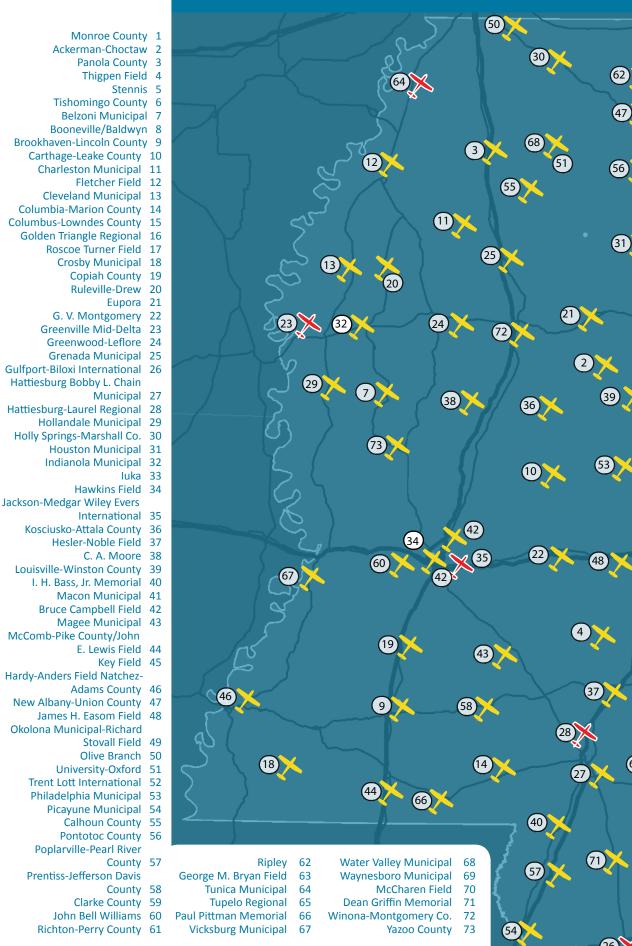
## **EXECUTIVE SUMMARY**

# ECONOMIC IMPACT OF MISSISSIPPI AIRPORTS



## MISSISSIPPI AIRPORT SYSTEM

(33)



### TOTAL ECONOMIC IMPACT







\$721,796,600



\$2,533,618,000



he Mississippi system of public-use airports is an integral component of the state's overall transportation system, and is also an important stimulus for economic growth and development in the state. Mississippi's airport system provides vital links that enable businesses to function efficiently and improve the quality of life for residents of Mississippi. The state's eight commercial service airports accommodate over 1.1 million passengers annually and generate several billions of dollars in economic benefits. The 65 general aviation airports are also significant generators of business revenue and wages, creating thousands of jobs and producing millions of dollars of economic impact throughout Mississippi each year. Thousands of visitors arriving in Mississippi via general aviation aircraft

each year support a variety of business in the hospitality sector such as dining, retail, lodging, and entertainment. Mississippi airports also provide numerous qualitative benefits such as air ambulance service, law enforcement support, aerial agriculture operations, aerospace education and oil and gas industry operations.

From the commercial airlines that serve eight Mississippi airports to the variety of general aviation services found throughout the state, the aviation industry provides thousands of jobs and creates more than \$2.5 billion in economic activity. When all of the impacts of Mississippi's 73 public-use airports are added together, 20,025 total jobs can be traced to the aviation industry and receive nearly \$722 million in total payroll.

Source: CDM Smith and IMPLAN





#### **IMPACTS BY TYPE**

#### **ECONOMIC IMPACTS**

#### **On-Airport**

- FAA, Other Government
- Airport Management
- Aircraft maintenance
- Vendors
- Retail & Restaurant
- Car Rental
- Parking
- Other Ground Transportation
- Fixed Based Operators

Jobs Payroll Economic Output

#### **Visitor Spending**

- Hotels
- Retail & Restaurants
- Travel Agents
- Convention Centers
- Tourist Destinations

Jobs Payroll Economic Output

#### **MULTIPLIER ECONOMIC IMPACTS**

- Suppliers of Materials & Services to Airports
- Air Dependent Businesses
- Visitor Dependent Businesses
- Consumer Product and Service Sales

Jobs Payroll Economic Output

#### **TOTAL ECONOMIC IMPACTS**

Total Jobs Total Payroll Total Economic Output

### STUDY METHODOLOGY

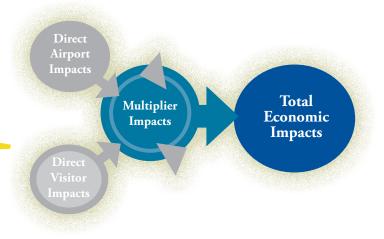
The economic benefits associated with aviation in Mississippi were estimated using a standard econometric modeling process that has been approved by the FAA. This economic input-output model estimates economic benefits in terms of jobs, payroll and economic output. This methodology has been used to successfully quantify the value of airports and airport systems throughout the United States.

The input for this model came from numerous data gathering efforts for each Mississippi airport. Airport managers and aviation-related businesses and government agencies were surveyed to collect the data necessary to estimate the on-airport employment, payroll, and output each airport supports. Visitors to Mississippi using commercial airlines and general aviation aircraft were surveyed to estimate the impacts their expenditures support.

The induced and indirect impacts of these airport activities were calculated using multipliers that are specific to Mississippi. For example, when an airport employee purchases local goods and services, that spending circulates through the local economy by supporting the jobs and payroll of other businesses and thereby generates additional economic activity in the region. The total economic impact is the sum of all on-airport, visitor, and multiplier impacts.

#### **METHODOLOGY**

When combined, direct and multiplier benefits equal the total economic impact associated with each airport.



## MISSISSIPPI EXECUTIVE VIEWPOINTS

66

"The John Bell Williams Airport is owned and operated by Hinds Community College. We have several aviation curriculums located here at the airport as well as general aviation maintenance facilities. As the aviation infrastructure within Mississippi grows, we're able to provide the workforce for pilots, mechanics, drone pilots as demand increases". Randy Pearcy, Aviation Department Chairman and Chief Flight Instructor, Hinds Community College

"Aurora Flight Sciences is a producer of advanced technology in aircraft and aircraft design. We actually design, develop, manufacture and produce aircraft and unmanned air vehicle systems. Locating at an airport is vital to our business".

Sherry Grady, General Manager - AMS Aurora Flight Sciences

"Sanderson Farms has grown a lot over the years, and the aviation department has grown with that. / Corporate aviation has enabled Sanderson Farms to manage its growth. I believe that it's enabled Sanderson Farms to expedite its growth, we're able to serve the plants and the communities where we have facilities much better than if we had to drive". Zane Lambert, Manager of Aircraft Operations Sanderson Farms

"Greenwood-Leflore Airport has played a large role as far as Provine Helicopters' growth and development. It's centrally located to where our work is, and also clients can use their airplanes—personal airplanes—and fly in here and visit with us at the airport to go over maps, information that we may need to go and do their job. Also it allows to get in our plane and go visit with them as well in whatever state that we may be working in".

Michael McCool, President Provine Helicopter Service







## ECONOMIC IMPACTS ACROSS MISSISSIPPI

ID	City	Airport Name	Total Employment	Total Payroll	Total Output			
Commercial Service Airports								
GTR	Columbus/West Point	Golden Triangle Regional	1,668	\$60,924,800	\$272,548,100			
GLH	Greenville	Greenville Mid-Delta	594	\$24,195,000	\$112,790,700			
GPT	Gulfport	Gulfport-Biloxi International	3,926	\$105,171,600	\$426,281,800			
PIB	Hattiesburg/Laurel	Hattiesburg-Laurel Regional	169	\$4,697,200	\$17,839,900			
JAN	Jackson	Jackson-Medgar Wiley Evers International	6,508	\$270,554,500	\$873,529,100			
MEI	Meridian	Key Field	1,796	\$73,742,200	\$152,308,400			
UTA	Tunka	Tunica Municipal	700	\$17,510,100	\$74,901,700			
TUP	Tupelo	Tupelo Regional	1,054	\$41,830,300	\$114,857,100			
Commercial Service Airport Total			16,415	\$598,625,700	\$2,045,056,800			

ID	City	Airport	Total Employment	Payroll	Total Output			
General	General Aviation Airports							
M40	Aberdeen/Amory	Monroe County	38	\$929,200	\$4,718,100			
9M4	Ackerman	Ackerman-Choctaw	1	\$9,100	\$32,400			
PMU	Batesville	Panola County	15	\$387,900	\$1,346,000			
00M	Bay Springs	Thigpen Field	8	\$139,100	\$466,600			
HSA	Bay St. Louis	Stennis	866	\$24,589,200	\$82,116,700			
01M	Belmont	Tishomingo County	17	\$435,400	\$1,574,600			
1M2	Belzoni	Belzoni Municipal	13	\$663,500	\$2,790,300			
8M1	Booneville	Booneville/Baldwyn	10	\$234,000	\$686,700			
1R7	Brookhaven	Brookhaven-Lincoln County	15	\$397,700	\$4,936,400			
08M	Carthage	Carthage-Leake County	8	\$176,400	\$799,000			
09M	Charleston	Charleston Municipal	9	\$484,000	\$1,952,400			
CKM	Clarksdale	Fletcher Field	43	\$1,244,500	\$5,504,700			
RNV	Cleveland	Cleveland Municipal	102	\$3,507,100	\$15,927,500			
0R0	Columbia	Columbia-Marion County	36	\$1,210,800	\$5,081,400			
UBS	Columbus	Columbus-Lowndes County	28	\$718,600	\$1,822,000			
CRX	Corinth	Roscoe Turner Field	33	\$872,200	\$5,012,600			
C71	Crosby	Crosby Municipal	1	\$12,700	\$37,100			
M11	Crystal Springs	Copiah County	33	\$680,000	\$3,018,700			
M37	Drew	Ruleville-Drew	9	\$377,000	\$1,487,600			
06M	Eupora	Eupora	-	\$10,500	\$30,800			
2M4	Forest	G. V. Montgomery	13	\$264,100	\$1,169,800			
GWO	Greenwood	Greenwood-Leflore	278	\$12,758,600	\$64,078,400			
GNF	Grenada	Grenada Municipal	16	\$277,000	\$1,682,500			
HBG	Hattiesburg	Hattiesburg Bobby L. Chain Municipal	108	\$4,078,000	\$18,691,600			
14M	Hollandale	Hollandale Municipal	9	\$424,100	\$1,709,000			
M41	Holly Springs	Holly Springs-Marshall County	34	\$782,900	\$3,082,800			
M44	Houston	Houston Municipal	27	\$361,300	\$1,240,000			

ID	City	Airport	Total Employment	Payroll	Total Output
IDL	Indianola	Indianola Municipal	34	\$1,291,100	\$4,913,700
15M	Iuka	luka	7	\$159,100	\$592,600
HKS	Jackson	Hawkins Field	213	\$8,435,900	\$21,931,500
OSX	Kosciusko	Kosciusko-Attala County	6	\$128,400	\$507,300
LUL	Laurel	Hesler-Noble Field	85	\$4,105,100	\$16,136,700
19M	Lexington	C. A. Moore	3	\$85,000	\$395,500
LMS	Louisville	Louisville-Winston County	6	\$127,600	\$542,200
4R1	Lumberton	I. H. Bass, Jr. Memorial	35	\$916,100	\$3,193,000
20M	Macon	Macon Municipal	6	\$182,600	\$719,700
МВО	Madison	Bruce Campbell Field	133	\$3,633,400	\$18,297,000
17M	Magee	Magee Municipal	9	\$174,800	\$607,000
МСВ	McComb	McComb-Pike County/John E. Lewis Field	14	\$385,300	\$2,148,400
HEZ	Natchez	Hardy-Anders Field Natchez-Adams County	30	\$883,100	\$3,295,200
M72	New Albany	New Albany-Union County	12	\$245,800	\$797,800
M23	Newton	James H. Easom Field	12	\$223,500	\$779,900
5A4	Okolona	Okolona Municipal-Richard Stovall Field	7	\$133,000	\$551,100
OLV	Olive Branch	Olive Branch	155	\$4,436,100	\$13,560,800
UOX	Oxford	University-Oxford	49	\$1,359,200	\$5,341,200
PQL	Pascagoula	Trent Lott International	387	\$15,540,900	\$63,900,200
MPE	Philadelphia	Philadelphia Municipal	27	\$640,100	\$3,516,300
MJD	Picayune	Picayune Municipal	230	\$12,510,600	\$51,238,700
04M	Pittsboro	Calhoun County	4	\$147,000	\$296,700
22M	Pontotoc	Pontotoc County	5	\$94,200	\$447,500
M13	Poplarville	Poplarville-Pearl River County	6	\$135,100	\$523,600
M43	Prentiss	Prentiss-Jefferson Davis County	2	\$34,600	\$147,100
23M	Quitman	Clarke County	7	\$160,900	\$619,000
JVW	Raymond	John Bell Williams	120	\$3,776,700	\$14,132,300
M59	Richton	Richton-Perry County	-	\$11,200	\$37,300
25M	Ripley	Ripley	6	\$121,800	\$446,600
STF	Starkville	George M. Bryan Field	68	\$2,078,300	\$8,583,500
T36	Tylertown	Paul Pittman Memorial	10	\$225,600	\$838,600
VKS	Vicksburg	Vicksburg Municipal	30	\$896,200	\$3,181,800
33M	Water Valley	Water Valley Municipal	2	\$68,100	\$50,400
2R0	Waynesboro	Waynesboro Municipal	7	\$155,600	\$608,100
M83	West Point	McCharen Field	19	\$290,800	\$1,328,100
M24	Wiggins	Dean Griffin Memorial	22	\$870,700	\$2,316,400
5A6	Winona	Winona-Montgomery County	51	\$1,477,100	\$6,957,000
871	Yazoo City	Yazoo County	21	\$1,005,400	\$4,085,700
General Aviation Airport Totals			3,610	\$123,170,900	\$488,561,200
Total			20,025	\$721,796,600	\$2,533,618,000







# INDUSTRY RELIANCE ON AVIATION

Corporate aviation is critical to these businesses day-to-day operations and plays a role in a competitive marketplace. This study found that there are 35 businesses in Mississippi with corporate flight departments on 17 Mississippi airports. These businesses include large agribusiness ventures to small manufacturers in mid-sized communities. Corporate aircraft include not only jet aircraft but piston and turboprop aircraft which provide advantages when flying into smaller general aviation airports.

Agriculture is Mississippi's number one industry, employing approximately 29% of the state's workforce either directly or indirectly. In Mississippi, agriculture is a \$7.5 billion industry. There are approximately 42,400 farms in the state covering 11.2 million acres, which makes agriculture a significant contributor to all 82 counties. Aerial applicators boost agricultural productivity by applying fungicides to insecticides cotton, corn, wheat and soy beans.





#### In Mississippi there are:

- Approximately 230 agricultural Licensed aviation pilots
- Over 100 aerial applicator businesses
- Over 190 registered aircraft for agricultural purposes

There are 12 system airports in MS where aerial applicator businesses are based while other airports throughout Mississippi support transient aerial application activities on an occasional basis.

Mississippi has a long tradition of excellence when it comes to aerospace and aviation. While most aerospace manufacturers are located off-airport six manufacturers base their operations on-airport to access the airport's runway and taxiway system.

Aerospace manufacturers located on Mississippi airports include:

- Airbus Helicopters (formerly American Eurocopter)
- Aurora Flight Sciences
- Stark Aerospace
- Northrop Grumman
- Advanced Technologies
- Mississippi State University RASPET Flight Research Lab

It's noteworthy to point out that Aurora Flight Sciences, Northrop Grumman Unmanned Systems and Stark Aerospace – all manufacture Unmanned Aerial Systems (UAS) in Mississippi.



## QUALITATIVE BENEFITS

In addition to substantial annual economic benefits, Mississippi airports support numerous qualitative benefits. Qualitative benefits are related to health, welfare, and safety and cannot be easily assigned dollar values. Airport-related qualitative benefits help to improve the overall quality of life in Mississippi. Examples of qualitative benefits at Mississippi airports include:

- Facilitating emergency medical transport
- Providing support to highway patrol and law enforcement
- Conducting search-and-rescue operations
- Supporting aerial surveying, photography, and utility inspection operations
- Supporting the U.S. military and other government organizations
- Supporting aviation-related higher education
- Providing youth outreach activities



## Law Enforcement

Mississippi law enforcement agencies are routinely called on to work in collaboration with state and local incident commanders to search for wanted, missing, or endangered persons, to conduct airborne incident and scene assessment, aerial photography, or investigative support and surveillance. Single-engine airplanes are extremely useful for police applications because of their slow flight characteristics. Their ability to remain aloft for long periods of time is particularly useful during long missions and searches.

In addition, law enforcement departments and Air Patrols throughout Mississippi participate in many search and rescue missions and disaster relief missions. Such service is typical of squadrons and members throughout the state.



Military Operations at Public Use Airports

Mississippi has a long legacy of military installations and the state's airports still support a significant presence of aviation-related military units. Five airports – Hawkins Field, Stennis International, Jackson International, Key Field, and Tupelo Regional – are home to a total of nine individual military units. These represent several branches of the United States Armed Forces, including the U.S. Coast Guard, U.S. Navy (Naval Special Warfare Command), U.S. Army (Army Aviation Support Facility), as well as several reserve components such as the Mississippi Army National Guard and the Mississippi Air National Guard.

The largest military aviation presence is located at Jackson- Medgar Wiley Evers International, where the Mississippi Air National Guard — 172nd Airlift Wing employs over 900 personnel with total payroll of over \$70 million and produces over \$172 million in economic output. Another notable military tenant is the Naval Special Warfare Command at Stennis International, which employs over 150 permanent personnel and conducts all types of training (air, sea, land) for thousands of military personnel each year in the Bay St. Louis area.



Air Ambulance

Mississippi also benefits from the numerous air ambulance operators located throughout the state that provide invaluable lifesaving service. Six airports support a total of nine air ambulance bases across the state. Operators include MedStat Air, Air Methods, Baptist Life Flight, Southeast Mississippi Air Ambulance, PHI Air Medical, and others. The largest outfit is operated by PHI Air Medical in conjunction with the University of Mississippi Medical Center (UMMC) at Key Field in Meridian.



**Aviation Education** 

Aerospace companies located in our state benefit from an established industry infrastructure, numerous nearby suppliers and our universities research centers of excellence. Advanced university programs supply a steady talent pool of aerospace and aviation workers specializing in polymer science, aerospace engineering, commercial aviation and jet engine mechanics.

Cleveland Municipal is home to the flight school of Delta State University, which offer Bachelor and Master of Commercial Aviation degree programs – the only such programs in the state.

A number of Mississippi's community colleges offer programs of particular interest to aerospace- and aviation-related companies, such as Northwest Mississippi Community College's aviation maintenance technology programs and Hinds Community College's aviation maintenance and avionics technology programs.



MDOT Aeronautics Divison would like to thank the participating Mississippi Airports and their passengers, users and tenants, for their cooperation and assistance in the preparation of this study. Thank you!

For further information about this study please contact:



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