

# SUMMARY REPORT FOR MIDDLE GEORGIA REGIONAL AIRPORT

GEORGIA AIRPORTS MEAN BUSINESS

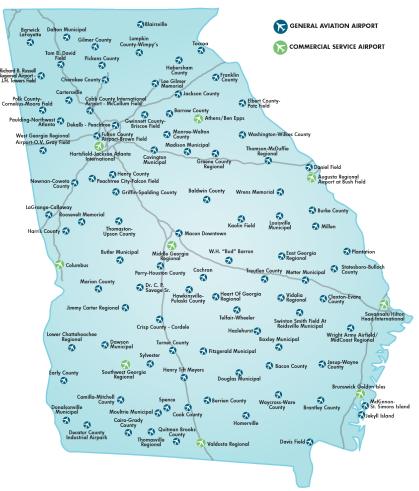
### **OVERVIEW**

The Georgia Department of Transportation, Aviation Programs Office, has recently completed an update to the Georgia Statewide Aviation System Plan (GSASP). This report provides a summary of information from the GSASP and highlights important information from the study as it pertains specifically to Middle Georgia Regional Airport (MCN). This report provides the following:

- » System Planning Process and Uses for the Plan
- » Georgia Airport Levels
- » Background Information for the Airport
- » Recommended Level for the Airport
- » Comparative Performance for the Airport
- » Outlook for Aviation Demand

- Other GSASP Efforts
- Local Governments Adjacent to the Airport with Land Use Controls
- Airport Control of Runway Protection Zones
- » Airport Report Card and Recommendations

#### **EXISTING GEORGIA AIRPORT SYSTEM 2017**

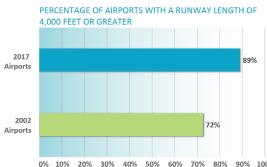


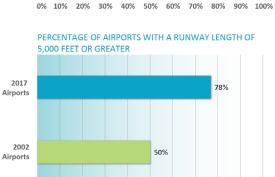
More information on the Georgia Statewide Aviation System Plan can be obtained from the GDOT Aviation website at <u>www.dot.ga.gov/IS/AirportAid/AviationSystemPlan</u>. In addition to the complete Technical Report, a statewide Executive Summary and Summary Video were also produced to support the GSASP. More information on all GSASP-related products can be obtained from GDOT Aviation by emailing <u>aviationprograms@dot.ga.gov</u>.

## THE SYSTEM PLANNING PROCESS AND USES FOR THE PLAN

The process used to update the GSASP was consistent with FAA's Advisory Circular 150/5070-7 - The Airport System Planning Process. Ultimately, the GSASP recommendations for Middle Georgia Regional Airport are a blend of projects/actions identified by the system plan and projects related to pavement maintenance and rehabilitation from Georgia's 2012 Statewide Airfield Pavement Management Study. An update to the Statewide Airfield Pavement Management Study began in 2018; when that analysis is completed, additional projects in the pavement management and maintenance categories will likely be identified for the Airport.

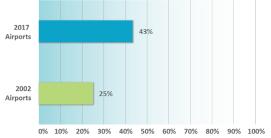
The GSASP is important because it gathers information on current activity, facilities, and services at the 103 study airports. One objective for this update was to provide information showing how the system has changed since the 2002 GSASP was published. As shown in the graphics below, GDOT, FAA, and local investments at system airports have significantly elevated statewide system performance for the measures shown here.



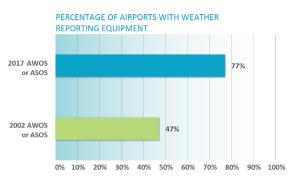


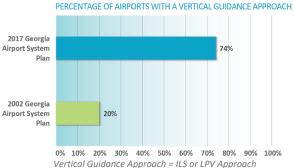
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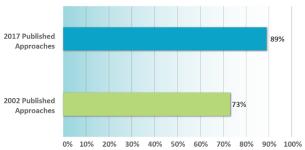








#### PERCENTAGE OF AIRPORTS WITH A PUBLISHED APPROACH



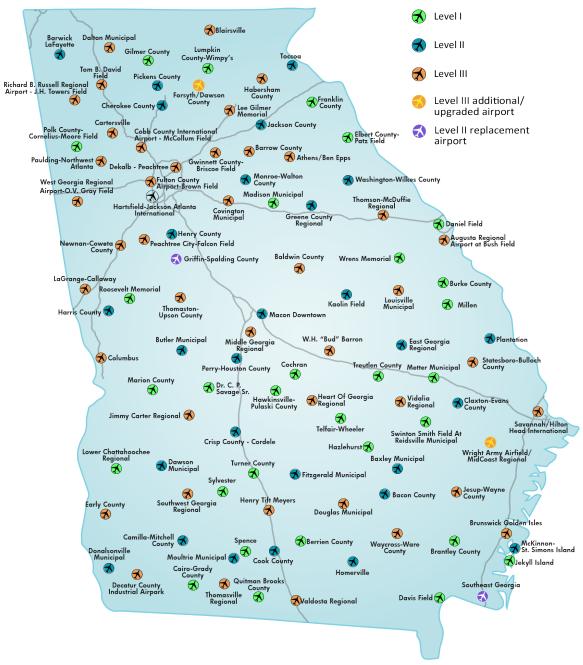
## **GEORGIA AIRPORT LEVELS**

The Statewide Aviation System Plan was last published in 2002. Since that time, Georgia airports have made significant progress toward meeting the GSASP performance measures. This update to the GSASP reset the bar for future system performance. This included identifying projects for individual airports that are needed to improve system performance in the coming years. It also included evaluating current state system planning levels for all system airports and determining if airport assigned levels should change to improve overall system accessibility and performance. The GSASP update also addressed the need for additional or replacement system airports. Each of the 103 airports was assigned to one of the following levels:

### **AIRPORT LEVELS**

LEVEL I	<b>Minimum Standard General Aviation Airport</b> : Level I facilities support a reasonable percentage of the general aviation fleet, including small business aircraft. Level I is recognized as the minimum to which airports in the system are recommended to develop. Objectives recommend a minimum runway length of 4,000 feet.
LEVEL II	<b>Business Airport of Local Impact</b> : Level II airports should be capable of accommodating all business and personnel use single- and twin-engine general aviation aircraft and 85% of business jet aircraft. The minimum runway length objective for Level II airports is 5,000 feet.
LEVEL III	Business Airports of Regional Impact: Level III airports are defined as the existing air carrier airports and general aviation airports that have a regional business impact. These airports are recommended to have at least 5,500 feet of runway and precision-like approaches to accommodate 95% of business jet aircraft.

A map of the recommended levels for airports in the Georgia system is shown on the next page. For the most part, after a thorough review of the existing system, current roles are unchanged. System plan recommendations include one new Level III airport, one airport upgraded from Level II to Level III, and two new Level II replacement airports. It is important to note that the identified level for each airport is the airport's minimum recommendation; an airport's actual facilities are determined by the airport owner or owners.



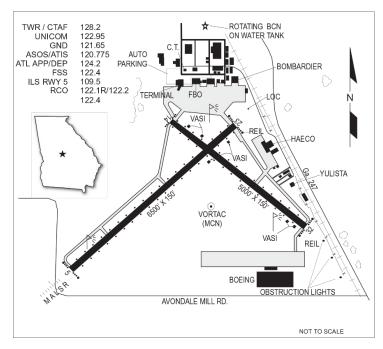
#### **RECOMMENDED LEVELS FOR GEORGIA AIRPORTS**

Source: Jviation

## BACKGROUND INFORMATION FOR MIDDLE GEORGIA REGIONAL AIRPORT

Middle Georgia Regional Airport is located in Bibb County in central Georgia approximately 86 miles south of Atlanta and 167 miles northwest of Savannah. Primary highway access to the Airport from the south and northwest is via U.S. 41 and from the northeast and south is via U.S. 129/Georgia Highway 247. Other highways in the vicinity include Interstates 16, 75, and 475.

The Airport, situated on 1,149 acres, is owned and operated by Macon-Bibb County. The Airport accommodates a variety of aviation-related activities that include commercial service, corporate/business jet, recreational flying, and police/law enforcement.



#### **AIRPORT DIAGRAM**

#### **30-MINUTE DRIVE TIME SERVICE AREA AND POPULATION**



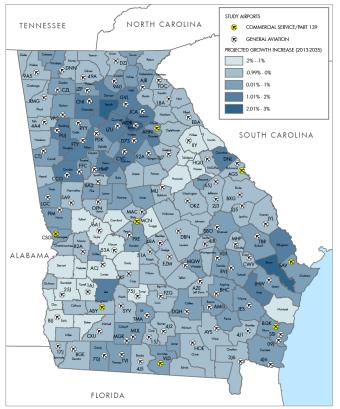
Source: Moffatt & Nichol

Assigned levels for Georgia airports consider the characteristics of the area the airport serves. Analysis for the GSASP was conducted using a geographic information system (GIS) and a 30minute drive time for each airport. The county's population growth rate is expected to be just below average, while employment growth is expected to be within the state average. Georgia's projected average annual rate of growth for population is between 0.5% and 1.49%; for employment, the average is between 0.998% and 1.39%.

Bibb County			
Projected Population Growth			
2013*	154,721		
2035	160,817		
2013-2035	0.18%		
Projected Employment Growth			
2015*	113,429		
2035	142,738		
2015-2035	1.16%		
**			

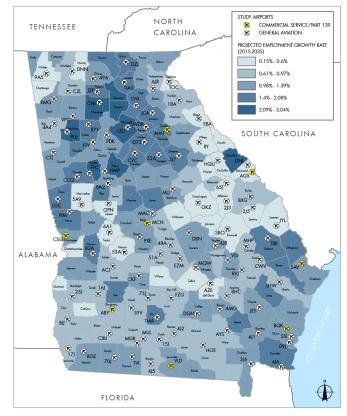
\*Reported as current

# PROJECTED POPULATION GROWTH



Source: Georgia Governor's Office of Planning and Budget, 2015 Series

### **PROJECTED EMPLOYMENT GROWTH**



Source: Woods & Poole, 2017

## RECOMMENDED LEVEL FOR MIDDLE GEORGIA REGIONAL AIRPORT

Middle Georgia Regional Airport has been assigned to Level III within the Georgia airport system. As a Level III airport, the GSASP has identified certain facilities and services that should ideally be in place at the Airport. These objectives are considered the "minimums" to which the Airport should be developed. Based on local needs/justification, it is quite possible that the Airport could exceed its minimum development objectives established in the GSASP. Middle Georgia Regional Airport's specific objectives, as they pertain to the Airport's Level III role in the state airport system, are listed below.

#### **OBJECTIVES FOR LEVEL III – BUSINESS AIRPORTS OF REGIONAL IMPACT**

#### **Airside Facilities**

- » Runway Length: Minimum 5,500 feet
- » Runway Width: 100 feet
- » Taxiway: Full parallel
- » Lighting Systems: HIRL for precision approaches and commercial service airports; MITL and approach lights
- » Approach: Precision
- » NAVAIDS/Visual aids: Rotating beacon, segmented circle and wind cone, PAPIs, others as required for non-precision/precision approach
- » Weather Reporting: AWOS or ASOS
- » Runway Pavement Strength: 30,000 pounds singlewheel/120,000 pounds dual-wheel
- » Airfield Signage: Runway hold position, location, and guidance signs
- » Fencing: Entire airport

#### **General Aviation Facilities**

- » Hangared Aircraft Storage: 70% of based aircraft fleet
- » Apron Parking/Storage: 30% of based aircraft fleet plus an additional 75% for transient aircraft
- » Terminal/Administration: 2,500 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

- » Fuel: AvGas and/or Jet fuel
- » FBO: Full service
- » Maintenance: Full service
- » Rental Cars: Available

## COMPARATIVE PERFORMANCE MIDDLE GEORGIA REGIONAL AIRPORT

One objective for the system plan update was to show how airports in the state have changed since the plan was last prepared in 2002. The following chart shows how facilities and services at Middle Georgia Regional Airport performed against system plan objectives between 2002 and 2017. Objectives are listed on the previous page and in the Report Card. It is worth noting that in some instances data collection efforts in 2002 versus 2017 were not identical, making it difficult to compare changes.

### FACILITY/SERVICE COMPARISON - 2002 VS 2017

Facility or Service	2002 Actual	2017 Actual
Runway Length	6,501 feet	6,500 Feet
Runway Width	150 feet	150 Feet
Тахіwау	Parallel	Full Parallel
Primary Runway PCI	73	100
Primary Runway Safety Area	Rwy. End 05-(1,000 Feet x 400 Feet) 23-(750 Feet x 400 Feet)	1,000 Feet x 500 Feet
Runway to Taxiway Separation	Met Standards	400 Feet
Lighting System		
– Runway	HIRL	HIRL
— Taxiway	MITL	MITL
Approach Lighting System	None	MALSR
Approach Type	Precision	Precision (ILS)
Weather Reporting	Yes	ASOS
Navigational Aids		
<ul> <li>Rotating Beacon</li> </ul>	Rotating Beacon	Rotating Beacon
– VGSI	VASI	PAPIs/VASIs
<ul> <li>Segmented Circle</li> </ul>	None	Segmented Circle
– Wind Cone	Not Collected in 2002	Wind Cone
Airfield Signage	Not Collected in 2002	Hold Position, Location, Guidance
Fencing	Not Collected in 2002	Full Perimeter
Hangared Aircraft Storage	30	37
Apron Parking/Storage	55	55
General Aviation Terminal/Administration	4,000 Sq Ft	4,000 Sq Ft w/Restrooms, Conference Area, Pilots' Lounge
General Aviation Auto Parking	139	139
Fuel	AvGas, JetA and MoGas	AvGas and JetA
FBO	Yes	Full Service
Maintenance	Not Collected in 2002	Full Service
Rental Cars	Not Collected in 2002	On-Site

## **OUTLOOK FOR AVIATION DEMAND**

While most development objectives for Middle Georgia Regional Airport are driven by role rather than demand, it is still important to have a general sense of how activity (based aircraft and annual operations) at the Airport could change in the coming years. The following table shows projections for the Airport developed as part of the GSASP. Forecast methodologies used in the GSASP included analysis of historic growth, FAA trends, and county-specific projections of population and employment. It is worth noting that demand projections developed as part of a state aviation system plan tend to be far more conservative than demand projections developed as part of an individual airport master plan or Airport Layout Plan (ALP) report. Statewide, the average annual compound rate of growth for both based aircraft and annual general aviation operations is expected to be 0.54%.

### MIDDLE GEORGIA REGIONAL AIRPORT PROJECTIONS OF AVIATION DEMAND

	Enplanements*	Commercial Service Operations*	Based Aircraft	Annual General Aviation Operations
2016 Actual **	0	0	97	13,677
2020	15,346	1,240	99	14,000
2025	15,996	1,240	102	14,300
2035	17,571	1,240	107	15,100

\* Average annual rate of growth in enplanements is 0.9%; commercial airport operations are expected to remain unchanged.

\*\* The Airport did not have any scheduled commercial airline service in 2016; service resumed in 2017.

Following the completion of Georgia's last statewide aviation system plan, the cost of acquiring and maintaining a general aviation plane, the cost to secure a private pilot's license, competing opportunities for allocation of disposable income, along with increases in the cost of aviation fuel, have all contributed to a contraction in general aviation demand.

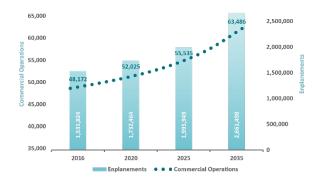
Recent economic recovery and increased use of general aviation as a tool to improve business efficiency have helped to stabilize the general aviation industry. For most airports in Georgia, however, anticipated growth in general aviation demand will be modest at best. The graphs below show statewide projections of based aircraft and annual general aviation operations for the 103 study airports as they were developed in the GSASP update, as well as commercial aviation operations and enplanements for Georgia's commercial airports.

# BASED AIRCRAFT AND ANNUAL GENERAL AVIATION OPERATIONS



# STATEWIDE PROJECTIONS OF:

#### COMMERCIAL AVIATION OPERATIONS AND ENPLANEMENTS



## **OTHER GSASP EFFORTS**

As part of the GSASP, additional efforts were included to determine how well the existing system is currently performing. This additional research included the following:

- » A land use and zoning inventory
- » Investigation to determine airport control of runway protection zones (RPZs)
- » An inventory of through-the-fence operators

A summary of statewide findings for each of these studies is below, followed by airport-specific results for each of these three areas of analysis.

- » Land Use and Zoning: According to FAA grant assurance #21, airports in the federal system should take appropriate steps to promote compatible land use in the airport environs. Study research indicates that there are at least 196 local governments in Georgia that border one of the system airports. According to study findings, only 40 of these municipalities currently have airport-specific land use zoning in place.
- » RPZ Control: The FAA encourages all airports in the federal airport system to have control through acquisition or land use planning/zoning over their RPZs; the RPZ is the area designated off each airport runway end to help promote safety. There are 280 RPZs for all study runways. While most of these RPZs are under partial airport control, study research determined that only 84 out of the 280 RPZs are under control. An estimated \$332 million is needed to bring all RPZs at system airports under control.
- Through-the-Fence Operations: The FAA discourages airports in the federal system from allowing off-airport businesses to have access to an airport's runway facilities. When an off-airport business does have access to an airport's airfield facilities, these businesses are typically referred to as through-the-fence operators. Only 17 of 103 airports in the Georgia system have any type of through-the-fence operator.

Airport-specific findings for these tasks, as applicable, follow.

## LOCAL GOVERNMENTS ADJACENT TO MIDDLE GEORGIA REGIONAL AIRPORT WITH LAND USE CONTROLS

Having land use and activities around airports that are compatible with aircraft operations is imperative from a safety standpoint. Airports that accept state and/or federal grants are obligated to take steps to promote compatible land use and activities in the environs of their airport. For the GSASP analysis, airports identified local governments in the environs of their airport. It is likely that the local governments identified by the Airport are the primary local governments adjacent to the Airport, but it is possible that if the Airport's extended safety and control surfaces designated by the FAA were considered, there could be additional local governments (beyond those reported here) that are in the airport environs.

Research was undertaken for local governments identified during the GSASP to determine if the local governments are taking steps to establish compatible land use and protect the operating environments for airports throughout the state. Local governments adjacent to Georgia airports were investigated to determine the following:

- » Has the local government adopted land use zoning controls?
- » Does the local government have an airport specific overlay zone or district?
- » Does the local government have a land use map that shows the location of the airport?
- » Has the local government adopted height restriction zoning around the airport?

The following table shows local governments adjacent to Middle Georgia Regional Airport and summarizes the status of land use controls for each. Local governments and airports throughout Georgia need to work together to help ensure airports are protected from incompatible land uses and from the encroachment of obstacles that pose a height hazard to safe airport operations.

### LAND USE CONTROL SUMMARY FOR MIDDLE GEORGIA REGIONAL AIRPORT

Turne of Control	Local Governments Adjacent to the Airport			
Type of Control	City of Macon	Bibb County		
Adopted Land Use Ordinance	Yes	Yes		
Adopted Height Zoning Ordinance	Yes	Yes		
Land Use Map	Yes	Yes		
Airport Overlay Zone/District	Yes	Yes		

Model ordinances to control land use and the height of objects in the airport environs are available on the GDOT website: www.dot.ga.gov/IS/AirportAid/AviationSystemPlan.

# AIRPORT CONTROL OF RUNWAY PROTECTION ZONES

A review of all RPZs was undertaken as part of the GSASP update. The RPZ is an FAA-designated safety zone off the end of each active runway; the size of the RPZ for each runway end is established by FAA guidelines and varies by the type of approach (visual, non-precision, precision) to the runway end. FAA standards indicate that all airports should have control over each RPZ either through fee simple ownership of the land within the RPZ or through avigation easements. Statewide, 84 (30%) of the 280 RPZs at all study airports are reported as under airport control.

As part of the GSASP analysis, categories were established for types of use within the RPZs at Georgia airports. Once these categories were identified, additional analysis was undertaken to identify potential costs by category that could be incurred to bring all RPZs under airport control. The analysis included the following:

- » Areas of the Airport's RPZ that are not fully under Airport control.
- » Types of use(s) and/or development in the uncontrolled portions of the Airport's RPZs.
- » Estimated cost to bring uncontrolled RPZ areas under Airport control.

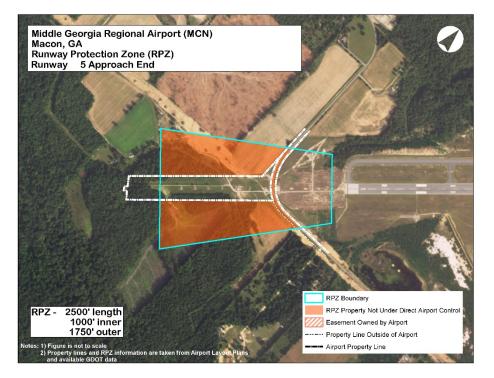
As indicated through the GSASP analysis, the cost to bring all portions of the Airport's RPZs under Airport control is estimated to be \$2,204,006. Airports are highly encouraged to gain control over RPZs to prevent incompatible land uses.

	Runway			
	5	23	14	32
Identified Land/Property Acquisitions				
Total Acres Outside Airport Control	48	5	0	4
– Urban Acres	48	5	0	4
– Rural Acres	0	0	0	0
Associated Costs				
Property Acquisition Costs				
<ul> <li>Urban Land Acquisition Costs*</li> </ul>	\$240,000	\$25,000	-	\$20,000
<ul> <li>Rural Land Acquisition Costs*</li> </ul>	-	-	-	-
- Residential Property Acquisition Costs	-	-	-	-
- Commercial Property Acquisition Costs	-	-	-	-
Relocation Costs				
<ul> <li>Paved Road Relocation Costs</li> </ul>	\$327,820	\$480,072	-	\$672,210
- Unpaved Road Relocation Costs	-	-	-	-
- Railroad Relocation Costs	-	\$146,163	-	\$292,741
Subtotal	\$567,820	\$651,235	-	\$984,951
Total	al \$2,204,006			

### MIDDLE GEORGIA REGIONAL AIRPORT RPZ CONTROL

Note: \* The urban vs. rural classification for property acquisition costs generally followed the Georgia Urbanized Areas as presented in GDOT's "Statewide Functional Classification and Urban Area Boundary Update" from February 2014. The land use definitions were further defined by observations of characteristics around each airport.

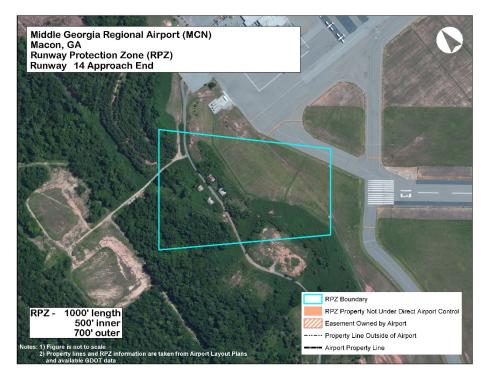
### MIDDLE GEORGIA REGIONAL AIRPORT RPZ – RUNWAY 5 APPROACH END



### MIDDLE GEORGIA REGIONAL AIRPORT RPZ – RUNWAY 23 APPROACH END



### MIDDLE GEORGIA REGIONAL AIRPORT RPZ – RUNWAY 14 APPROACH END



### MIDDLE GEORGIA REGIONAL AIRPORT RPZ – RUNWAY 32 APPROACH END



## AIRPORT REPORT CARD AND RECOMMENDATIONS

This report provides information on GSASP facility/service objectives associated with a Level III airport in the state airport system. The Report Card on the following pages shows Middle Georgia Regional Airport's ability to meet its objectives. If the Airport does not meet an objective, an estimated cost to enable the Airport to meet the objective was developed. The GSASP also reviewed the Airport's current capital improvement plan (CIP), as submitted to GDOT; while the GSASP identified costs to meet system plan objectives, CIP costs to meet local airport development goals are also included in the Report Card.

Pavement projects identified for the Airport in the 2012 Statewide Airfield Pavement Management Study that have not yet been completed are also shown in the Airport's Report Card. The Airport's pavement projects were compared to the projects from the system plan and the Airport's CIP to avoid duplication. An update to GDOT's Statewide Airfield Pavement Management Study is underway and expected to be complete in early 2019.

The GSASP identified that over the next five years, an estimated \$1.34 billion will be needed to maintain and improve all commercial and general aviation airports in Georgia to their system plan recommendations; an additional \$710.6 million will be needed to meet the additional goals of local communities. Sources for the total financial need of \$2.05 billion are shown in the pie chart below.

#### **Total Financial Need: \$2.05 billion** 10% Facility/Service Projects \$204.8 M The GSASP focuses on recommendations and costs to 28% **Runway Protection Zone** implement needs identified in the Mitigation Projects study. The Report Cards also \$576.8 M include airport CIPs to enable Maior Pavement airports to understand the Maintenance Projects potential costs to meet both \$710.6 M **GSASP** and local development Capital Improvement objectives. Of the \$2.05 billion Plan Projects financial need, 35% is related to locally developed CIPs. Additional and/or 13% Replacement Airport Projects \$278.8 M

### AREAS OF FINANCIAL NEED TO MAINTAIN AND IMPROVE THE GEORGIA AIRPORT SYSTEM

When the Airport's system plan projects are considered, it is estimated that a total of \$15,575,000 will be needed over the next five years. When the Airport's CIP is included, the total need is estimated at \$45,760,053. On average over the next five years, \$9,152,011 will be needed on an annual basis to maintain and improve the Airport. GDOT's last statewide economic impact study, completed in 2012, shows that the Airport is responsible for an estimated \$198,544,400 in annual economic impact. When the Airport's annual need (\$9,152,011) is compared to its annual benefit (\$198,544,400), it is clear that the Airport is well worth the investment.

The Report Card for Middle Georgia Regional Airport, developed as part of the system plan, is shown on the following pages.

### Middle Georgia Regional Airport Report Card

AIRPORT NAME: Middle Georgia Regional Airport

CITY: Macon, Georgia

#### COUNTY: Bibb County

AIRPORT CODE: MCN

Middle Georgia Regional Airport Report Card					
Actions Needed to Meet Facility and Service Objectives					
	Actual	Minimum Objective	Objective Met	Improvement Needed	Estimated Cost
Runway Length	6,500 Feet	5,500 Feet	Yes	-	-
Runway Width	150 Feet	100 Feet	Yes	-	-
Taxiway	Full Parallel	Full Parallel	Yes	-	-
Primary Runway PCI	100	70 or Greater	Yes	-	-
Primary Runway Safety	1,000 Feet x 500 Feet	1,000 Feet x 500 Feet	Yes	_	_
Area	_,	_,			
Runway to Taxiway Separation	400 Feet	400 Feet	Yes	-	-
Lighting System					
– Runway	HIRL	HIRL	Yes	-	-
– Taxiway	MITL	MITL	Yes	-	-
<ul> <li>Approach Lighting</li> <li>System</li> </ul>	MALSR	ALS	Yes	-	-
Approach Type	Precision (ILS)	Precision	Yes	-	-
Weather Reporting	ASOS	AWOS or ASOS	Yes	-	-
Navigational Aids					
<ul> <li>Rotating Beacon</li> </ul>	Rotating Beacon	Rotating Beacon	Yes	-	-
– VGSI	PAPIs/VASIs	PAPIs	No	Replace VASI with PAPI on RW 23	\$75,000
<ul> <li>Segmented Circle</li> </ul>	Segmented Circle	Segmented Circle	Yes	-	
<ul> <li>Wind Cone</li> </ul>	Wind Cone	Wind Cone	Yes	-	-
Airfield Signage	Hold Position, Location, Guidance	Hold Position, Location, and Guidance	Yes	-	-
Fencing	Full Perimeter	Full Perimeter	Yes	-	-
Hangared Aircraft Storage	37	70% of Based Aircraft Fleet	No	Add 38 Hangar Spaces	\$15,050,000
Apron Parking/Storage	55	30% of Based Aircraft Fleet Plus an Add'l 75% for Transient Aircraft	No	Add 2 Tie- downs	\$300,000
General Aviation Terminal/Administration	4,000 Sq Ft w/Restrooms, Conference Area, Pilots' Lounge	2,500 Square Feet of Public Use Space Including Restrooms, Conference Area, and Pilots' Lounge	Yes	-	-
General Aviation Auto Parking	139	1 Space for Each Based Aircraft Plus an Add'l 50% for Visitors/Employees	No	Add 22 Auto Parking Spaces	\$150,000
Fuel	AvGas and Jet A	AvGas and/or Jet Fuel	Yes	-	-
FBO	Full Service	Full Service	Yes	-	-
Maintenance	Full Service	Full Service	Yes	-	-
Rental Cars	On-Site	Available	Yes	-	-
Estimated SASP Facility/Service Project Cost \$15,			\$15,575,000		

Middle Georgia Regional Airport Report Card					
Runway Protection Zone Mitigation Projects					
Runway End	Estimated Land Cost	Estimated Residential/Commercial Property Cost	Estimated Road Cost	Estimated Railroad Cost	Total Estimated Cost
- RW 05	\$240,000	No Action	\$327,820	No Action	\$567,820
– RW 14	No Action	No Action	No Action	No Action	\$0
– RW 23	\$25,000	No Action	\$480,072	\$146,163	\$651,235
– RW 32	\$20,000	No Action	\$672,210	\$292,741	\$984,951
		Estimated	d RPZ Mitigati	on Project Costs	\$2,204,006
	Major Pavem	ent Maintenance Projects Planned			
		Project Description			Estimated Cost
Runway 14/32	Major Maintenance & Re	ehabilitation (e.g. Mill & Overlay, Overlay	verlay, or Reco	onstruction)	\$2,053,636
Runway 05/23	Global Preventative (e.g. Surface Treatment to Entire Pavement)				\$249,903
Taxiways	Major Maintenance & Rehabilitation (e.g. Mill & Overlay, Overlay, or Reconstruction)				\$2,610,307
Taxiways	Global Preventative (e.g. Surface Treatment to Entire Pavement)				\$136,012
Apron	Major Maintenance & Rehabilitation (e.g. Mill & Overlay, Overlay, or Reconstruction)				\$5,580,285
Apron	Local P	al Preventative (e.g. Crack Sealing or Patching)			\$6,168
Estimated Major Pavement Project Costs		\$10,636,311			
Capital Improvement Plan (CIP) Projects Planned 2018-2022					
Program Year	Project Type	Project Des	cription		Estimated Cost
2018	Land Acquisition & Easements	Land Acquisition for Runway	05/23 Extensi	on (1,500')	\$1,200,000
2018	Runways	Design Runway 05/23 Ex	tension, 1,500	' x 150'	\$1,750,000
2019	Runways	Runway 05/23 Extension 300' X 1 Extension an		& Drainage For	\$1,947,368
2020	Runways	Runway 05/23 Extension, 300' x Electric		Base, Paving, &	\$5,947,368
2021	Runways	Runway 05/23 Extension, 1,500' > Draina		p, Grading, and	\$2,000,000
2021	Runways	unways Runway 05/23 Extension, 1,500' X 150' (Wetland Mitigation)		\$1,500,000	
2022	2022 Runways Runway 05/23 Extension, 1,500' X 150' (Paving and Electrical)		and Electrical)	\$3,000,000	
			Estimated C	CIP Project Costs	\$17,344,736
			Total Estimate	ed Project Costs	\$45,760,053

# **GLOSSARY OF ACRONYMS**

ALP: Airport Layout Plan	LIRL: Low-Intensity Runway Lighting
ALS: Approach Lighting System	LITL: Low-Intensity Taxiway Lighting
ALSF: ALS with Sequenced Flashers	LPV: Lateral Precision Performance with Vertical
ASOS: Automatic Surface Observation System	Guidance
ATCT: Air Traffic Control Tower	MALS: Medium-Intensity Approach Lighting System
AvGas: Aviation Gasoline	MALSF: MALS with Sequenced Flashers
AWOS: Automated Weather Observation System	MALSR: MALS with Runway Alignment Indicator Lights
CAGR: Compound Annual Growth Rate	MIRL: Medium-Intensity Runway Lighting
CATEX: Categorical Exclusion	MITL: Medium-Intensity Taxiway Lighting
CIP: Capital Improvement Plan	MoGas: Motor Gasoline
DBE: Disadvantaged Business Enterprise	NAVAIDs: Navigational Aids
DME: Distance Measuring Equipment	PAPI: Precision Approach Path Indicator
FBO: Fixed Base Operator	PCI: Pavement Condition Index
FIDS: Flight Information Display System	PFC: Passenger Facility Charge
GA: General Aviation	REIL: Runway End Indication Lights
GIS: Geographic Information System	RNAV: Area Navigation
GSASP: Georgia Statewide Aviation System Plan	RPZ: Runway Protection Zone
HIRL: High-Intensity Runway Lighting	RSA: Runway Safety Area
HITL: High-Intensity Taxiway Lighting	sqmi: Square Miles
ILS: Instrument Landing System	VASI: Visual Approach Slope Indicator
Jet A: Jet Fuel	VGSI: Visual Glideslope Indicator
LF: Linear Feet	VOR: Very High Frequency (VHF) Omni-Directional Range
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WHMP: Wildlife Hazard Management Plan





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