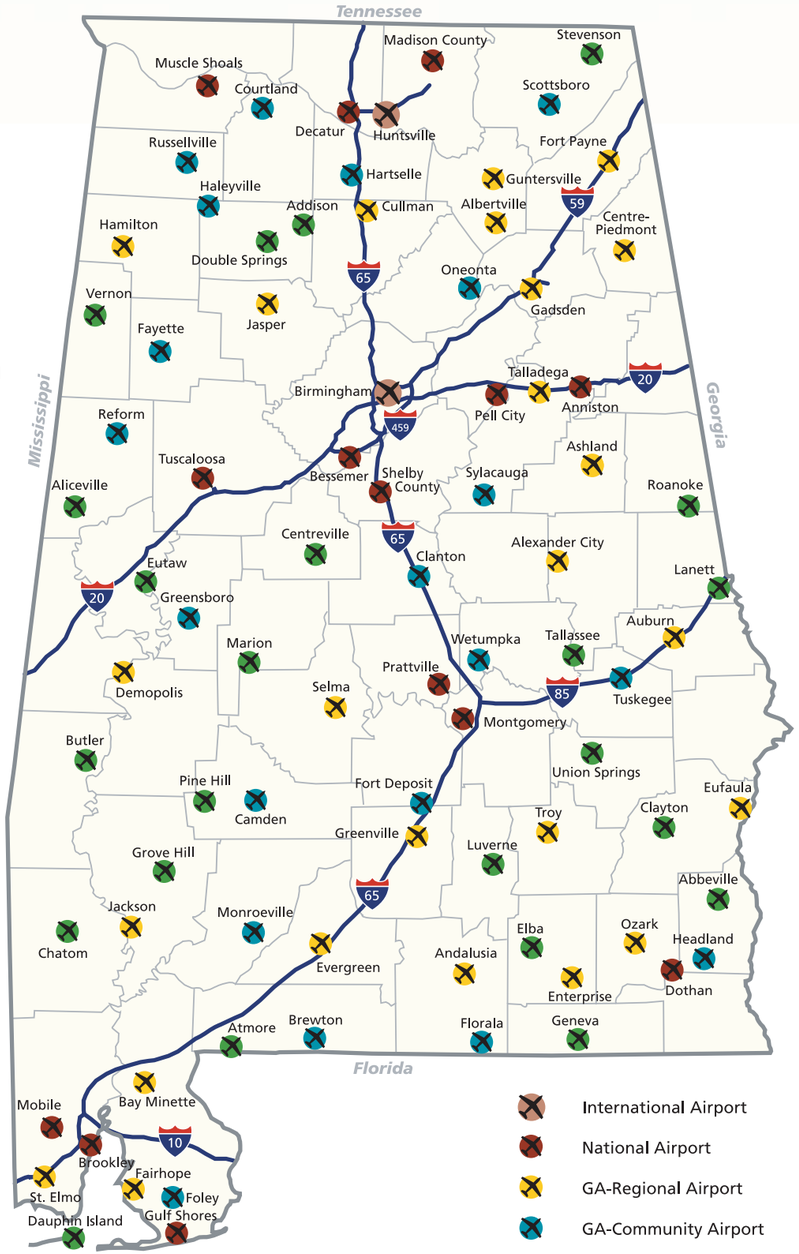
- *Population*
- *Corporate registered aircraft*
- *State licensing standards*
- *Primary runway length*
- *Economic impact*
- *Air cargo activity*
- *Total based aircraft*
- *FAA design standards*
- *Airside and landside expansion*
- *Current airport management*

From this evaluation, five airport roles were developed to categorize Alabama's system: International, National, General Aviation-Regional, General Aviation-Community, and Local. These five airport classifications were used to evaluate the adequacy of Alabama's airport system to meet its goals and objectives.

THE RECOMMENDED AIRPORT SYSTEM

The recommended airport system was developed to serve and support the State's population, airport users, industrial parks, economic centers, recreational attractions, and planned highway improvements. At the heart of the recommended airport system were the five functional roles that work together to provide a wide variety of aviation facilities and services across the State.

- International airports serve as Alabama's primary gateway to global passenger and air cargo markets.
- National airports serve a contributing role in providing the local, regional, and statewide concerns with access to and from the national and global economy.
- GA-Regional airports support the local and regional economies and connect them to the State and national economies.
- GA-Community airports serve a supplemental role for the local economy and focus on providing aviation access for small business, recreational, and personal flying.
- Local airports, while serving a limited contributing role for the local economy, are considered to have local importance in supporting aviation activity.



Based on the role of the airport, specific facility and service objectives were established. These objectives serve as minimum criteria that airports in the system should strive to meet. The minimum criteria for the facilities and services are described by category benchmarks.

	CATEGORY BENCHMARKS	MINIMUM CRITERIA
INTERNATIONAL AIRPORTS	Airside, landside, and terminal infrastructure needs are driven by demands which exceed the National Airports' benchmark requirements.	As required by demand or opportunity
NATIONAL AIRPORTS	AIRPORT REFERENCE CODE RUNWAY LENGTH RUNWAY WIDTH TAXIWAY NAVIGATIONAL AID VISUAL AIDS LIGHTING WEATHER SERVICES FACILITIES	C-II or Design Aircraft Minimum 5,500' To Meet ARC Full Parallel Precision Approach MALSR, GVGIs MIRL*, Beacon, Lighted Windsock Automated Weather Reporting Phone, Restrooms, FBO, Maintenance, Jet Fuel, Ground Transportation, RCO/ATCT Modern Terminal, Aircraft Apron, Hangars, Auto Parking
GENERAL AVIATION-REGIONAL AIRPORTS	AIRPORT REFERENCE CODE RUNWAY LENGTH RUNWAY WIDTH TAXIWAY NAVIGATIONAL AID VISUAL AIDS LIGHTING WEATHER SERVICES FACILITIES	B-II or Greater Minimum 5,000' To Meet ARC Partial Parallel Non-Precision-Straight In Approach GVGIs MIRL, Beacon, Lighted Windsock Automated Weather Reporting Phone, Restrooms, FBO, Maintenance, Jet Fuel, Ground Transportation Terminal, Aircraft Apron, Hangars, Auto Parking
GENERAL AVIATION-COMMUNITY AIRPORTS	AIRPORT REFERENCE CODE RUNWAY LENGTH RUNWAY WIDTH TAXIWAY NAVIGATIONAL AID VISUAL AIDS LIGHTING SERVICES FACILITIES	B-I or Greater Minimum 3,700' Minimum 60' Turnarounds & Connector Non-Precision Approach GVGIs MIRL, Beacon, Lighted Windsock Phone, Restrooms, Avgas Pilots Lounge, Aircraft Apron, Hangars, Auto Parking
LOCAL AIRPORTS	AIRPORT REFERENCE CODE RUNWAY LENGTH RUNWAY WIDTH TAXIWAY LIGHTING SERVICES FACILITIES	A-I or Turf Maintain Existing (minimum 2,000 feet) Minimum 60' Connector and/or Turnarounds LIRL, Beacon, Lighted Windsock Phone, Restrooms Aircraft Apron, Hangars, Auto Parking

* FAA requires only MIRL for precision approaches; however, HIRL is generally preferred among pilots during instrument landing conditions.