

Last Updated Summer 2003



# >> | GEORGIA AVIATION SYSTEM PLAN

## EXECUTIVE SUMMARY



# Acknowledgment

This document was produced under the auspices of the  
**GEORGIA DEPARTMENT OF TRANSPORTATION**

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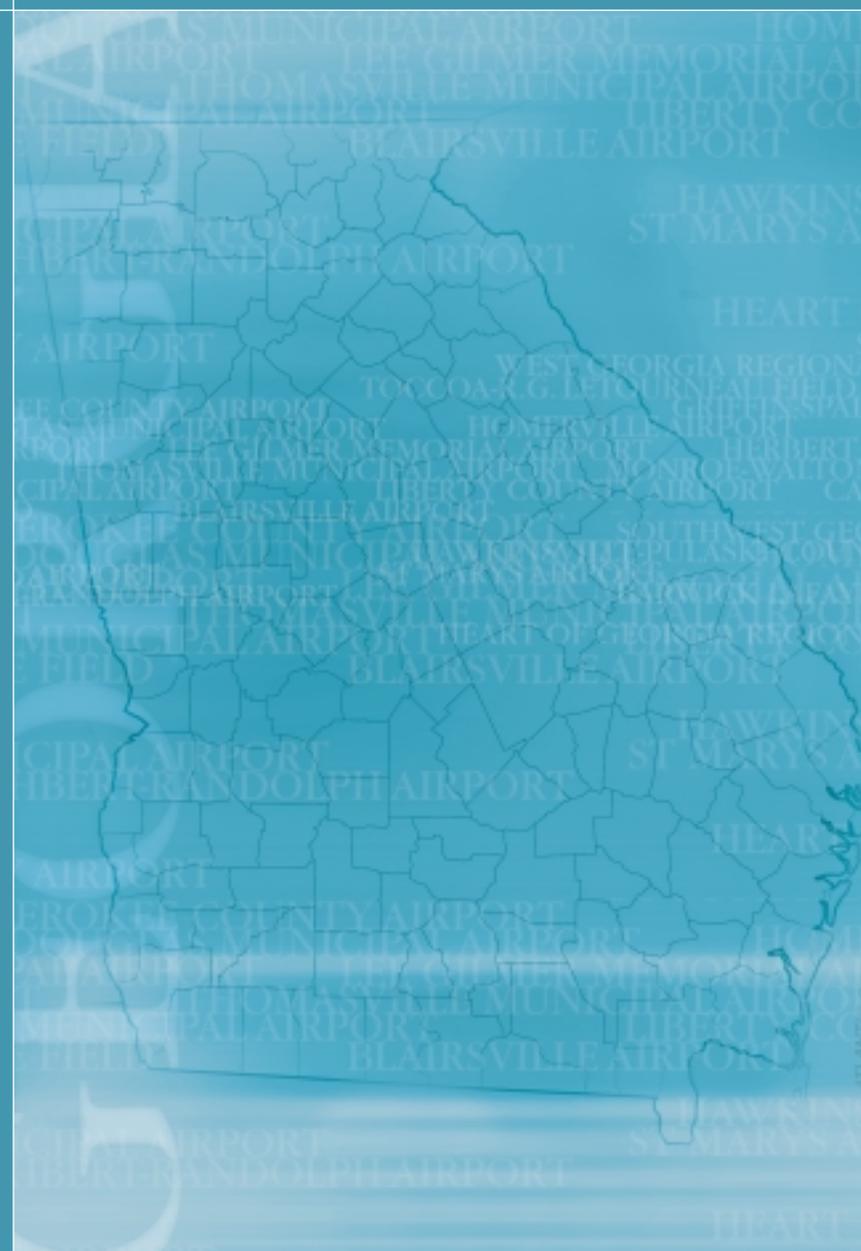
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## Introduction



Georgia is served by one of the most comprehensive and progressive aviation systems in the United States. To prepare a long-term plan to guide the development of this aviation system, it was necessary to follow an approach that will keep Georgia airports at the forefront of aviation.

In late 2001, Aviation Programs, Georgia Department of Transportation, began an update to its statewide aviation system plan. It had been almost 10 years since the Georgia Aviation System Plan had last been updated. This document is a summary of the technical report that was prepared to document the System Plan.

The update to the Georgia Aviation System Plan contained four components:

- *THE SYSTEM PLAN*
- *AN AIR SERVICE/PASSENGER DEMAND ANALYSIS*
- *A PAVEMENT MANAGEMENT STUDY*
- *AN AVIATION TAX REVENUE STUDY*

More information on any of these studies can be obtained from Aviation Programs, Georgia Department of Transportation.

Georgia's aviation demand is served by a diverse mixture of airports ranging in size from small general aviation airports to Hartsfield Atlanta International, the nation's busiest commercial airport. The Georgia Aviation System is made up of 103 public use airports conveniently located to meet a full range of commercial, business, personal, recreational, and training activities.

To identify the development needs of Georgia airports, Aviation Programs took a strategic approach to planning for the future aviation system. The approach to the Georgia Aviation System Plan was performance-based, enabling Aviation Programs to determine how the airport system is currently performing, to set objectives for its future performance, and to determine the actions necessary to direct the airport system toward established goals.

*This executive summary highlights the findings from the Georgia Aviation System Plan, as well as the Air Service/Passenger Demand Analysis. A separate study was conducted to analyze the condition of pavements at all Georgia airports. The Pavement Management Study outlines airport specific actions that are needed to maintain and enhance the condition of runways, taxiways, and apron areas at all system airports. The Aviation Tax Revenue Study estimates total annual aviation related taxes that are collected in Georgia each year. This analysis compares annual aviation related taxes collected to annual funding requests from all airports and to the current annual budget that is available to Aviation Programs. More information on all studies is available from Aviation Programs.*

# Georgia Aviation System Plan Overview

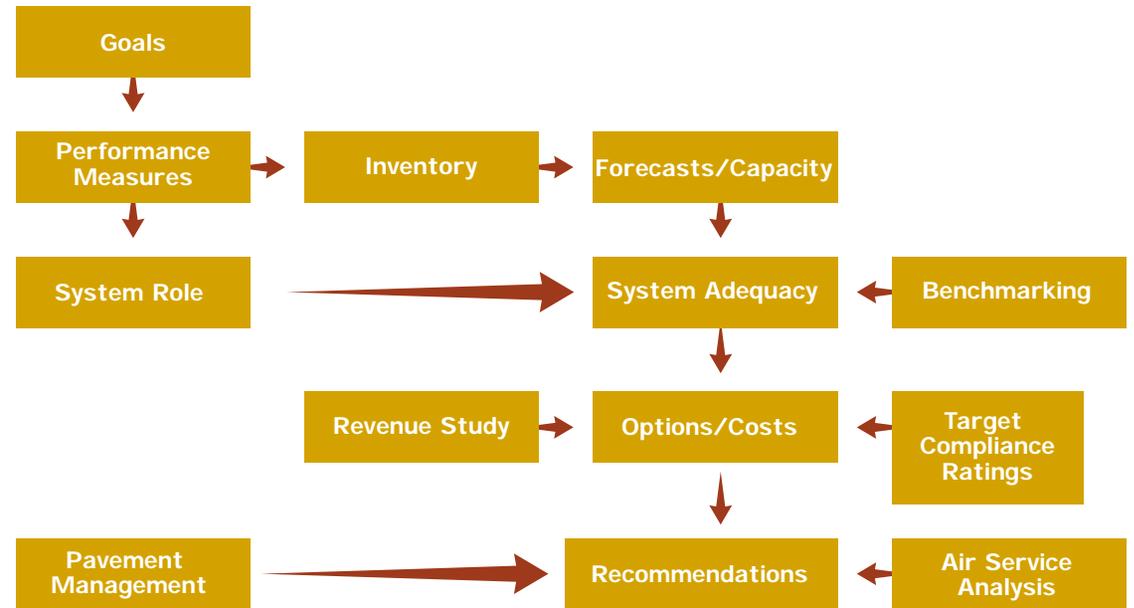


The System Plan update considered a variety of technical tasks and analyses that included each of the following:

- Inventory of the State's existing public use airport system: The inventory included on-site airport visits and cataloging each airport's historic and current facilities and activity levels.
- Identification of each airport's functional role within the system: System leveling or stratification was accomplished by determining how each airport currently contributes to meeting Georgia's air transportation needs and goals.
- Evaluation of each airport's performance relative to its functional role or system level: Specific facility and service objectives were identified for each airport role or level, and the ability of system airports to comply with established facility and service objectives was determined.
- Identification of deficiencies in the system: The performance-based approach to the System Plan update resulted in the identification of long-range system needs.
- Documentation of specific airport projects: The System Plan identified specific projects that should be implemented to allow individual airports to fulfill their functional role and to increase performance to targeted levels.
- Estimation of development costs: Costs that may be incurred to enable system airports to comply with established facility and service objectives and to elevate the overall performance of the Georgia Aviation System were estimated as part of the study.



## study process



## Study Outputs

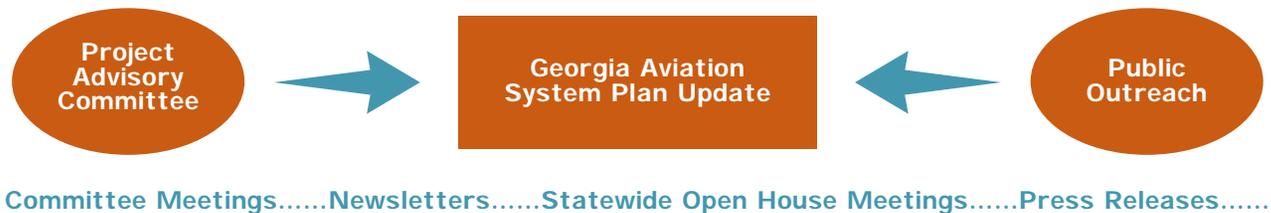
The purpose of the Georgia Aviation System Plan is to provide Aviation Programs with a key decision making document and guidance for:

- Identifying airports and related facilities that are needed to meet study objectives and to promote aviation in Georgia.
- Determining current deficiencies in the Georgia Aviation System.
- Recommending facilities and services that are needed for each airport to comply with its identified system role.
- Identifying areas of Georgia where new, replacement, or upgraded airport facilities are needed to meet target performance objectives for operational capacity and accessibility.

## Public Outreach

An important part of the update to the Georgia Aviation System Plan was the information and outreach effort. This effort included:

- On-site visits, direct mailings, and telephone contacts to all system airports.
- A broad-based Project Advisory Committee that provided input and direction for study development.
- Meetings with the Project Advisory Committee at key study milestones.
- Fourteen different statewide open house meetings that provided information on the System Plan's formulation and progress.
- Three project related newsletters distributed to over 2,500 individuals, agencies, groups, and elected officials throughout Georgia.



## The Existing Airport System

Georgia's current system of airports consists of 103 public use aeronautical facilities. Nine airports have scheduled commercial airline service; the remaining 94 airports are exclusively general aviation. General aviation includes corporate, recreational, and training activities. Georgia's commercial airports also play key roles in supporting general aviation activity.

One of the first steps in the process to strategically plan for the Georgia Aviation System was to determine the role each airport currently plays in the system. It was essential to determine how the system is currently performing before setting a course to identify long-term needs and future airport roles.

The Georgia Aviation System was stratified and airport roles/levels assigned based on each airport's current contribution to the system. Accessibility goals for the airport system were important in assigning system airports to one of three system levels. Factors considered in stratifying the airport system included the following:

- Ability of the airport to accommodate future growth.
- Proximity of the airport to major population and business centers and to aircraft owners and registered pilots.
- Current airport infrastructure, facilities and services.
- Accessibility and geographic coverage.
- Aviation activity levels and type of aviation demand served.



### system facts

- **103 open to the public airports**
- **94 general aviation airports**
- **9 commercial service airports**
- **94% of the Georgia airports are in the NPIAS**
- **2.3 million general aviation operations served**
- **73,266 commercial operations served** (does not include Hartsfield Atlanta International)
- **75% of airports have runway lengths of 4,000-feet or greater**
- **51% of airports have runway lengths of 5,000-feet or greater**
- **26% of airports have runway lengths of 5,500-feet or greater**
- **5,209 aircraft are based at Georgia airports**
- **1.4 million square yards of pavement are at Georgia airports**
- **77% of Georgia airports meet or exceed a PCI rating of 70 for their primary runway**



# The Existing Airport System

System airports were initially stratified into the following levels to reflect their current role in the system:

**Level I - Minimum standard general aviation airport**

Level I represents the minimum to which airports in the system are expected to develop. Level I airports should accommodate all single-engine and some small twin-engine general aviation aircraft. For Level I airports, a minimum runway length objective of 4,000 feet has been established; ideally, operations at Level I airports should also be aided by a non-precision instrument approach.

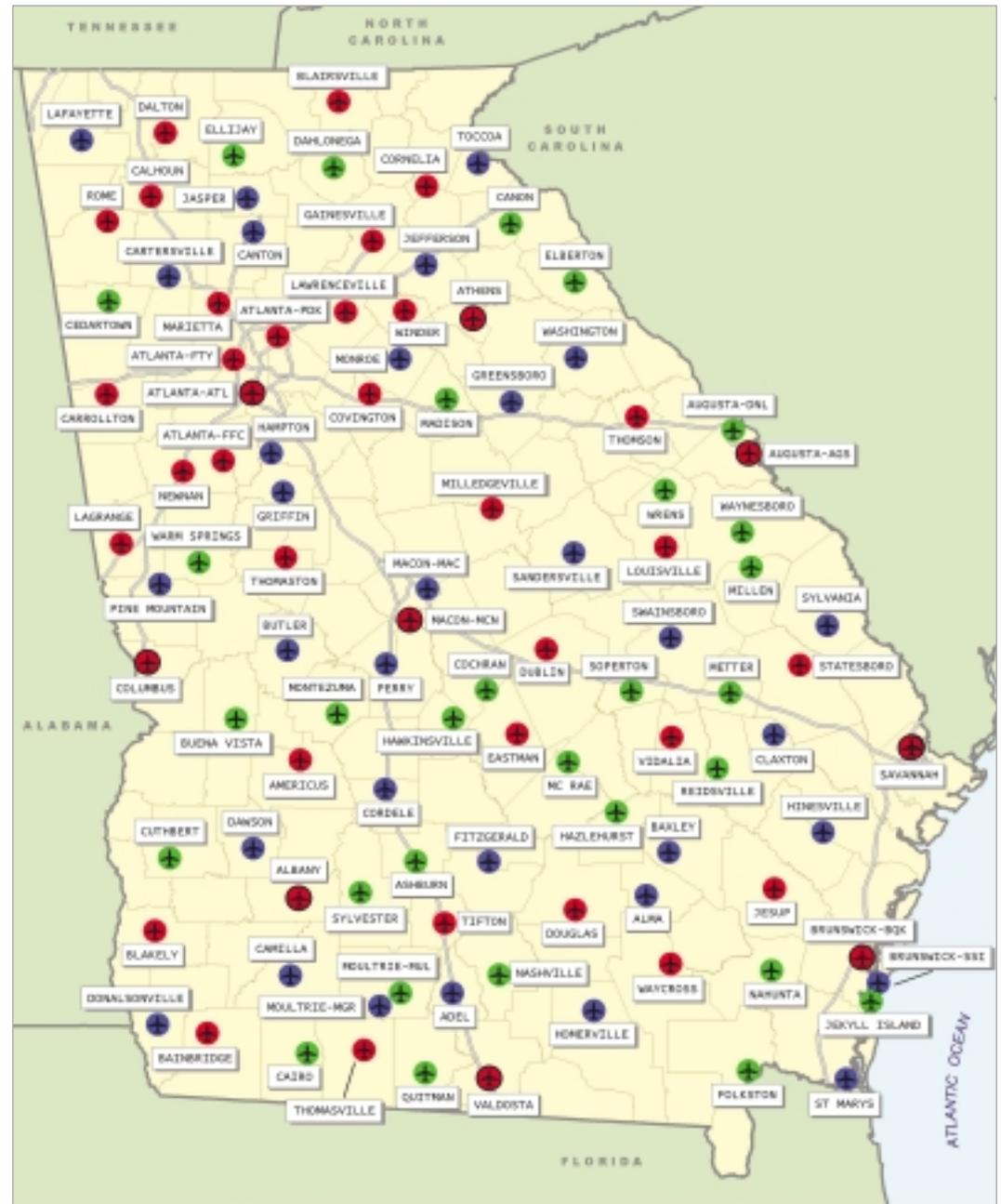
**Level II - Business airport of local impact**

Business airport of local significance; capable of accommodating all business and personnel use single and twin-engine general aviation and a broad range of the corporate/business jet fleet. For Level II airports, a minimum runway length objective of 5,000 feet has been established; operations at Level II airports should also be aided by a non-precision instrument approach.

**Level III - Business airport of regional impact**

Air carrier airports and general aviation airports of regional significance capable of accommodating commercial aircraft or a variety of business and corporate jet aircraft. For Level III airports, a minimum runway length objective of 5,500 feet has been established; ideally, operations at Level III airports should also be aided by a precision instrument approach.

-  Level I Airport
-  Level II Airport
-  Level III Airport
-  Level III Airport Commercial Service
-  Interstate Highway



# Facility And Service Objectives

Each Georgia airport contributes to the aviation system by supporting different types and levels of aviation activity. The types of facilities and services that should ideally be in place at airports in each of three functional levels, Level I, Level II, and Level III, were determined during the development of the System Plan.

By comparing existing facilities and services to each airport's respective facility and service objectives, a report card for each airport in the system was developed. The results of each airport's report card were subsequently used in the System Plan to identify airport specific recommendations for improvement.

The facility and service objectives identified for Level I, Level II, and Level III airports should be used as a guide for individual system airports as they plan future development. Local circumstances and needs may warrant the development of certain system airports beyond these minimum objectives.



## LEVEL I – Minimum Standard General Aviation Airport

Airside Facilities	Minimum Requirements
Runway Length	4,000 feet
Runway Width	75 feet
Taxiways	Full parallel desirable; turnarounds at each end minimum objective
Lighting Systems	MIRL and MITL
Approach	Non-Precision
NAVAIDs/Visual Aids	Rotating beacon, segmented circle and wind cone, PAPI's, and other aids as required for non-precision approach
Weather Reporting	AWOS or ASOS desirable
Ground Communications	Public telephone; GCO as needed
Fencing	Operations area at a minimum; entire airport desirable
General Aviation Facilities	Minimum Requirements
Hangared Aircraft Storage	60% of based aircraft fleet
Apron Parking/Storage	40% of based aircraft fleet plus an additional 25% for transient aircraft
Terminal/Administration	750 square feet enclosed space for public use with restrooms
Auto Parking	One space for each based aircraft plus an additional 25% for visitors/employees
Services	Minimum Requirements
Fuel	AvGas and/or jet fuel as required
FBO	Limited Service

# Facility And Service Objectives

## LEVEL II – Business Airports of Local Impact

Airside Facilities	Minimum Requirements
Runway Length	5,000 feet
Runway Width	100 feet
Taxiways	Full Parallel
Lighting Systems	MIRL and MITL
Approach	Non-Precision
NAVAIDS/Visual Aids	Rotating beacon, segmented circle and wind cone, PAPI's, and other aids as required for non-precision approach
Weather Reporting	AWOS or ASOS
Ground Communications	Public telephone, GCO
Airfield Signage	Runway hold position signs, location and guidance signs
Fencing	Entire airport
General Aviation Facilities	Minimum Requirements
Hangared Aircraft Storage	60% of based aircraft fleet
Apron Parking/Storage	40% of based aircraft plus an additional 50% for transient aircraft
Terminal/Administration	1,500 square feet minimum of public use space including restrooms, conference area, and pilots' lounge
Auto Parking	One space for each based aircraft plus an additional 50% for visitors/employees
Services	Minimum Requirements
Fuel	AvGas and/or jet fuel
FBO	Full Service
Maintenance	Limited/Full Service
Rental Cars	Available

## LEVEL III - Business Airports of Regional Impact

Airside Facilities	Minimum Requirements
Runway Length	5,500 feet
Runway Width	100 feet
Taxiways	Full Parallel
Lighting Systems	HIRL for precision approaches and commercial service airports; MITL and approach lights
NAVAIDS/Visual Aids	Rotating beacon, segmented circle and wind cone, PAPI's and other aids as appropriate for precision approaches
Approach	Precision
Weather Reporting	AWOS or ASOS
Ground Communication	Public telephone, GCO
Airfield Signage	Runway hold position signs, location and guidance signs
Fencing	Entire airport
General Aviation Facilities	Minimum Requirements
Hangared Aircraft Storage	70% of based aircraft fleet
Apron Parking/Storage	30% of based aircraft plus an additional 75% for transient aircraft
Terminal/Administration	2,500 square feet minimum with public restrooms, conference area, and pilots' lounge
Auto Parking	One space for each based aircraft plus an additional 50% for visitors/employees
Services	Minimum Requirements
Fuel	AvGas and jet fuel
FBO	Full Service
Maintenance	Full Service
Rental Cars	Available

# Forecasts

Developing aviation activity projections for Georgia airports was necessary to assess the need for and phasing of future system improvements. Demand projections provide a foundation for determining the future role of system airports, for evaluating the system's capacity to accommodate long-term aviation demand, and for planning future airside and landside facilities for the system.

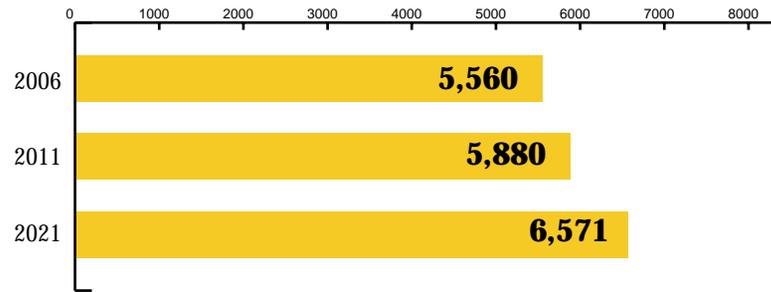
The forecasts developed from the System Plan yielded the following:

- Due to expected increases in population and employment, based aircraft at Georgia's public airports are predicted to increase from 5,209 to 6,571 by 2021.
- Statewide general aviation operations are projected to reach 2.9 million annually in 2021, up from 2.3 million currently.
- Commercial enplanements at all commercial airports, excluding Hartsfield Atlanta International, are projected to grow from their current level of 1.3 million to 2.4 million by 2021.
- Operations by commercial carriers, excluding those at Hartsfield Atlanta International, are anticipated to grow from 73,266 to 101,250 by 2021.

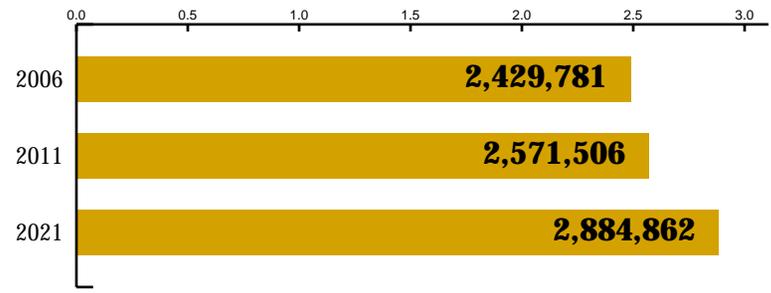
These projections were developed based on activity levels reported by system airports at the time the inventory element of the System Plan was completed.



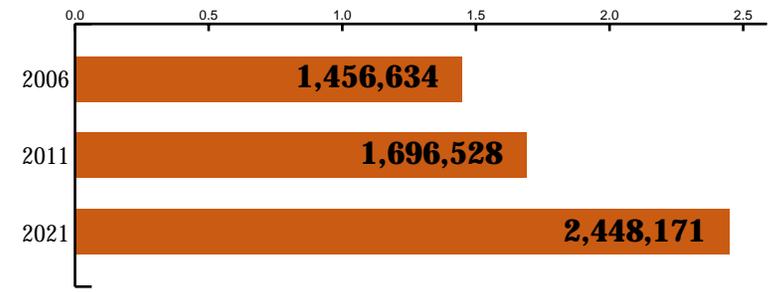
## system based aircraft



## total annual general aviation operations



## total annual commercial enplanements



Source: Georgia Aviation System Plan 2002

# System Goals

Targets for future system performance provided the foundation for subsequent system recommendations. These recommendations are summarized in the following sections.

## Goals for the Georgia Aviation System and their performance measures

Goal	Performance Measure
To provide an airport system that can support current and future demand.	Capacity
To provide an airport system that meets applicable design standards.	Standards
To provide an airport system that can respond to foreseen and unforeseen changes.	Flexibility
To provide an airport system that is accessible from both the air and the ground.	Accessibility
To provide an airport system that meets established facility and service objectives.	Facilities

## Performance Measure: Capacity

The FAA has determined that as an airport's annual operational demand reaches 60 percent or more of the airport's calculated airfield operating capacity, delays to aircraft on the ground and in the air begin to increase. As annual demand exceeds or equals 80 percent of an airport's operational capacity, delays can increase dramatically.

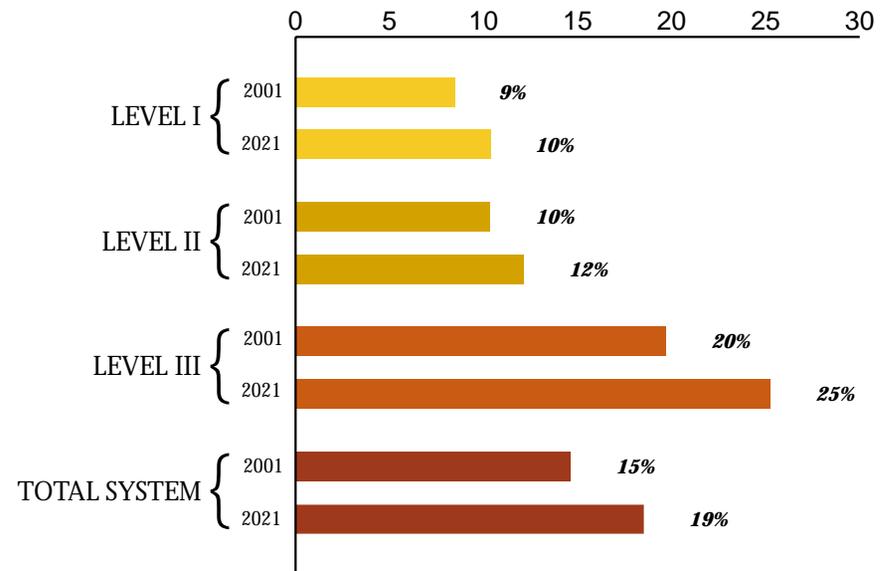
Statewide, sufficient operational capacity exists to meet Georgia's projected operational demand. Systemwide, only 6 percent of all airports will have demand/capacity ratios that approach the FAA's critical demand/capacity trigger point of 60 percent.

Savannah International Airport, DeKalb-Peachtree Airport, Fulton County-Brown Field, Cobb County-McCollum Field, Gwinnett County Airport-Briscoe Field and Winder-Barrow Airport will approach or exceed the 60 percent demand/capacity threshold by 2021. Demand/capacity ratios and potential shortfalls discussed in this section do not include those projected for Hartsfield Atlanta International Airport.

These airports are located in Georgia's two most densely populated urban areas, Savannah and Atlanta. The System Plan supports efforts that may be underway locally to increase operational capacity at these airports, but these efforts alone will not yield sufficient operating capacity for these two metropolitan areas.

A demand management strategy which relies on under utilized capacity at existing airports, combined with additional operational capacity provided by new system airports, is recommended to meet the System Plan target for all Georgia airports to operate at a demand/capacity ratio of less than 60 percent.

## statewide demand/capacity ratios



## Atlanta Metropolitan Area

The Atlanta area is served by an extensive and complex system of general aviation airports. Several key airports in this area are projected to exceed a 60 percent demand/capacity threshold. Most of the capacity constrained airports in the Atlanta area do not have the ability to expand to provide new airfield facilities. Therefore, a combination of new airports, expansion of existing facilities, and maximization of available capacity at existing airports will be needed to provide long-term operational capacity to meet the area's needs.

It will be important for existing airports that are part of this area's demand management strategy to meet stated runway length objectives. The Cartersville-Bartow County Airport (Cartersville) should be upgraded to Level III to address the region's operational capacity needs.

New system airports are recommended in the Forsyth/Dawson county area and in Paulding County. These airports should initially be introduced to the system as Level II airports with the potential to be upgraded as demand and conditions warrant. The accompanying table summarizes the demand management strategy that is recommended to meet potential operational capacity shortfalls for the Atlanta Metropolitan Area.



### atlanta metro capacity enhancement options

Associated City	Airport Name	Current Level	Current Runway Length	Future Runway Length	Current Demand/Capacity Ratio	Future Demand/Capacity Ratio
<i>Atlanta Metro Area</i>						
Atlanta	DeKalb-Peachtree Airport	III	6001	6001	84.81	104.41
Atlanta	Fulton County-Brown Field	III	5796	5796	54.21	66.74
Atlanta	Peachtree City-Falcon Field	III	5219	5500	26.45	32.56
Lawrenceville	Gwinnett County Airport-Briscoe Field	III	6000	6000	47.19	52.38
Marietta	Cobb County-McCollum Field	III	5355	5500	56.52	87.27
Hampton	Clayton County-Tara Field	II	4503	5000	13.19	16.23
<i>Immediately Adjacent to Metro Area</i>						
Covington	Covington Municipal Airport	III	4203	5500	18.54	20.58
Newnan	Newnan-Coweta County	III	5007	5500	13.78	16.97
Winder	Winder-Barrow County Airport	III	5500	5500	30.97	55.10
Canton	Cherokee County Airport	II	3412	5000	25.65	35.01
Cartersville*	Cartersville Airport	III	5760	5760	30.75	41.97
Monroe	Monroe-Walton County Airport	II	4112	5000	13.04	14.48
	Forsyth-Dawson County	II (NEW)		5000		
	Paulding County	II (NEW)		5000		
<i>Adjacent to Metro Area</i>						
Calhoun	Tom B. David Field	III	5010	5500	16.54	18.36
Carrollton	West Georgia Regional-O.V. Gray Field	III	5002	5500	20.94	24.26
Gainesville	Lee Gilmer Memorial Airport	III	5004	5500	16.17	17.95
Jasper	Pickens County Airport	II	5000	5000	4.65	6.35
Cedartown	Cornelius Moore Field	I	4004	4004	14.94	20.38

\*Recommended to move from Level II to Level III

 Airports identified for runway lengthening projects

capacity

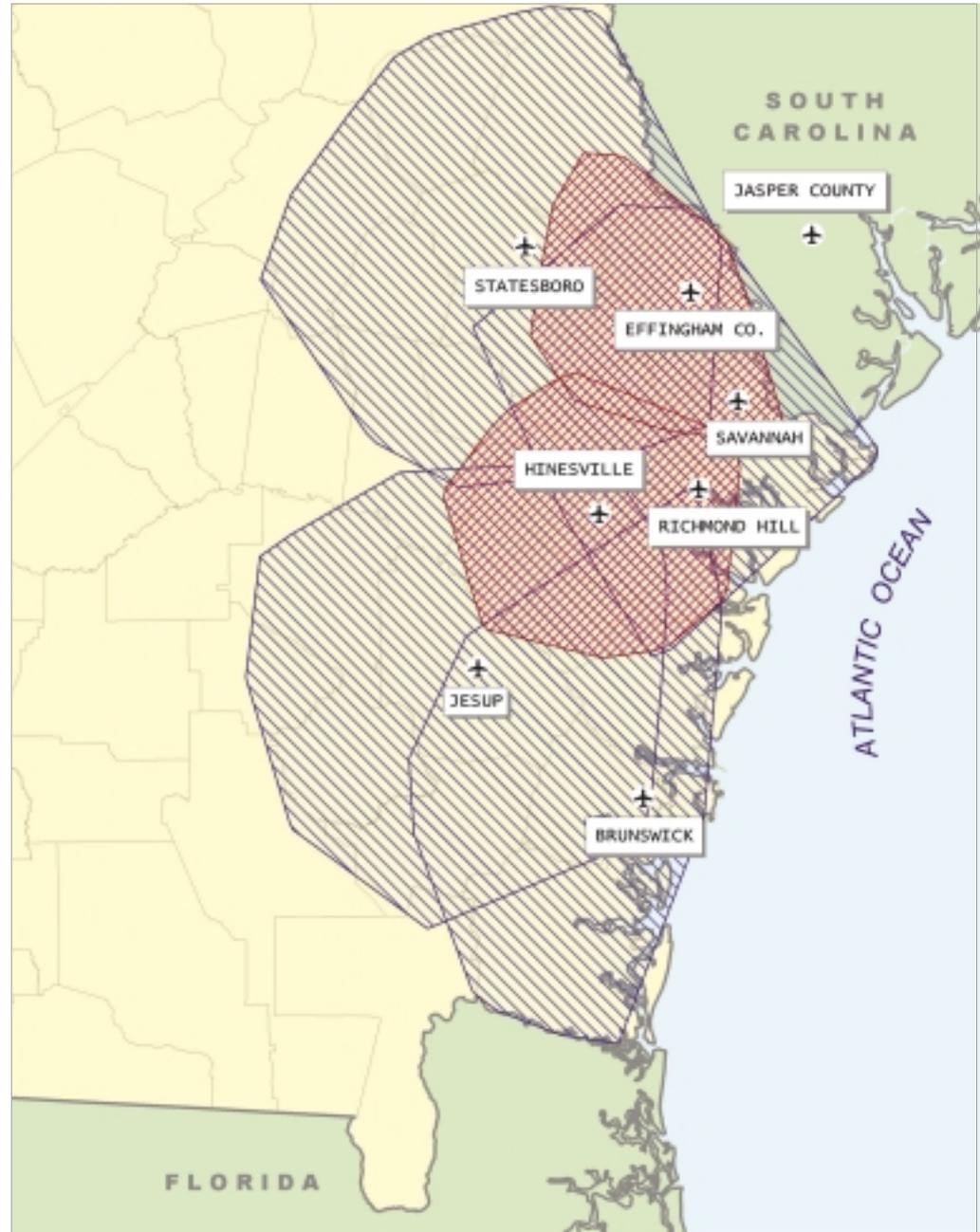
## Savannah Metropolitan Area

Savannah International Airport, Georgia's second busiest commercial airport, is projected to experience shortfalls in operational capacity by the end of the 20-year planning period. A large percentage of this airport's operations fall into the general aviation category. Therefore, other general aviation airports in the system will be called upon to support the region's operational needs.

The System Plan recommends that after the Liberty County Airport (Hinesville) is relocated to Wright Army Airfield, this airport be designated an FAA reliever for Savannah International. Initially, this relocated facility should enter the system as a Level II airport with the potential to be upgraded as demand and conditions warrant.

A new system airport, north of Savannah in Effingham County, is also recommended. This recommendation is consistent with the prior State System Plan and with the FAA's National Plan for Integrated Airport Systems (NPIAS). This airport should be designated a Level II airport.

-  Airport
-  30 Min Drivetime
-  45 Min Drivetime
-  Georgia County



## Performance Measure: Standards

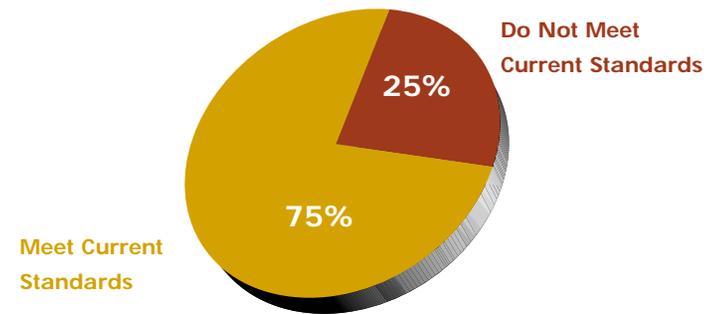
Airports were reviewed for their ability to meet or to comply with three facility standards:

- The ability to meet the separation standard between their primary runway centerline and any full or partial parallel taxiway centerline; each airport's standard is determined by its current FAA airport reference code (ARC).
- The ability to meet dimensions of runway safety areas (RSA) on each end of their primary runway; standards were again determined by current ARCs for each airport.
- The ability of airports to meet a standard pavement condition index (PCI) rating of 70 or greater for their primary runway; current PCIs for all runways at Georgia airports were established by the Pavement Management Study.

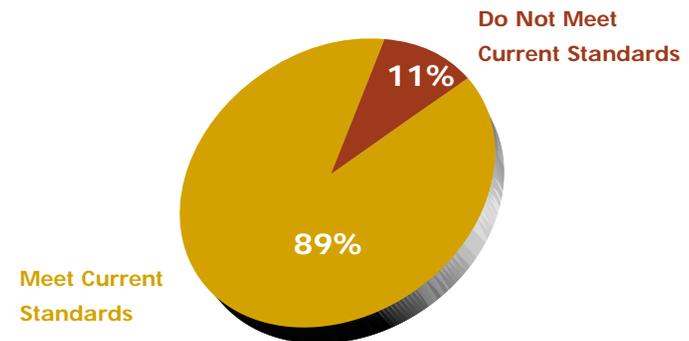
On a statewide basis, 75 percent of all airports with full or partial taxiways currently meet applicable standards. For all system airports, 89 percent currently meet applicable RSA standards for their primary runways, and 77 percent of all airports reportedly have a PCI rating of 70 or higher for their primary runway.



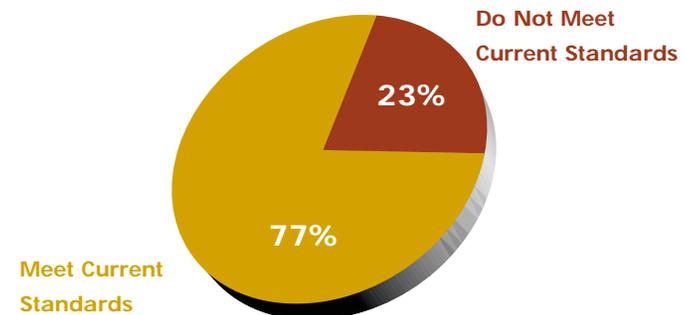
### runway/taxiway separation standards



### RSA standards for primary runway



### PCI standards for primary runway



## Performance Measure: Flexibility

Two benchmarks were used to evaluate the system for its ability to insure that airports in Georgia have the flexibility to meet foreseen and unforeseen changes in aviation demand. The first of these benchmarks considered current planning documents. If airports in Georgia are adequately planned, with timely updates to their master plans and/or airport layout plans (ALPs), there is a greater likelihood that they will be effectively protected. The System Plan established the following objectives for planning documents:

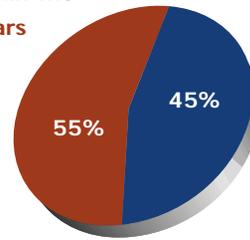
- Level I Airports – current plans every 15 years
- Level II Airports – current plans every 10 years
- Level III Airports – current plans every 10 years

Secondly, airports and their host and surrounding communities should take steps to identify and adopt zoning and land use activities compatible with airport operations. Actions are needed throughout the system to achieve compliance with this benchmark.

At the start of the System Plan, 45 percent of all system airports reported planning documents current within the past five years, and 42 percent report their host and surrounding communities have adopted land use controls or zoning.

### current planning documents

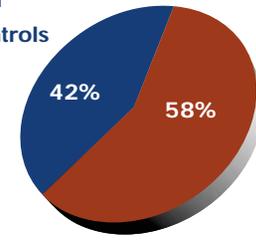
Have Not Completed Plans Within The Past 5 Years



Have Completed Plans Within The Past 5 Years

### compatible land use planning

Have Adopted Land Use or Zoning Controls



Have Not Adopted Land Use or Zoning Controls

## Performance Measure: Accessibility

An airport system that is easily accessible is important to the State's transportation and economic objectives. The System Plan established the following targets for system accessibility:

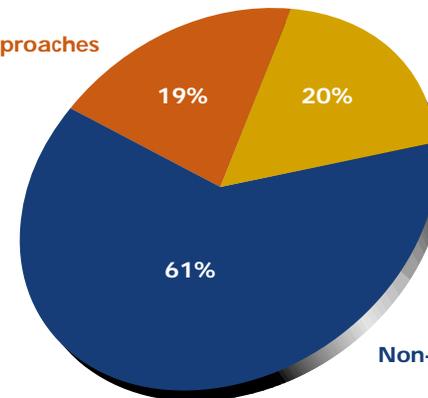
- Level I Airport – within a 30-minute drive time of all areas of the State.
- Level II Airport – within a 30-minute drive time of all areas of the State.
- Level III Airport – within a 45-minute drive time of all areas of the State and a 60-minute drive time for commercial service airports.

The minimum runway length objective for Level I airports is 4,000 feet, for Level II airports the minimum objective is 5,000 feet, and for Level III airports the minimum runway length objective is 5,500 feet. Maps on the following pages show how system accessibility is anticipated to increase as Georgia airports implement projects to meet their targeted runway length objectives.

Targets for increasing system accessibility from the air were established as part of the system planning process. While all Level I and Level II airports should have some type of non-precision approach, all Level III airports should ideally be equipped with a precision approach and an approach lighting system. Many of the Level III airports have projects underway that will enable them to meet these approach objectives.

### current approaches to system airports

Visual Approaches



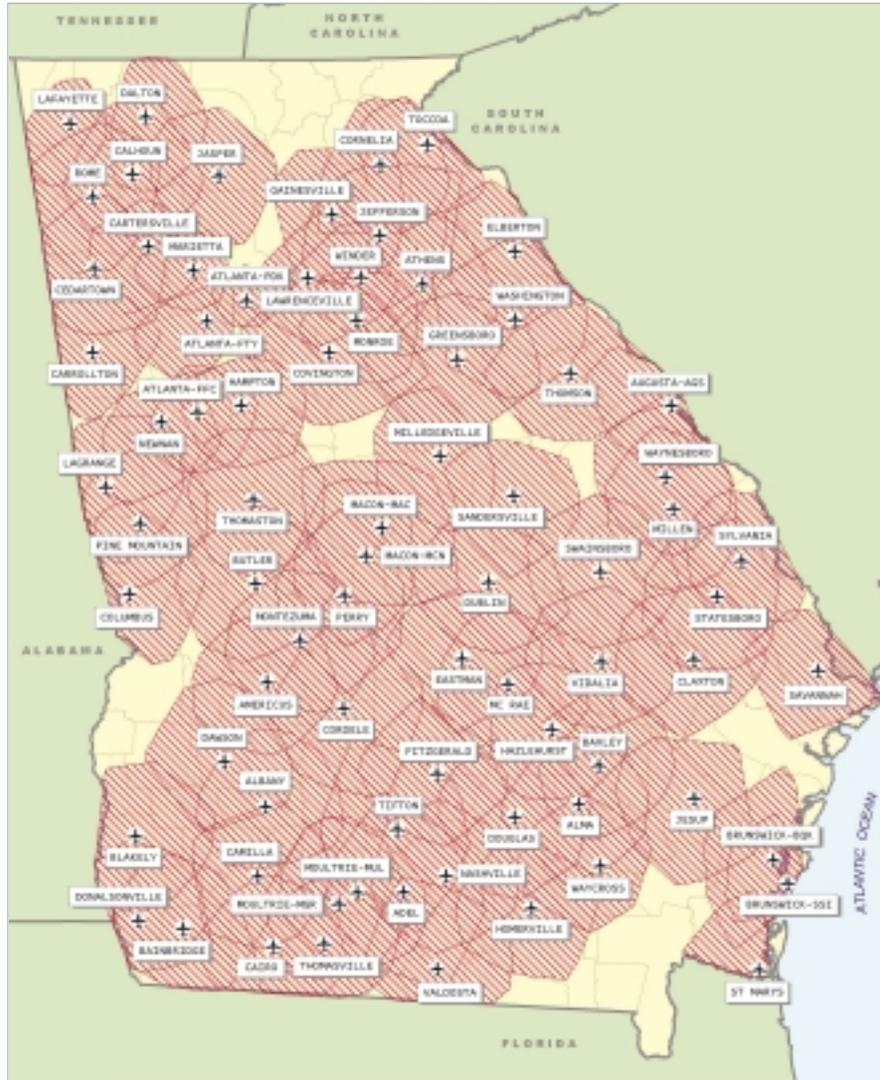
Precision Approaches

Non-Precision Approaches

## Performance Measure: Standards

# Accessibility: 4,000 feet at 30 Minutes

runways existing

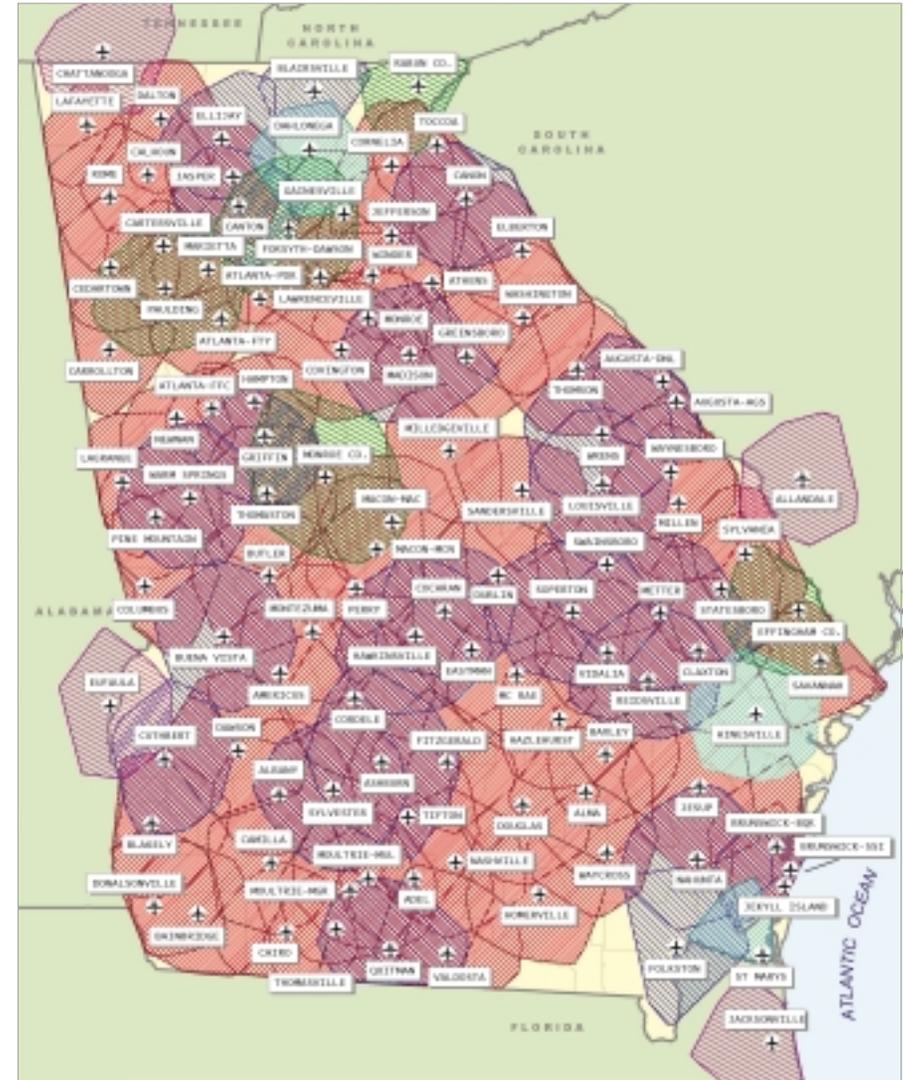


Current Coverage with Runways 4,000 feet or Greater

State	90.1%
Population	91.7%
Employment	90.9%

- Airport
- 30 Min Drivetime
- Georgia County

runways recommended



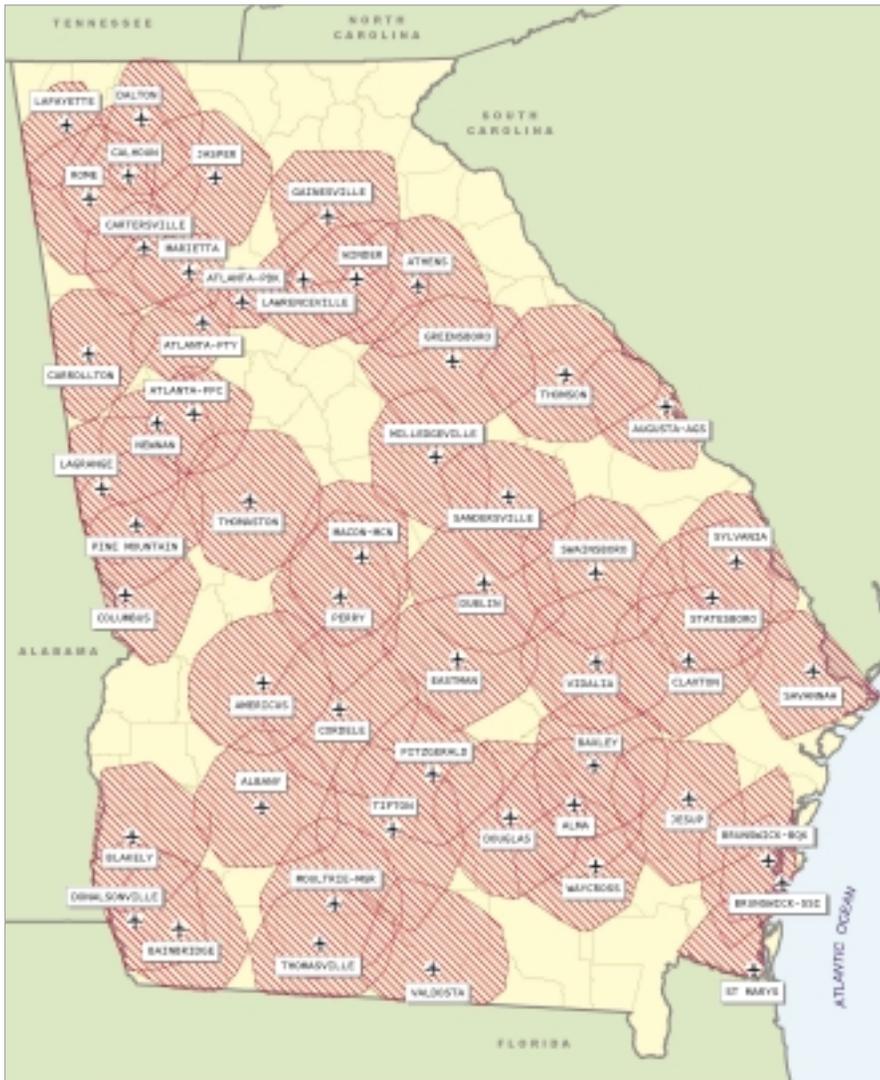
Target Coverage with Runways 4,000 feet or Greater

State	96.1%
Population	96.4%
Employment	96.3%

- Airport
- Upgrade 4000 Ft Runway
- Existing 4000 Ft Runway
- Out-of-State Airports
- Proposed New Airports
- Replacement Airports
- Georgia County

# Accessibility: 5,000 feet at 30 Minutes

runways existing

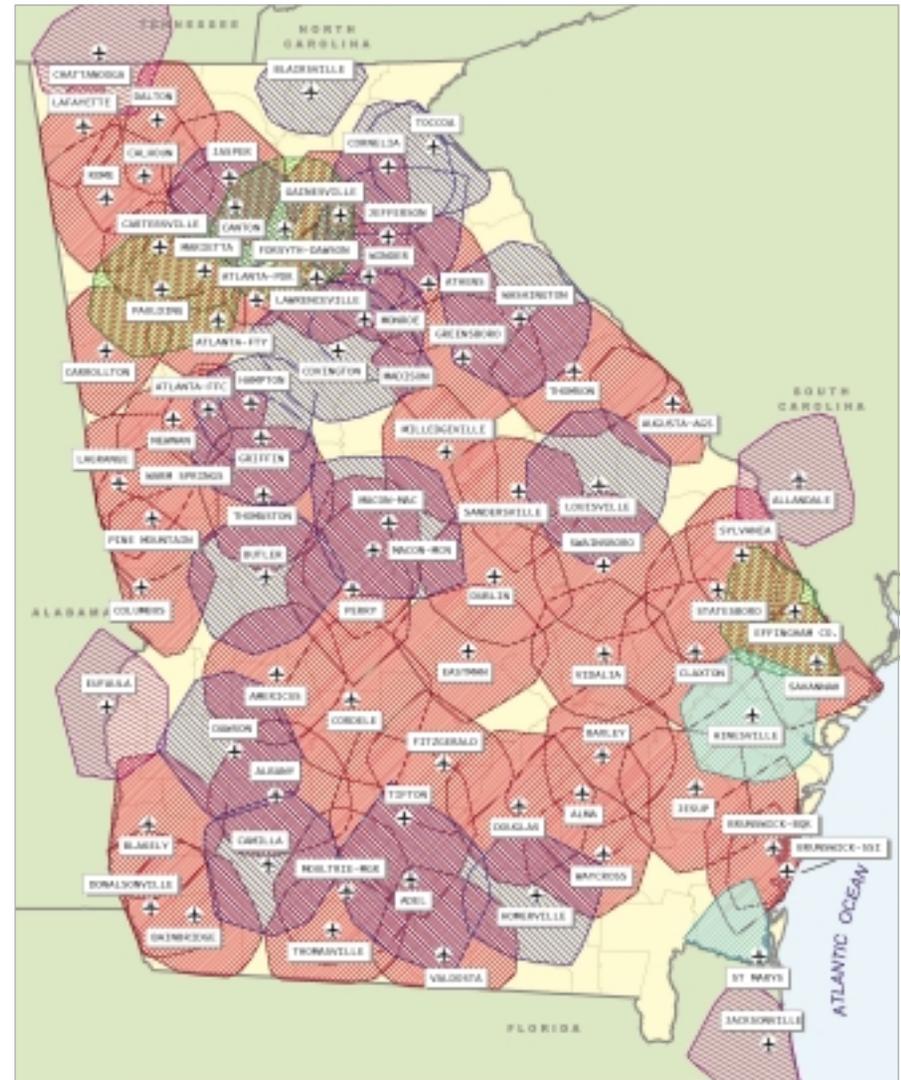


Current Coverage with Runways 5,000 feet or Greater

State	79.4%
Population	80.6%
Employment	81.2%

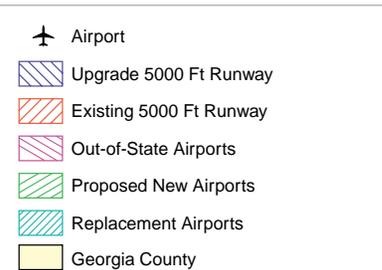


runways recommended



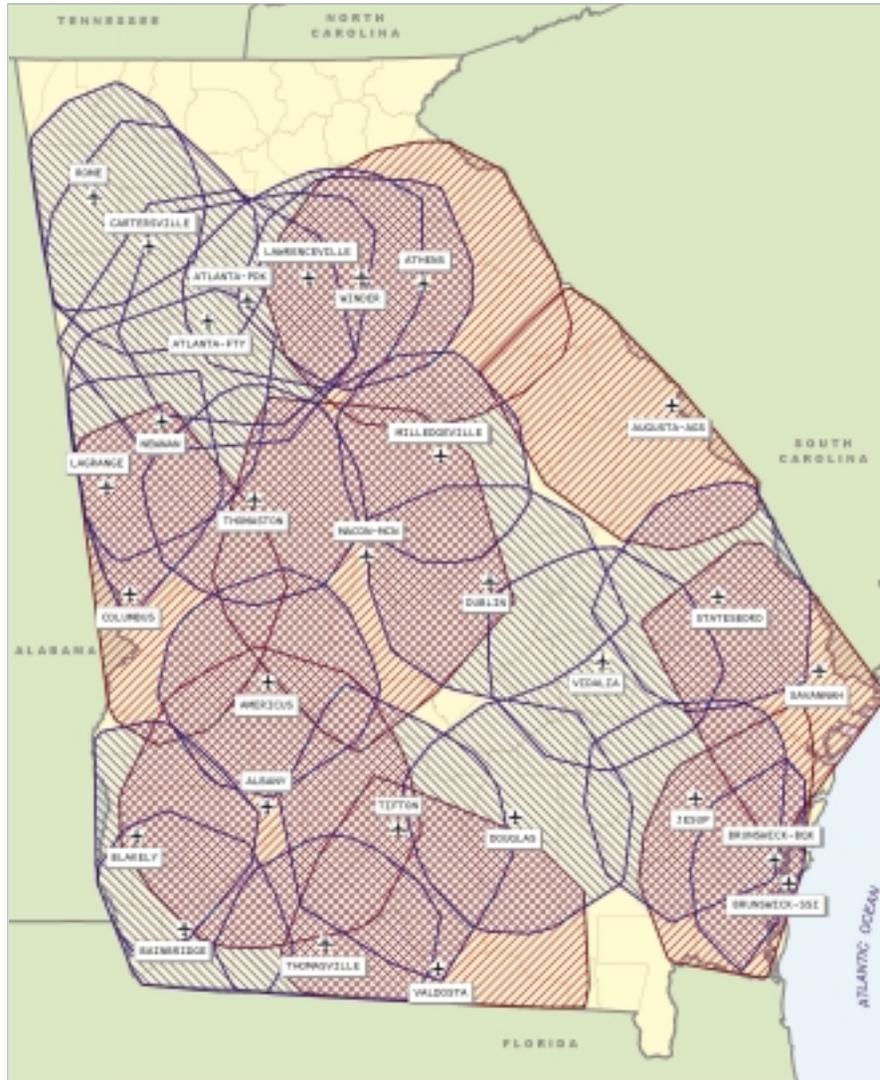
Target Coverage with Runways 5,000 feet or Greater

State	89.5%
Population	94.5%
Employment	94.9%

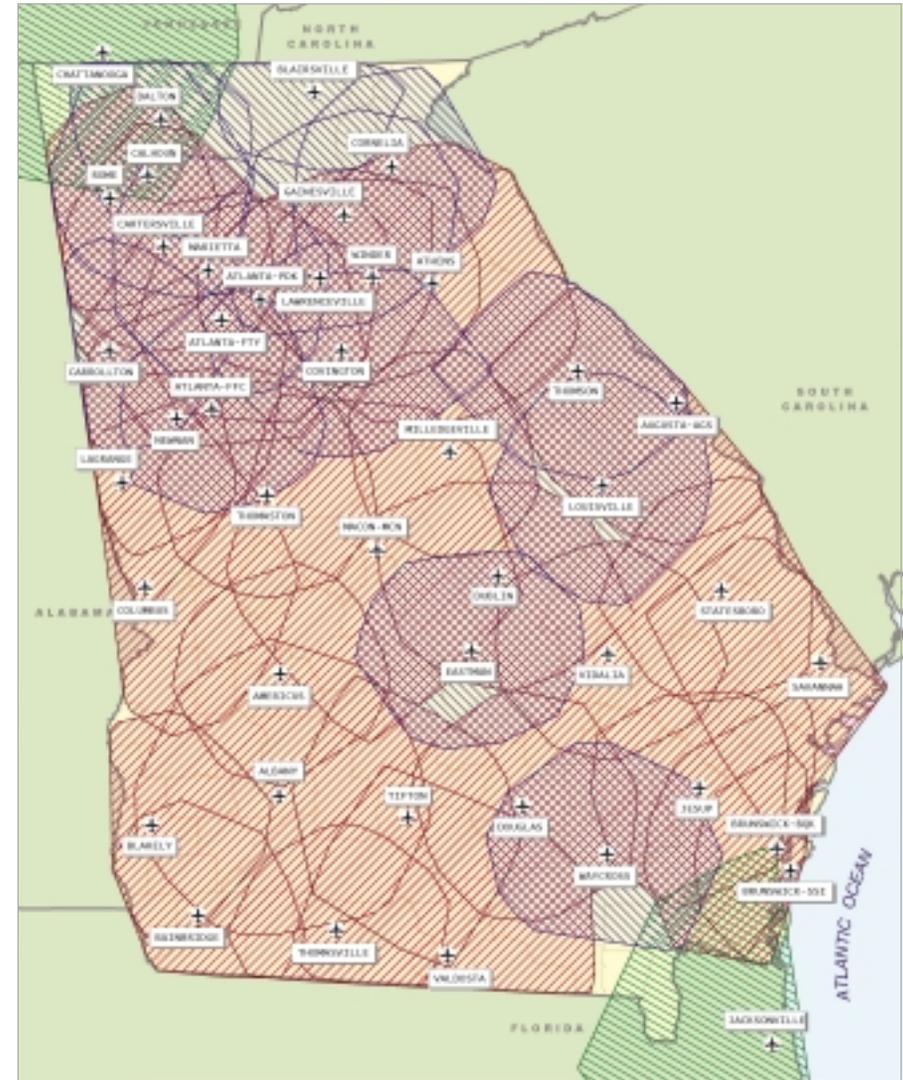


# Accessibility: 5,500 feet at 45/60 Minutes

runways existing



runways recommended



Current Coverage with Runways 5,500 feet or Greater

State 91.3%  
 Population 95.5%  
 Employment 96.5%

- Airport
- 60 Minute Drivetime for Commercial Service Airport
- 45 Minute Drivetime for General Airport
- Georgia County

Target Coverage with Runways 5,500 feet or Greater

State 98.1%  
 Population 99.3%  
 Employment 99.5%

- Airport
- Upgrade 5500 Ft Runway 45 Minute Drivetime
- Existing 5500 Ft Runway 45 & 60 Minute Drivetime
- Out-of-State Airports 60 Minute Drivetime
- Georgia County

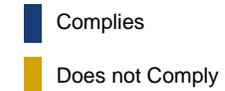
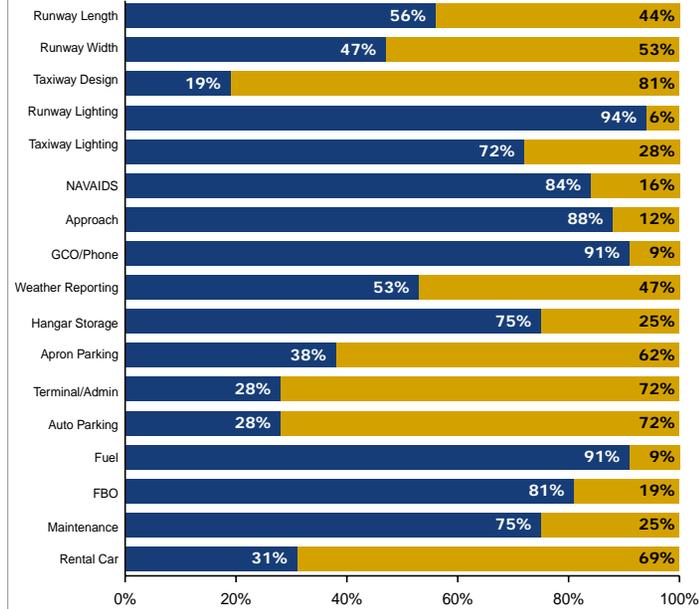
## Performance Measure: Facilities and Services

Airports in Georgia perform separate and distinct roles, serving varying types of aviation demand and activity. The types of facilities and services that are appropriate at each airport also vary accordingly, and the System Plan has identified specific facilities and services desirable for each airport.

Actions required to bring each airport into compliance with its respective facility and service objectives are available from Aviation Programs and have been distributed directly to each system airport as part of this plan. The accompanying airport facility and service graphs show the improvements needed to make all system airports compliant with established facility and service objectives.

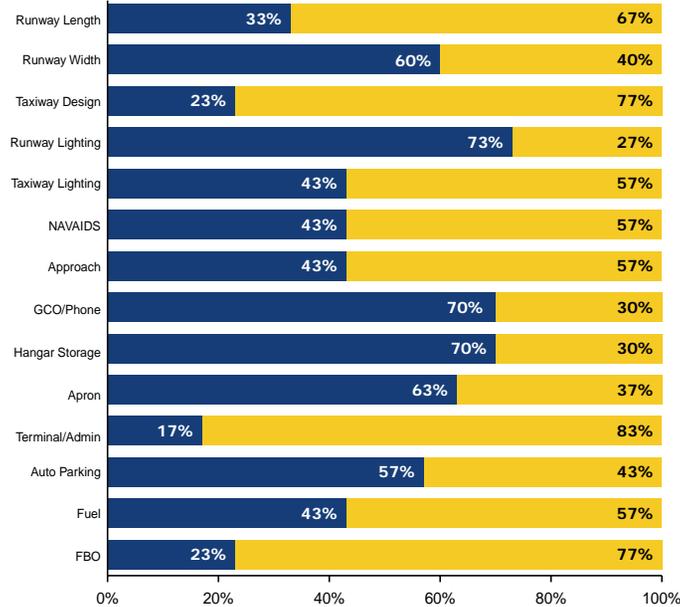
### Level II Airports

current facility and service objective results



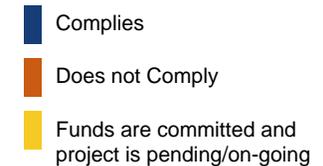
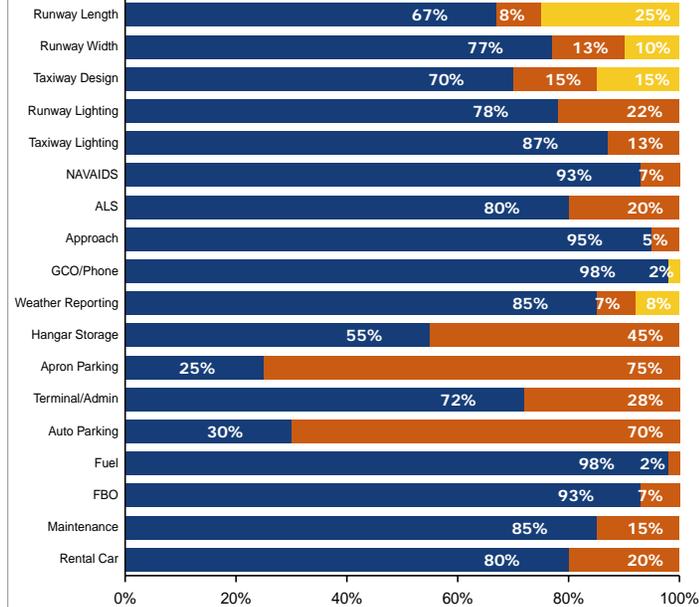
### Level I Airports

current facility and service objective results



### Level III Airports

current facility and service objective results



# Future Aviation System

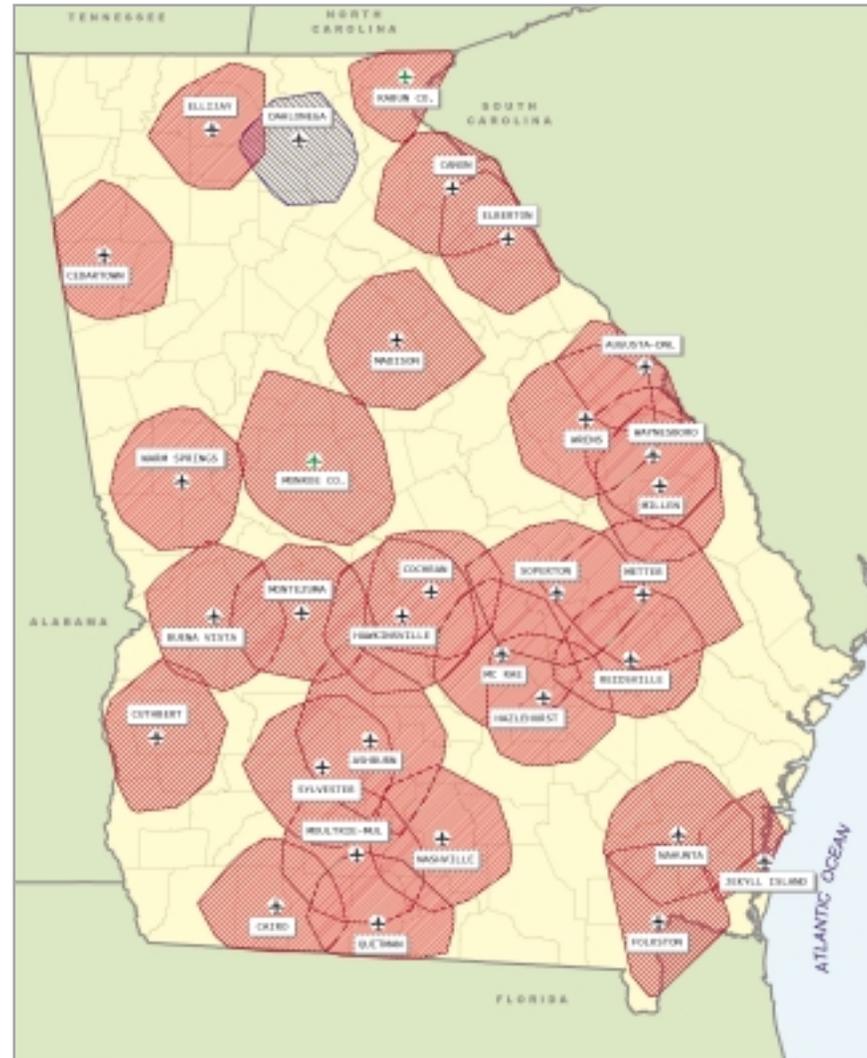
Georgia must be served by a system of well-developed, strategically located, and diversified airports. Recommendations that emerged from the Georgia Aviation System Plan meet each of these important criteria.

Local actions will be needed for the Georgia Aviation System to move toward the objectives established in the System Plan. The responsibility for implementing the recommendations contained in the System Plan ultimately rests with each airport owner. Recommendations stemming from the System Plan should serve as a guide for airport specific development.

## Georgia Aviation System – Level I Airports

Associated City	Airport Name
ASHBURN	TURNER COUNTY AIRPORT
AUGUSTA	DANIEL FIELD
BUENA VISTA	MARION COUNTY AIRPORT
CAIRO	CAIRO-GRADY COUNTY AIRPORT
CANON	FRANKLIN-HART COUNTY AIRPORT
CEDARTOWN	CORNELIUS-MOORE FIELD
COCHRAN	COCHRAN AIRPORT
CUTHBERT	CUTHBERT-RANDOLPH COUNTY AIRPORT
ELBERTON	ELBERT COUNTY-PATZ FIELD
ELLIJAY	GILMER COUNTY AIRPORT
FOLKSTON	DAVIS FIELD
HAWKINSVILLE	HAWKINSVILLE-PULASKI COUNTY AIRPORT
HAZLEHURST	HAZLEHURST AIRPORT
JEKYLL ISLAND	JEKYLL ISLAND AIRPORT
MADISON	MADISON MUNICIPAL AIRPORT
MCRAE	TELFAIR-WHEELER AIRPORT
METTER	METTER MUNICIPAL AIRPORT
MILLEN	MILLEN AIRPORT
MONTEZUMA	DR. C.P. SAVAGE, SR. AIRPORT
MOULTRIE	SPENCE FIELD
NAHUNTA	BRANTLEY COUNTY AIRPORT
NASHVILLE	BERRIEN COUNTY AIRPORT
QUITMAN	QUITMAN-BROOKS COUNTY AIRPORT
REIDSVILLE	REIDSVILLE AIRPORT
SOPERTON	TREUTLEN COUNTY AIRPORT
SYLVESTER	SYLVESTER AIRPORT
WARM SPRINGS	ROOSEVELT MEMORIAL AIRPORT
WAYNESBORO	BURKE COUNTY AIRPORT
WRENS	WRENS MEMORIAL AIRPORT

## Designated LEVEL I Airports



Associated City	Airport Name
<b>New Airports</b>	
MONROE COUNTY	
RABUN COUNTY	
<b>Replacement Airports</b>	
DAHLONEGA	LUMPKIN COUNTY-WIMPY'S AIRPORT

-  Existing Airports
-  New Airports
-  Replacement Airports

RUNWAY EXTENSION RECOMMENDED

# Future Aviation System

## Designated LEVEL II Airports

### Georgia Aviation System – Level II Airports

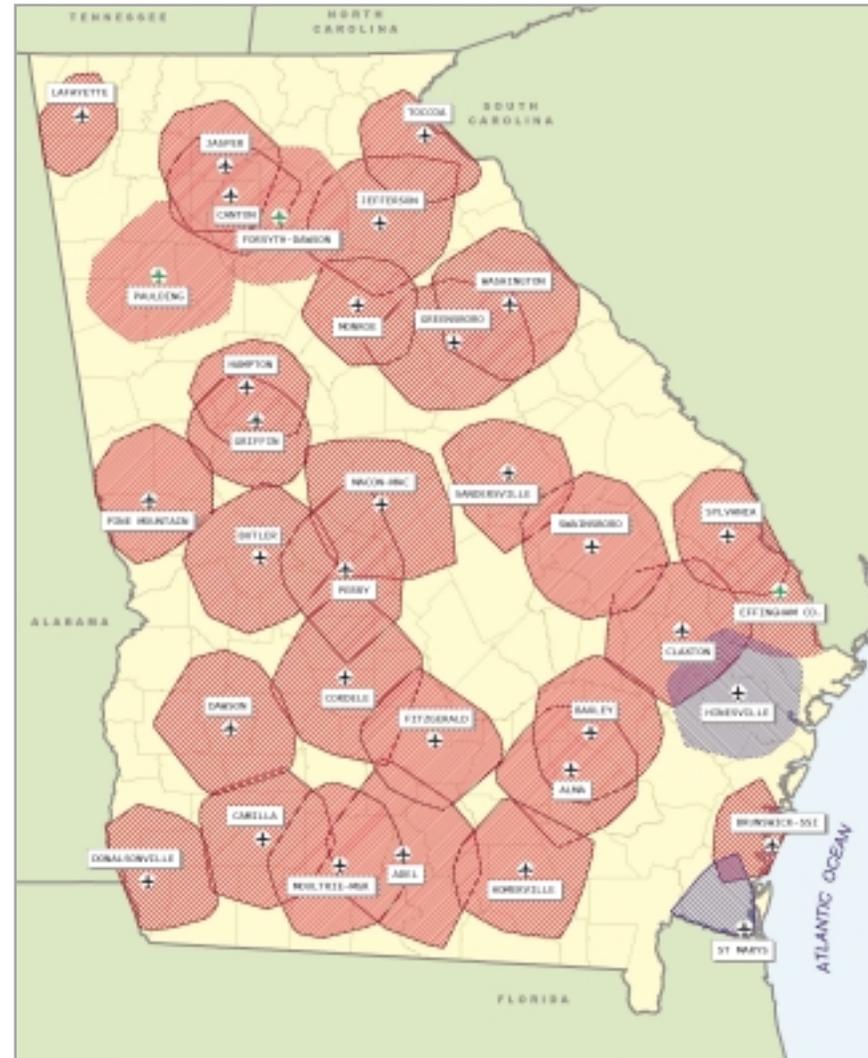
Associated City	Airport Name
ADEL	COOK COUNTY AIRPORT
ALMA	BACON COUNTY AIRPORT
BAXLEY	BAXLEY MUNICIPAL AIRPORT
BRUNSWICK	McKINNON ST. SIMONS AIRPORT
BUTLER	BUTLER MUNICIPAL AIRPORT
CAMILLA	CAMILLA-MITCHELL COUNTY AIRPORT
CANTON	CHEROKEE COUNTY AIRPORT
CLAXTON	CLAXTON-EVANS COUNTY AIRPORT
CORDELE	CRISP COUNTY-CORDELE AIRPORT
DAWSON	DAWSON MUNICIPAL AIRPORT
DONALSONVILLE	DONALSONVILLE MUNICIPAL AIRPORT
FITZGERALD	FITZGERALD MUNICIPAL AIRPORT
GREENSBORO	GREENE COUNTY REGIONAL AIRPORT
GRIFFIN	GRIFFIN-SPALDING COUNTY AIRPORT
HAMPTON	CLAYTON COUNTY-TARA FIELD
HOMERVILLE	HOMERVILLE AIRPORT
JASPER	PICKENS COUNTY AIRPORT
JEFFERSON	JACKSON COUNTY AIRPORT
LAFAYETTE	BARWICK LAFAYETTE AIRPORT
MACON	HERBERT SMART DOWNTOWN AIRPORT
MONROE	MONROE-WALTON COUNTY AIRPORT
MOULTRIE	MOULTRIE MUNICIPAL AIRPORT
PERRY	PERRY-HOUSTON COUNTY AIRPORT
PINE MOUNTAIN	CALLAWAY GARDENS-HARRIS COUNTY AIRPORT
SANDERSVILLE	KAOLIN FIELD
SWAINSBORO	EMANUEL COUNTY AIRPORT
SYLVANIA	PLANTATION AIRPARK
TOCCOA	TOCCOA-R.G. LETOURNEAU FIELD
WASHINGTON	WASHINGTON-WILKES COUNTY AIRPORT

### New Airports

EFFINGHAM COUNTY  
 FORSYTH/DAWSON COUNTY  
 PAULDING COUNTY

### Replacement Airports

HINESVILLE LIBERTY COUNTY AIRPORT  
 ST MARYS ST MARYS AIRPORT



-  Existing Airports
-  New Airports
-  Replacement Airports

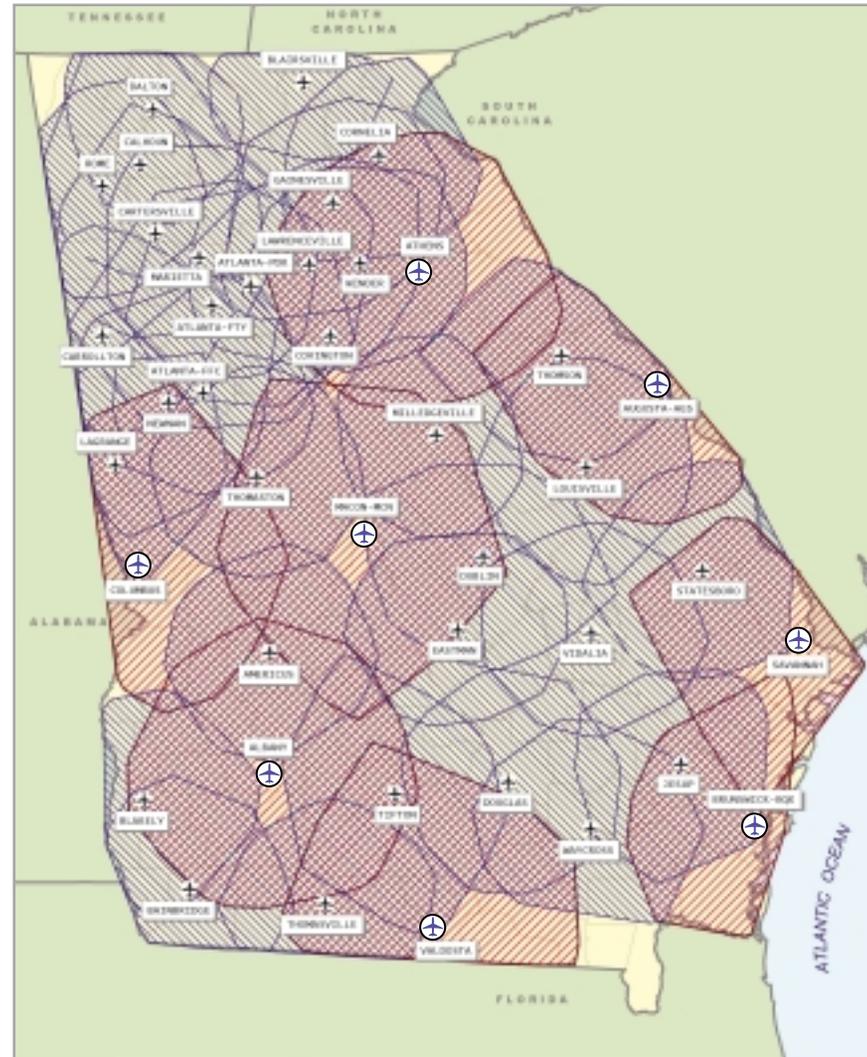
RUNWAY EXTENSION RECOMMENDED

# Future Aviation System

## Designated LEVEL III Airports

### Georgia Aviation System – Level III Airports

<b>Associated City</b>	<b>Airport Name</b>
ALBANY	SOUTHWEST GEORGIA REGIONAL AIRPORT
AMERICUS	SOUTHER FIELD
ATHENS	ATHENS/BEN EPPS AIRPORT
ATLANTA	PEACHTREE CITY-FALCON FIELD
ATLANTA	FULTON COUNTY-BROWN FIELD
ATLANTA	DEKALB-PEACHTREE AIRPORT
AUGUSTA	AUGUSTA REGIONAL AT BUSH FIELD
BAINBRIDGE	DECATUR COUNTY IND. AIR PARK
BLAIRSVILLE	BLAIRSVILLE AIRPORT
BLAKELY	EARLY COUNTY AIRPORT
BRUNSWICK	BRUNSWICK GOLDEN ISLES AIRPORT
CALHOUN	TOM B. DAVID FIELD
CARTERSVILLE	CARTERSVILLE AIRPORT
CARROLLTON	WEST GEORGIA REGIONAL-O.V. GRAY FIELD
COLUMBUS	COLUMBUS METROPOLITAN AIRPORT
CORNELIA	HABERSHAM COUNTY AIRPORT
COVINGTON	COVINGTON MUNICIPAL AIRPORT
DALTON	DALTON MUNICIPAL AIRPORT
DOUGLAS	DOUGLAS MUNICIPAL AIRPORT
DUBLIN	W.H. "BUD" BARRON AIRPORT
EASTMAN	HEART OF GEORGIA REGIONAL AIRPORT
GAINESVILLE	LEE GILMER MEMORIAL AIRPORT
JESUP	WILLIAM A. ZORN AIRPORT
LAGRANGE	LAGRANGE-CALLAWAY AIRPORT
LAWRENCEVILLE	GWINNETT COUNTY AIRPORT-BRISCOE FIELD
LOUISVILLE	LOUISVILLE MUNICIPAL AIRPORT
MACON	MIDDLE GEORGIA REGIONAL AIRPORT
MARIETTA	COBB COUNTY-MCCOLLUM FIELD
MILLEDGEVILLE	BALDWIN COUNTY AIRPORT
NEWNAN	NEWNAN-COWETA COUNTY AIRPORT
ROME	RICHARD B. RUSSELL REGIONAL AIRPORT
SAVANNAH	SAVANNAH-HILTON HEAD INTERNATIONAL AIRPORT
STATESBORO	STATESBORO - BULLOCK COUNTY AIRPORT
THOMASTON	THOMASTON-UPSON COUNTY AIRPORT
THOMASVILLE	THOMASVILLE MUNICIPAL AIRPORT
THOMSON	THOMSON-MCDUFFIE REGIONAL AIRPORT
TIFTON	HENRY TIFT MYERS AIRPORT



<b>Associated City</b>	<b>Airport Name</b>
VALDOSTA	VALDOSTA REGIONAL AIRPORT
VIDALIA	VIDALIA MUNICIPAL AIRPORT
WAYCROSS	WAYCROSS-WARE COUNTY AIRPORT
WINDER	WINDER-BARROW COUNTY AIRPORT

-  General Aviation Airports
-  Commercial Service Airports

RUNWAY EXTENSIONS RECOMMENDED  
 RUNWAY EXTENSIONS RECOMMENDED-FUNDS COMMITTED



## Development Costs

Significant investment on the local, state and federal levels will be required to enable Georgia airports to satisfy all facility and service objectives and to elevate the performance of the system to satisfy each performance measure. An estimated \$313 million will be required to satisfy the System Plan's performance objectives over the next twenty years. While the investment is significant, the potential return is far greater.

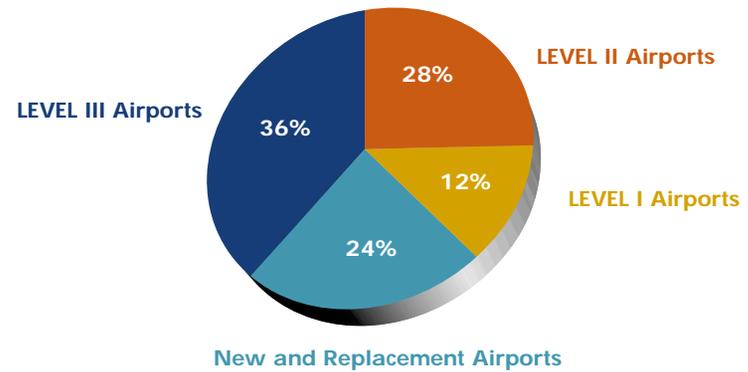
Georgia airports are a significant contributor to national, state, regional, and local economies. Prior studies by Aviation Programs showed that aviation in Georgia produced an estimated annual \$1.8 billion in positive annual economic benefits in 1992. Based on the annual rate of inflation alone, this annual economic benefit may now range between \$2.2 and 2.3 billion. When this annual economic return is compared to the estimated investment needed over the next 20 years to enhance the performance of the system and each airport in that system, it can be clearly seen that the economic return will substantially exceed the needed investment.

AIRPORT LEVEL	PHASE I	PHASE II	PHASE III	TOTAL ALL PHASES
LEVEL I	\$10,429,506	\$12,399,133	\$14,650,600	\$37,479,229
LEVEL II	\$38,653,981	\$25,114,865	\$22,290,045	\$86,058,891
LEVEL III	\$83,273,557	\$12,363,550	\$18,278,000	\$113,915,107
REPLACEMENT AIRPORTS	\$1,791,100	\$10,594,700	\$7,108,200	\$19,494,000
NEW AIRPORTS	\$750,000	\$29,454,400	\$25,559,600	\$55,764,000
<b>SYSTEM TOTAL</b>	<b>\$134,898,144</b>	<b>\$89,926,638</b>	<b>\$87,886,445</b>	<b>\$312,711,226</b>

Source: 27JAN03 LPA airport data files

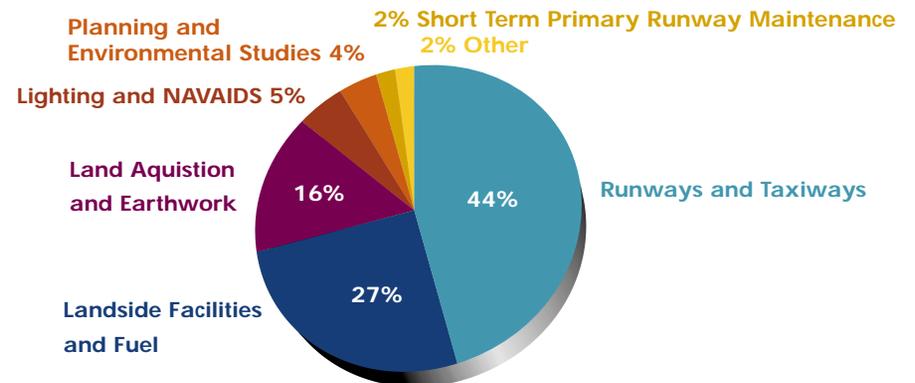
These cost do not include most pavement maintenance costs, nor do they include all costs that may be contained in individual airport capital improvement plans.

## development costs by level



The Georgia Aviation System Plan identified costs that will be incurred to elevate the performance of the airport system and enable individual airports in the system to fulfill their designated roles. The Pavement Management Study has further identified costs needed to allow all airports in the system to maintain their runways, taxiways and apron areas at a PCI of 70 or greater. At least \$27 million will be needed annually to improve and maintain the airport system. Aviation Programs now has an annual budget ranging between \$3 and \$4 million to meet this need. The Aviation Tax Revenue Study concluded that aviation contributes approximately \$100 million to Georgia in tax revenue alone, with \$70 million contributed to Georgia's General Revenue Fund. The annual economic return from Georgia airports far exceeds the system investment needs.

## development costs by type



## Air Service Study

# Commercial Passenger Demand

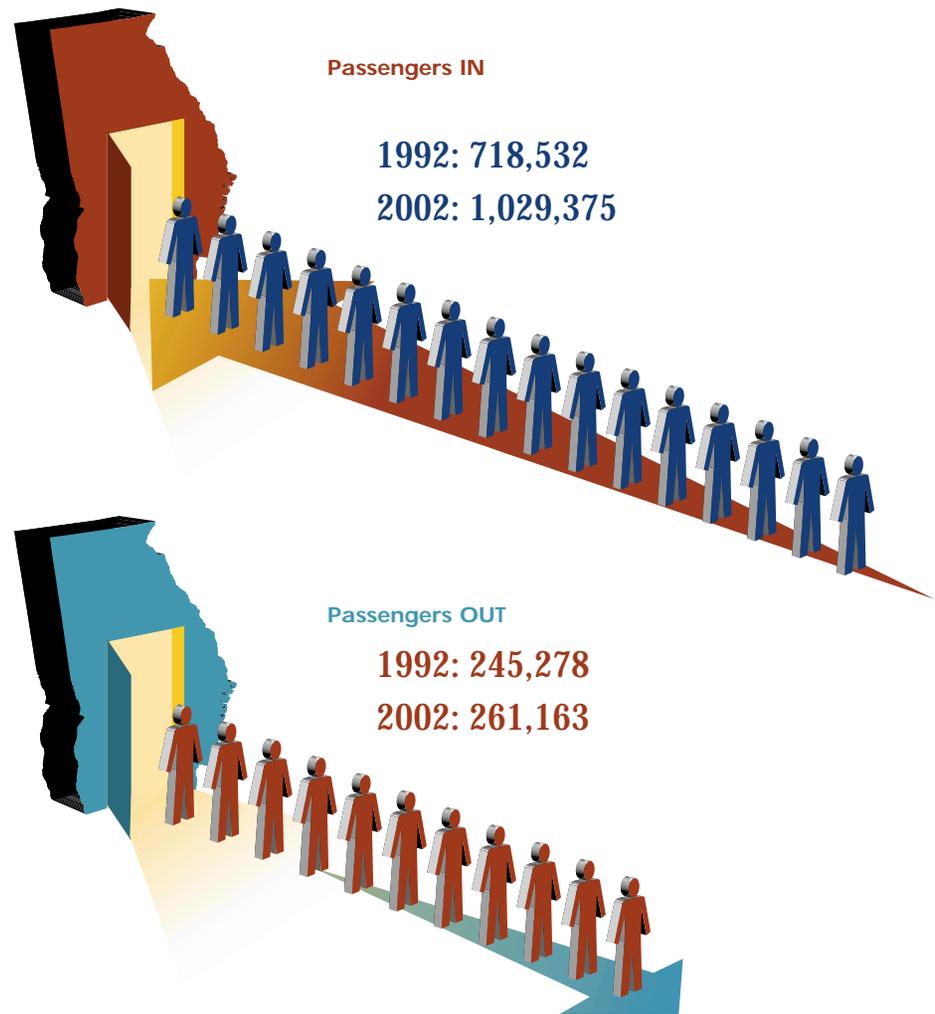
Each county in Georgia has some inherent level of demand for commercial airline travel. A county's demand for commercial airline travel varies, but a common set of factors determining demand for commercial airline travel includes population, employment, income, and tourism. A complex equation of variables including fares, specific air carriers, flight frequency/schedules, types of aircraft being flown, and airport accessibility, determines where each county's demand is served.

Major findings from the Air Service Study include:

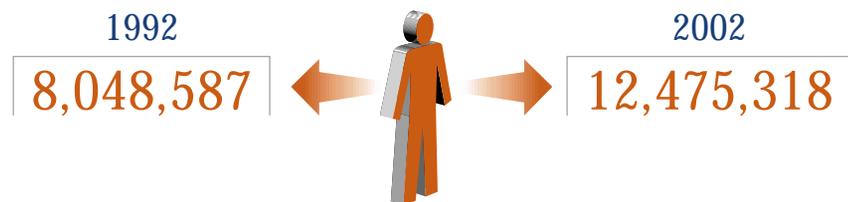
- The number of originating airline travelers (both residents and visitors) that are associated with all Georgia counties increased from 8,048,587 in 1992 to 12,475,318 in 2002.
- Georgia's number of annual originating commercial airline passengers grew, although the actual number of enplaning passengers between 1992 and 2002 fell at several commercial airports. Only Hartsfield Atlanta International, Valdosta Regional, and Savannah International recorded enplanement increases for this time frame.



## passenger attraction and diversion



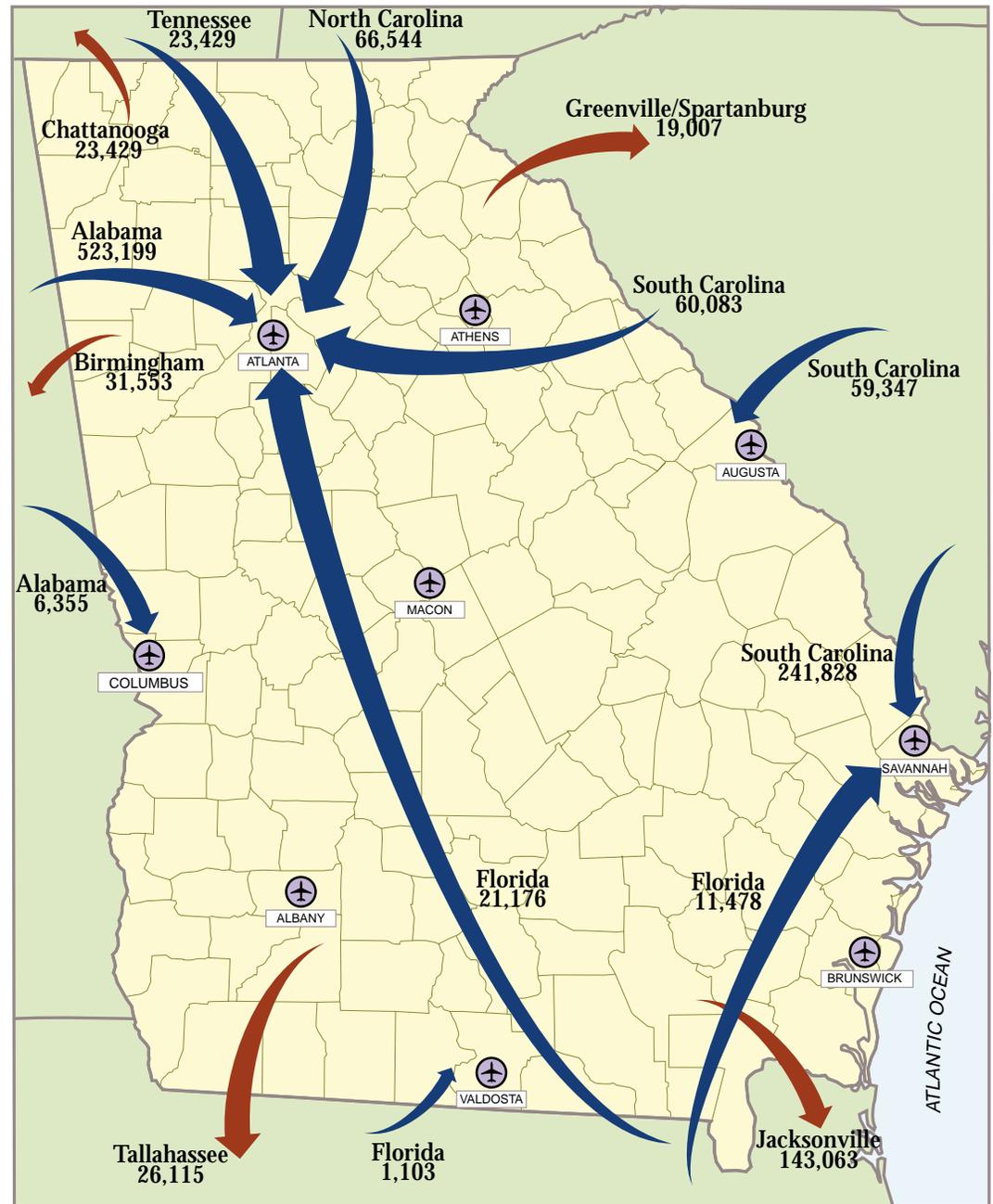
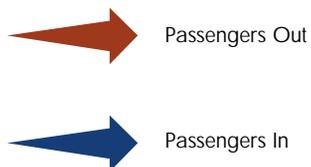
## georgia passenger originations



Air Service Study

# Georgia Passenger Originations

- The market area for Hartsfield Atlanta International within Georgia has grown. This growth can be attributed to the comparatively lower fares that are now available at this major international airport. Growth at Hartsfield has contributed to declining passenger enplanement levels at other commercial airports in Georgia.
- Hartsfield Atlanta International experienced growth in its domestic and international airline service. Several Georgia airports once served by large commercial jets now have only regional jet service. Relative changes in commercial airline service have resulted in more Georgia passengers choosing Hartsfield as their departure airport.
- In 1992, 718,532 originating passengers were attracted to Georgia from nearby states. By 2002, out-of-state enplaning passenger attraction had increased to 1,029,375 passengers. This represents a 30 percent increase in passenger attraction.
- In 1992, an estimated 245,278 enplaning passengers left Georgia primarily for lower fares offered by competing airports in neighboring states. By 2002, this passenger diversion had increased only slightly to 261,163, representing only a 6 percent increase in passenger diversion.
- Over the past 10 years, Georgia's growth in passenger attraction has far exceeded in passenger diversion.



# Summary



The Georgia Aviation System is a comprehensive and progressive system of public airports designed to meet the transportation and economic needs of Georgia. Aviation Programs, Georgia Department of Transportation, has, through the update of its Aviation System Plan, identified an aggressive approach to improve and enhance the statewide aviation system to meet Georgia's current and future aviation needs.

The update to the Georgia Aviation System Plan contained the following elements:

- PAVEMENT MANAGEMENT STUDY
- AVIATION TAX REVENUE STUDY
- AIR SERVICE/PASSENGER DEMAND STUDY
- AVIATION SYSTEM PLAN

The PAVEMENT MANAGEMENT STUDY evaluated runway, taxiway, and apron areas at 94 general aviation and 9 commercial airports.

- These 103 public use airports have over 1.4 million square yards of pavement.
- A pavement condition index (PCI) of 70 was established as a goal for all airports.
- Over the next 10 years, an average annual investment of \$7 million will be needed to keep all general aviation pavements at a PCI of 70 or greater and \$4 million will be needed to keep all commercial airport pavements at a PCI of 70 or greater.
- The overall PCI rating for the Georgia airports could drop below 60 within as little as five years without investments noted.

The AVIATION TAX REVENUE STUDY determined that aviation related activities make a significant contribution to state and local tax revenue streams.

- Over \$100 million in aviation related taxes are collected in Georgia each year:
  - aviation fuel - \$35 million
  - aircraft sales - \$4 million
  - aviation goods and services - \$31 million
  - aircraft ad valorem taxes - \$30 million.
- Approximately \$70 million in aviation related taxes is contributed annually to the Georgia General Revenue Fund. The remaining \$30 million remains in the counties.
- More than \$32 million in State aid is requested by Georgia airports annually.

The AIR SERVICE/PASSENGER DEMAND STUDY measured resident and visitor related demand for commercial airline travel on a county-by-county basis.

- Georgia's total originating commercial airline passengers increased from 8 million to 12.5 million over the past ten years.
- Many of Georgia's smaller commercial airports experienced declining levels of enplaned passengers as a result of intense airline fare and service competition.
- Georgia benefits from an estimated 1,029,375 travelers from neighboring states who fly from Georgia's commercial airports, up 30% over the past ten years.
- Georgia sends only 261,163 of its originating passengers to competing airports in neighboring states.
- Georgia's passenger attraction far exceeds its passenger diversion.

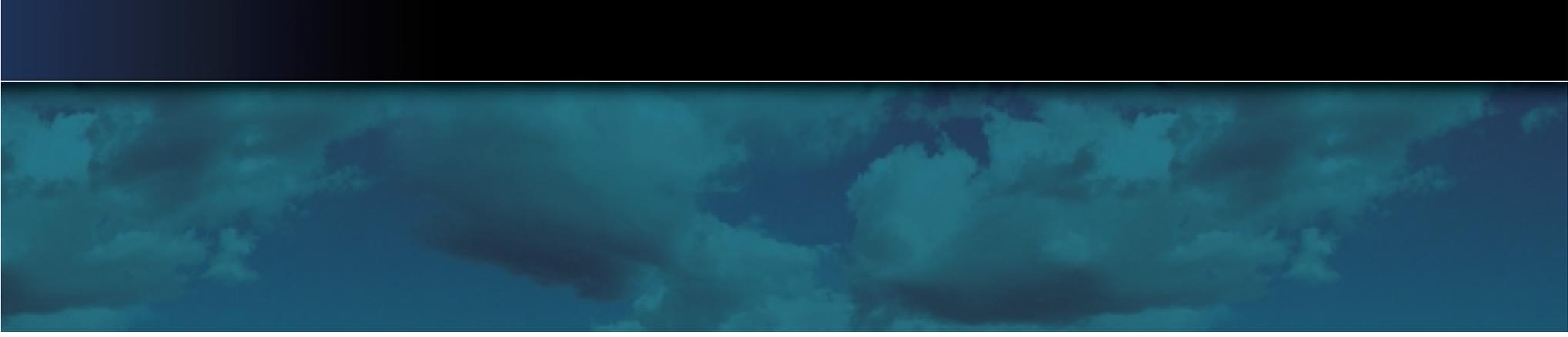
The GEORGIA AVIATION SYSTEM PLAN identified future needs for all public airports in Georgia, providing Aviation Programs with a blueprint for the development of the Georgia Aviation System.

- All airports were assigned to one of three levels or functional roles: Level I is the minimum standard general aviation airport; Level II is business airports of local impact; and Level III is business airports of regional impact.
- Five new and 3 replacement airports are recommended to meet operating capacity or targets for system accessibility.
- System airports needing longer runways, improved instrument approaches, and facility and service enhancements were identified.
- Specific airport and systemwide costs for airport development were calculated. Approximately \$142 million is needed over the next five years and \$178 million is needed over the following 15 years for airport development.

Georgia has experienced rapid growth over the past decade. Increased population, new businesses, and industrial growth underline the need for a progressive airport system. Airport development is a key factor in the economic growth and the well being of all Georgia communities. The Georgia Aviation System Plan is an important tool for ensuring the aviation system in Georgia will meet economic and transportation needs of Georgia's citizens now and in the future.



CRISP COUNTY-CORDELE AIRPORT HAZLEHURST AIRPORT  
STATESBORO MUNICIPAL DALTON MUNICIPAL AIRPORT DOUGLAS MUN  
MOULTRIE MUNICIPAL AIRPORT EARLY COUNTY AIRPORT WILLIAM A. ZORN AIRPORT THOMAS  
TURNER COUNTY AIRPORT GILMER COUNTY AIRPORT DONALDSONVILLE MUNICIPAL AIR  
WRENS MEMORIAL AIRPORT GWINNETT COUNTY BRISCOLE FIELD  
DAWSON MUNICIPAL AIRPORT HENRY TIFT MYERS AIRPORT  
ELBERT COUNTY-PATZ FIELD TREUTLEN COUNTY AIRPORT  
CLAXTON-EVANS COUNTY AIRPORT MADISON MUNICIPAL AIRPORT  
GREENE COUNTY REGIONAL AIRPORT CUTHBERT RANDOL  
JEKYLL ISLAND AIRPORT  
BRANTLEY COUNTY AIRPORT  
SAVANNAH INTERNATIONAL AIRPORT  
WEST GEORGIA REGIONAL-OV GRAY FIELD SPENCE FIELD  
TOCCOA-R.G. LETOURNEAU FIELD CAIRO GRADY COUNTY AIRPORT BALDWIN CO  
Y AIRPORT GRIFFIN-SPALDING COUNTY AIRPORT MARION COUNTY AIRPO  
CIPAL AIRPORT HOMERVILLE AIRPORT FRANKLIN HART COUNTY AIRPORT HAZLEHU  
LEE GILMER MEMORIAL AIRPORT HERBERT SMART DOWNTOWN AIRPORT  
SVILLE MUNICIPAL AIRPORT MONROE WALTON COUNTY AIRPORT BUTLER MUNICIPAL AIRPORT  
PORT LIBERTY COUNTY AIRPORT CALLAWAY GARDENS HARRIS COUNTY AIRPORT  
BLAIRSVILLE AIRPORT GLYNCO JETPORT LUMPKIN COUNTY-WIMPY'S  
SOUTHWEST GEORGIA REGIONAL AIRPORT  
HAWKINSVILLE-PULASKI COUNTY AIRPORT



SAVANNAH INTERNATIONAL AIRPORT  
 WEST GEORGIA REGIONAL-O.V. GRAY FIELD  
 SPCENCE FIELD  
 BALDWIN COUNTY AIRPORT  
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 HEART OF GEORGIA REGIONAL AIRPORT



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