



Florida

Statewide Aviation Economic Impact Study



EXECUTIVE SUMMARY



March 2010

Introduction

Hearing a plane overhead is an everyday occurrence. But how many people stop to think that what they are really hearing is the sound of Florida's economy in motion? This report summarizes the significant economic benefit that Florida receives each year from aviation. Economic benefits presented in this report were measured in a recent Florida Department of Transportation (FDOT) Aviation Office economic impact study. For readers interested in viewing the full technical report for the economic impact study, it is available at: www.dot.state.fl.us/aviation/economicimpact.shtm.

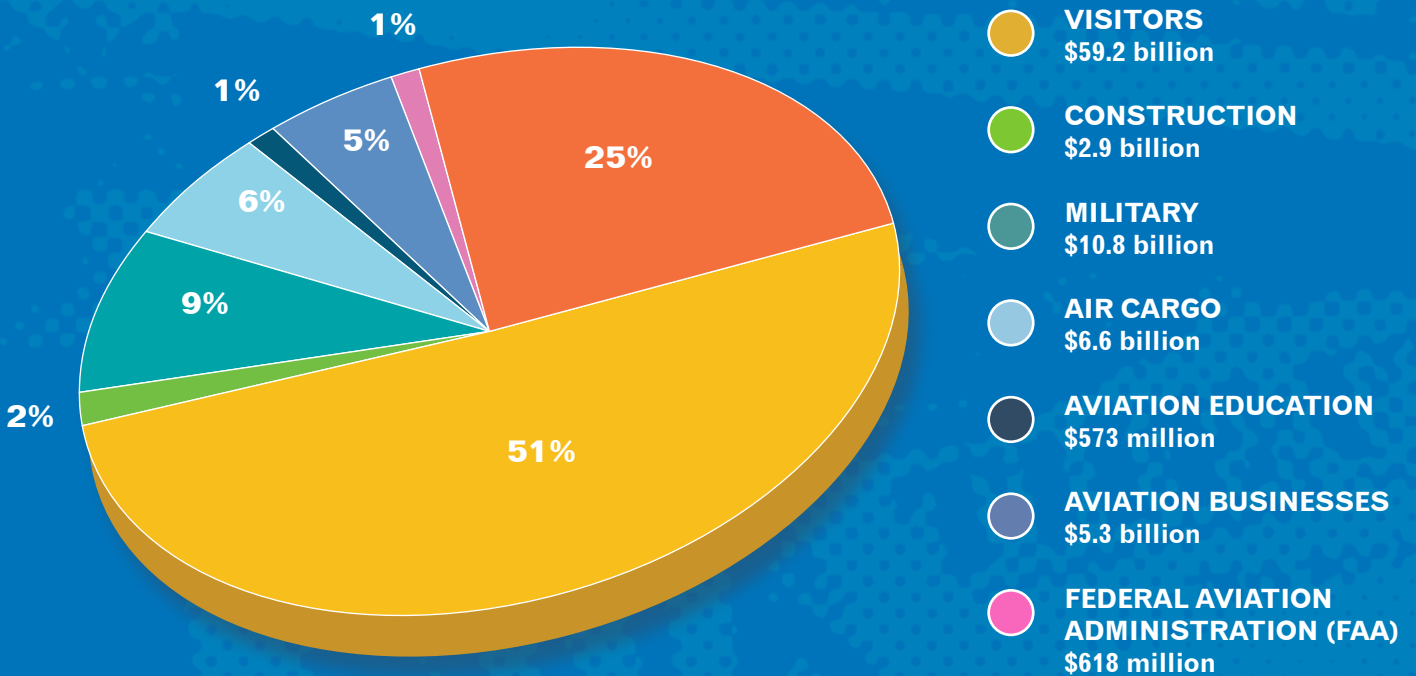


Overview of Aviation's Economic Impact in Florida

This FDOT study focused on measuring economic impacts associated with 19 commercial and 102 general aviation airports. In addition, the impacts of 11 military airfields were estimated in the study as were the economic impacts of various off-airport aviation-related activities. The study concluded that for all benefit categories measured, aviation in Florida is responsible for an estimated \$114.7 billion in annual economic activity or output. More information on economic impacts associated with each benefit category is presented later in this summary.

In addition to the \$114.7 billion in annual economic impact that Florida realizes from aviation, businesses throughout Florida that rely on the commercial airlines, air cargo, and general aviation are able to increase their annual productivity by an estimated \$94.5 billion. This increased productivity is a result of the added efficiency businesses realize when they use various types of air transportation.

Distribution of \$114.7 Billion in Annual Economic Impact by Category





Types of Aviation Economic Impact Measured

Economic benefits measured in this FDOT study focused on the categories in the left column. In most instances, economic impacts measured in this study take place on a commercial or general aviation airport or a military airfield; or in the case of visitor-related impacts, the benefits are directly facilitated by travel supported by an airport. In some instances, aviation-related economic benefits measured in the study take place off-airport. This FDOT study distinguishes between on-airport and off-airport related economic impacts.

For all benefit categories included in the study, economic impacts are expressed using three measures:



Airports



Visitors



Construction



Military Aviation



Air Cargo



Aviation Education



Aviation Businesses



Federal Aviation Administration



Business Reliance

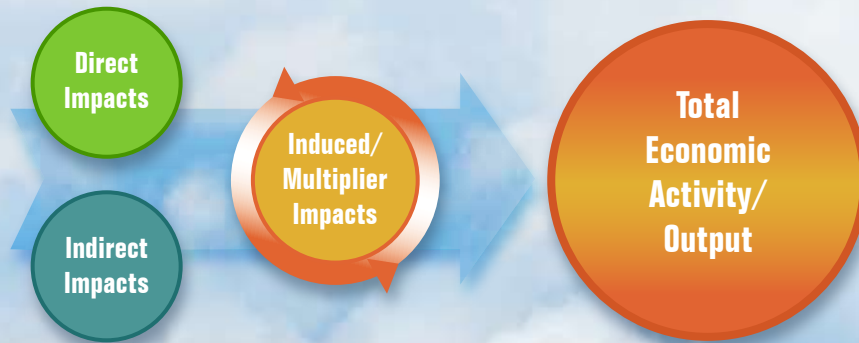


Approach to Measuring Aviation Economic Impact in Florida

The approach for measuring aviation-related economic impacts in Florida followed a methodology prescribed by the FAA. All aviation-related economic impacts that take place on an airport were classified in this FDOT study as direct impacts. Within the direct impact category are activities associated with on-airport tenants and businesses, airport construction, and airport management. Off-airport impacts, such as those that are associated with visitor spending, were classified as indirect impacts.

Once all direct and indirect aviation-related economic impacts were calculated, an input-output

model was used to show how initial direct and indirect economic impacts continue to re-circulate through Florida's economy. For this study, the Impact Analysis for Planning (IMPLAN) model was used to measure additional impacts. These additional impacts are referred to as multiplier or induced impacts. For this FDOT study, multipliers specific to Florida were used to estimate all induced impacts. All economic impacts presented in this summary report reflect total impacts which include direct and indirect impacts along with induced or multiplier impacts.



Airports

Airport Economic Impacts



Commercial and general aviation airports in Florida are the backbone of the economic impacts measured in this FDOT study. Economic impacts that take place on one of the study airports fall into the direct impact category. On-airport related economic impacts presented in this section are related to the activities of some on-airport tenants or businesses. Examples of tenants/businesses included in this study include: airport management, fixed base operators (FBOs), airlines, and various airport concessionaires. Other economic impacts that take place on airports in the construction, air cargo, aviation education, aviation business, and FAA categories are discussed in subsequent sections. Annual economic impacts for selected on-airport tenants/businesses at all study airports follow:

Jobs	158,861
Annual Payroll	\$7.8 billion
Annual Economic Activity (Output)	\$28.8 billion

Visitors

Visitor Economic Impacts



Each year, millions of visitors arrive in Florida by air. While most visitors arrive on commercial airlines, many also arrive on general aviation aircraft at both commercial and general aviation airports. Approximately 41.7 million visitors come to Florida each year on commercial airlines, while 3.7 million arrive on general aviation aircraft. Visit Florida estimates that about half of all visitors who come to Florida each year arrive by air. While in Florida, these visitors have expenditures for lodging, food, retail, transportation, recreation, and entertainment. In this study, spending by visitors arriving by air is equivalent to total annual visitor output; visitor output is classified as an indirect impact. Visitor spending helps to support many jobs in Florida and the annual payroll associated with these jobs. Total annual economic impact associated with visitors arriving by air follows:

Jobs	753,353
Annual Payroll	\$19.3 billion
Annual Economic Activity (Output)	\$59.2 billion

Construction

Construction Economic Impacts

Annually, a variety of both large and small improvement projects are undertaken at the commercial and general aviation airports in Florida. Investment/spending is needed to support the development of new airport facilities, as well as to renovate and/or rehabilitate existing facilities. Over the duration of each project, construction related spending helps to support additional jobs and the annual payroll associated with these jobs. For this study, average investment for construction at all airports over a multi-year period was considered to estimate average annual economic impacts from on-airport construction projects; these construction impacts follow:

Jobs	25,321
Annual Payroll	\$1.0 billion
Annual Economic Activity (Output)	\$2.9 billion



Military Aviation

Military Aviation Economic Impacts

As a result of its strategic location, excellent weather, and topography, the military has many active airfields in Florida. In fact, many of the state's commercial and general aviation airports were once airfields that the military used to train pilots during WW I and WW II. Similar to the civilian airports included in this study, there are 11 military airfields in Florida that provide significant aviation-related economic impact. Economic impacts for military airfields in Florida follow:

Jobs	116,860
Annual Payroll	\$5.9 billion
Annual Economic Activity (Output)	\$10.8 billion



Air Cargo

Air Cargo Economic Impacts

Many businesses in Florida rely on air cargo. As the gateway to Latin America, Florida airports are responsible for significant volumes of air cargo. A total of 24 commercial and general aviation airports in Florida accommodate scheduled air cargo activity; other airports support the movement of air cargo on an on-demand basis. Air cargo operators are important on-airport tenants for several airports in Florida. The economic impacts associated with on-airport air cargo tenants/businesses are presented in this section.

In addition, there are many other off-airport businesses in Florida dedicated to the sorting, storing, and ground movement of air cargo. Off-airport air cargo-related

businesses play an important role in the economic impact of aviation in Florida. While these additional air cargo impacts take place off-airport, their benefits were assigned to one of the system airports accommodating scheduled air cargo activity.

First Class mail originating in Florida or destined to the state moves by air. As a result, a portion of the economic activity of the United State Postal Service (USPS) is supported by aviation. The economic impact of this activity was estimated in this study. The economic impact of all facets of air cargo activity in Florida follows:

	Jobs	Annual Payroll	Annual Economic Activity
On-Airport Air Cargo	20,393	\$754 million	\$1.3 billion
Off-Airport Air Cargo*	21,480	\$960 million	\$2.6 billion
Off-Airport USPS	27,383	\$1.3 billion	\$2.7 billion
Total	69,256	\$3.1 billion	\$6.6 billion

* Even though this impact is reported as being off-airport, for this study, these impacts were assigned to an individual system airport.

Aviation Education

Aviation Education Economic Impacts

Florida is a world leader in providing aviation-related education; this includes the training of pilots, mechanics, flight attendants, air traffic controllers, and those in aviation management, and other aspects of the aviation industry. Some aviation-related schools are located on airports in Florida, while others are located off-airport. Economic impacts related to aviation-related schools are associated with: spending associated with the schools to support their operations, maintenance, and development; employment at all levels and the payroll associated with this employment; and spending by domestic and international students who are non-residents. On and off-airport economic impacts related to aviation-related educational schools follows:



	Jobs	Annual Payroll	Annual Economic Activity
On-Airport	6,385	\$174 million	\$521 million
Off-Airport	592	\$27 million	\$52 million
Total	6,977	\$201 million	\$573 million

Aviation-Related Businesses

Aviation-Related Businesses Economic Impacts

Throughout Florida, there are many businesses in Florida that are engaged in the production or the manufacture of aircraft or various aircraft components. Some of these aviation-related businesses are located on airports, while others are located off-airport. These businesses help to supply aircraft and aircraft components to the nation and the world. The economic impacts of aviation-related businesses, both on and off-airport, follow:



	Jobs	Annual Payroll	Annual Economic Activity
On-Airport	13,336	\$472 million	\$1.5 billion
Off-Airport	22,650	\$784 million	\$3.8 billion
Total	35,986	\$1.3 billion	\$5.3 billion



Federal Aviation Administration Economic Impacts



The FAA is the federal agency charged with developing, monitoring, and prescribing safety guidelines for our nation's public airports and airways. Because of the number of active commercial and general aviation airports, along with Florida's complex airspace system, the FAA is very active in Florida. In fact, the FAA has more activity in Florida that is off-airport than is on a system airport. Economic impacts for the FAA in Florida follow:

	Jobs	Annual Payroll	Annual Economic Activity
On-Airport	1,503	\$111 million	\$195 million
Off-Airport	3,042	\$207 million	\$423 million
Total	4,545	\$318 million	\$618 million

Business Reliance

Business Reliance on Aviation



Many non-aviation businesses in Florida rely on and benefit from their use of various aspects of the aviation industry. In particular businesses in the manufacturing, wholesale, distribution, finance, insurance, real estate, and professional service sectors rely on commercial aviation, air cargo, and general aviation to support their business activities. A survey completed as part of this FDOT study shows that as many as 920,600 jobs in Florida may benefit on a regular basis from aviation. The annual payroll associated with these jobs is estimated at \$38.6 billion. The annual productivity of businesses in Florida that use aviation is increased by an estimated \$94.5 billion.

Jobs Supported by Increased Productivity	920,600
Payroll Supported by Increased Productivity	\$38.6 billion
Annual Increased Productivity	\$94.5 billion

Total

Total Annual Economic Impacts of Commercial and General Aviation Airports in Florida

Preceding sections of this summary have documented the significant economic impact that aviation has in Florida. When all on-airport activities, tenants, and visitors are considered, commercial and general aviation airports in Florida are responsible for \$97.0 billion in annual

economic activity or output. This economic activity helps to support over one million jobs that have an annual payroll estimated at \$30.6 billion. The total annual economic impact for all commercial and general aviation airports in Florida follows:

	Jobs	Annual Payroll	Annual Economic Activity
General Aviation Airports	54,250	\$1.8 billion	\$6.0 billion
Commercial Airports	946,382	\$28.8 billion	\$91.0 billion
Total	1,000,632	\$30.6 billion	\$97.0 billion



Annual Economic Impact of *Commercial Airports*

Associated City	Airport Name	Total Employment	Total Payroll	Total Output
Daytona Beach	Daytona Beach International Airport	8,340	\$237,414,200	\$741,319,500
Fort Lauderdale	Ft. Lauderdale/Hollywood International Airport	134,638	\$3,470,123,700	\$10,637,293,900
Fort Myers	Southwest Florida International Airport	41,588	\$1,147,221,300	\$3,762,932,000
Gainesville	Gainesville Regional Airport	2,391	\$73,327,600	\$231,383,700
Jackstonville	Jacksonville International Airport	23,040	\$690,216,500	\$2,181,699,000
Key West	Key West International Airport	5,648	\$154,368,900	\$495,189,000
Melbourne	Melbourne International Airport	10,893	\$407,522,000	\$1,151,991,300
Miami	Miami International Airport	294,850	\$10,628,672,700	\$28,265,637,900
Naples	Naples Municipal Airport	2,372	\$79,075,200	\$273,138,900
Orlando	Orlando International Airport	247,848	\$6,967,465,000	\$26,440,028,000
Orlando	Orlando Sanford International Airport	18,025	\$ 522,145,900	\$2,530,024,000
Panama City	Northwest Florida Beaches International Airport *	1,007	\$33,710,000	\$116,800,100
Panama City	Panama City-Bay County International Airport	3,017	\$83,933,500	\$267,048,900
Pensacola	Pensacola Regional Airport	5,772	\$163,998,100	\$565,839,500
Sarasota	Sarasota/Bradenton International Airport	11,487	\$314,435,900	\$966,936,400
St. Petersburg/Clearwater	St. Petersburg-Clearwater International Airport	8,254	\$275,444,700	\$923,875,900
Tallahassee	Tallahassee Regional Airport	3,930	\$122,355,200	\$377,310,000
Tampa	Tampa International Airport	80,526	\$2,237,724,400	\$7,097,031,600
Valparaiso	Northwest Florida Regional Airport/Eglin AFB	5,252	\$140,624,800	\$466,076,700
West Palm Beach	Palm Beach International Airport	37,504	\$1,074,413,600	\$3,495,488,600
Commercial Service Airports Total		946,382	\$28,824,193,200	\$90,987,044,900

* Impacts supported by construction activity only



Annual Economic Impact of *General Aviation Airports*

Associated City	Airport Name	Total Employment	Total Payroll	Total Output
Apalachicola	Apalachicola Regional Airport	70	\$1,967,000	\$6,677,000
Apalachicola	St. George Island Airport	7	\$193,100	\$584,300
Apopka	Orlando Apopka Airport	232	\$7,569,300	\$18,355,700
Arcadia	Arcadia Municipal Airport	3	\$67,800	\$339,800
Archer	Flying Ten Airport	8	\$97,400	\$308,800
Avon Park	Avon Park Executive Airport	143	\$4,882,800	\$13,280,700
Bartow	Bartow Municipal Airport	295	\$10,499,500	\$34,763,400
Belle Glade	Belle Glade State Municipal Airport	51	\$1,781,500	\$7,017,100
Blountstown	Calhoun County Airport	4	\$127,700	\$460,800
Boca Raton	Boca Raton Airport	1,237	\$35,327,800	\$154,474,100
Bonifay	Tri-County Airport	34	\$901,200	\$3,070,400
Brooksville	Hernando County Airport	413	\$15,398,100	\$62,864,400
Carrabelle	Carrabelle-Thompson Airport	2	\$59,200	\$264,300
Cedar Key	George T. Lewis Airport	4	\$97,400	\$281,300
Clearwater	Clearwater Air Park	87	\$1,919,800	\$8,147,000
Clewiston	Airglades Airport	24	\$775,600	\$3,837,600
Crestview	Bob Sikes Airport	133	\$3,982,100	\$13,784,400
Cross City	Cross City Airport	22	\$547,400	\$1,230,800
Crystal River	Crystal River Airport	115	\$2,996,500	\$9,613,100
DeFuniak Springs	DeFuniak Springs Airport	85	\$2,915,100	\$9,191,400
Deland	Bob Lee Flight Strip	0	\$8,400	\$43,800
Deland	Deland Municipal-Sidney H. Taylor Field	2,595	\$66,180,300	\$217,157,900
Destin	Destin-Ft. Walton Beach Airport	386	\$10,533,600	\$40,008,200
Dunnellon	Dunnellon/Marion County & Park of Commerce Airport	27	\$1,003,100	\$4,053,500
Englewood	Buchan Airport	4	\$329,200	\$543,100
Everglades	Everglades Airpark	11	\$325,700	\$933,200
Fernandina Beach	Fernandina Beach Municipal Airport	357	\$10,136,400	\$31,246,400
Fort Lauderdale	Downtown Fort Lauderdale Heliport	3	\$93,600	\$387,300
Fort Lauderdale	Ft. Lauderdale Executive Airport	5,090	\$176,202,500	\$815,788,400
Fort Myers	Page Field	987	\$29,206,800	\$94,555,400
Fort Pierce	St. Lucie County International Airport	1,371	\$50,039,500	\$164,199,900
High Springs	Oak Tree Landing Airport	0	0	\$4,100
Hilliard	Hilliard Airpark	4	\$140,400	\$409,100
Hollywood	North Perry Airport	1,285	\$41,757,200	\$133,328,200
Homestead	Homestead General Aviation Airport	127	\$3,750,600	\$11,179,400
Immokalee	Immokalee Airport	56	\$1,914,900	\$7,723,900
Indiantown	Indiantown Airport	58	\$1,703,500	\$13,463,000
Inverness	Inverness Airport	25	\$759,900	\$2,649,900
Jacksonville	Cecil Field	5,437	\$217,937,900	\$531,333,200
Jacksonville	Craig Municipal Airport	1,191	\$40,295,200	\$131,309,300
Jacksonville	Herlong Airport	212	\$6,517,300	\$21,596,600
Keystone Heights	Keystone Airpark	45	\$1,386,400	\$4,848,100
La Belle	La Belle Municipal Airport	23	\$715,500	\$3,192,000
Lake City	Lake City Municipal Airport	1,497	\$58,524,600	\$165,668,900
Lake Wales	Chalet Suzanne Air Strip	55	\$1,552,300	\$6,434,100
Lake Wales	Lake Wales Municipal Airport	12	\$290,300	\$746,500
Lakeland	Lakeland Linder Regional Airport	1,279	\$44,234,900	\$162,531,700
Leesburg	Leesburg International Airport	509	\$17,607,900	\$63,729,000
Live Oak	Suwannee County Airport	26	\$948,900	\$3,737,300
Malabar	Valkaria Airport	73	\$2,193,600	\$6,220,200
Marathon	The Florida Keys Marathon Airport	387	\$12,132,800	\$37,773,600
Marco Island	Marco Island Airport	202	\$5,816,800	\$20,534,900
Marianna	Marianna Municipal Airport	64	\$2,144,500	\$9,450,600
Merritt Island	Merritt Island Airport	399	\$11,260,300	\$34,029,700

Annual Economic Impact of *General Aviation Airports* (Continued)

Associated City	Airport Name	Total Employment	Total Payroll	Total Output
Miami	Dade-Collier Training and Transition Airport	8	\$373,400	\$554,600
Miami	Kendall-Tamiami Executive Airport	2,018	\$67,443,400	\$204,742,700
Miami	Miami SPB	18	\$619,500	\$2,324,400
Miami	Opa-Locka Executive Airport	2,418	\$79,662,600	\$252,544,800
Milton	Peter Prince Field	39	\$1,111,400	\$4,570,600
Navarre	Ft. Walton Beach Airport	18	\$290,900	\$660,400
New Smyrna Beach	New Smyrna Beach Municipal Airport	940	\$27,050,200	\$94,898,900
Ocala	Ocala International-Jim Taylor Field	794	\$22,920,600	\$88,646,200
Okeechobee	Okeechobee County Airport	83	\$2,847,800	\$9,866,300
Orlando	Executive Airport	2,085	\$65,027,700	\$245,517,600
Orlando	Kissimmee Gateway Airport	1,132	\$33,543,600	\$109,062,000
Ormond Beach	Ormond Beach Municipal Airport	512	\$14,775,700	\$49,046,900
Pahokee	Palm Beach County Glades Airport	13	\$382,600	\$2,552,900
Palatka	Palatka Municipal-Lt. Kay Larkin Field	83	\$2,551,500	\$8,785,600
Palm Coast	Flagler County Airport	1,431	\$40,751,800	\$120,859,500
Panacea	Wakulla County Airport	1	\$29,700	\$113,900
Pensacola	Coastal Airport	10	\$214,100	\$465,300
Pensacola	Ferguson Airport	46	\$1,106,000	\$3,364,900
Perry	Perry-Foley Airport	17	\$443,600	\$1,860,900
Pierson	Pierson Municipal Airport	4	\$97,400	\$292,100
Plant City	Plant City Airport	93	\$2,593,600	\$8,216,700
Pompano Beach	Pompano Beach Airpark	565	\$17,063,500	\$53,761,300
Port St. Joe	Costin Airport	9	\$237,300	\$724,000
Punta Gorda	Charlotte County Airport	1,386	\$43,676,700	\$141,383,900
Punta Gorda	Shell Creek Airpark	24	\$692,900	\$2,523,200
Quincy	Quincy Municipal Airport	19	\$622,400	\$2,077,600
Sebastian	Sebastian Municipal Airport	177	\$5,387,300	\$15,125,000
Sebring	Sebring Regional Airport	312	\$9,285,300	\$39,924,600
St. Augustine	St. Augustine Airport	2,925	\$94,081,900	\$256,038,500
St. Petersburg	Albert Whitted Airport	345	\$10,627,200	\$36,674,900
Stuart	Witham Field	1,240	\$35,775,300	\$295,482,600
Tampa	Peter O. Knight Airport	338	\$9,272,800	\$28,779,100
Tampa	Tampa Executive Airport	454	\$12,843,200	\$41,154,900
Tampa	Tampa North Aero Park	32	\$713,700	\$2,068,200
Titusville	Arthur Dunn Air Park	40	\$1,350,800	\$4,030,500
Titusville	Space Coast Regional Airport	1,380	\$42,296,100	\$171,029,200
Umatilla	Umatilla Municipal Airport	13	\$387,100	\$1,314,900
Venice	Venice Municipal Airport	818	\$22,547,500	\$83,037,600
Vero Beach	New Hibiscus Airpark	11	\$264,600	\$1,895,700
Vero Beach	Vero Beach Municipal Airport	4,152	\$131,992,200	\$355,567,300
Wauchula	Wauchula Municipal Airport	22	\$531,400	\$1,598,600
West Palm Beach	North Palm Beach County General Aviation Airport	639	\$17,747,300	\$53,317,800
West Palm Beach	Palm Beach County Park Airport	296	\$9,852,100	\$32,165,700
Williston	Williston Municipal Airport	75	\$2,140,800	\$7,052,800
Winter Haven	Jack Browns SPB	15	\$408,800	\$2,085,900
Winter Haven	Winter Haven's Gilbert Airport	192	\$4,849,800	\$18,237,200
Zellwood	Bob White Field	18	\$578,600	\$862,500
Zephyrhills	Zephyrhills Municipal Airport	224	\$6,846,600	\$25,775,800
General Aviation Airports Total		54,250	\$1,755,661,400	\$5,971,993,300

ALL AIRPORTS TOTAL	Total Employment	1,000,632
	Total Payroll	\$30,579,854,600
	Total Output	\$96,959,038,200

Summary

The FDOT economic impact study concluded that aviation activities in Florida support almost 1.2 million jobs and that these jobs have an annual payroll of \$38.8 billion. The annual economic impact of aviation-related activities in Florida is estimated at \$114.7 billion.

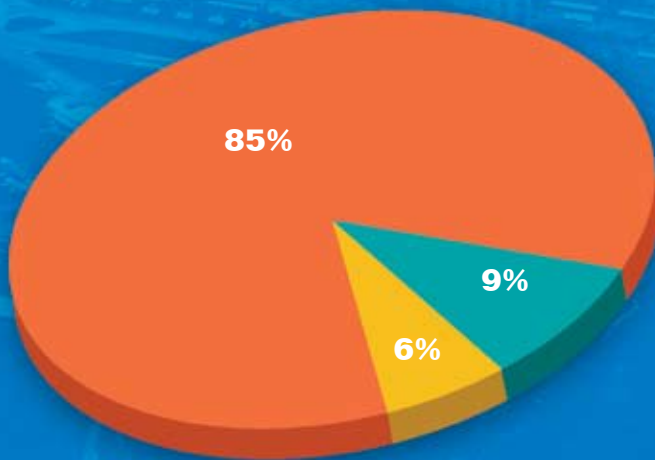
Of the \$114.7 billion that aviation contributes to Florida's economy annually, 85 percent of this impact is associated with the commercial and general aviation airports. The military airfields support nine percent of the total impact, while off-airport activities associated with the United States Postal Service, the FAA, aviation schools, and aviation-related businesses account for the remaining six percent of the total impact.

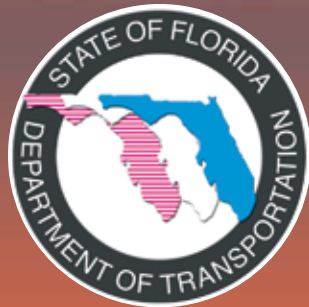
When this economic impact is considered along with the \$94.5 billion in increased productivity that non-aviation businesses realize from their use of aviation, it is clear that aviation and the airports and military airfields in Florida that support aviation-related activities have a significant positive impact on Florida's economy.

Now when you hear that same plane overhead, what you may also hear is the sound of billions of dollars that aviation is contributing to Florida's economy each year.

Distribution of Total Annual Economic Aviation Output in Florida

- AIRPORT SUPPORTED OUTPUT**
\$97.0 billion
- MILITARY AIRFIELD SUPPORTED OUTPUT**
\$10.8 billion
- OFF-AIRPORT AVIATION-SUPPORTED OUTPUT**
\$7.0 billion





**Florida Department of Transportation
Aviation Office
www.dot.state.fl.us/aviation**

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This report was prepared as an effort of the Continuing Florida Aviation System Planning Process under the sponsorship of the Florida Department of Transportation. A full technical report containing information on data collection, methodologies, and approaches for estimating statewide and airport specific economic impacts is available at www.dot.state.fl.us/aviation/economicimpact.shtm. More information on the Florida's Aviation Economic Impact Study can be obtained from the Aviation Office by calling 850-414-4500.

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