FLORIDA DEPARTMENT OF TRANSPORTATION

AEIS 2022

Florida Aviation Economic Impact Study

Technical Report

2022

FDOT AVIATION

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1. Executive Summary

Florida relies on an extensive, robust, and evolving airport system to support the state's economy and drive economic growth. Florida's diverse airport system includes over 120 public-use airports, as well as 11 military aviation installations, and can accommodate significant tourism, business, air cargo, and military activities. Florida's year-round sunshine encourages consistent operations throughout the year, supporting a strong employment base (airport administration and tenants) and driving investment through capital improvements. Florida's airports also support access for millions of out-of-state visitors each year who fly in to experience Florida's world-renowned tourism scene and in support of business activities. Combined with the immense air cargo volumes flowing through the airports and the military's aviation activities at several installations across the state, Florida's airport system supports the state's economy in a variety of ways.

The 2022 Florida Aviation Economic Impact Study (2022 AEIS) is a multi-faceted and interrelated analysis that measures the contribution of Florida's airport system to the state's economy. The 2022 AEIS started with an extensive data collection effort at nearly all of Florida's public-use airports, including gathering data on airport employees, tenant employees, capital expenditures, and out-of-state visitors. The data collection effort also included collecting visitor survey data in-person at commercial service airports *and* general aviation (GA) airports—the first statewide aviation economic impact study to do so.

The 2022 AEIS results are a snapshot of the estimated annual economic contribution of Florida's airport system to the state's economy in calendar year (CY) 2021. Key findings from this analysis are presented in **Figure 1-1**.

Figure 1-1: 2022 FL AEIS Results

On-Airport

Florida's public-use airports support the employment of over 14,000 people and host over 5,000 businesses that employ an additional 164,000 on airport property. This on-airport activity is estimated to generate 398,611 jobs and $77.2 billion in annual economic impact (output).

Visitor Spending

Over 122 million out-of-state visitors traveled through at least one of Florida's public-use airports, originating from all 50 states and over 500 international airports. Visitor spending is estimated to generate $94.4 billion in annual economic impact (output).

Off-Airport Air Cargo

Approximately 839,000 tons of air cargo, valued at $46 billion, passed through one of Florida's airports in 2021. Off-airport air cargo impacts contribute to over 700,000 jobs and generate approximately $150 billion in annual economic impact (output).

Military Aviation

Florida's military aviation installations support over 143,000 jobs and generate a combined $12.9 billion in annual economic impact (output).

Industry Reliance

As home to 22 Fortune 500 companies, the third largest workforce, and the second largest foreign trade zone network in the U.S., Florida's airports support over 11,300 jobs and contributes an estimated $1.9 billion in annual output tied to industry reliance in airports.

Total Economic Impact (Output)

Florida's On-Airport, Visitor Spending, Off-Airport Air Cargo, Military Aviation, and Industry Reliance impacts collectively contribute $336 billion in total annual economic impact (output).

2. Study Introduction

The Florida Department of Transportation (FDOT) Aviation Office (AO) commissioned the 2022 Statewide Aviation Economic Impact Study (2022 AEIS) to quantify and communicate the contributions of Florida's airports and aviation industry at local, regional (FDOT District), and statewide levels. The 2022 AEIS is an update to the previously completed 2019 AEIS and includes quantitative results as well as qualitative case studies and real-life stories that justify continued investment for the robust aviation system in the Sunshine State.

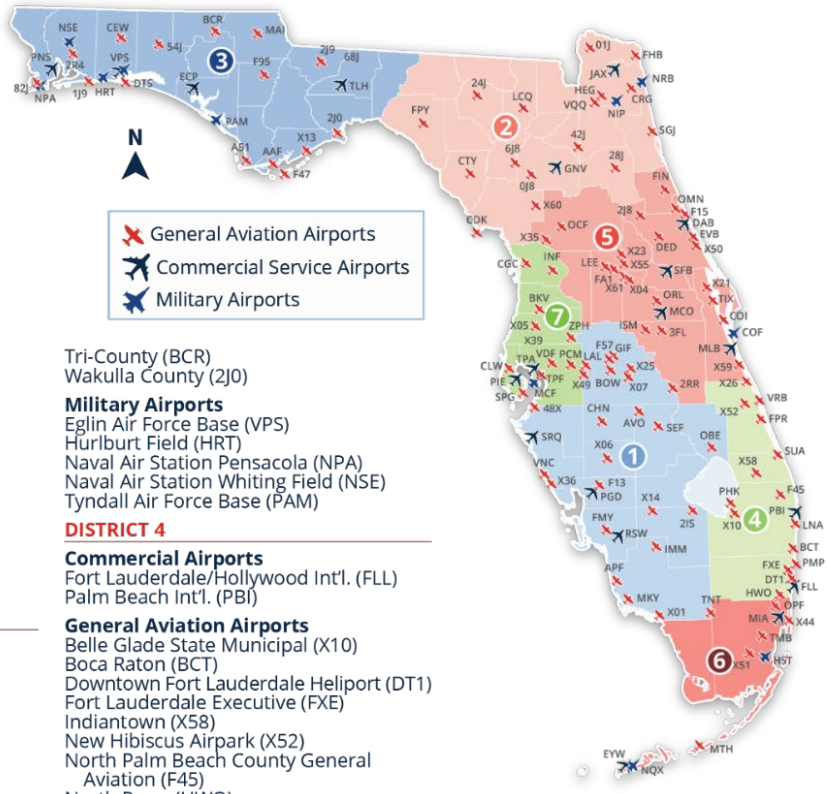
2.1. Background and Purpose

Florida's airports are vital to the daily lives of Floridians and visitors. The state's extensive aviation system supports Florida's diverse economy in many sectors, including tourism, aviation and aerospace, manufacturing, cargo and shipping, agriculture, and education. The state's airports also play a critical role in essential services, including emergency response, medical transportation, disaster response, law enforcement, and search and rescue. Therefore, whether it is from catching a commercial airline flight or benefiting from one of the many aviation-reliant services the state has to offer, residents and out-of-state visitors rely on its strong aviation system to stay connected to each other as well as to global markets. In addition to the civil airport system, Florida is also home to 11 aviation-based military installations. Florida's military installations serve a critical role in supporting the nation's national defense system and active military troops both at home and abroad, all while contributing greatly to the state's economy.

2.2. Study Airports

There are 130 public-use airports in Florida's system, however, two airports (Tallahassee Commercial [68J] and Tampa North Aero Park [X39]) declined to participate. One airport (Bob Lee Flight Strip [1J6]) was included in the study but officially closed in 2022. The remaining public-use airports make up the 2022 AEIS study airports which consists of 19 commercial service airports and 109 general aviation airports. An additional 11 military aviation facilities were also included and are illustrated in **Figure 2-1**. The 11 military aviation installations include five Naval Air Stations (NAS), four Air Force Bases (AFB), one Space Force Base (SFB), and one Air Reserve Base (ARB). It should be noted that Destin – Fort Walton Beach (VPS) is co-located on Eglin Air Force Base (VPS) through a joint-use agreement. The 2022 AEIS measured the economic impact of each facility separately.

Figure 2-1: 2022 AEIS Study Airports and FDOT Districts



DISTRICT 1

Commercial Airports
Punta Gorda (PGD)
Sarasota/Bradenton Int'l. (SRQ)
Southwest Florida Int'l. (RSW)

General Aviation Airports
Airglades (2IS)
Arcadia Municipal (X06)
Avon Park Executive (AVO)
Bartow Executive (BOW)
Buchan (X36)
Chalet Suzanne Air Strip (X25)
Everglades Airpark (X01)
Immokalee Regional (IMM)
Jack Browns Seaplane Base (F57)
La Belle Municipal (X14)
Lake Wales Municipal (X07)
Lakeland Linder Int'l. (LAL)
Manatee (48X)
Marco Island Executive (MKY)
Naples Municipal (APF)
Okeechobee County (OBE)
Page Field (FMY)
River Ranch Resort (2RR)
Sebring Regional (SEF)
Shell Creek Airpark (F13)
South Lakeland (X49)
Venice Municipal (VNC)
Wauchula Municipal (CHN)
Winter Haven Regional (GIF)

DISTRICT 2

Commercial Airports
Gainesville Regional (GNV)
Jacksonville Int'l. (JAX)

General Aviation Airports
Cecil (VQQ)
Cross City (CTY)
Fernandina Beach Municipal (FHB)
Flying Ten (0J8)
George T Lewis (CDK)
Herlong Recreational (HEG)
Hilliard Airpark (01J)
Jacksonville Executive At Craig (CRG)
Keystone Heights (42J)
Lake City Gateway (LCQ)
Northeast Florida Regional (SGJ)
Oak Tree Landing (6J8)
Palatka Municipal-Lt Kay Larkin Field (28J)
Perry-Foley (FPY)
Suwannee County (24J)
Williston Municipal (X60)

Military Airports
Naval Air Station Jacksonville (NIP)
Naval Air Station Mayport (NRB)

DISTRICT 3

Commercial Airports
Destin – Fort Walton Beach (VPS)
Northwest Florida Beaches Int'l. (ECP)
Pensacola Int'l. (PNS)
Tallahassee Int'l. (TLH)

General Aviation Airports
Apalachicola Regional-Cleve Randolph Field (AAF)
Bob Sikes (CEW)
Calhoun County (F95)
Carrabelle – Thompson (X13)
Costin (A51)
DeFuniak Springs (54J)
Destin Executive (DTS)
Fort Walton Beach (1J9)
Marianna Municipal (MAI)
Peter Prince Field (2R4)
Quincy Municipal (2J9)
Roscoe Field (82J)
St George Island (F47)
Tri-County (BCR)
Wakulla County (2J0)

Military Airports
Eglin Air Force Base (VPS)
Hurlburt Field (HRT)
Naval Air Station Pensacola (NPA)
Naval Air Station Whiting Field (NSE)
Tyndall Air Force Base (PAM)

DISTRICT 4

Commercial Airports
Fort Lauderdale/Hollywood Int'l. (FLL)
Palm Beach Int'l. (PBI)

General Aviation Airports
Belle Glade State Municipal (X10)
Boca Raton (BCT)
Downtown Fort Lauderdale Heliport (DT1)
Fort Lauderdale Executive (FXE)
Indiantown (X58)
New Hibiscus Airpark (X52)
North Palm Beach County General Aviation (F45)
North Perry (HWO)
Palm Beach County Glades (PHK)
Palm Beach County Park (LNA)
Pompano Beach Airpark (PMP)
Sebastian Municipal (X26)
Treasure Coast Int'l. (FPR)
Vero Beach Regional (VRB)
Witham Field (SUA)

DISTRICT 5

Commercial Airports
Daytona Beach Int'l. (DAB)
Melbourne Orlando Int'l. (MLB)
Orlando Int'l. (MCO)
Orlando Sanford Int'l. (SFB)

General Aviation Airports
Arthur Dunn Air Park (X21)
Bob White Field (X61)
Deland Municipal – Sidney H Taylor Field (DED)
Executive (ORL)
Flagler Executive (FIN)
Halifax River Sea Plane Base (F15)
Kissimmee Gateway (ISM)
Leesburg Int'l. (LEE)
Marion County (X35)
Massey Ranch Airpark (X50)
Merritt Island (COI)
Mid-Florida (X55)
New Smyrna Beach Municipal (EVB)
Ocala Int'l.-Jim Taylor Field (OCF)
Orlando Apopka (X04)
Ormond Beach Municipal (OMN)
Pierson Municipal (2J8)
Space Coast Regional (TIX)
St Cloud Seaplane Base (3FL)
Tavares Seaplane Base (FA1)
Umatilla Municipal (X23)
Valkaria (X59)

Military Airports
Patrick Space Force Base (COF)

DISTRICT 6

Commercial Airports
Key West Int'l. (EYW)
Miami Int'l. (MIA)

General Aviation Airports
Dade-Collier Training And Transition (TNT)
Miami Executive (TMB)
Miami Homestead General Aviation (X51)
Miami Seaplane Base (X44)
Miami-Opa Locka Executive (OPF)
The Florida Keys Marathon Int'l. (MTH)

Military Airports
Homestead Air Force Base (HST)
Naval Air Station Key West (NQX)

DISTRICT 7

Commercial Airports
St Pete-Clearwater Int'l. (PIE)
Tampa Int'l. (TPA)

General Aviation Airports
Albert Whitted (SPG)
Brooksville – Tampa Bay Regional (BKV)
Clearwater Air Park (CLW)
Crystal River – Captain Tom Davis Field (CGC)
Inverness (INF)
Peter O Knight (TPF)
Pilot Country (X05)
Plant City (PCM)
Tampa Executive (VDF)
Zephyrhills Municipal (ZPH)

Military Airports
MacDill Air Force Base (MCF)

Note: Bob Lee Flight Strip (1J6) closed in 2022 but is included in this analysis since the study's base year is 2021
Source: FDOT, 2022; Kimley-Horn, 2022

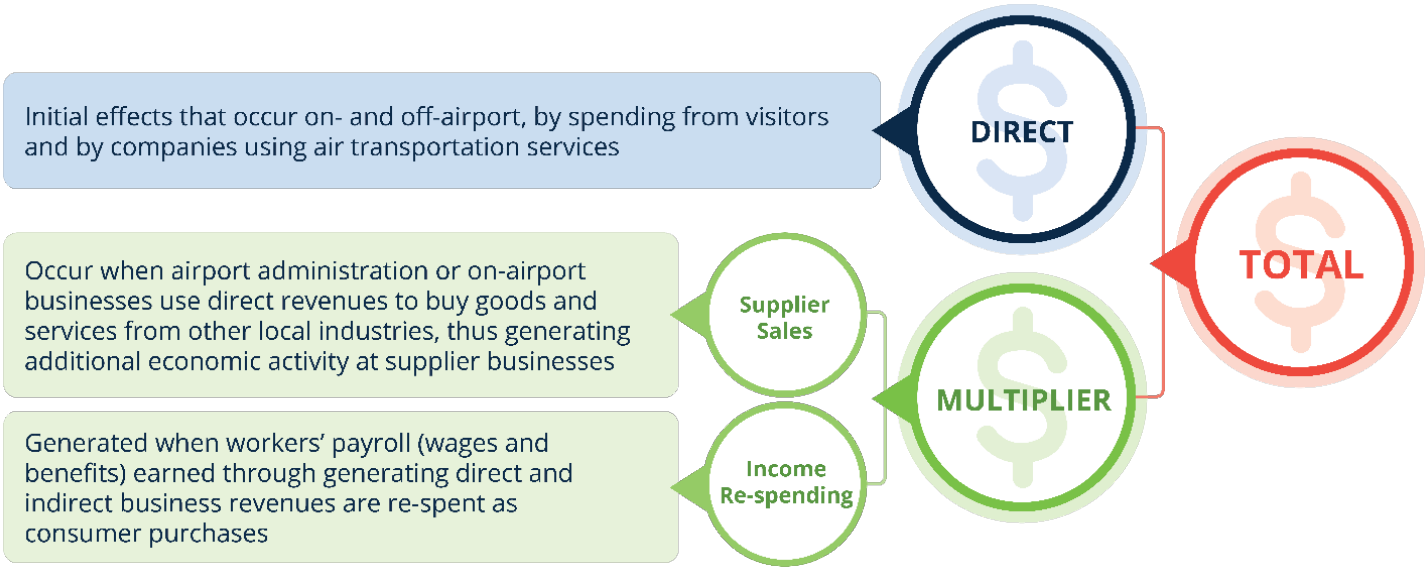
3. Economic Impact Definitions

The following section defines the various economic impact terms, measures, and categories used to quantify aviation impacts in Florida. Details regarding the economic impact modeling process and results are presented in a later section.

3.1. Economic Impact Terms

The three economic impact terms utilized in the study include Direct Impacts, Multiplier Impacts (also known as Supplier Sales and Income Re-spending), and Total Impacts. Simply stated, direct impacts are the impacts the project team collected from airports and associated users. Supplier sales and income re-spending are the multiplier impacts, sometimes referred to as "spin-off" impacts, that were quantified as part of the economic modeling process. Total impacts are the sum of direct and multiplier impacts. These terms are defined as illustrated in **Figure 3-1**.

Figure 3-1: Economic Impact Terms

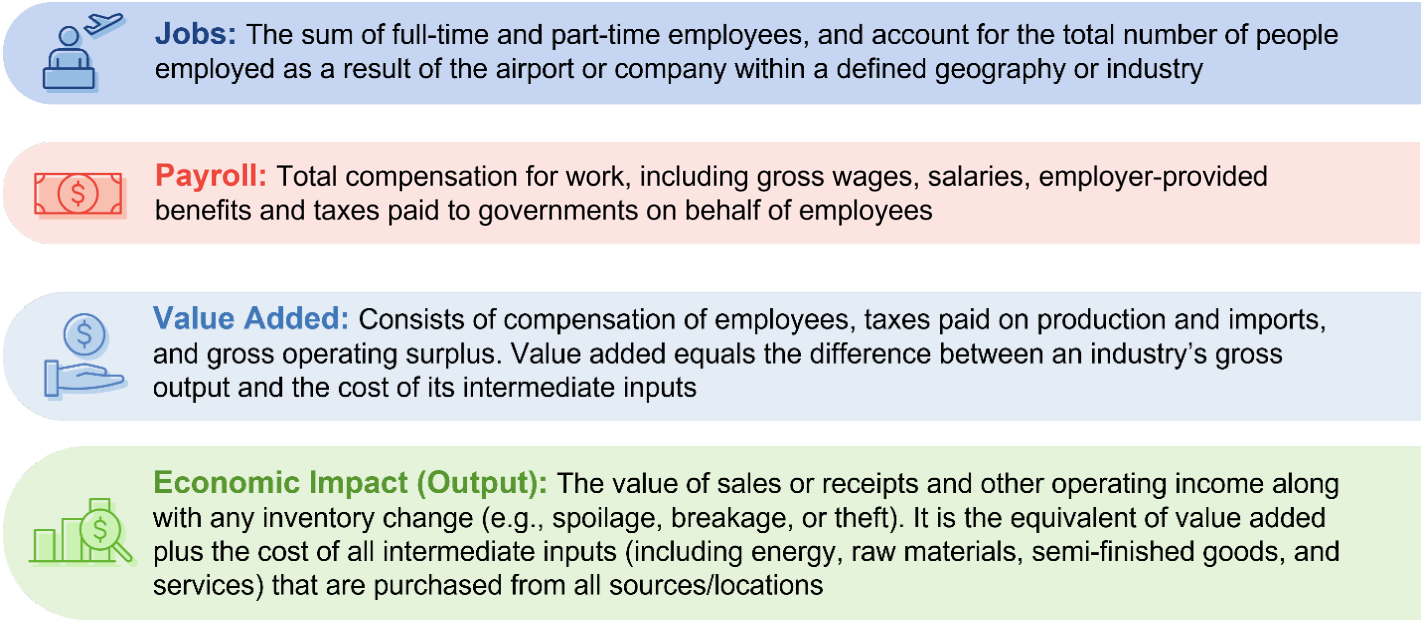


Source: EBP US, 2022; Kimley-Horn, 2022

3.2. Economic Impact Measures

As mentioned, total impacts are the sum of direct impacts and multiplier impacts. Total impacts, or the economic contribution of aviation to Florida's economy, are represented by four economic measures which include Jobs, Payroll, Value Added, and Economic Impact (Output) as described in **Figure 3-2**. It should be noted that economic impact measures are not additive.

Figure 3-2: Economic Impact Measures



Source: Kimley-Horn, 2022

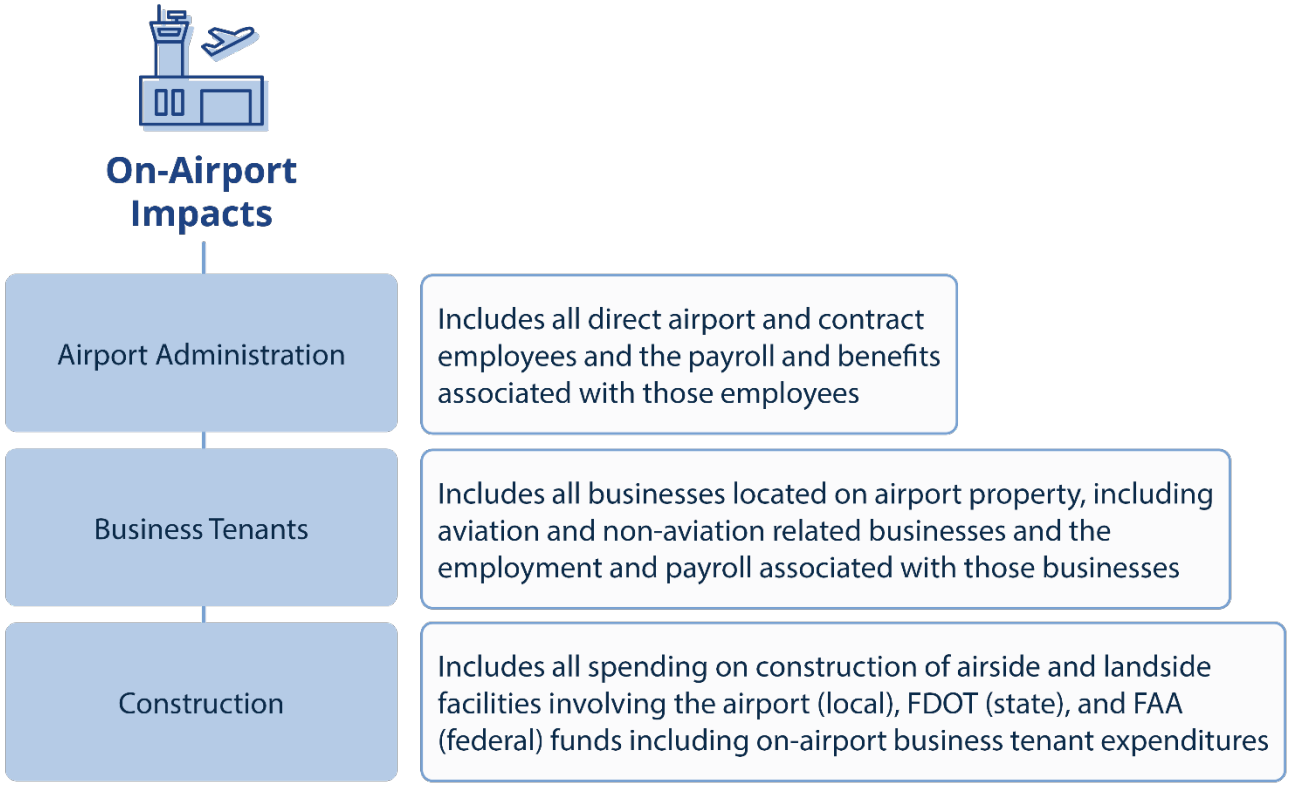
3.3. Economic Impact Categories

The 2022 AEIS includes five categories of aviation activity that provide an economic contribution to Florida's economy. These include On-Airport, Visitor Spending, Off-Airport Air Cargo, Military, and Industry Reliance Impacts.

3.3.1. On-Airport Impacts

Aviation's economic impact begins with the activities on airport property. Airport administration, on-airport business tenants, and airport capital expenses (construction) are the three drivers of on-airport economic activity.

Figure 3-3: Components of On-Airport Impacts



Source: Kimley-Horn, 2022

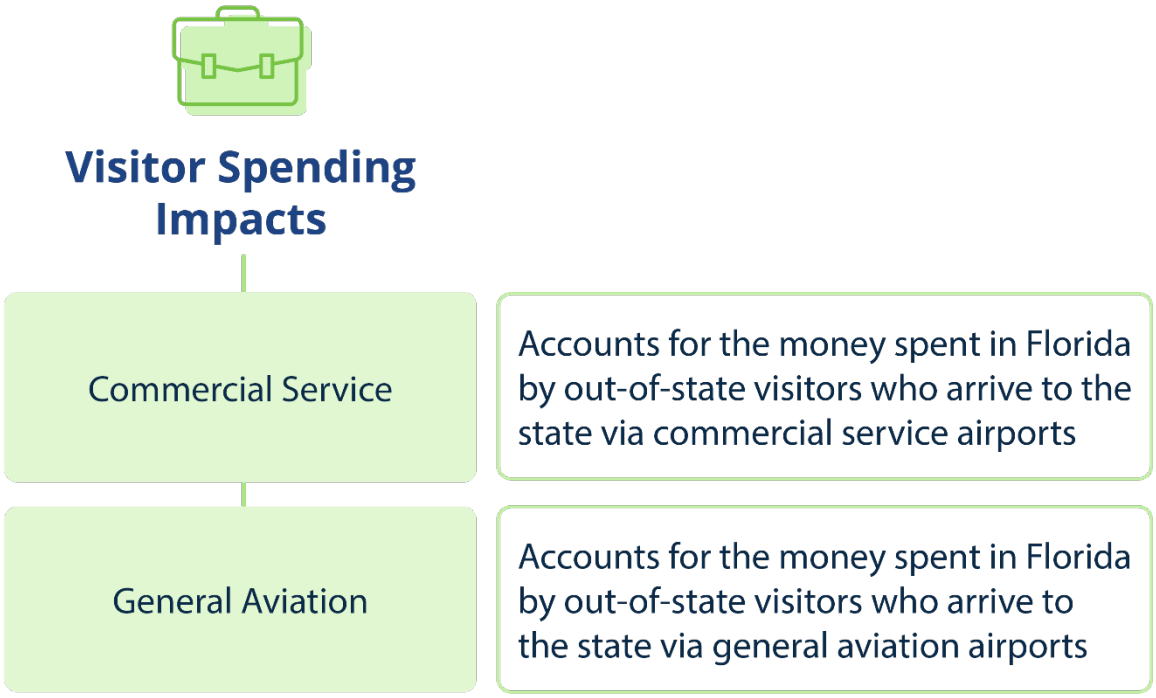
3.3.2. Visitor Spending Impacts

The Sunshine State's airports welcome millions of leisure and business visitors who are eager to experience the state's world-renowned tourist destinations and to engage in business. Of the 122 million total visitors travelling into and out of Florida in 2021, over 40 million arrived through one of Florida's commercial service airports and another 4.6 million arrived via one of the state's GA airports.[1,2] Visitors support the state's economy by spending on goods and services including lodging, food, and entertainment.

The 2022 AEIS measures visitor spending from visitors arriving from out-of-state via commercial service and GA airports to measure the influx and impact of new dollars in Florida. Spending from Florida residents flying from one of Florida's airports to another is not included in the analysis.

[1] Visit Florida. *Research*. 2021. https://www.visitflorida.org/resources/research/.
[2] Kimley-Horn, 2022.

Figure 3-4: Components of Visitor Spending Impacts



Source: Kimley-Horn, 2022

3.3.3. Off-Airport Air Cargo Impacts

Across Florida, airports deliver critical support to industries by enabling businesses to transport commodities and finished goods both from suppliers and to customers. Air cargo services provided by Florida's airports connect both long-distance domestic and international markets to companies in the state—positioning Florida as a global business leader. These services enable Florida-based companies to expand customer markets and acquire commodities used for production or to create opportunities for sales around the world.

The 2022 AEIS measures the impact of air cargo transported through Florida's airports and directly interacting with Florida's off-airport businesses. This category does not include traditional air cargo operations such as FedEx or UPS which are accounted for as an on-airport business tenant within the on-airport category.

3.3.4. Military Aviation Impacts

Aviation is involved with nearly all branches of the military and plays a crucial role in the United States' national defense system. With an ideal year-round climate and immense space for over-water operations, Florida has been an ideal state for the U.S. military to conduct military training operations, reconnaissance, flight testing, space launches, and other missions since the dawn of military aviation. There are 11 military aviation installations located all around Florida that provide centers of employment for thousands of service members and associated personnel.

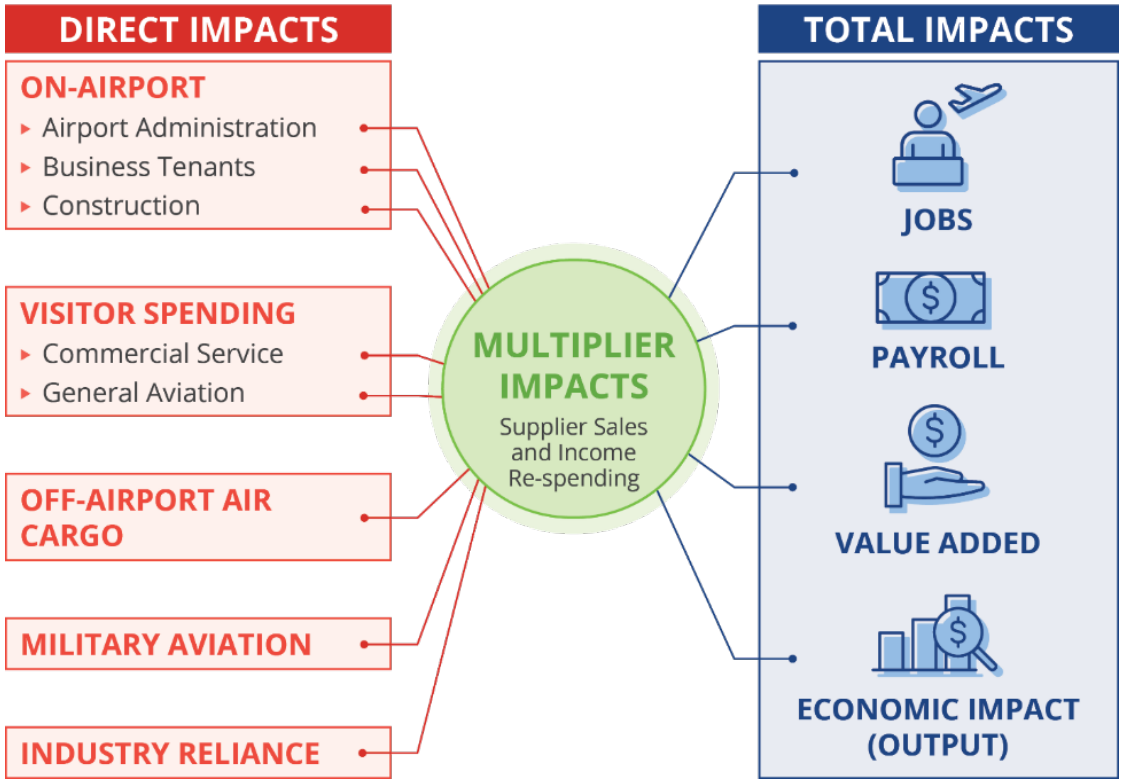
3.3.5. Industry Reliance Impacts

With a robust transportation system and employment base, as well as its advantageous geographic location, Florida provides a conducive environment for business activities. As a result, the state employs the third largest workforce in the US and 22 Fortune 500 companies call Florida home.[3] Florida's numerous industries rely on airports for transporting company personnel to conduct business. These industries may base their corporate aircraft at a Florida airport or frequently utilize airports for air travel access. These activities are indicators of industry reliance in Florida's airport system that may not be captured in other components of economic impact.

3.3.6. Summary of Economic Impact Categories

Figure 3-5 illustrates the relationship between all economic impact terms, measures, and categories included in the 2022 AEIS.

Figure 3-5: Economic Impact Overview



Source: Kimley-Horn, 2022

[3] Business Climate. *Enterprise Florida*. 2022.

4. Data Collection Process

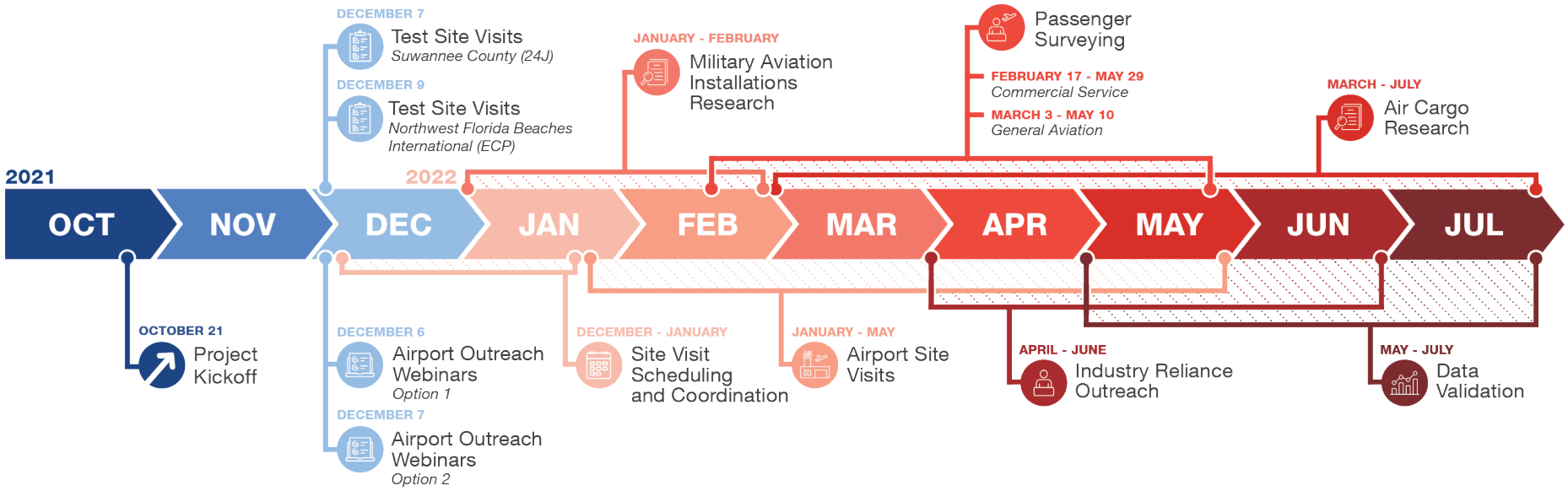
As mentioned, economic impacts attributed to Florida's airport system are measured across five impact categories: on-airport, visitor spending, off-airport air cargo, military aviation, and industry reliance. Calculating the impacts for each of these requires a comprehensive data collection effort to obtain accurate and defensible information.

The 2022 AEIS implemented several types of surveys and research methods to gather data points necessary for measuring economic impact. This includes five survey instruments (**Section 4.1**) and three primary methods of data collection for collecting all pertinent data points for the study (**Section 4.2**):

- In-person airport site visits
- Out-of-state visitor surveying
- Online research

The entire data collection process was completed between January 2022 and July 2022, as illustrated in **Figure 4-1**. The primary steps illustrated in the Data Collection Timeline are described in detail throughout this report.

Figure 4-1: Data Collection Timeline



Source: Kimley-Horn, 2022

4.1. Surveys

Five survey instruments were developed to collect information from airports and measure the economic impact of the 2022 AEIS study airports. These included the following:

- Airport Management Survey
- Airport Tenant Survey
- Commercial Air Passenger Survey
- GA Pilot & Passenger Survey
- Off-Airport Business Reliance Survey

These survey instruments were distributed through in-person airport site visits, in-person passenger surveying, and email outreach. The 2022 AEIS made a general assumption that the data provided by airports is accurate and reflects the condition and activities in CY 2021.

4.1.1. Airport Management Survey

The Airport Management Survey (AMS) serves as the primary mechanism and foundation for obtaining data for the study and relies on a two-pronged process. The first part of the process is to identify airport employment, payroll, operating expenses, and capital expenses (e.g., on-airport impacts). The second part of the process is to obtain contact information from specific users at each airport including on-airport tenants and off-airport-reliant businesses (e.g., on-airport and industry-reliant impacts) for subsequent surveying efforts and research. The AMS was completed in hard copy or fillable PDF during the project site visit (described in a later section). All requested data are for CY 2021. **Table 4-1** describes all the major data points collected as part of the AMS.

Table 4-1: AMS Data Points

Airport Background Information	Airport Manager's Contact Information
Airport Employment	Survey respondent contact information
	Full-time and part-time employment across several major categories (managerial/supervisory, clerical, building maintenance, airfield maintenance, line service, security, other [airport to specify])
	Contracted employment (individuals)
	Contracted firms (not including entities completing capital improvements)
Airport Expenditures	Total wages and benefits
	Annual capital improvement spending (CY 2018-2021)

Airport Background Information	Airport Manager's Contact Information
	Operating budget
	Volume of fuel sold (100LL and Jet-A)
Airport Activity	Estimate of out-of-state operations
	Types of GA activity
	Qualitative information concerning special attributes of the airport
	Qualitative information concerning major changes at the airport since 2017 (as presented in the 2019 AEIS)
On-Airport Business Tenants	Contact information
	Type of business
	Employment estimates (full- and part-time)
Industry Reliance	Contact information
	Type of business
	Employment estimates

Source: Kimley-Horn, 2022

4.1.2. Airport Tenant Survey

The 2022 AEIS defines an on-airport business tenant as an established business (aeronautical or non-aeronautical) that has a base of operations at a Florida airport and employs at least one person (e.g., not a volunteer organization). Examples of on-airport tenants include fixed-base operators (FBOs), airlines, aircraft manufacturing and repair companies, general manufacturing companies, hospitality-related businesses, and many more. The first step of deploying the Airport Tenant Survey was determining all on-airport tenants at an airport. As shown in **Table 4-1**, airport managers provided a list of on-airport tenants including contact information and estimates of on-airport business tenant employment. The Airport Tenant Survey was deployed to each on-airport business tenant to validate or revise the airport's estimate of their business's employment (CY 2021), as well as capture additional data related to payroll and other expenditures. On-airport tenants submitted survey responses in a hard copy or online format using SurveyMonkey accessible via a web link or quick response (QR) code. **Table 4-2** indicates the data points collected in the Airport Tenant Survey. It is important to note that the responses gathered from the Airport Tenant Survey were aggregated and summarized to the airport level.

Table 4-2: Airport Tenant Survey Data Points

Category	Data Point(s)
Background Information	Airport name
	Business/company name and contact information
	Business type
Employment	Number of full-time employees
	Number of part-time employees
Expenditures	Total payroll
	Total real estate taxes (if applicable)
	Total capital improvement spending
Other	Anecdotal information on additional economic benefits/services provided by the business

Source: Kimley-Horn, 2022

4.1.3. Commercial Air Passenger Survey

Commercial service airports welcome millions of visitors to the Sunshine State every year. Whether visiting for business, leisure, or for other personal reasons, out-of-state visitors spend money in Florida's economy on accommodations, ground transportation, retail purchases, and other hospitality-related industries. The Commercial Air Passenger Survey collected data to determine out-of-state visitor spending impacts specific to commercial air travel. Spending profiles were not collected of Florida residents traveling from one Florida airport to Florida airport or returning home from an out-of-state trip.

Commercial Air Passenger Surveys were administered through in-person surveying at select airports and all responses were collected anonymously. **Table 4-3** provides the data points collected as part of the Commercial Air Passenger Survey. Additional information on the commercial air passenger surveying process is detailed in **Section 4.1.8.1**.

Table 4-3: Commercial Passenger Survey Data Points

Category	Data Point(s)		
Background Information	Airport where the survey was completed		
	Origin city, state, or country (if applicable)		
Trip Purpose and Attributes	Primary purpose of trip (business, convention, cruise, other)		
	Major product/service provided by employed company and/or company being visited (business travel only)		
	Number of people in travelling party		
Accommodations	Number of nights spent in Florida		
	Type of overnight accommodations (e.g., hotel, Airbnb, private home)		
Estimated Spending Across Categories	Lodging Entertainment Rental car	Taxi/Uber/Lyft Other transport Food/beverage	Retail purchases
Secondary Travel Plans	Travel plans to Florida if host airport was not available		
	Alternate airport(s) if host airport was not available		

Source: Kimley-Horn, 2022

4.1.4. GA Pilot & Passenger Survey

Florida's GA airports also welcome thousands of out-of-state visitors who spend their money on accommodations, ground transportation, retail purchases, and other hospitality-related industries. The GA Pilot & Passenger Survey collected trip information and spending activity from out-of-state visitors travelling to or from Florida's airports on non-commercial aircraft. Data were not collected for Florida residents traveling from one Florida airport to another or returning home from an out-of-state trip.

Surveys were offered for completion in various formats, including hard copy, fillable PDF, SurveyMonkey, and in-person surveying. Refer to **Section 4.2.3.2** for more information about the survey methods. **Table 4-4** lists the data points collected in the GA Pilot & Passenger Survey. Note that the data points collected in the GA Pilot & Passenger Survey are the same as in the Commercial Air Passenger Survey.

Table 4-4: GA Pilot & Passenger Survey Data Points

Category	Data Point(s)		
Background Information	Airport where the survey was completed		
	Origin city, state, or country (if applicable)		
Trip Purpose and Attributes	Primary purpose of trip: business, convention, cruise, other personal (vacation, leisure travel, funerals), other (any travel that doesn't align with the other categories)		
	Major product/service provided by employed company and/or company being visited (business travel only)		
	Number of people in travelling party		
Accommodations	Number of nights spent in Florida		
	Type of overnight accommodations (e.g., hotel, Airbnb, private home)		
Estimated Spending Across Categories	Lodging Entertainment Rental car	Taxi/Uber/Lyft Other transport Food/beverage	Retail purchases
Secondary Travel Plans	Travel plans to Florida if host airport was not available		
	Alternate airport(s) if host airport was not available		

Source: Kimley-Horn, 2022

4.1.5. Off-Airport Business Reliance Survey

Florida airports support the operational needs of many industries conducting business in the state but may not be located on airport property. This can include businesses that base aircraft at Florida airports to ship products or transport personnel (e.g., Office Depot basing a company aircraft at a Florida airport to transport personnel to/from their headquarters). Alternatively, some off-airport businesses may frequently rely on air transportation operators to ship materials or transport personnel into and out of Florida (e.g., Publix transporting company executives using an air charter provider for a local meeting). Contact information on these businesses were identified as part of the AMS. SurveyMonkey links were then sent to the airport reliant businesses via email. **Table 4-5** lists the data points collected in the Off-Airport Business Reliance Survey.

Table 4-5: Off-Airport Business Reliance Survey Data Points

Category	Data Point(s)
Company Information	Name and contact information
	Primary product/service
Company Details	Full- and part-time employment (in Florida)
	Use of commercial service and GA airports
	Percentage of company business revenues that depend on use of Florida airports

Source: Kimley-Horn, 2022

The 2022 AEIS utilized survey results from off-airport reliant businesses which were completed in 2018. During the 2019 AEIS, Florida airport managers were asked to identify businesses relying on their airport. Using the contact information provided, a survey was circulated to these businesses to estimate the extent of business reliance on air transportation. One hundred twenty-two companies responded to the survey (approximately a 32 percent response rate). These companies comprise various industry profiles, including manufacturing, construction, distribution, hospitality, entertainment, health care, information, government, and services. This business reliance survey asked businesses to indicate the extent of their reliance on aviation as a percent range of their total business revenues or employment. **Section 4.2.6** provides more information about this survey and how the results were integrated into the 2022 AEIS.

4.2. Airport Outreach and Data Collection Methods

4.2.1. 101 Webinar

Full airport participation in the data collection effort was crucial for successfully measuring the total economic impact of the Florida airport system in the 2022 AEIS. To maximize participation, airports were invited to a series of informational introductory webinars, which explained the purpose of the 2022 AEIS and the participation requested of the airports through the site visits and surveys. Invitations were extended to all public-use airport managers, directors, and other representatives. There were two webinar options, hosted on Microsoft Teams:

- Option 1: Thursday, December 2, 2021
- Option 2: Monday, December 6, 2021

Email invitations were sent out to 257 airport representatives for both webinars.[4] Airport representatives were asked to attend the webinar that worked best for their schedule. Option 1 had 58 attendees and Option 2 had 41 attendees for 99 total attendees.

4.2.2. Site Visits

Site visits were conducted for 127 public-use airports including 126 completed in-person.[5] The primary goal of the site visit was completing the AMS and distributing Airport Tenant Surveys and GA Pilot/Passenger Surveys. The in-person format of the site visits also allowed for a more engaging discussion about each airport, providing opportunities for pointed follow-on questions for a comprehensive understanding of the airport.

4.2.2.1. Site Visit Scheduling and Coordination

The study team contacted all study airports from November 2021 to December 2021 to schedule in-person site visits and distribute the applicable surveys. This outreach included a phone call and email to the designated primary contact for the facility.[6] Emails included a PDF copy of the AMS and a pre-populated on-airport business tenant spreadsheet for the airport to review, edit, and complete prior to the site visit.[7,8] All site visits were initially scheduled for completion between January and May 2022.

Approximately one week before the scheduled site visit, the study team reached out to the designated airport representative to confirm the site visit day, time, and meeting location. As airports provided updated versions of the AMS and/or the on-airport business tenant spreadsheet, the study team reviewed these forms to be more informed about the airport's administration and activity. These updated forms were printed and referenced during the site visits.

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[4] Contact information was obtained from contacts listed in the Florida Aviation Database (FAD), current as of November 2021. If the airport indicated a new designated airport representative(s), contact information and further outreach was modified accordingly.

[5] In-person site visits were not completed at three airports: Tallahassee Commercial Airport (68J), Tampa North Aero Park (X39), and River Ranch Resort Airport (2RR). 68J and X39 declined to participate in the study. 2RR completed their AMS over the phone and is included in the study.

[6] Contact information for the primary contact was obtained from contacts listed in the FAD, current as of November 2021. If the airport indicated a new designated airport representative(s), contact information and further outreach was modified accordingly.

[7] Refer to **Section 6.1.1** for details on the AMS.

[8] As an extension of the AMS, a spreadsheet of all on-airport business tenants was generated for each airport that was pre-populated with tenant data captured in the 2019 AEIS. This includes the company name, contact information, and the number of employees at the on-site location (organized by full-time and part-time employment). This information was distributed to airports during scheduling and provided space for capturing additional tenant information as needed.

4.2.2.2. Test Site Visits

The validity of the 2022 AEIS depends on collecting accurate and consistent data, which are crucial for modeling airport economic impacts at a statewide level. Before the airport site visits began, all members of the site visit team attended and facilitated two airport meetings as "test" site visits. This included one GA airport and one commercial service airport:

- Suwannee County (24J) on Tuesday, December 7, 2021
- Northwest Florida Beaches International (ECP) on Thursday, December 9, 2021

The purpose of the test site visits was to standardize site visit and survey processes across all members of the study team. Surveys were completed as a group to ensure each member was collecting data consistently at each airport. Similarly, Airport Tenant Surveys were distributed to tenants as a group to ensure that the process was consistent as well. The test site visits also allowed the study team to receive feedback on the overall study process, AMS, Airport Tenant Survey, and site visit methodology from the participating airports, which was incorporated in time to be applicable to the remaining site visits.

Suwannee County Airport Terminal Building

Source: Kimley-Horn, 2022

Northwest Florida Beaches International Airport Terminal Building

Source: Kimley-Horn, 2022

4.2.2.3. Airport Site Visits

Airport site visits were largely segmented into five parts:

- General discussion related to purpose of the study and meeting agenda
- Review and completion of the AMS and on-airport business tenant spreadsheet
- Airport tour
- On-airport business tenant visits
- Distribution of GA Pilot & Passenger Surveys

Hard copies of the AMS were distributed to all attendees for review and validation. In some instances, airport representative(s) provided an updated version of this form. If the airport representative had an updated AMS, the study team member validated each completed response with the airport

representative to ensure the provided information was accurate and asked any remaining questions to complete the form. If the airport had not previously provided a complete or partially complete AMS, the study team member worked with the airport representative(s) to complete the entire form during the site visit. Any data points that could not be completed at the time of the meeting were flagged by the study team member for future follow-up with the airport. One hundred and twenty-eight airports completed an AMS as part of the study.

Once the AMS was complete, the study team transitioned to collecting information about the airport's business tenants. This was largely guided by a pre-populated spreadsheet of the on-airport business tenants captured from the 2019 AEIS. Data specific to on-airport business tenants was obtained in three distinct steps:

- Airport manager edits to the tenant lists from the 2019 AEIS
- Confirmation of business tenant employment estimates by way of door-to-door surveying
- Distribution of the Airport Tenant Survey for additional data beyond employment estimates

Tomlinson Aviation at Ormond Beach Municipal Airport (OMN)

Source: Kimley-Horn, 2022

The study team reviewed all tenant information with the designated airport representative to confirm or edit as appropriate. Data points included business name, type of business, contact name, and airport representative estimates of each business' full- and part-time employment. New businesses since 2019 were added as a separate line item and businesses that left the airport since 2019 were noted accordingly.

Following this effort, airport representative(s) facilitated a tour of the airport with the surveyor.[9] This enabled the study team to visit on-airport business tenants to validate the contact information and employment estimates provided by the airport. In some instances, airports had hundreds of business tenants which made it challenging for a member of the study team to visit each business. In these cases, members of the study team focused their efforts on visiting the largest business tenants and relied on airport administration staff to follow up with the remainder. Additionally, for commercial service airports, on-airport tenant lists were obtained in the form of security badge lists. On-airport businesses received

[9] In some cases, the airport representatives were unable to facilitate a tour of the airport and allowed the study team to complete the tour on their own in non-secured, publicly accessible areas.

an Airport Tenant Survey in hard copy from an in-person meeting with a surveyor, in fillable PDF distributed by airport staff, or via SurveyMonkey link via email from a member of the survey team.[10]

During the airport tour, the study team also took photos of the airport to be included in final project deliverables (e.g., individual airport brochures). The study team also distributed copies of the GA Pilot & Passenger Survey in areas with high visitor traffic (e.g., fixed-base operators and pilot lounges) to encourage any GA visitors to complete a short survey of their activity and spending habits during their stay in Florida.[11] Additionally, laminated cards with QR codes to the GA Pilot & Passenger Survey on SurveyMonkey were fixed to certain fuel stations to capture spending habits of GA pilots and passengers who may not have visited the FBO or GA terminal building.

Following completion of the site visit, the study team emailed the designated airport representative thanking them for their time and transmitted a copy of the updated AMS with information obtained from the visit. Any incomplete data points were requested in the follow-up email.

4.2.3. Visitor Surveying

Off-airport activities, including commercial service and GA visitor spending, are a component of direct economic impacts.

- Commercial service visitor spending accounts for the money spent in Florida by out-of-state visitors who arrive in the state via commercial service airports.
- GA visitor spending accounts for the money spent in Florida by out-of-state GA visitors who arrive in the state via a commercial service or GA airport.

The following subsections describe each visitor spending survey method.

4.2.3.1. Commercial Service Visitor Spending

Commercial service visitor spending was captured through in-person surveying of out-of-state visitors in the terminal buildings. Members of the study team conducted commercial service visitor spending in-person at select commercial service airports. At least one airport per FDOT District was surveyed. The study team members were positioned around airline check-in areas and corridors prior to security checkpoints. Out-of-state travelers departing from the airport were specifically targeted under the assumption that they had recently spent money and were leaving Florida. Study team members conducted the surveys on an iPad, which had a link to the survey on SurveyMonkey. Surveys were anonymous and typically took about four minutes to complete per traveling party. Study team members who speak Spanish were posted at Miami International Airport (MIA) and Fort Lauderdale/Hollywood International Airport (FLL) to capture surveys from Spanish-speaking visitors. Upon completion of the

[10] Refer to **Section 6.1.2** for details on the Airport Tenant Survey.
[11] Refer to **Section 6.1.4** for details on the GA Pilot & Passenger Survey.

surveying effort, the study team reviewed all results and removed any in-state visitors and incomplete responses to yield "validated visitors" that were included in the 2022 AEIS. **Table 4-6** shows the commercial service visitor surveying schedule completed between February and May 2022, in order of date completed.

Table 4-6: Commercial Service Visitor Surveying Schedule

Airport Name	FAA ID	FDOT District	Dates	Validated Visitors
St. Pete–Clearwater International Airport	PIE	7	2/17 – 2/19	299
Fort Lauderdale/Hollywood International Airport	FLL	4	2/25 – 3/1	1,004
Sarasota/Bradenton International Airport	SRQ	1	3/3 – 3/5	406
Daytona Beach International Airport	DAB	5	3/3 – 3/5	373
Northwest Florida Beaches International Airport	ECP	3	3/10 – 3/12	213
Jacksonville International Airport	JAX	2	3/17 – 3/19	483
Miami International Airport	MIA	6	3/23 – 3/27	863
Tampa International Airport	TPA	7	4/06 – 4/10	522
Tallahassee International Airport	TLH	3	4/12 – 4/14	55
Orlando International Airport	MCO	5	5/25 – 5/29	609

Source: Kimley-Horn, 2022

Visitor spending results from validated visitors (indicated in **Table 4-6**) are aggregated to the FDOT District level; therefore, Commercial Service Visitor Surveys were not collected at every commercial service airport in the state. **Section 5.1.2.4** details how visitor spending results from the surveys were aggregated and used to calculate total visitor spending for all commercial service airports.

4.2.3.2. GA Visitor Spending

The 2022 AEIS included the first ever in-person GA Pilot & Passenger Survey effort. Traditionally, statewide aviation economic impact studies collect this data passively, by leaving surveys in GA terminals and FBOs. A passive data collection effort for GA visitor surveys was also deployed for the 2022 AEIS in addition to the in-person effort. Survey teams were sent to four GA airports to collect data in person. These airports were selected for a variety of reasons:

- Diverse geographic coverage
- Accepted invitation for study team to complete in-person passenger surveying
- Large GA traffic and populous catchment areas

Similar to the in-person surveying at commercial service airports, each surveyor was equipped with an iPad to allow the study team to log anonymous responses in real-time. Upon completion of the surveying effort, the study team reviewed all results and removed any in-state visitors and incomplete responses to yield visitor spending information for "validated visitors" included in the 2022 AEIS. **Table 4-7** shows the GA visitor surveying schedule that occurred between March and May 2022, in order of date completed.

Table 4-7: GA Visitor Surveying Schedule

Airport Name	FAA ID	FDOT District	Dates	Validated Visitors
Naples Municipal Airport	APF	1	3/3 – 3/6	181
Boca Raton Airport	BCT	4	3/17 – 3/19	74
Lake City Gateway Airport	LCQ	2	4/1 – 4/4	13
Lakeland Linder International Airport[12]	LAL	1	4/5 – 5/10	617

Source: Kimley-Horn, 2022

As mentioned, the study team also used the site visits to distribute hard copies of the GA Pilot & Passenger Surveys across 127 airports. Copies of the survey were stationed in areas with a large volume of GA visitor traffic (e.g., FBOs and terminals). Additionally, posters and laminated cards were posted around the airport encouraging GA users to scan a QR code and complete the same survey via SurveyMonkey.

For information on how the number of GA visitors and spending per visitor were calculated and applied for each airport, refer to **Section 5.1.2.4**.

[12] Passenger surveying at LAL coincided with the Sun 'n Fun Aerospace Expo, a week-long aerospace convention attracting an estimated 225,000 visitors to the airport. Only visitors arriving from out-of-state were surveyed.

4.2.4. Off-Airport Air Cargo Impacts

Several Florida industries located off-airport property rely on cargo shipped via Florida's airports. The 2022 AEIS measures this activity as the direct reliance of Florida's off-airport businesses on Florida's airports and the larger contributions of this air cargo activity to the statewide economy. Measuring the economic impact of air cargo required the use of two data repositories and one data analysis product listed in **Table 4-8**. It is important to note that one data source (Freight Analysis Framework [FAF]) was last updated in 2020 and thus does not reflect data in the study's baseline data year of 2021.

Table 4-8: Air Cargo Data Sources/Tools

Data Source	Responsible Party	Purpose
WISERTrade	U.S. Census Bureau's Foreign Trade Division	Reports volume and value of international air cargo flowing through Florida airports
Freight Analysis Framework (FAF)[13]	U.S. Bureau of Transportation Statistics (BTS) and the Federal Highway Administration (FHWA)	Reports and maps domestic air cargo movement
vFreight™	EBP US	Calculates the economic impacts of domestic and international freight on county, regional, and state economies

Source: Kimley-Horn, 2022

These results were aggregated and extrapolated across Florida to setup the data for the economic modeling process. For a full overview of the economic impact of Florida's off-airport air cargo dependance, refer to **Appendix C**.

4.2.5. Military Impacts

The economic impact of Florida's military aviation installations was determined using online resources and direct coordination with each base's respective Office of Public Affairs. Many military facilities included in the 2022 AEIS publish their own economic impact statements which were incorporated as appropriate into the 2022 AEIS. A total of 11 military aviation installations were incorporated into the 2022 AEIS.

For a full overview of military impacts and the data sources referenced, refer to **Appendix D**.

4.2.6. Industry Reliance Impacts

The industry reliance of Florida's airports was measured using the results gathered from the Off-Airport Business Reliance Survey (described in **Section 4.1.5**). During the site visits, airport representative(s) identified off-airport businesses that base aircraft at Florida airports or frequently use at least one Florida

[13] The FAF was last updated in 2020.

airport. Contact information was recorded in the Industry Reliance category of the AMS (listed in **Table 4-1)**. The study team emailed the identified businesses and distributed the Off-Airport Business Reliance Survey that was developed in SurveyMonkey.

Results were limited to the survey effort and then extrapolated to approximate industry-wide reliance in the Florida economy. In addition, the survey results were adjusted for this study by:

1. Removing all business reliance associated with air cargo movements to avoid double counting with the cargo analysis conducted for this study; and
2. Inflating dollars to 2021 value.

These results were aggregated and extrapolated across Florida to setup the data for the economic modeling process described in **Section 5.1**.

4.3. Data Validation and Results

All data from completed survey forms were exported into a consolidated Microsoft Excel workbook, by survey type. All data points were forensically reviewed for accuracy and consistency. Suspect, missing, or questionable inputs were flagged for follow-up with airport staff and data were cleansed for use in subsequent analysis. The following reflects modifications made to the inputs:

- Removal of errant characters from entries (e.g., punctuation, leading and trailing spaces)
- Format of all data points for consistency (e.g., dollar values formatted as $1,000,000 vs. $1M)
- Missing data points and/or outlier data such as exceedingly large CIP expenditures were flagged for follow-up with airports

Before initiating the economic impact modeling process, all airports were given a final opportunity to validate the key data points collected in the AMS, including employment, capital expenditures, and on-airport business tenant data. This information was transmitted to the airports via email on June 13, 2022. Airports were given two weeks to respond to the email with any updates to the transmitted data and were advised that if they did not respond, data were considered final. Any updates provided by the airport are reflected in the data contained within the study. All data points were finalized on July 11, 2022 and were used to calculate the total economic impact of the Florida airport system.

4.4. Summary

The extensive data collection effort completed for the 2022 AEIS provided all the pertinent data for documenting an updated snapshot of the current use of and reliance on the Florida airport system since the last completed statewide study in 2019. Selection and implementation of each data collection approach was guided by previous completed studies, the data being collected, and the five surveying instruments utilized. This complex approach allowed the study team to gather the most accurate and

comprehensive set of data necessary to measure the economic impact of Florida's airport system, as detailed in **Section 6. Economic Impact Findings**.

5. Methodology

5.1. Economic Modeling Process

This section documents the methods used in the economic modeling process. It clarifies the difference between the statewide and District-level economic impact analysis, reviews the methods used, and explains the multiplier impact concept and how the multipliers were derived.

The 2022 AEIS used IMPLAN's economic model system to calculate Florida's aviation contributions to the local, FDOT District, and statewide economies. IMPLAN is the most widely used input-output model in the United States, with data derived from the Bureau of Economic Analysis (BEA), Bureau of Labor Statistics (BLS), U.S. Census, and the U.S. Department of Commerce. The IMPLAN model reflects the current economic measures (e.g., jobs, payroll, value added, and business revenue) for up to 546 industry classifications per county, which roughly correspond to two- to five-digit groups in the North American Industry Classification System (NAICS).[14]

5.1.1. Florida Districts

There are seven FDOT Districts in the state that are important to consider due to each District's distinct industry mixes, wage rates, economic impacts (outputs), and sales per employee. The regional perspective also accounts for variation in productivity factors, cost-of-living, and wages in regions that vary in geographic and economic characteristics (e.g., impacts in District 3 [western Panhandle] vs. District 6 [south Florida]). The counties in each FDOT region are listed in **Table 5-1.**

[14] IMPLAN uses built-in data sets to quantify economic impact and are updated regularly. At the time of this report, 2020 data was available, but 2019 data were used. Due to unprecedented and irregular economic disruptions during 2020, it was determined that 2019 was more representative of the Florida economy in 2021.

Table 5-1: The Seven FDOT Districts and Associated Counties

FDOT District	Associated Counties
District 1	Charlotte, Collier, De Soto, Glades, Hardee, Hendry, Highlands, Lee, Manatee, Okeechobee, Polk, Sarasota
District 2	Alachua, Baker, Bradford, Clay, Columbia, Dixie, Duval, Gilchrist, Hamilton, Lafayette, Levy, Madison, Nassau, Putnam, St Johns, Suwannee, Taylor, Union
District 3	Bay, Calhoun, Escambia, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson, Leon, Liberty, Okaloosa, Santa Rosa, Wakulla, Walton, Washington
District 4	Broward, Indian River, Martin, Palm Beach, St Lucie
District 5	Brevard, Flagler, Lake, Marion, Orange, Osceola, Seminole, Sumter, Volusia
District 6	Miami-Dade, Monroe
District 7	Citrus, Hernando, Hillsborough, Pasco, Pinellas

Source: FDOT, 2022

5.1.2. Modeling Process for On-Airport and Visitor Spending Impacts

The first step in developing an economic analysis is establishing direct impacts for on-airport and visitor spending impacts. Direct data for each of these components were based on survey results from airport managers, on-airport business tenants, and out-of-state visitors. In some cases, IMPLAN was used to fill in direct impact gaps. For example, some on-airport business tenants returned partially complete surveys that left the payroll question blank. In this instance, county-level industry data assembled by IMPLAN were used to calculate direct payroll, value added, and business sales which are assumptions based on the on-airport business' associated industry identified in the survey.

After direct impacts were calculated and vetted by FDOT, IMPLAN was applied to estimate multiplier impacts, including supplier purchases made by directly affected businesses and public entities (indirect impacts) and re-spending of workers' income earned from direct and supplier sales (induced impacts).

5.1.2.1. Data Requirements and Model Assumptions for On-Airport Activity

On-airport impacts are the sum of economic activity generated by airport administration, airport tenants, and construction expenditures. Descriptions of these on-airport activity groups, along with the assumptions needed to arrive at direct impact estimates, are discussed below.

Airport Administration. Airport administration includes airport managers and other staff required to operate airports, including business operations (which may be in the airport or in a city or county office, depending on who serves as the airport sponsor), grounds care (including lawn care and obstruction removal), routine building maintenance, contractors who receive IRS Form 1099-MISC from the airport, and other jobs necessary to manage and run the airport. Data received for airport administration often included jobs, payroll, and annual budgets of airports, as well as the value of contracts to outside firms that provide and/or support administrative functions. On occasion, when only jobs were provided,

regional averages (county-level data, primarily from the U.S. BEA assembled by IMPLAN) were used when needed to estimate payroll and business revenue.[15]

Airport Tenants. For all airports, employment for business tenants was based on survey responses directly from tenants, estimates from airport managers, and/or secondary data sources, which include establishment databases such as Data Axle Reference Solutions (formerly Reference USA).[16] Each tenant was assigned an industry classification based on their survey responses, description of business activity noted by airport management or other sources, web-based research, and/or coordination with FDOT staff. Before modeling tenant impacts, the comprehensive list of airport tenants and employment were verified with each airport manager.

Each business tenant per airport was identified by industry to establish the correct levels of direct economic activity (jobs, payroll, value added, and economic impact (output)) to estimate supplier sales and income re-spending associated with each business. Direct values for payroll, value added, and business revenue were calculated for more than 3,300 tenants in over 375 tenant-reported sectors using IMPLAN. **Table 8-29** lists all sectors represented by airport tenants.

Construction. Capital expenditures or construction spending, as reported by airport managers, were averaged across the previous four years (2018-2021) after all data were converted to 2021 dollars. Averaging smooths out any anomalies (schedule, weather, financing, grant funding, or others) in capital expenditures over time which may be very high for some years and lower in others. Construction data only accounted for expenditures, which were treated as direct business revenue (these are revenues that are received by companies that perform the construction work).

5.1.2.2. Filling in Data Gaps with IMPLAN to Estimate Direct Impacts

Much of the direct data obtained from surveys, completed by either airport managers or tenants and businesses, included only one of three measures requested: jobs, payroll, or business revenue. A handful of survey respondents provided two of the three measures, while few provided all three direct measures. The economic relationships anchored in the District economies are used to fill-in the direct data when values were not provided from the data collection efforts. **Figure 5-1** provides an overview of how direct data received by surveys or other sources were supplemented by District-level industry data reported by IMPLAN.

[15] BEA provides estimates of GDP, personal income, and employment by state, metropolitan area, and county through its Regional Economic Information System (REIS). These data are used by IMPLAN, LLC and other input/output vendors to develop county-level industry tables.

[16] https://www.data-axle.com/what-we-do/reference-solutions/

Figure 5-1: Estimating Missing Direct Impacts with IMPLAN

Data Provided	Jobs	Payroll	Business Revenue
Jobs	●	X	X
Jobs & Payroll	●	●	X
Business Revenue	X	X	●
Jobs, Payroll & Business Revenue	●	●	●

● Direct data provided through surveys/other data sources
X Direct data inferred by district level ratios provided through IMPLAN

Source: EBP, 2022

The specific adjustments required to fill in the missing direct impacts for airports and visitor spending are described as follows.

5.1.2.2.1. Jobs Provided, Payroll Data Not Provided

Industry level data per region assembled by IMPLAN were applied to calculate missing payroll and business revenue when only employment data was reported through tenant or airport manager surveys. In these cases, payroll and business revenue were derived from the number of reported jobs based on the ratios of jobs-to-total labor compensation and jobs-to-business revenue by industry in each region.

5.1.2.2.2. Job and Payroll Data Provided

Payroll information reported by tenant or airport manager surveys were used for the direct payroll impacts. If a business provided both jobs and payroll, the industry-specific default regional ratio of payroll-to-business revenue from IMPLAN was applied to the payroll data to estimate business revenue.

5.1.2.2.3. Business Revenue Data Provided, Payroll and Jobs Not Provided

For construction expenditures and visitor spending, the only data collected was spending (which equates to total business revenue), requiring a process to translate this into jobs and payroll.

Airport managers were asked to provide construction spending for four years such that an average of construction spending would be represented in this study. Visitors were asked how much money they spent while in Florida either when using commercial airline service and/or GA. In both these cases, based on total spending, regional economic data assembled by IMPLAN were used to calculate jobs and payroll that are supported by this business revenue.

5.1.2.2.4. Approach to Sectors that Contain Multiple Industries

Some on-airport sectors (for example construction and aerospace) and visitor spending sectors are aggregations of multiple detailed industries. This is done to make the surveys easier to complete by tenants, airport managers, and visitors. Jobs provided in the survey responses were allocated to each

industry within an aggregated industry using the percentages of regional jobs (e.g., 50 percent, 30 percent, and 20 percent). An example of this is an airport tenant reporting they belong to the aerospace industry, which for modeling purposes includes three industries of the IMPLAN industry classifications: aircraft manufacturing, aircraft engine and engine parts manufacturing, and other aircraft parts and auxiliary equipment manufacturing. However, specific industries were used when reported or when they could be inferred from the description. Similarly, as subsequently described, visitor spending for lodging, retail expenditures, entertainment, local transportation, and dining are each made up of multiple industries, as it is not realistic to ask visitors to account for each type of retail purchase or to itemize their entertainment spending. District-specific payroll-to-job ratios for individual industries from the IMPLAN database were then applied to these jobs to calculate the payroll for each individual industry. After these calculations were completed, the aggregated industry was then re-totaled to present jobs, payroll, and economic impact (output).

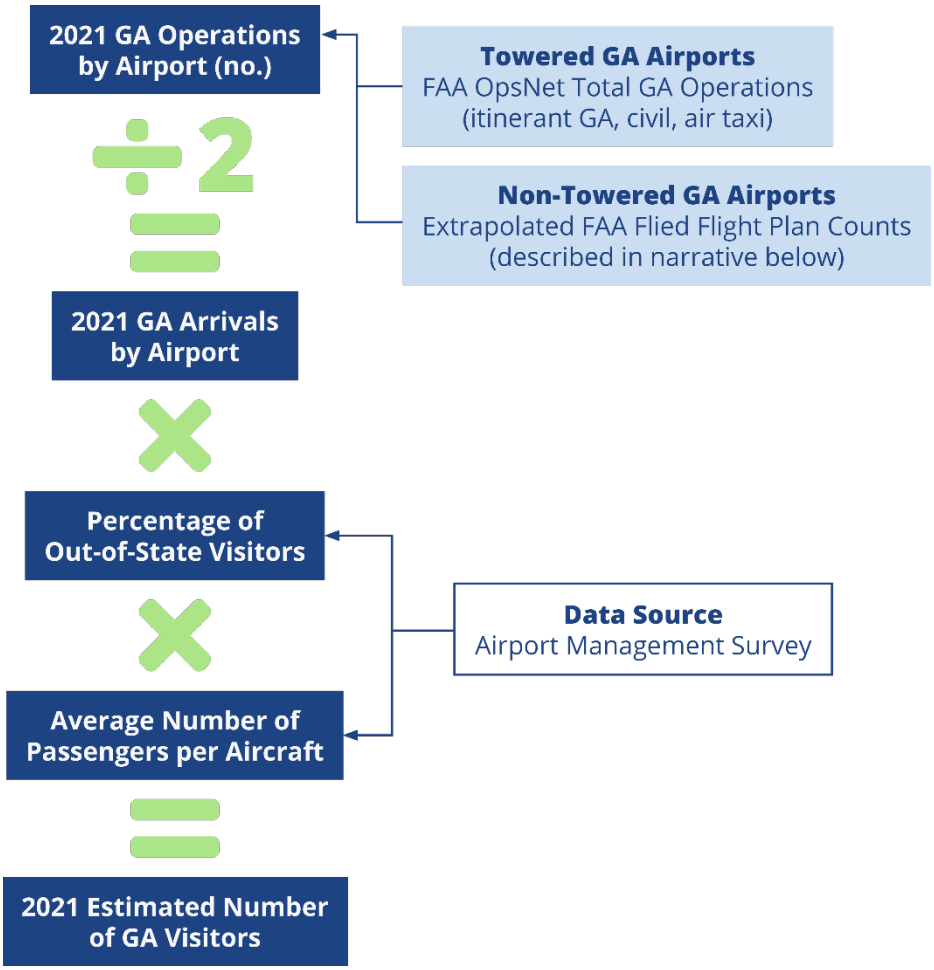
5.1.2.3. Calculating Value Added with IMPLAN

Value added was not requested nor reported by survey respondents given the information is not readily available and is complex to estimate. This measure is more commonly used in economic impact analysis (and other macroeconomic analysis) than in day-to-day business operations. Direct impacts in terms of value added were calculated based on business revenue and/or payroll using the IMPLAN model.

5.1.2.4. Data Requirements and Model Assumptions for Visitor Spending

Direct impacts from visitors are generated by travelers who arrive in Florida from out of state via commercial airlines and private or business GA aircraft and spend money in the state. The first step in calculating visitor spending is to estimate the total number of visitors. For commercial service airports, visitor data was purchased from Airline Data, Inc. (data is summarized in **Table 6-7** and **Table 6-9**). The company uses FAA data assembled by the U.S. BTS to determine the number of visitors from out of state to Florida by airport in 2021. The number of GA visitors were estimated using the formula illustrated in **Figure 5-2.**

Figure 5-2: 2021 GA Visitor Count Methodology

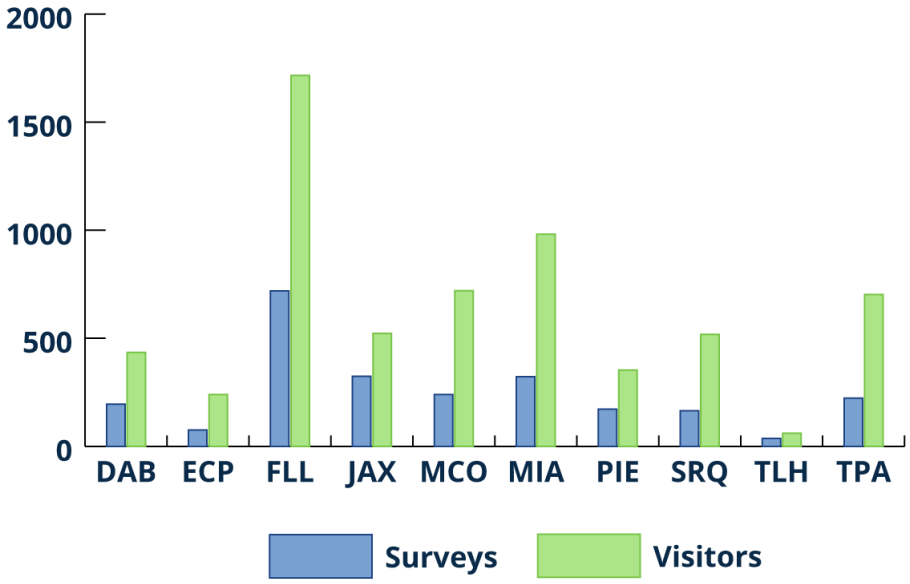


Source: Kimley-Horn, 2022

Commercial Visitor Spending

To estimate total commercial visitor spending per airport, Florida commercial passenger spending surveys were administered at 10 commercial airports and completed by more than 6,250 visitors for this study. **Figure 5-3** shows the levels of survey responses by airport, which range from more than 30 to almost 720 completed surveys collected representing 60 to approximately 1,700 visitors based on the airport.

Figure 5-3: Commercial Visitor Spending Surveys and Passengers

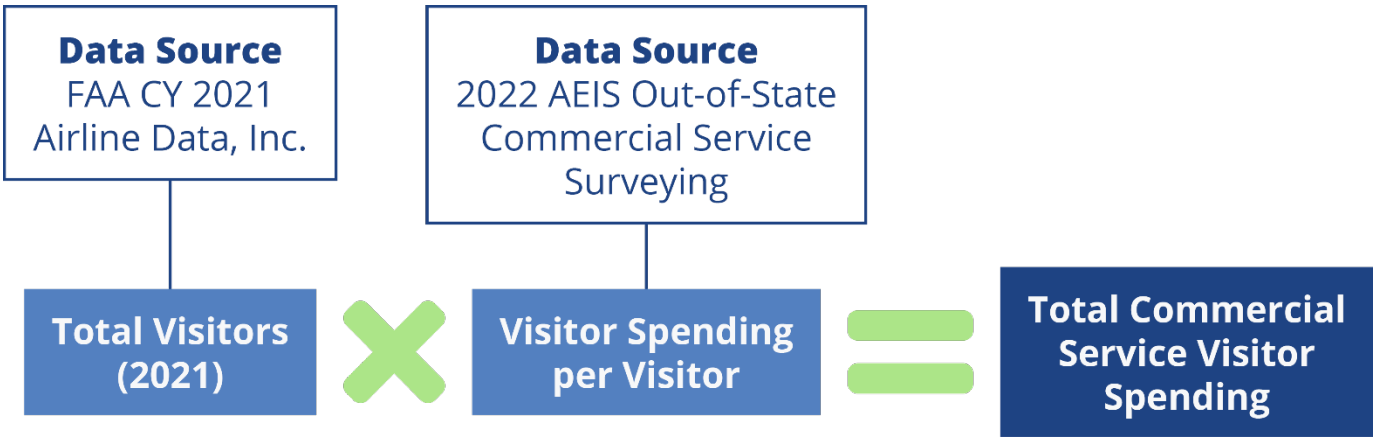


Source: Florida Commercial Visitor Spending Survey

For each of the 19 commercial airports in the state, the following methodology was applied:

- Airports with a valid sample of surveys (representing at least a 90 percent confidence rate) were assigned the visitor spending per visitor for that airport. This was applicable for eight airports: Sarasota/Bradenton International Airport (SRQ), Jacksonville International Airport (JAX), Fort Lauderdale International Airport (FLL), Daytona Beach International Airport (DAB), Orlando International Airport (MCO), Miami International Airport (MIA), St Pete-Clearwater International Airport (PIE), and Tampa International Airport (TPA).
- Airports that were surveyed but the effort did not result in a valid sample were combined with other airports in their respective District. This was applied to two airports: Northwest Florida Beaches International Airport (ECP) and Tallahassee International Airport (TLH).
- Airports without valid surveys were assigned a District value based on the total valid surveys collected in that District and based on the average visitor spending for all airports in that District. This was applicable for nine airports: Punta Gorda Airport (PGD), Southwest Florida International Airport (RSW), Gainesville Regional Airport (GNV), Pensacola International Airport (PNS), Destin-Ft Walton Beach Airport (VPS), Palm Beach International Airport (PBI), Melbourne International Airport (MLB), Orlando Sanford International Airport (SFB), and Key West International Airport (EYW).
- For each airport, total commercial service visitor spending was calculated by multiplying the total number of 2021 visitors per airport by the visitor spending per visitor per airport. **Figure 5-4** illustrates the equation used to calculate total commercial service visitor spending.

Figure 5-4: Total Commercial Service Visitor Spending Calculation



Source: Kimley-Horn, 2022

Spending totals were characterized by category from the survey, as shown by **Table 5-2.** Visitors were asked to report their spending in five categories: accommodation, entertainment, local transportation, food and beverage, and retail purchases. Prior to modeling, commercial spending data was first reviewed by FDOT to ensure the data was consistent with their understanding of the state's airports and District economies.

GA Visitor Spending

GA visitor spending was calculated for each study airport which stemmed from various surveying efforts. As mentioned previously, in-person surveying was conducted at Naples Airport (APF), Boca Raton Airport (BCT), and Lakeland Linder International Airport (LAL). Passive surveying was conducted at the remaining airports by way of GA visitor surveys that could be completed by pilots and passengers. Three methodologies were used to quantify GA visitor spending and were applied individually to airports to account for the varying surveying methods used and responses received during the 2022 AEIS.

- **APF, BCT, and LAL:** Data from in-person surveying yielded a statistically significant response in terms of spending profiles and surveyed visitors. Visitor spending results were aggregated by airport and averaged by the total number of validated visitors to generate an average spend per visitor.
- **Commercial Service and National Airports (excluding APF, BCT, and LAL):** The passive GA visitor survey results from Commercial Service and National airports were not statistically significant. As such, GA visitor spending for the Commercial Service Airports and remaining National airports was calculating by applying a county-specific economic ratio to the average per visitor spending calculated for APF, BCT, and LAL. The economic ratio is based on the value-added spending in arts and entertainment, recreation, accommodation, and food services (AERAFS) per capita in 2019. County AERAFS (based on the airport's location) was compared with the statewide AERAFS to generate the ratios and account for more localized spending habits.

- **Other GA Airports:** The passive GA visitor survey results from the remaining GA airports were also not statistically significant. As such, GA visitor spending for the remaining airports was calculating by applying an AEFAFS county-statewide ratio (accounting for more localized spending habits) to each airport's GA visitor spending survey results, then averaged and aggregated by NPIAS role and re-applied across the airports to calculate more robust GA spending per visitor.

Average GA visitor spending calculated using the methods described above were multiplied by the total annual visitors estimated at each airport to yield the total annual GA visitor spending at each airport. This spending information was modeled using IMPLAN to measure the multiplier impacts of GA visitor spending statewide.

Commercial service and GA visitors were asked to identify spending in five basic categories. Each of these categories represent two to ten industry classifications in the IMPLAN model (**Table 5-2**).

Table 5-2: Sectors Used to Categorize Visitor Spending

Visitor Spending Categories	Industry Sector
Accommodations	Hotels and motels, including casino hotels
	Other accommodations
Entertainment	Performing arts companies
	Commercial sports except racing
	Racing and track operation
	Independent artists, writers, and performers
	Museums, historical sites, zoos, and parks
	Amusement parks and arcades
	Gambling industries (except casino hotels)
	Other amusement and recreation industries
	Fitness and recreational sports centers
	Bowling centers
Food & Beverage	Full-service restaurants
	Limited-service restaurants
	All other food and drinking places
Ground Transportation (including car rental engaged off-airport)	Retail – Gasoline stores
	Transit and ground passenger transportation
	Automotive equipment rental and leasing
	Transportation support activities
Retail	Retail – Electronics and appliance stores
	Retail – Food and beverage stores
	Retail – Health and personal care stores
	Retail – Clothing and clothing accessories stores
	Retail – Sporting goods, hobby, musical instruments, and books
	Retail – General merchandise stores
	Retail – Miscellaneous store retailers

Source: EBP using the 2019 IMPLAN economic model, accessed 2022

5.1.2.5. Retail Margining

While spending on retail reflects the value of the item sold, only a portion of the sale is actual revenue for the retail store. This portion, referred to as margin costs, reflects the "mark-up" value that retail stores add to the price of goods to cover their operating costs and profit. Only the mark-up produces revenue and economic activity for local retailers. Revenue generated by that mark-up supports employee payroll and operating costs of the business (e.g., rents, utilities, capital, and other business expenses)—not gross revenue collected by the retail business or industry. To isolate the revenues that accrue to retailers, the margin percentage was applied to the value of all retail goods sold. For example, if retail sales total $1

million, only $380,000 of these sales may be the mark-up earned by retail establishments, since it may have cost the stores $620,000 to purchase the items for sale from farmers, manufacturers, wholesalers, and/or distributors. The retail margin rates for IMPLAN for this model range from about 22 percent to 56 percent, varying by retail commodity. This approach was used to measure the economic impacts of retail spending when working with sales data to estimate jobs and payroll. With employment provided for retail establishments on airport, the jobs represent direct effects after margining has occurred and additional margining was not required.

Table E-1 lists all sectors used to categorize airport tenants.

6. Economic Impact Findings

As mentioned previously, 2022 FL AEIS results are reported in five major categories (on-airport, visitor spending, off-airport air cargo, military aviation, and industry reliance). This section documents the findings of each impact category and includes associated jobs, payroll, value added (where applicable) and total economic impact (output). [17]

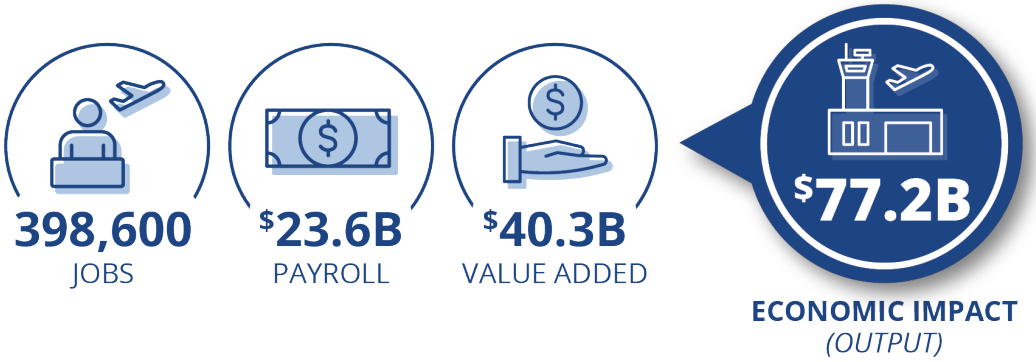
6.1. On-Airport

One of the most recognizable components of Florida's aviation economic impact is generated from activity on each airport's property. This includes the employment and capital spending from airports (including airport administration) and on-airport business tenants. Multiplier impacts including supplier sales and income re-spending are also included in the presentation of total on-airport economic impacts. Most multiplier impacts generated by on-airport businesses are supplier sales and income re-spending that occur off-airport. Across the state, Florida's airports support employment to 14,500 people (airport administration and contract employees) and are home to over 5,000 businesses. These businesses vary from aviation-related businesses, such as airlines, to non-aviation-related businesses, such as government offices. These on-airport businesses directly employ an additional 164,000 people.

As shown in **Table 6-1**, the 2022 AEIS quantified the impacts of on-airport employment and found that statewide, on-airport impacts generate a total of 398,611 jobs, $23.6 billion in payroll, $40.3 billion in value added, and $77.2 billion in economic impact (output). These figures include $5.3 billion in airport administration economic impact (output), $68.5 billion in airport tenant economic impact (output), and $3.3 billion in construction economic impact (output). The activity on airport property not only includes the employment and capital spending of airports, but also airport business tenants that may rely on accessibility to aviation facilities to support their business functions. **Table 6-1** summarizes the impacts generated from on-airport activities.

[17] Economic impact findings were updated for Tallahassee International Airport (TLH) and Daytona Beach International Airport (DAB) and are not reflected in this chapter. These updates are included in the individual airport brochure and PowerPoint prepared for these airports.

Figure 6-1: Statewide On-Airport Impacts



Note: Figure may not match the table below due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

Table 6-1: Statewide On-Airport Impacts

Type of Impact	Jobs	Payroll	Value Added	Economic Impact (Output)
Direct	183,552	$12,268,382,000	$20,760,219,000	$41,126,255,000
Multiplier	215,060	$11,289,359,000	$19,530,128,000	$36,050,458,000
Total	398,611	$23,557,741,000	$40,290,346,000	$77,176,713,000

Note: Rows or columns may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

The following subsections describe each of the categories measured in on-airport activity and summarize the individual economic impacts at a statewide level.

6.1.1. Airport Administration

Airport administration activities consist of the total employment directly supported by the airport, including contract employees, and the operating expenses incurred annually. Airport administration requires personnel to manage operations, financial, and administrative functions that maintain a safe and efficient environment for aviation activity. The public-use airports participating in the 2022 AEIS employ over 14,000 people, which includes approximately 6,000 direct airport employees, 3,200 independent contractors, and 5,200 people employed by a company contracted by the airport.

Airport administration contributes over 28,500 jobs, $1.6 billion in payroll, $2.3 billion in value added, and $5.3 billion in economic impact (output). **Table 6-2** summarizes the impacts generated from airport administration.

Table 6-2: Statewide Airport Administration Impacts

Type of Impact	Jobs	Payroll	Value Added	Economic Impact (Output)
Direct	9,268	$624,247,000	$674,722,000	$2,260,905,000
Multiplier	19,244	$999,847,000	$1,648,335,000	$3,060,791,000
Total	28,511	$1,624,094,000	$2,323,057,000	$5,321,696,000

Note: Rows or columns may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

6.1.2. On-Airport Tenants

On-airport tenants rely on airports for aviation facilities and services, with airports serving as the ideal business environment to generate economic output from their aviation activity. Through the data collection process (described in **Section 4**), there are almost 3,500 business tenants employing almost 164,000 people across all the study airports. On-airport tenants contribute over 350,600 jobs, $20.9 billion in payroll, $36.2 billion in value added, and $68.5 billion in economic impact (output). **Table 6-3** summarizes the estimated statewide impact results generated from the economic modeling process of on-airport tenants.

Table 6-3: Statewide On-Airport Tenant Impacts

Type of Impact	Jobs	Payroll	Value Added	Economic Impact (Output)
Direct	163,702	$11,055,718,000	$19,248,832,000	$37,173,451,000
Multiplier	186,900	$9,816,049,000	$16,997,614,000	$31,354,171,000
Total	350,602	$20,871,767,000	$36,246,445,000	$68,527,622,000

Note: Rows or columns may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

6.1.3. Airport Capital Improvements

Beyond routine maintenance, airports complete large capital projects to improve existing infrastructure and construct new facilities for enhancing the user experience and accommodating future aviation demand. All these construction activities often rely on outside businesses that employ personnel and must source materials and equipment. This leads to income re-spending and supplier purchases throughout the economy. In total, airport capital improvements contribute nearly 19,500 jobs, $1.1 billion in payroll, $1.7 billion in value added, and $3.3 billion in economic impact (output). **Table 6-4** summarizes the impacts generated from airport capital improvements.

Table 6-4: Statewide Airport Capital Improvement Impacts

Type of Impact	Jobs	Payroll	Value Added	Economic Impact (Output)
Direct	10,582	$588,417,000	$836,665,000	$1,691,899,000
Multiplier	8,916	$473,463,000	$884,179,000	$1,635,496,000
Total	19,498	$1,061,880,000	$1,720,844,000	$3,327,395,000

Note: Rows or columns may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

6.1.4. On-Airport Summary

Table 6-5 compares the total impacts of airport administration, on-airport tenants, and airport capital improvements.

Table 6-5: Statewide On-Airport Impact Comparison

On-Airport Category	Jobs	Payroll	Value Added	Economic Impact (Output)
Airport Administration	28,511	$1,624,094,000	$2,323,057,000	$5,321,696,000
On-Airport Tenants	350,602	$20,871,767,000	$36,246,445,000	$68,527,622,000
Airport Capital Improvements	19,498	$1,061,880,000	$1,720,844,000	$3,327,395,000
All Categories	398,611	$23,557,741,000	$40,290,346,000	$77,176,713,000

Note: Rows or columns may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

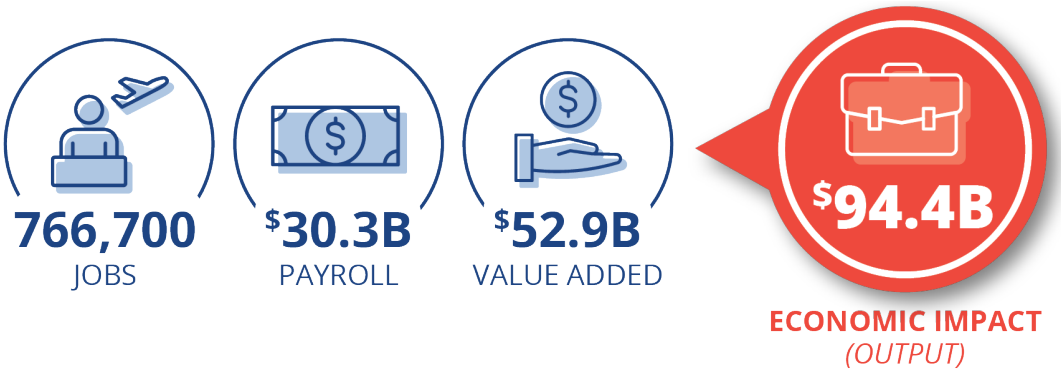
6.2. Visitor Spending

Visitor spending impacts are attributed to out-of-state visitors travelling through Florida's airports and spending their dollars among Florida's businesses. Over 122 million out-of-state visitors travelled through at least one of Florida's public-use airports in 2021, spending over $47 billion throughout the state's economy. The 2022 AEIS measures visitor spending activity across two major categories of air travel:

- Commercial Service
- General Aviation

Upon all the data being collected and finalized (described in **Section 4**), the study team completed an economic modeling process to calculate the multiplier and total economic impact of visitor spending activities across the two categories. As shown in **Table 6-6,** the 2022 AEIS quantified the impacts of visitor spending activity and found that statewide, total visitor spending impacts generate over 766,700 jobs, $30.3 billion in payroll, $52.9 billion in value added, and $94.4 billion in economic impact (output).

Figure 6-2: Statewide Visitor Spending Impacts



Note: Figure may not match the table below due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

Table 6-6: Statewide Visitor Spending Impacts

Type of Impact	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Direct	500,377	$16,880,603,000	$28,902,967,000	$49,963,878,000
Multiplier	266,344	$13,416,042,000	$23,990,801,000	$44,398,787,000
Total	766,721	$30,296,645,000	$52,893,767,000	$94,362,665,000

Note: Rows or columns may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

6.2.1. Commercial Service Visitors

Commercial service visitors are defined as out-of-state visitors travelling into Florida via a commercial service operator (e.g., Delta Air Lines, Southwest Airlines, JetBlue Airways). These activities are primarily seen among Florida's 19 commercial service airports. As described in **Section 4.2.3.2**, an in-person surveying effort was completed across several of these airports to collect average spending information among different types of facilities and across the various geographies within the state. These averages were assigned to all 19 airports and when multiplied by estimated annual visitor counts, the totals provide an estimated total visitor spending attributed to each airport. **Table 6-7** summarizes this information.

Table 6-7: Commercial Service Number of Visitors and Spending

FAA ID	Airport Name	Number of Visitors	Spending per Visitor	Total Visitor Spending
DAB	Daytona Beach International Airport	158,624	$1,167	$185,114,208
VPS	Destin-Ft Walton Beach Airport	685,230	$905	$620,457,867
FLL	Fort Lauderdale/Hollywood International Airport	6,789,776	$709	$4,813,951,184
GNV	Gainesville Regional Airport	83,617	$816	$68,231,472
JAX	Jacksonville International Airport	1,217,292	$816	$993,310,272
EYW	Key West International Airport	587,333	$943	$553,855,019
MLB	Melbourne International Airport	91,120	$1,267	$115,491,538
MIA	Miami International Airport	6,966,410	$943	$6,569,324,630
ECP	Northwest Florida Beaches International Airport	544,177	$905	$492,738,060
MCO	Orlando International Airport	12,224,621	$1,329	$16,246,521,309
SFB	Orlando Sanford International Airport	781,012	$1,267	$989,542,204
PBI	Palm Beach International Airport	1,547,182	$709	$1,096,952,038
PNS	Pensacola International Airport	642,050	$905	$581,359,505
PGD	Punta Gorda Airport	538,146	$988	$531,688,248
SRQ	Sarasota/Bradenton International Airport	1,031,445	$988	$1,019,067,660

FAA ID	Airport Name	Number of Visitors	Spending per Visitor	Total Visitor Spending
RSW	Southwest Florida International Airport	3,521,598	$988	$3,479,338,824
PIE	St. Pete-Clearwater International Airport	656,569	$821	$539,043,149
TLH	Tallahassee International Airport	136,982	$905	$124,033,623
TPA	Tampa International Airport	4,918,600	$712	$3,502,043,200

Note: Rows or columns may not sum due to rounding.
Source: Kimley-Horn, 2022

Commercial service visitor spending contributes a total of 660,438 jobs, $26.2 billion in payroll, $45.8 billion in value added, and $80.8 billion in economic impact (output). **Table 6-8** summarizes the impacts generated from commercial service visitor spending activity.

Table 6-8: Statewide Commercial Service Visitor Spending Impacts

Type of Impact	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Direct	430,743	$14,588,739,000	$25,062,185,000	$42,522,064,000
Multiplier	229,695	$11,566,480,000	$20,688,186,000	$38,265,534,000
Total	660,438	$26,155,219,000	$45,750,371,000	$80,787,598,000

Note: Rows or columns may not sum due to rounding.
Source: EBP US, 2022; Kimley-Horn, 2022

6.2.2. General Aviation (GA) Visitors

Florida's visitors also travel via GA aircraft, which may include a privately-owned aircraft, fractional ownership, or charter company. As described in **Section 4.2.3.1**, the 2022 AEIS completed an in-person surveying effort across several GA airports to collect visitor spending information from GA visitors. This information was extrapolated and calculated with the total number of GA visitors recorded for each airport to yield total GA visitor spending among all airports. **Table 6-9** summarizes the results of this analysis by NPIAS role, with the average GA visitor spending statewide being $668.

Table 6-9: Statewide GA Visitor Count and Spending by NPIAS Classification

NPIAS Category/Role	Number of Airports	Average Passengers Per Operation	Total Number of Visitors	Average Spending Per Visitor	Total Visitor Spending
Primary	19	5	2,619,665	$1,070	$2,803,043,000
National	12	5	1,939,549	$1,094	$2,121,547,000

NPIAS Category/Role	Number of Airports	Average Passengers Per Operation	Total Number of Visitors	Average Spending Per Visitor	Total Visitor Spending
Regional	34	4	2,140,817	$1,014	$2,170,423,000
Local	25	3	436,720	$709	$309,535,000
Basic	8	3	123,819	$272	$33,720,000
Unclassified/ Non-NPIAS	30	2	58,664	$38	$3,552,000
All Airports	128	3	7,319,233	$668	$7,441,820,000

Note: Rows or columns may not sum due to rounding.
Source: EBP US, 2022; Kimley-Horn, 2022

GA visitor spending contributes a total of 106,280 jobs, $4.1 billion in payroll, $7.1 billion in value added, and $13.6 billion in economic impact (output). **Table 6-10** summarizes the impacts generated from GA visitor spending activity.

Table 6-10: Statewide GA Visitor Spending Impacts

Type of Impact	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Direct	69,634	$2,291,863,000	$3,840,782,000	$7,441,820,000
Multiplier	36,649	$1,849,562,000	$3,302,614,000	$6,133,246,000
Total	106,283	$4,141,425,000	$7,143,396,000	$13,575,066,000

Note: Rows or columns may not sum due to rounding.
Source: EBP US, 2022; Kimley-Horn, 2022

6.2.3. Visitor Spending Summary

Table 6-11 compares the total impacts of commercial service and GA visitor spending.

Table 6-11: Statewide Visitor Spending Impact Comparison

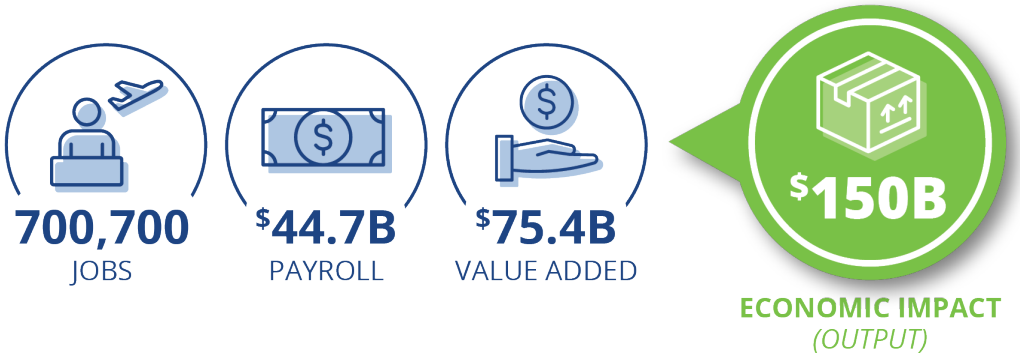
Visitor Spending Category	Jobs	Payroll	Value Added	Economic Impact (Output)
Commercial Service	660,438	$26,155,219,000	$45,750,371,000	$80,787,598,000
General Aviation	106,283	$4,141,425,000	$7,143,396,000	$13,575,066,000
All Categories	766,721	$30,296,645,000	$52,893,767,000	$94,362,665,000

Note: Rows or columns may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

6.3. Off-Airport Air Cargo

As detailed in **Section 3.3.3**, off-airport air cargo impacts specifically include air cargo transported through Florida's airports and directly interacting with Florida's off-airport businesses. In 2021, Florida's industries relied on approximately 839,000 tons of air cargo, valued at $46 billion, for supporting business operations and sales. As shown in **Figure 6-3**, the 2022 AEIS quantified the impacts of off-airport air cargo activity and found that statewide, this activity generated a total of 700,738 jobs, $44.7 billion in payroll, $75.4 billion in value added, and $150 billion in economic impact (output). **Table 6-12** summarizes the impacts generated from off-airport air cargo activity.

Figure 6-3: Statewide Off-Airport Air Cargo Impacts



Note: Figure may not match the table below due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

Table 6-12: Statewide Off-Airport Air Cargo Impacts

Type of Impact	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Direct	285,246	$22,300,000,000	$36,400,000,000	$77,900,000,000
Multiplier	415,492	$22,400,000,000	$39,000,000,000	$72,100,000,000
Total	700,738	$44,700,000,000	$75,400,000,000	$150,000,000,000

Note: Rows or columns may not sum due to rounding.
Source: EBP US, 2022; Kimley-Horn, 2022

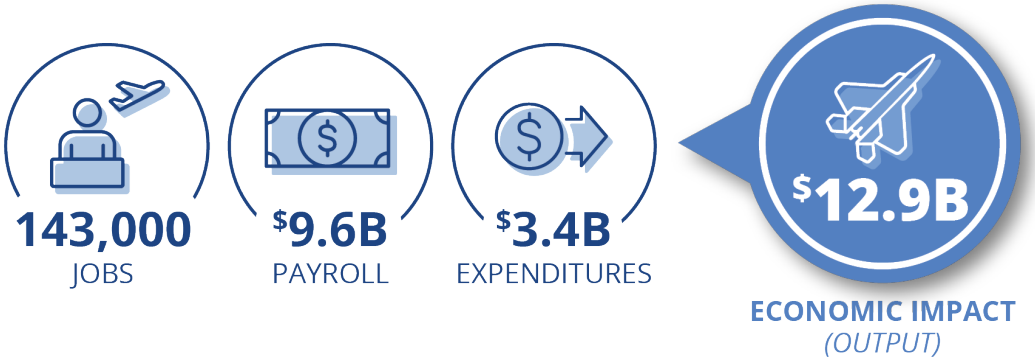
Section A.3 provides an in-depth analysis of off-airport air cargo activity including a summary of top imported and exported commodities and a review of domestic versus international air cargo.

6.4. Military

Florida's 11 military aviation installations employ over 143,000 individuals that engage in spending among the state's businesses, contributing substantially to Florida's economy. In addition, military activities such as flight training, flight testing, and military exercises may require goods and services from the local economy, further supporting the economic impact of the military. The 2022 AEIS quantified the impacts

of military aviation installations and found that statewide, these facilities generate 143,000 jobs, $9.6 billion in payroll, $3.4 billion in expenditures, and $12.9 billion in economic impact (output). **Figure 6-4** summarizes the impacts generated from military aviation installations.

Figure 6-4: Statewide Military Impacts



Note: Figure may not match the table below due to rounding.
Source: Kimley-Horn research, 2022

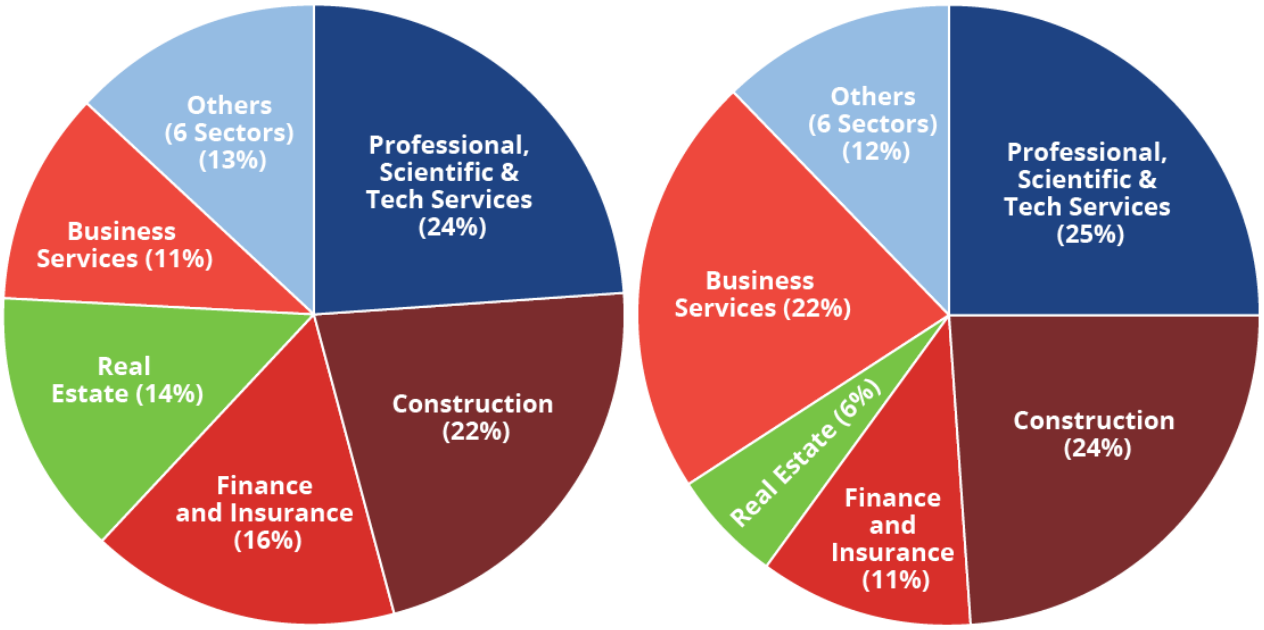
Appendix D provides an in-depth review of all 11 military aviation installations including a summary of military activity and economic impact by installation.

6.5. Industry Reliance

Florida's businesses constantly rely on airports to transport personnel into and out of the state. Businesses may base their own aircraft at a Florida airport, rely on commercial service travel, or rely on an aircraft charter or fractional ownership company (e.g., Wheels Up, NetJets) to support corporate travel. Through surveying businesses relying on airports, the 2022 AEIS was able to estimate the industry reliance impacts to Florida's economy.

Tabulation of the survey respondents and the subsequent adjustments (described in **Section 3.3.5**) indicate that business air travel supports more than $1.9 billion of business revenue and 11,000 jobs in Florida. Almost 90% of these impacts are generated from professional, scientific, and technical services; finance and insurance; business services; and the real estate and construction industries. **Figure 6-5** illustrates the concentration of jobs and business sales in these sectors.

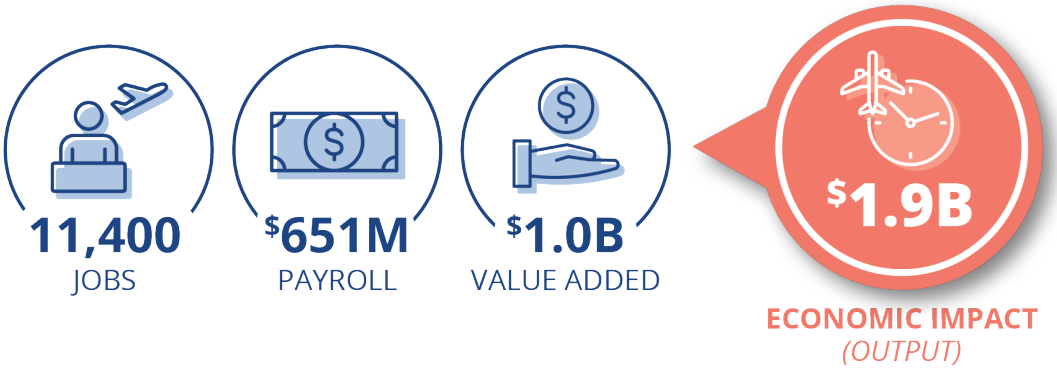
Figure 6-5: Jobs and Business Revenue Relying on Air Transportation



Sources: 2019 AEIS; EBP, 2022; Kimley-Horn, 2022

The 2022 AEIS quantified the impacts of industry reliance on Florida airports and found that statewide, industry reliance generate 11,400 jobs, $651 million in payroll, $1.0 billion in value added, and $1.9 billion in economic impact (output). **Figure 6-5** summarizes the statewide impacts generated from industry reliance.[18]

Figure 6-6: Statewide Industry Reliance Impacts



Note: Figure may not match the table below due to rounding.
Source: Kimley-Horn, 2022

[18] Industry reliance impacts were not calculated for individual airports or each FDOT district.

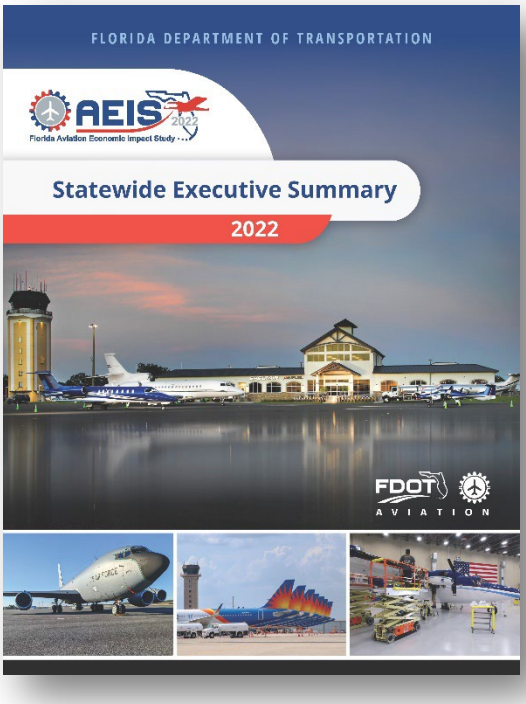
7. Communications Toolkit

The results reported in the 2022 AEIS are of interest to several audiences including airport staff, municipalities, FDOT, other state government officials, airport users, and the general public. Reporting the economic impact of Florida's aviation industry can provide a convincing argument of the significance of airports to community leaders and their constituents. As such, the 2022 AEIS developed a comprehensive toolkit consisting of several deliverables to present relevant information tailored for each intended audience. The Communications Toolkit consists of several deliverables in multiple formats including a video, brochures, and PowerPoints. The following subsections describe each deliverable produced and the intended purpose.

7.1. Statewide Video

The 2022 AEIS included production of a short video to introduce the Florida airport system and its significance, report the statewide economic impacts from the study, and provide strong visuals for viewers to see where the economic activity is generated from. Flying into Florida using airline travel and transporting perishables such as flowers are just some of the drivers contributing billions to Florida's economy annually. This video can be presented to a city council or a municipality as an introduction to the study and be followed by a presentation of the individual airport PowerPoint for that individual airport.

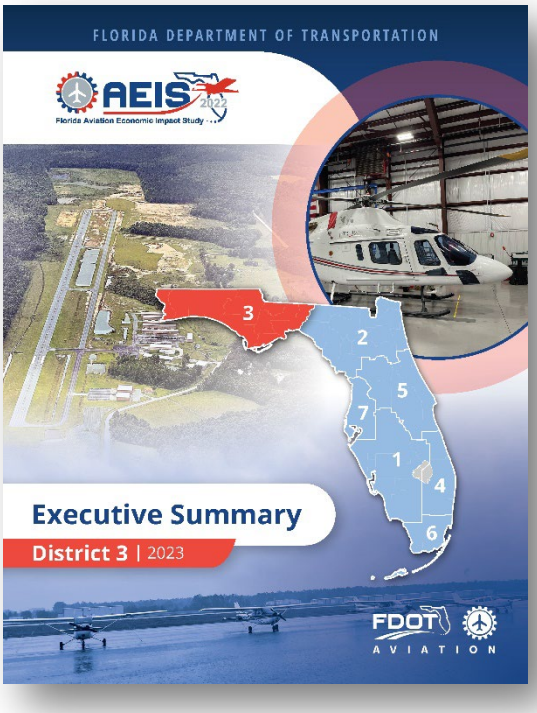
7.2. Statewide Executive Summary



The 2022 AEIS was summarized in a eight-page brochure that describes the Florida airport system, presents the results of the study at a statewide level, describes each component of economic impact, illustrates the major milestones in the study, and lists the total impacts by airport. The brochure is complemented by numerous visuals of airports and aviation activity in Florida, including a map illustrating the reach of Florida's airports from all FAA-filed flight plans recorded in 2021. The intent of this deliverable is to be the "face" of the study for anyone interested in learning more about the contribution of airports and aviation activity to Florida's economy.

The statewide executive summary is available to view and download as a PDF at https://www.airportfapa.com/economic-impact/.

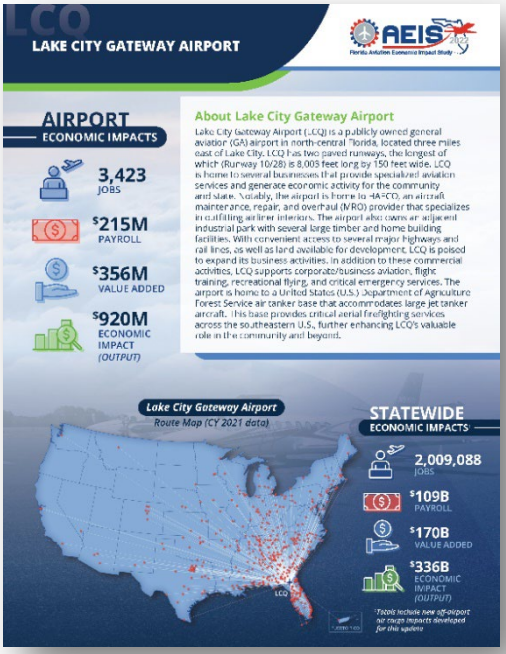
7.3. FDOT District Executive Summaries



The FDOT manages the state's transportation network through a decentralized system of seven districts that provide individual attention to the airports in their district to support the state's diverse range of transportation users. To provide focused results for each district, the 2022 AEIS included a series of brochures to present study results for aviation facilities in each FDOT district. These brochures include numerous visuals of airports and aviation activity specific to each FDOT district. The brochures also share cases of FDOT investment supporting airport development and generating additional economic activity. FDOT district staff can use these brochures to learn more about the economic impacts for airports in their jurisdiction and inform future planning, operational, funding, and administrative decisions.

FDOT district executive summaries are available to view and download as a PDF at https://www.airportfapa.com/economic-impact/.

7.4. Individual Airport Brochures



In many cases, residents living near an airport may not be aware of the activities occurring at the airport or the benefits that the facility provides to the statewide economy. As a marketing tool for airports, the 2022 AEIS included development of individual profiles for each airport. These two-page profiles provide a brief summary of the airport, the airport's estimated annual economic contribution, statewide economic impact results, and details on how to interpret the results. Nearly all the brochures also include a map illustrating the reach of the airport in terms of FAA-filed flight plans recorded in 2021. Airport managers and owners can distribute these brochures to explain the significance of the airport for constituents in surrounding areas. Airport managers/owners can also use these brochures when requesting federal, state, or local funding for capital improvements to demonstrate the economic contributions of the airport that are typically not fully understood.

Individual airport brochures are available to view and download as a PDF at https://www.airportfapa.com/economic-impact/.

7.5. Individual Airport PowerPoints

As noted previously, residents living near an airport may not be aware of the types of activities occurring at the airport or the benefits that the facility provides to the economy. As a marketing tool for airports, individual PowerPoints for each airport were produced during the 2022 AEIS. These presentations or slide decks include several topics pertaining to the study:

- Background and purpose of the 2022 AEIS
- Estimated annual economic impacts of the airport
- Aviation economic impact results calculated at a statewide and FDOT district level for the airport
- Methodology for calculating the economic impact results

Nearly all the brochures also include a short video animating the FAA-filed flight plans recorded throughout CY 2021. All slides include speaker notes to provide context to the content being presented and other important notes for the speaker to consider. Airport managers and owners can present this PowerPoint in meetings to explain to local community leaders and constituents the significance of the airport and the importance of supporting a new funding request.

The PowerPoints are available to view and download as Microsoft PowerPoint files at https://www.airportfapa.com/economic-impact/.

7.6. Case Studies

Aviation has provided tremendous benefits to Florida's residents and businesses, some of which can't be quantified. Five case studies were developed in the 2022 AEIS presenting on a variety of topics relating to aviation economic impact and societal benefits:

- Education
- Historical Significance
- Emergency/Disaster Response
- Anchor Tenants
- Rural Access
- Seaplane Bases

Appendix A. Economic Impacts by Airport

The following tables present the economic impacts of each airport facility in terms of jobs, payroll, value added, and total output.

Total On-Airport Impacts by Airport

Table A-1: Total On-Airport Impacts by Airport[19]

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Airglades Airport	2IS	94	$5,591,000	$7,640,000	$13,343,000
Albert Whitted Airport	SPG	405	$22,019,000	$31,945,000	$62,912,000
Apalachicola Regional-Cleve Randolph Field	AAF	58	$2,932,000	$4,459,000	$10,358,000
Arcadia Municipal Airport	X06	33	$2,102,000	$3,052,000	$6,084,000
Arthur Dunn Air Park	X21	55	$3,045,000	$4,179,000	$8,175,000
Avon Park Executive Airport	AVO	48	$3,654,000	$4,993,000	$9,656,000
Bartow Executive Airport	BOW	1,571	$95,417,000	$146,751,000	$301,282,000
Belle Glade State Municipal Airport	X10	60	$2,945,000	$4,184,000	$8,078,000
Bob Lee Flight Strip	1J6	2	$6,000	$10,000	$20,000
Bob Sikes Airport	CEW	2,346	$155,296,000	$258,734,000	$872,372,000
Bob White Field	X61	4	$211,000	$303,000	$682,000
Boca Raton Airport	BCT	1,367	$78,397,000	$133,566,000	$260,994,000
Brooksville – Tampa Bay Regional Airport	BKV	5,405	$300,934,000	$552,998,000	$1,212,633,000
Buchan Airport	X36	6	$51,000	$64,000	$98,000
Calhoun County Airport	F95	43	$2,367,000	$4,055,000	$10,559,000
Carrabelle – Thompson Airport	X13	19	$636,000	$1,032,000	$2,970,000
Cecil Airport	VQQ	7,575	$500,824,000	$764,448,000	$1,779,399,000

[19] Impacts for DAB and TLH do not match the impacts shown in the Statewide Executive Summary, their Individual Airport Brochures, or PowerPoint presentation because updated direct impacts were provided near the conclusion of this study.

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Chalet Suzanne Air Strip	X25	-	$33,000	$42,000	$71,000
Clearwater Air Park	CLW	141	$7,660,000	$10,805,000	$21,233,000
Costin Airport	A51	-	$29,000	$41,000	$81,000
Cross City Airport	CTY	23	$1,359,000	$2,283,000	$4,428,000
Crystal River – Captain Tom Davis Field	CGC	223	$11,403,000	$16,533,000	$23,195,000
Dade-Collier Training And Transition Airport	TNT	6	$316,000	$433,000	$840,000
Daytona Beach International Airport	DAB	3,462	$160,662,000	$280,823,000	$482,256,000
DeFuniak Springs Airport	54J	33	$1,878,000	$2,916,000	$8,164,000
Deland Municipal – Sidney H Taylor Field	DED	1,636	$89,580,000	$160,282,000	$306,291,000
Destin – Fort Walton Beach Airport / Eglin Air Force Base	VPS	2,163	$113,860,000	$189,174,000	$346,788,000
Destin Executive Airport	DTS	159	$9,232,000	$14,068,000	$33,439,000
Downtown Fort Lauderdale Heliport	DT1	11	$624,000	$803,000	$1,229,000
Everglades Airpark	X01	8	$545,000	$747,000	$1,448,000
Executive Airport	ORL	2,841	$139,875,000	$227,661,000	$419,125,000
Fernandina Beach Municipal Airport	FHB	243	$12,217,000	$17,842,000	$35,075,000
Flagler Executive Airport	FIN	1,177	$60,201,000	$140,749,000	$275,480,000
Flying Ten Airport	0J8	-	$3,000	$9,000	$16,000
Fort Lauderdale Executive Airport	FXE	16,173	$955,487,000	$1,532,065,000	$3,054,462,000
Fort Lauderdale/ Hollywood International Airport	FLL	29,182	$1,804,342,000	$3,234,426,000	$5,677,695,000
Fort Walton Beach Airport	1J9	7	$425,000	$701,000	$1,252,000
Gainesville Regional Airport	GNV	1,224	$74,883,000	$127,364,000	$259,981,000
George T Lewis Airport	CDK	8	$202,000	$324,000	$618,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Halifax River Sea Plane Base	F15	5	$259,000	$355,000	$702,000
Herlong Recreational Airport	HEG	305	$17,345,000	$27,763,000	$53,820,000
Hilliard Airpark	01J	10	$314,000	$511,000	$1,397,000
Immokalee Regional Airport	IMM	175	$11,094,000	$17,471,000	$37,706,000
Indiantown Airport	X58	59	$4,466,000	$7,041,000	$18,494,000
Inverness Airport	INF	132	$7,453,000	$10,449,000	$18,397,000
Jack Browns Seaplane Base	F57	27	$573,000	$723,000	$1,133,000
Jacksonville Executive At Craig Airport	CRG	470	$24,278,000	$34,616,000	$66,216,000
Jacksonville International Airport	JAX	6,417	$380,849,000	$605,567,000	$1,124,779,000
Key West International Airport	EYW	1,747	$112,396,000	$199,968,000	$359,117,000
Keystone Heights Airport	42J	136	$5,796,000	$9,265,000	$18,648,000
Kissimmee Gateway Airport	ISM	3,113	$171,555,000	$271,848,000	$533,733,000
La Belle Municipal Airport	X14	55	$2,799,000	$4,423,000	$9,813,000
Lake City Gateway Airport	LCQ	2,729	$188,034,000	$310,711,000	$832,453,000
Lake Wales Municipal Airport	X07	174	$11,769,000	$15,989,000	$28,814,000
Lakeland Linder International Airport	LAL	6,693	$344,247,000	$585,321,000	$1,216,168,000
Leesburg International Airport	LEE	407	$22,603,000	$34,116,000	$70,159,000
Manatee Airport	48X	5	$149,000	$203,000	$384,000
Marco Island Airport	MKY	181	$9,849,000	$14,762,000	$25,912,000
Marianna Municipal Airport	MAI	167	$8,376,000	$13,787,000	$33,314,000
Marion County Airport	X35	596	$33,521,000	$56,905,000	$116,585,000
Massey Ranch Airpark	X50	27	$1,556,000	$2,130,000	$4,209,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Melbourne Orlando International Airport	MLB	12,579	$777,156,000	$1,354,814,000	$2,420,015,000
Merritt Island Airport	COI	196	$11,361,000	$15,980,000	$30,420,000
Miami Executive Airport	TMB	732	$45,627,000	$73,298,000	$150,202,000
Miami Homestead General Aviation Airport	X51	108	$6,156,000	$8,604,000	$16,613,000
Miami International Airport	MIA	122,226	$6,786,358,000	$12,132,508,000	$22,357,789,000
Miami Seaplane Base	X44	15	$1,088,000	$1,451,000	$2,366,000
Miami-Opa Locka Executive Airport	OPF	2,869	$166,760,000	$262,998,000	$515,625,000
Mid-Florida Airport	X55	7	$182,000	$251,000	$487,000
Naples Airport	APF	1,880	$122,237,000	$188,276,000	$346,833,000
New Hibiscus Airpark	X52	-	$5,000	$8,000	$14,000
New Smyrna Beach Municipal Airport	EVB	711	$42,249,000	$63,912,000	$114,498,000
North Palm Beach County General Aviation Airport	F45	149	$9,841,000	$14,946,000	$36,315,000
North Perry Airport	HWO	1,108	$54,829,000	$82,602,000	$160,479,000
Northeast Florida Regional Airport	SGJ	3,813	$282,298,000	$460,297,000	$1,341,605,000
Northwest Florida Beaches International Airport	ECP	1,409	$77,552,000	$135,863,000	$260,546,000
Oak Tree Landing Airport	6J8	3	$33,000	$52,000	$147,000
Ocala International-Jim Taylor Field	OCF	444	$24,790,000	$41,138,000	$75,328,000
Okeechobee County Airport	OBE	401	$22,914,000	$38,478,000	$88,598,000
Orlando Apopka Airport	X04	49	$2,613,000	$3,782,000	$7,335,000
Orlando International Airport	MCO	55,593	$3,371,603,000	$5,837,743,000	$10,824,647,000
Orlando Sanford International Airport	SFB	6,475	$411,503,000	$677,855,000	$1,330,218,000
Ormond Beach Municipal Airport	OMN	221	$12,310,000	$18,207,000	$36,703,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Page Field	FMY	2,078	$102,281,000	$155,992,000	$286,187,000
Palatka Municipal-Lt Kay Larkin Field	28J	59	$3,785,000	$5,978,000	$15,516,000
Palm Beach County Glades Airport	PHK	30	$1,586,000	$2,371,000	$5,251,000
Palm Beach County Park Airport	LNA	473	$29,796,000	$47,144,000	$106,360,000
Palm Beach International Airport	PBI	10,599	$667,650,000	$1,088,618,000	$2,050,833,000
Pensacola International Airport	PNS	5,795	$311,646,000	$530,052,000	$1,085,641,000
Perry-Foley Airport	FPY	12	$635,000	$978,000	$2,023,000
Peter O Knight Airport	TPF	187	$9,967,000	$14,579,000	$30,850,000
Peter Prince Field	2R4	129	$7,049,000	$10,430,000	$25,021,000
Pierson Municipal Airport	2J8	6	$192,000	$232,000	$322,000
Pilot Country Airport	X05	47	$2,243,000	$3,300,000	$8,050,000
Plant City Airport	PCM	105	$5,217,000	$7,456,000	$14,212,000
Pompano Beach Airpark	PMP	903	$59,187,000	$95,641,000	$191,462,000
Punta Gorda Airport	PGD	2,650	$198,780,000	$315,437,000	$558,956,000
Quincy Municipal Airport	2J9	36	$1,855,000	$2,788,000	$6,249,000
River Ranch Resort Airport	2RR	3	$245,000	$313,000	$530,000
Roscoe Field	82J	60	$3,363,000	$4,621,000	$9,217,000
Sarasota/Bradenton International Airport	SRQ	3,983	$261,967,000	$448,243,000	$789,670,000
Sebastian Municipal Airport	X26	264	$15,377,000	$23,354,000	$52,064,000
Sebring Regional Airport	SEF	1,851	$88,653,000	$162,774,000	$361,641,000
Shell Creek Airpark	F13	42	$3,562,000	$4,549,000	$7,670,000
South Lakeland Airport	X49	13	$689,000	$997,000	$2,419,000
Southwest Florida International Airport	RSW	8,453	$641,408,000	$1,030,016,000	$1,747,563,000
Space Coast Regional Airport	TIX	711	$40,188,000	$58,273,000	$112,762,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
St Cloud Seaplane Base	3FL	2	$142,000	$197,000	$388,000
St George Island Airport	F47	-	$2,000	$2,000	$5,000
St Pete-Clearwater International Airport	PIE	9,014	$569,744,000	$966,213,000	$1,933,528,000
Suwannee County Airport	24J	227	$14,285,000	$21,040,000	$30,895,000
Tallahassee International Airport	TLH	1,512	$78,161,000	$131,299,000	$257,282,000
Tampa Executive Airport	VDF	197	$10,186,000	$14,745,000	$26,790,000
Tampa International Airport	TPA	23,933	$1,400,445,000	$2,297,048,000	$4,375,829,000
Tavares Seaplane Base	FA1	34	$1,761,000	$2,429,000	$4,886,000
The Florida Keys Marathon International Airport	MTH	303	$19,538,000	$29,135,000	$45,890,000
Treasure Coast International Airport	FPR	1,285	$81,915,000	$128,762,000	$279,742,000
Tri-County Airport	BCR	34	$1,810,000	$2,656,000	$5,805,000
Umatilla Municipal Airport	X23	124	$8,649,000	$17,370,000	$30,373,000
Valkaria Airport	X59	214	$11,146,000	$16,141,000	$28,013,000
Venice Municipal Airport	VNC	222	$14,986,000	$20,921,000	$43,539,000
Vero Beach Regional Airport	VRB	4,514	$261,788,000	$393,731,000	$752,634,000
Wakulla County Airport	2J0	1	$31,000	$40,000	$62,000
Wauchula Municipal Airport	CHN	39	$2,087,000	$3,124,000	$6,043,000
Williston Municipal Airport	X60	2,792	$183,090,000	$342,504,000	$793,610,000
Winter Haven Regional Airport	GIF	154	$8,829,000	$14,761,000	$30,161,000
Witham Field	SUA	2,682	$196,491,000	$316,260,000	$779,230,000
Zephyrhills Municipal Airport	ZPH	413	$25,343,000	$38,346,000	$80,024,000

Note: Totals may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

Total Visitor Spending Impacts by Airport

Table A-2: Total Visitor Spending Impacts by Airport[20]

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Airglades Airport	2IS	16	$637,000	$1,123,000	$2,002,000
Albert Whitted Airport	SPG	543	$20,873,000	$36,610,000	$65,402,000
Apalachicola Regional-Cleve Randolph Field	AAF	51	$1,871,000	$3,337,000	$6,197,000
Arcadia Municipal Airport	X06	39	$1,658,000	$2,902,000	$5,079,000
Arthur Dunn Air Park	X21	33	$1,295,000	$2,316,000	$4,142,000
Avon Park Executive Airport	AVO	33	$1,392,000	$2,437,000	$4,265,000
Bartow Executive Airport	BOW	336	$13,430,000	$23,094,000	$44,110,000
Belle Glade State Municipal Airport	X10	-	$-	$-	$-
Bob Lee Flight Strip	1J6	-	$1,000	$2,000	$3,000
Bob Sikes Airport	CEW	317	$11,522,000	$20,406,000	$38,183,000
Bob White Field	X61	-	$4,000	$7,000	$13,000
Boca Raton Airport	BCT	3,476	$140,760,000	$243,901,000	$431,936,000
Brooksville – Tampa Bay Regional Airport	BKV	687	$26,142,000	$45,196,000	$86,983,000
Buchan Airport	X36	-	$2,000	$3,000	$5,000
Calhoun County Airport	F95	2	$79,000	$142,000	$263,000
Carrabelle – Thompson Airport	X13	2	$67,000	$117,000	$230,000
Cecil Airport	VQQ	588	$22,554,000	$38,454,000	$74,565,000
Chalet Suzanne Air Strip	X25	-	$1,000	$1,000	$2,000
Clearwater Air Park	CLW	544	$21,318,000	$37,384,000	$66,644,000
Costin Airport	A51	1	$35,000	$62,000	$122,000

[20] Impacts for DAB and TLH do not match the impacts shown in the Statewide Executive Summary, their Individual Airport Brochures, or PowerPoint presentation because updated direct impacts were provided near the conclusion of this study.

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Cross City Airport	CTY	27	$1,050,000	$1,841,000	$3,316,000
Crystal River – Captain Tom Davis Field	CGC	254	$9,696,000	$16,850,000	$31,490,000
Dade-Collier Training And Transition Airport	TNT	-	$6,000	$11,000	$19,000
Daytona Beach International Airport	DAB	10,090	$381,837,000	$672,440,000	$1,270,397,000
DeFuniak Springs Airport	54J	243	$8,822,000	$15,624,000	$29,235,000
Deland Municipal – Sidney H Taylor Field	DED	595	$22,588,000	$39,799,000	$74,628,000
Destin – Fort Walton Beach Airport / Eglin Air Force Base	VPS	10,725	$392,790,000	$690,738,000	$1,279,296,000
Destin Executive Airport	DTS	2,883	$101,618,000	$177,162,000	$356,156,000
Downtown Fort Lauderdale Heliport	DT1	-	$-	$-	$-
Everglades Airpark	X01	5	$212,000	$364,000	$681,000
Executive Airport	ORL	1,237	$46,576,000	$81,529,000	$157,653,000
Fernandina Beach Municipal Airport	FHB	1,481	$59,633,000	$102,200,000	$183,768,000
Flagler Executive Airport	FIN	1,411	$53,111,000	$92,968,000	$179,773,000
Flying Ten Airport	0J8	1	$50,000	$85,000	$161,000
Fort Lauderdale Executive Airport	FXE	6,785	$268,538,000	$458,843,000	$874,821,000
Fort Lauderdale/Hollywood International Airport	FLL	80,866	$3,231,289,000	$5,598,702,000	$9,762,500,000
Fort Walton Beach Airport	1J9	-	$6,000	$10,000	$19,000
Gainesville Regional Airport	GNV	2,333	$92,721,000	$155,114,000	$296,029,000
George T Lewis Airport	CDK	6	$248,000	$434,000	$782,000
Halifax River Sea Plane Base	F15	-	$-	$-	$1,000
Herlong Recreational Airport	HEG	209	$8,145,000	$13,913,000	$26,190,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Hilliard Airpark	01J	8	$315,000	$540,000	$971,000
Immokalee Regional Airport	IMM	97	$4,097,000	$7,172,000	$12,551,000
Indiantown Airport	X58	1	$33,000	$55,000	$103,000
Inverness Airport	INF	411	$16,133,000	$28,292,000	$50,435,000
Jack Browns Seaplane Base	F57	-	$-	$-	$-
Jacksonville Executive At Craig Airport	CRG	1,186	$45,469,000	$77,525,000	$150,325,000
Jacksonville International Airport	JAX	16,047	$663,203,000	$1,087,437,000	$2,039,495,000
Key West International Airport	EYW	9,340	$414,248,000	$711,406,000	$1,212,416,000
Keystone Heights Airport	42J	304	$12,236,000	$20,971,000	$37,708,000
Kissimmee Gateway Airport	ISM	3,233	$121,746,000	$213,111,000	$412,093,000
La Belle Municipal Airport	X14	46	$1,937,000	$3,390,000	$5,933,000
Lake City Gateway Airport	LCQ	694	$26,602,000	$45,357,000	$87,949,000
Lake Wales Municipal Airport	X07	84	$3,547,000	$6,209,000	$10,865,000
Lakeland Linder International Airport	LAL	1,638	$65,438,000	$112,407,000	$216,862,000
Leesburg International Airport	LEE	107	$4,013,000	$7,024,000	$13,583,000
Manatee Airport	48X	-	$11,000	$18,000	$34,000
Marco Island Airport	MKY	1,769	$70,616,000	$121,434,000	$231,937,000
Marianna Municipal Airport	MAI	278	$10,083,000	$17,857,000	$33,413,000
Marion County Airport	X35	188	$7,297,000	$13,046,000	$23,330,000
Massey Ranch Airpark	X50	3	$105,000	$183,000	$345,000
Melbourne Orlando International Airport	MLB	5,307	$200,347,000	$352,722,000	$663,617,000
Merritt Island Airport	COI	255	$9,882,000	$17,667,000	$31,593,000
Miami Executive Airport	TMB	2,588	$111,297,000	$186,782,000	$347,689,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Miami Homestead General Aviation Airport	X51	168	$7,380,000	$12,552,000	$21,774,000
Miami International Airport	MIA	99,740	$4,438,806,000	$7,641,518,000	$12,897,867,000
Miami Seaplane Base	X44	-	$1,000	$1,000	$2,000
Miami-Opa Locka Executive Airport	OPF	2,420	$104,056,000	$174,632,000	$325,070,000
Mid-Florida Airport	X55	-	$2,000	$3,000	$5,000
Naples Airport	APF	3,574	$139,027,000	$238,918,000	$434,095,000
New Hibiscus Airpark	X52	1	$36,000	$62,000	$115,000
New Smyrna Beach Municipal Airport	EVB	990	$37,258,000	$65,219,000	$126,114,000
North Palm Beach County General Aviation Airport	F45	318	$12,594,000	$21,520,000	$41,029,000
North Perry Airport	HWO	981	$39,104,000	$67,209,000	$124,227,000
Northeast Florida Regional Airport	SGJ	75	$2,939,000	$5,152,000	$9,281,000
Northwest Florida Beaches International Airport	ECP	10,161	$369,856,000	$649,532,000	$1,218,962,000
Oak Tree Landing Airport	6J8	-	$3,000	$5,000	$9,000
Ocala International-Jim Taylor Field	OCF	830	$31,266,000	$54,729,000	$105,830,000
Okeechobee County Airport	OBE	493	$20,139,000	$34,798,000	$64,127,000
Orlando Apopka Airport	X04	7	$266,000	$464,000	$876,000
Orlando International Airport	MCO	254,325	$9,646,818,000	$17,170,468,000	$30,608,472,000
Orlando Sanford International Airport	SFB	17,749	$672,655,000	$1,194,787,000	$2,152,349,000
Ormond Beach Municipal Airport	OMN	294	$11,152,000	$19,650,000	$36,846,000
Page Field	FMY	1,364	$54,437,000	$93,612,000	$178,798,000
Palatka Municipal-Lt Kay Larkin Field	28J	30	$1,168,000	$1,995,000	$3,755,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Palm Beach County Glades Airport	PHK	4	$150,000	$261,000	$463,000
Palm Beach County Park Airport	LNA	300	$11,953,000	$20,544,000	$37,972,000
Palm Beach International Airport	PBI	20,998	$838,061,000	$1,449,629,000	$2,556,045,000
Pensacola International Airport	PNS	10,422	$381,155,000	$670,079,000	$1,244,654,000
Perry-Foley Airport	FPY	22	$812,000	$1,385,000	$2,617,000
Peter O Knight Airport	TPF	571	$21,836,000	$37,949,000	$70,921,000
Peter Prince Field	2R4	236	$8,563,000	$15,164,000	$28,375,000
Pierson Municipal Airport	2J8	-	$13,000	$23,000	$42,000
Pilot Country Airport	X05	1	$53,000	$92,000	$172,000
Plant City Airport	PCM	109	$4,242,000	$7,371,000	$13,224,000
Pompano Beach Airpark	PMP	1,695	$67,069,000	$114,599,000	$218,491,000
Punta Gorda Airport	PGD	8,669	$342,094,000	$586,257,000	$1,091,529,000
Quincy Municipal Airport	2J9	36	$1,312,000	$2,324,000	$4,348,000
River Ranch Resort Airport	2RR	1	$37,000	$64,000	$119,000
Roscoe Field	82J	23	$788,000	$1,378,000	$2,701,000
Sarasota/Bradenton International Airport	SRQ	19,025	$751,841,000	$1,289,020,000	$2,407,933,000
Sebastian Municipal Airport	X26	17	$693,000	$1,201,000	$2,123,000
Sebring Regional Airport	SEF	452	$18,047,000	$31,035,000	$59,276,000
Shell Creek Airpark	F13	-	$-	$-	$-
South Lakeland Airport	X49	-	$3,000	$6,000	$11,000
Southwest Florida International Airport	RSW	52,031	$2,051,050,000	$3,513,836,000	$6,526,745,000
Space Coast Regional Airport	TIX	1,878	$72,929,000	$130,381,000	$233,156,000
St Cloud Seaplane Base	3FL	-	$-	$-	$-
St George Island Airport	F47	2	$82,000	$143,000	$280,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
St Pete-Clearwater International Airport	PIE	11,760	$451,180,000	$789,852,000	$1,416,512,000
Suwannee County Airport	24J	129	$5,178,000	$8,875,000	$15,958,000
Tallahassee International Airport	TLH	2,260	$82,611,000	$145,213,000	$270,073,000
Tampa Executive Airport	VDF	3,213	$122,355,000	$211,536,000	$407,117,000
Tampa International Airport	TPA	58,204	$2,272,729,000	$4,009,108,000	$6,942,261,000
Tavares Seaplane Base	FA1	4	$140,000	$245,000	$461,000
The Florida Keys Marathon International Airport	MTH	1,410	$60,655,000	$101,794,000	$189,485,000
Treasure Coast International Airport	FPR	2,071	$81,960,000	$140,043,000	$267,004,000
Tri-County Airport	BCR	4	$127,000	$222,000	$435,000
Umatilla Municipal Airport	X23	5	$195,000	$349,000	$624,000
Valkaria Airport	X59	430	$16,699,000	$29,855,000	$53,388,000
Venice Municipal Airport	VNC	1,176	$46,945,000	$80,728,000	$154,190,000
Vero Beach Regional Airport	VRB	1,399	$55,386,000	$94,636,000	$180,432,000
Wakulla County Airport	2J0	-	$15,000	$26,000	$51,000
Wauchula Municipal Airport	CHN	19	$821,000	$1,436,000	$2,514,000
Williston Municipal Airport	X60	520	$20,239,000	$34,569,000	$65,074,000
Winter Haven Regional Airport	GIF	446	$18,208,000	$31,461,000	$57,978,000
Witham Field	SUA	4,176	$165,262,000	$282,379,000	$538,378,000
Zephyrhills Municipal Airport	ZPH	78	$2,963,000	$5,149,000	$9,623,000

Note: Totals may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

Direct Impacts by Airport

Table A-3: Direct Impacts by Airport[21]

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Airglades Airport	2IS	61	$3,515,000	$4,293,000	$7,202,000
Albert Whitted Airport	SPG	561	$22,579,000	$33,049,000	$62,976,000
Apalachicola Regional-Cleve Randolph Field	AAF	65	$2,621,000	$3,921,000	$9,188,000
Arcadia Municipal Airport	X06	41	$2,138,000	$3,138,000	$5,936,000
Arthur Dunn Air Park	X21	47	$2,277,000	$2,962,000	$5,720,000
Avon Park Executive Airport	AVO	41	$2,867,000	$3,742,000	$7,118,000
Bartow Executive Airport	BOW	971	$58,679,000	$82,093,000	$181,591,000
Belle Glade State Municipal Airport	X10	32	$1,487,000	$1,749,000	$3,600,000
Bob Lee Flight Strip	1J6	2	$4,000	$5,000	$11,000
Bob Sikes Airport	CEW	1,063	$79,689,000	$126,755,000	$617,381,000
Bob White Field	X61	2	$88,000	$99,000	$299,000
Boca Raton Airport	BCT	2,932	$119,719,000	$202,207,000	$370,646,000
Brooksville – Tampa Bay Regional Airport	BKV	2,607	$142,137,000	$264,147,000	$672,496,000
Buchan Airport	X36	6	$33,000	$35,000	$45,000
Calhoun County Airport	F95	17	$1,082,000	$1,819,000	$6,324,000
Carrabelle – Thompson Airport	X13	13	$357,000	$536,000	$2,025,000
Cecil Airport	VQQ	3,780	$281,049,000	$385,384,000	$1,084,023,000
Chalet Suzanne Air Strip	X25	-	$19,000	$20,000	$31,000
Clearwater Air Park	CLW	431	$15,873,000	$24,902,000	$45,272,000
Costin Airport	A51	1	$35,000	$50,000	$101,000

[21] Impacts for DAB and TLH do not match the impacts shown in the Statewide Executive Summary, their Individual Airport Brochures, or PowerPoint presentation because updated direct impacts were provided near the conclusion of this study.

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Cross City Airport	CTY	28	$1,250,000	$2,098,000	$4,082,000
Crystal River – Captain Tom Davis Field	CGC	324	$13,319,000	$19,306,000	$29,189,000
Dade-Collier Training And Transition Airport	TNT	3	$163,000	$180,000	$367,000
Daytona Beach International Airport	DAB	8,678	$304,255,000	$521,219,000	$948,447,000
DeFuniak Springs Airport	54J	174	$5,782,000	$9,758,000	$20,750,000
Deland Municipal – Sidney H Taylor Field	DED	1,234	$60,836,000	$108,709,000	$210,532,000
Destin – Fort Walton Beach Airport / Eglin Air Force Base	VPS	8,245	$284,202,000	$480,740,000	$871,939,000
Destin Executive Airport	DTS	1,978	$60,352,000	$100,650,000	$216,733,000
Downtown Fort Lauderdale Heliport	DT1	7	$409,000	$437,000	$553,000
Everglades Airpark	X01	7	$394,000	$503,000	$1,006,000
Executive Airport	ORL	2,363	$101,852,000	$159,020,000	$294,138,000
Fernandina Beach Municipal Airport	FHB	1,085	$38,787,000	$61,608,000	$112,720,000
Flagler Executive Airport	FIN	1,340	$50,800,000	$120,553,000	$242,010,000
Flying Ten Airport	0J8	1	$27,000	$48,000	$92,000
Fort Lauderdale Executive Airport	FXE	11,432	$607,277,000	$931,150,000	$1,905,654,000
Fort Lauderdale/ Hollywood International Airport	FLL	67,013	$2,790,296,000	$4,865,881,000	$8,189,360,000
Fort Walton Beach Airport	1J9	3	$241,000	$360,000	$603,000
Gainesville Regional Airport	GNV	2,062	$88,155,000	$143,824,000	$303,622,000
George T Lewis Airport	CDK	11	$246,000	$387,000	$725,000
Halifax River Sea Plane Base	F15	2	$130,000	$139,000	$298,000
Herlong Recreational Airport	HEG	290	$13,580,000	$20,608,000	$41,540,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Hilliard Airpark	01J	13	$325,000	$514,000	$1,384,000
Immokalee Regional Airport	IMM	139	$7,982,000	$12,035,000	$26,756,000
Indiantown Airport	X58	26	$2,496,000	$3,634,000	$12,159,000
Inverness Airport	INF	341	$13,155,000	$20,177,000	$34,942,000
Jack Browns Seaplane Base	F57	23	$352,000	$367,000	$484,000
Jacksonville Executive At Craig Airport	CRG	1,042	$37,833,000	$55,756,000	$113,185,000
Jacksonville International Airport	JAX	13,260	$555,855,000	$845,025,000	$1,619,216,000
Key West International Airport	EYW	6,559	$288,506,000	$497,554,000	$817,585,000
Keystone Heights Airport	42J	275	$9,599,000	$15,183,000	$28,917,000
Kissimmee Gateway Airport	ISM	3,820	$165,078,000	$250,781,000	$509,383,000
La Belle Municipal Airport	X14	59	$2,540,000	$3,939,000	$8,518,000
Lake City Gateway Airport	LCQ	1,607	$112,544,000	$174,940,000	$583,412,000
Lake Wales Municipal Airport	X07	133	$8,602,000	$10,862,000	$18,628,000
Lakeland Linder International Airport	LAL	4,464	$205,010,000	$349,625,000	$781,072,000
Leesburg International Airport	LEE	263	$13,873,000	$18,921,000	$42,389,000
Manatee Airport	48X	3	$88,000	$98,000	$188,000
Marco Island Airport	MKY	1,262	$45,458,000	$74,364,000	$141,812,000
Marianna Municipal Airport	MAI	262	$9,573,000	$15,725,000	$36,317,000
Marion County Airport	X35	387	$20,222,000	$33,772,000	$71,383,000
Massey Ranch Airpark	X50	14	$836,000	$933,000	$1,975,000
Melbourne Orlando International Airport	MLB	9,136	$538,457,000	$935,600,000	$1,658,504,000
Merritt Island Airport	COI	263	$11,832,000	$17,100,000	$31,183,000
Miami Executive Airport	TMB	1,961	$85,717,000	$136,549,000	$270,693,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Miami Homestead General Aviation Airport	X51	152	$7,181,000	$10,339,000	$18,552,000
Miami International Airport	MIA	119,638	$5,860,775,000	$10,540,747,000	$18,359,283,000
Miami Seaplane Base	X44	6	$659,000	$736,000	$1,031,000
Miami-Opa Locka Executive Airport	OPF	2,839	$143,143,000	$218,082,000	$435,527,000
Mid-Florida Airport	X55	5	$94,000	$105,000	$213,000
Naples Airport	APF	3,286	$148,587,000	$230,948,000	$415,228,000
New Hibiscus Airpark	X52	1	$23,000	$36,000	$67,000
New Smyrna Beach Municipal Airport	EVB	1,047	$47,062,000	$70,516,000	$131,132,000
North Palm Beach County General Aviation Airport	F45	275	$12,236,000	$18,561,000	$44,209,000
North Perry Airport	HWO	1,271	$51,862,000	$75,015,000	$145,520,000
Northeast Florida Regional Airport	SGJ	1,529	$149,028,000	$228,071,000	$907,554,000
Northwest Florida Beaches International Airport	ECP	7,384	$247,182,000	$426,217,000	$799,370,000
Oak Tree Landing Airport	6J8	2	$6,000	$7,000	$67,000
Ocala International-Jim Taylor Field	OCF	770	$31,075,000	$51,029,000	$96,939,000
Okeechobee County Airport	OBE	500	$22,091,000	$36,140,000	$83,048,000
Orlando Apopka Airport	X04	29	$1,547,000	$1,906,000	$3,815,000
Orlando International Airport	MCO	191,596	$7,191,580,000	$12,538,198,000	$21,958,347,000
Orlando Sanford International Airport	SFB	14,451	$596,733,000	$1,004,747,000	$1,866,948,000
Ormond Beach Municipal Airport	OMN	298	$12,572,000	$18,871,000	$38,159,000
Page Field	FMY	2,081	$86,984,000	$128,109,000	$236,964,000
Palatka Municipal – Lt. Kay Larkin Field	28J	45	$2,499,000	$3,738,000	$11,475,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Palm Beach County Glades Airport	PHK	18	$924,000	$1,231,000	$3,129,000
Palm Beach County Park Airport	LNA	420	$22,850,000	$34,563,000	$83,099,000
Palm Beach International Airport	PBI	18,675	$828,496,000	$1,347,335,000	$2,424,024,000
Pensacola International Airport	PNS	9,580	$371,777,000	$631,455,000	$1,254,631,000
Perry-Foley Airport	FPY	19	$732,000	$1,100,000	$2,342,000
Peter O. Knight Airport	TPF	476	$17,118,000	$26,510,000	$54,007,000
Peter Prince Field	2R4	213	$8,257,000	$12,651,000	$28,831,000
Pierson Municipal Airport	2J8	5	$140,000	$145,000	$160,000
Pilot Country Airport	X05	29	$1,273,000	$1,601,000	$4,901,000
Plant City Airport	PCM	129	$5,022,000	$7,072,000	$13,252,000
Pompano Beach Airpark	PMP	1,477	$67,314,000	$107,476,000	$219,261,000
Punta Gorda Airport	PGD	6,862	$309,155,000	$497,521,000	$899,835,000
Quincy Municipal Airport	2J9	41	$1,641,000	$2,409,000	$5,442,000
River Ranch Resort Airport	2RR	2	$162,000	$181,000	$289,000
Roscoe Field	82J	41	$2,105,000	$2,547,000	$5,384,000
Sarasota/Bradenton International Airport	SRQ	14,184	$563,118,000	$948,011,000	$1,715,902,000
Sebastian Municipal Airport	X26	145	$8,685,000	$11,704,000	$30,293,000
Sebring Regional Airport	SEF	1,244	$50,450,000	$93,642,000	$234,241,000
Shell Creek Airpark	F13	15	$2,053,000	$2,127,000	$3,261,000
South Lakeland Airport	X49	7	$399,000	$497,000	$1,484,000
Southwest Florida International Airport	RSW	37,571	$1,517,711,000	$2,488,822,000	$4,437,702,000
Space Coast Regional Airport	TIX	1,562	$62,101,000	$98,005,000	$176,212,000
St. Cloud Seaplane Base	3FL	1	$71,000	$79,000	$168,000
St George Island Airport	F47	2	$46,000	$77,000	$154,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
St. Pete-Clearwater International Airport	PIE	11,935	$551,564,000	$916,454,000	$1,813,449,000
Suwannee County Airport	24J	223	$12,615,000	$17,603,000	$24,878,000
Tallahassee International Airport	TLH	2,249	$87,437,000	$146,186,000	$279,931,000
Tampa Executive Airport	VDF	2,249	$72,867,000	$119,009,000	$237,027,000
Tampa International Airport	TPA	49,789	$1,991,488,000	$3,315,802,000	$5,866,896,000
Tavares Seaplane Base	FA1	19	$943,000	$1,059,000	$2,330,000
The Florida Keys Marathon International Airport	MTH	1,056	$45,975,000	$71,193,000	$126,105,000
Treasure Coast International Airport	FPR	1,967	$90,378,000	$139,198,000	$306,539,000
Tri-County Airport	BCR	19	$988,000	$1,236,000	$3,121,000
Umatilla Municipal Airport	X23	47	$4,710,000	$10,491,000	$17,799,000
Valkaria Airport	X59	407	$16,228,000	$24,937,000	$42,126,000
Venice Municipal Airport	VNC	871	$34,838,000	$54,170,000	$108,519,000
Vero Beach Regional Airport	VRB	3,040	$164,513,000	$222,634,000	$440,911,000
Wakulla County Airport	2J0	1	$28,000	$36,000	$53,000
Wauchula Municipal Airport	CHN	30	$1,501,000	$2,140,000	$3,977,000
Williston Municipal Airport	X60	1,345	$93,489,000	$180,764,000	$490,706,000
Winter Haven Regional Airport	GIF	367	$14,995,000	$25,084,000	$48,524,000
Witham Field	SUA	3,866	$199,447,000	$313,178,000	$789,881,000
Zephyrhills Municipal Airport	ZPH	259	$15,930,000	$21,608,000	$49,482,000

Note: Totals may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

Multiplier Impacts by Airport

Table A-4: Multiplier Impacts (Supplier Sales and Income Re-spending Combined) by Airport[22]

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Airglades Airport	2IS	49	$2,712,000	$4,470,000	$8,144,000
Albert Whitted Airport	SPG	387	$20,313,000	$35,506,000	$65,338,000
Apalachicola Regional-Cleve Randolph Field	AAF	44	$2,182,000	$3,875,000	$7,367,000
Arcadia Municipal Airport	X06	31	$1,622,000	$2,816,000	$5,227,000
Arthur Dunn Air Park	X21	41	$2,063,000	$3,533,000	$6,597,000
Avon Park Executive Airport	AVO	40	$2,179,000	$3,688,000	$6,803,000
Bartow Executive Airport	BOW	936	$50,168,000	$87,752,000	$163,801,000
Belle Glade State Municipal Airport	X10	28	$1,458,000	$2,435,000	$4,478,000
Bob Lee Flight Strip	1J6	-	$3,000	$7,000	$12,000
Bob Sikes Airport	CEW	1,600	$87,129,000	$152,385,000	$293,174,000
Bob White Field	X61	2	$127,000	$211,000	$396,000
Boca Raton Airport	BCT	1,911	$99,438,000	$175,260,000	$322,284,000
Brooksville – Tampa Bay Regional Airport	BKV	3,485	$184,939,000	$334,047,000	$627,120,000
Buchan Airport	X36	-	$20,000	$32,000	$58,000
Calhoun County Airport	F95	28	$1,364,000	$2,378,000	$4,498,000
Carrabelle – Thompson Airport	X13	8	$346,000	$613,000	$1,175,000
Cecil Airport	VQQ	4,383	$242,329,000	$417,518,000	$769,941,000
Chalet Suzanne Air Strip	X25	-	$15,000	$23,000	$42,000
Clearwater Air Park	CLW	254	$13,105,000	$23,287,000	$42,605,000
Costin Airport	A51	-	$29,000	$53,000	$102,000

[22] Impacts for DAB and TLH do not match the impacts shown in the Statewide Executive Summary, their Individual Airport Brochures, or PowerPoint presentation because updated direct impacts were provided near the conclusion of this study.

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Cross City Airport	CTY	22	$1,159,000	$2,026,000	$3,662,000
Crystal River – Captain Tom Davis Field	CGC	153	$7,780,000	$14,077,000	$25,496,000
Dade-Collier Training And Transition Airport	TNT	3	$159,000	$264,000	$492,000
Daytona Beach International Airport	DAB	4,874	$238,244,000	$432,044,000	$804,206,000
DeFuniak Springs Airport	54J	102	$4,918,000	$8,782,000	$16,649,000
Deland Municipal – Sidney H Taylor Field	DED	997	$51,332,000	$91,372,000	$170,387,000
Destin – Fort Walton Beach Airport / Eglin Air Force Base	VPS	4,643	$222,448,000	$399,172,000	$754,145,000
Destin Executive Airport	DTS	1,064	$50,498,000	$90,580,000	$172,862,000
Downtown Fort Lauderdale Heliport	DT1	4	$215,000	$366,000	$676,000
Everglades Airpark	X01	6	$363,000	$608,000	$1,123,000
Executive Airport	ORL	1,715	$84,599,000	$150,170,000	$282,640,000
Fernandina Beach Municipal Airport	FHB	639	$33,063,000	$58,434,000	$106,123,000
Flagler Executive Airport	FIN	1,248	$62,512,000	$113,164,000	$213,243,000
Flying Ten Airport	0J8	-	$26,000	$46,000	$85,000
Fort Lauderdale Executive Airport	FXE	11,526	$616,748,000	$1,059,758,000	$2,023,629,000
Fort Lauderdale/ Hollywood International Airport	FLL	43,035	$2,245,335,000	$3,967,247,000	$7,250,835,000
Fort Walton Beach Airport	1J9	4	$190,000	$351,000	$668,000
Gainesville Regional Airport	GNV	1,495	$79,449,000	$138,654,000	$252,388,000
George T Lewis Airport	CDK	3	$204,000	$371,000	$675,000
Halifax River Sea Plane Base	F15	3	$129,000	$216,000	$405,000
Herlong Recreational Airport	HEG	224	$11,910,000	$21,068,000	$38,470,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Hilliard Airpark	01J	5	$304,000	$537,000	$984,000
Immokalee Regional Airport	IMM	133	$7,209,000	$12,608,000	$23,501,000
Indiantown Airport	X58	34	$2,003,000	$3,462,000	$6,438,000
Inverness Airport	INF	202	$10,431,000	$18,564,000	$33,890,000
Jack Browns Seaplane Base	F57	4	$221,000	$356,000	$649,000
Jacksonville Executive At Craig Airport	CRG	614	$31,914,000	$56,385,000	$103,356,000
Jacksonville International Airport	JAX	9,204	$488,197,000	$847,979,000	$1,545,058,000
Key West International Airport	EYW	4,528	$238,138,000	$413,820,000	$753,948,000
Keystone Heights Airport	42J	165	$8,433,000	$15,053,000	$27,439,000
Kissimmee Gateway Airport	ISM	2,526	$128,223,000	$234,178,000	$436,443,000
La Belle Municipal Airport	X14	42	$2,196,000	$3,874,000	$7,228,000
Lake City Gateway Airport	LCQ	1,816	$102,092,000	$181,128,000	$336,990,000
Lake Wales Municipal Airport	X07	125	$6,714,000	$11,336,000	$21,051,000
Lakeland Linder International Airport	LAL	3,867	$204,675,000	$348,103,000	$651,958,000
Leesburg International Airport	LEE	251	$12,743,000	$22,219,000	$41,353,000
Manatee Airport	48X	2	$72,000	$123,000	$230,000
Marco Island Airport	MKY	688	$35,007,000	$61,832,000	$116,037,000
Marianna Municipal Airport	MAI	183	$8,886,000	$15,919,000	$30,410,000
Marion County Airport	X35	397	$20,596,000	$36,179,000	$68,532,000
Massey Ranch Airpark	X50	16	$825,000	$1,380,000	$2,579,000
Melbourne Orlando International Airport	MLB	8,750	$439,046,000	$771,936,000	$1,425,128,000
Merritt Island Airport	COI	188	$9,411,000	$16,547,000	$30,830,000
Miami Executive Airport	TMB	1,359	$71,207,000	$123,531,000	$227,198,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Miami Homestead General Aviation Airport	X51	124	$6,355,000	$10,817,000	$19,835,000
Miami International Airport	MIA	102,328	$5,364,389,000	$9,233,279,000	$16,896,373,000
Miami Seaplane Base	X44	9	$430,000	$716,000	$1,337,000
Miami-Opa Locka Executive Airport	OPF	2,450	$127,673,000	$219,548,000	$405,168,000
Mid-Florida Airport	X55	2	$90,000	$149,000	$279,000
Naples Airport	APF	2,168	$112,677,000	$196,246,000	$365,700,000
New Hibiscus Airpark	X52	-	$18,000	$34,000	$62,000
New Smyrna Beach Municipal Airport	EVB	654	$32,445,000	$58,615,000	$109,480,000
North Palm Beach County General Aviation Airport	F45	192	$10,199,000	$17,905,000	$33,135,000
North Perry Airport	HWO	818	$42,071,000	$74,796,000	$139,186,000
Northeast Florida Regional Airport	SGJ	2,359	$136,209,000	$237,378,000	$443,332,000
Northwest Florida Beaches International Airport	ECP	4,186	$200,226,000	$359,178,000	$680,138,000
Oak Tree Landing Airport	6J8	1	$30,000	$50,000	$89,000
Ocala International-Jim Taylor Field	OCF	504	$24,981,000	$44,838,000	$84,219,000
Okeechobee County Airport	OBE	394	$20,962,000	$37,136,000	$69,677,000
Orlando Apopka Airport	X04	27	$1,332,000	$2,340,000	$4,396,000
Orlando International Airport	MCO	118,322	$5,826,841,000	$10,470,013,000	$19,474,772,000
Orlando Sanford International Airport	SFB	9,773	$487,425,000	$867,895,000	$1,615,619,000
Ormond Beach Municipal Airport	OMN	217	$10,890,000	$18,986,000	$35,390,000
Page Field	FMY	1,361	$69,734,000	$121,495,000	$228,021,000
Palatka Municipal – Lt. Kay Larkin Field	28J	44	$2,454,000	$4,235,000	$7,796,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Palm Beach County Glades Airport	PHK	16	$812,000	$1,401,000	$2,585,000
Palm Beach County Park Airport	LNA	353	$18,899,000	$33,125,000	$61,233,000
Palm Beach International Airport	PBI	12,922	$677,215,000	$1,190,912,000	$2,182,854,000
Pensacola International Airport	PNS	6,637	$321,024,000	$568,676,000	$1,075,664,000
Perry-Foley Airport	FPY	15	$715,000	$1,263,000	$2,298,000
Peter O. Knight Airport	TPF	282	$14,685,000	$26,018,000	$47,764,000
Peter Prince Field	2R4	152	$7,355,000	$12,943,000	$24,565,000
Pierson Municipal Airport	2J8	1	$65,000	$110,000	$204,000
Pilot Country Airport	X05	19	$1,023,000	$1,791,000	$3,321,000
Plant City Airport	PCM	85	$4,437,000	$7,755,000	$14,184,000
Pompano Beach Airpark	PMP	1,121	$58,942,000	$102,764,000	$190,692,000
Punta Gorda Airport	PGD	4,457	$231,719,000	$404,173,000	$750,650,000
Quincy Municipal Airport	2J9	31	$1,526,000	$2,703,000	$5,155,000
River Ranch Resort Airport	2RR	2	$120,000	$196,000	$360,000
Roscoe Field	82J	42	$2,046,000	$3,452,000	$6,534,000
Sarasota/Bradenton International Airport	SRQ	8,824	$450,690,000	$789,252,000	$1,481,701,000
Sebastian Municipal Airport	X26	136	$7,385,000	$12,851,000	$23,894,000
Sebring Regional Airport	SEF	1,059	$56,250,000	$100,167,000	$186,676,000
Shell Creek Airpark	F13	27	$1,509,000	$2,422,000	$4,409,000
South Lakeland Airport	X49	6	$293,000	$506,000	$946,000
Southwest Florida International Airport	RSW	22,913	$1,174,747,000	$2,055,030,000	$3,836,606,000
Space Coast Regional Airport	TIX	1,027	$51,016,000	$90,649,000	$169,706,000
St. Cloud Seaplane Base	3FL	1	$71,000	$118,000	$220,000
St George Island Airport	F47	-	$38,000	$68,000	$131,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
St. Pete-Clearwater International Airport	PIE	8,839	$469,360,000	$839,611,000	$1,536,591,000
Suwannee County Airport	24J	133	$6,848,000	$12,312,000	$21,975,000
Tallahassee International Airport	TLH	1,523	$73,335,000	$130,326,000	$247,424,000
Tampa Executive Airport	VDF	1,161	$59,674,000	$107,272,000	$196,880,000
Tampa International Airport	TPA	32,348	$1,681,686,000	$2,990,354,000	$5,451,194,000
Tavares Seaplane Base	FA1	19	$958,000	$1,615,000	$3,017,000
The Florida Keys Marathon International Airport	MTH	657	$34,218,000	$59,736,000	$109,270,000
Treasure Coast International Airport	FPR	1,389	$73,497,000	$129,607,000	$240,207,000
Tri-County Airport	BCR	19	$949,000	$1,642,000	$3,119,000
Umatilla Municipal Airport	X23	82	$4,134,000	$7,228,000	$13,198,000
Valkaria Airport	X59	237	$11,617,000	$21,059,000	$39,275,000
Venice Municipal Airport	VNC	527	$27,093,000	$47,479,000	$89,210,000
Vero Beach Regional Airport	VRB	2,873	$152,661,000	$265,733,000	$492,155,000
Wakulla County Airport	2J0	-	$18,000	$30,000	$60,000
Wauchula Municipal Airport	CHN	28	$1,407,000	$2,420,000	$4,580,000
Williston Municipal Airport	X60	1,967	$109,840,000	$196,309,000	$367,978,000
Winter Haven Regional Airport	GIF	233	$12,042,000	$21,138,000	$39,615,000
Witham Field	SUA	2,992	$162,306,000	$285,461,000	$527,727,000
Zephyrhills Municipal Airport	ZPH	232	$12,376,000	$21,887,000	$40,165,000
Statewide Airport-Specific Multiplier Impacts		481,406	$24,705,394,000	$43,520,914,000	$80,449,235,000

Note: Totals may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

Total Economic Impacts by Airport

Table A-5: Total Economic Impacts by Airport[23]

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Airglades Airport	2IS	110	$6,227,000	$8,763,000	$15,346,000
Albert Whitted Airport	SPG	948	$42,892,000	$68,555,000	$128,314,000
Apalachicola Regional-Cleve Randolph Field	AAF	109	$4,803,000	$7,796,000	$16,555,000
Arcadia Municipal Airport	X06	72	$3,760,000	$5,954,000	$11,163,000
Arthur Dunn Air Park	X21	88	$4,340,000	$6,495,000	$12,317,000
Avon Park Executive Airport	AVO	81	$5,046,000	$7,430,000	$13,921,000
Bartow Executive Airport	BOW	1,907	$108,847,000	$169,845,000	$345,392,000
Belle Glade State Municipal Airport	X10	60	$2,945,000	$4,184,000	$8,078,000
Bob Lee Flight Strip	1J6	2	$7,000	$12,000	$23,000
Bob Sikes Airport	CEW	2,663	$166,818,000	$279,140,000	$910,555,000
Bob White Field	X61	4	$215,000	$310,000	$695,000
Boca Raton Airport	BCT	4,843	$219,157,000	$377,467,000	$692,930,000
Brooksville - Tampa Bay Regional Airport	BKV	6,092	$327,076,000	$598,194,000	$1,299,616,000
Buchan Airport	X36	6	$53,000	$67,000	$103,000
Calhoun County Airport	F95	45	$2,446,000	$4,197,000	$10,822,000
Carrabelle - Thompson Airport	X13	21	$703,000	$1,149,000	$3,200,000
Cecil Airport	VQQ	8,163	$523,378,000	$802,902,000	$1,853,964,000
Chalet Suzanne Air Strip	X25	-	$34,000	$43,000	$73,000
Clearwater Air Park	CLW	685	$28,978,000	$48,189,000	$87,877,000
Costin Airport	A51	1	$64,000	$103,000	$203,000

[23] Impacts for DAB and TLH do not match the impacts shown in the Statewide Executive Summary, their Individual Airport Brochures, or PowerPoint presentation because updated direct impacts were provided near the conclusion of this study.

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Cross City Airport	CTY	50	$2,409,000	$4,124,000	$7,744,000
Crystal River - Captain Tom Davis Field	CGC	477	$21,099,000	$33,383,000	$54,685,000
Dade-Collier Training And Transition Airport	TNT	6	$322,000	$444,000	$859,000
Daytona Beach International Airport	DAB	13,552	$542,499,000	$953,263,000	$1,752,653,000
DeFuniak Springs Airport	54J	276	$10,700,000	$18,540,000	$37,399,000
Deland Municipal - Sidney H. Taylor Field	DED	2,231	$112,168,000	$200,081,000	$380,919,000
Destin - Fort Walton Beach Airport / Eglin Air Force Base	VPS	12,888	$506,650,000	$879,912,000	$1,626,084,000
Destin Executive Airport	DTS	3,042	$110,850,000	$191,230,000	$389,595,000
Downtown Fort Lauderdale Heliport	DT1	11	$624,000	$803,000	$1,229,000
Everglades Airpark	X01	13	$757,000	$1,111,000	$2,129,000
Executive Airport	ORL	4,078	$186,451,000	$309,190,000	$576,778,000
Fernandina Beach Municipal Airport	FHB	1,724	$71,850,000	$120,042,000	$218,843,000
Flagler Executive Airport	FIN	2,588	$113,312,000	$233,717,000	$455,253,000
Flying Ten Airport	0J8	1	$53,000	$94,000	$177,000
Fort Lauderdale Executive Airport	FXE	22,958	$1,224,025,000	$1,990,908,000	$3,929,283,000
Fort Lauderdale/Hollywood International Airport	FLL	110,048	$5,035,631,000	$8,833,128,000	$15,440,195,000
Fort Walton Beach Airport	1J9	7	$431,000	$711,000	$1,271,000
Gainesville Regional Airport	GNV	3,557	$167,604,000	$282,478,000	$556,010,000
George T. Lewis Airport	CDK	14	$450,000	$758,000	$1,400,000
Halifax River Sea Plane Base	F15	5	$259,000	$355,000	$703,000
Herlong Recreational Airport	HEG	514	$25,490,000	$41,676,000	$80,010,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Hilliard Airpark	01J	18	$629,000	$1,051,000	$2,368,000
Immokalee Regional Airport	IMM	272	$15,191,000	$24,643,000	$50,257,000
Indiantown Airport	X58	60	$4,499,000	$7,096,000	$18,597,000
Inverness Airport	INF	543	$23,586,000	$38,741,000	$68,832,000
Jack Browns Seaplane Base	F57	27	$573,000	$723,000	$1,133,000
Jacksonville Executive At Craig Airport	CRG	1,656	$69,747,000	$112,141,000	$216,541,000
Jacksonville International Airport	JAX	22,464	$1,044,052,000	$1,693,004,000	$3,164,274,000
Key West International Airport	EYW	11,087	$526,644,000	$911,374,000	$1,571,533,000
Keystone Heights Airport	42J	440	$18,032,000	$30,236,000	$56,356,000
Kissimmee Gateway Airport	ISM	6,346	$293,301,000	$484,959,000	$945,826,000
La Belle Municipal Airport	X14	101	$4,736,000	$7,813,000	$15,746,000
Lake City Gateway Airport	LCQ	3,423	$214,636,000	$356,068,000	$920,402,000
Lake Wales Municipal Airport	X07	258	$15,316,000	$22,198,000	$39,679,000
Lakeland Linder International Airport	LAL	8,331	$409,685,000	$697,728,000	$1,433,030,000
Leesburg International Airport	LEE	514	$26,616,000	$41,140,000	$83,742,000
Manatee Airport	48X	5	$160,000	$221,000	$418,000
Marco Island Airport	MKY	1,950	$80,465,000	$136,196,000	$257,849,000
Marianna Municipal Airport	MAI	445	$18,459,000	$31,644,000	$66,727,000
Marion County Airport	X35	784	$40,818,000	$69,951,000	$139,915,000
Massey Ranch Airpark	X50	30	$1,661,000	$2,313,000	$4,554,000
Melbourne Orlando International Airport	MLB	17,886	$977,503,000	$1,707,536,000	$3,083,632,000
Merritt Island Airport	COI	451	$21,243,000	$33,647,000	$62,013,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Miami Executive Airport	TMB	3,320	$156,924,000	$260,080,000	$497,891,000
Miami Homestead General Aviation Airport	X51	276	$13,536,000	$21,156,000	$38,387,000
Miami International Airport	MIA	221,966	$11,225,164,000	$19,774,026,000	$35,255,656,000
Miami Seaplane Base	X44	15	$1,089,000	$1,452,000	$2,368,000
Miami-Opa Locka Executive Airport	OPF	5,289	$270,816,000	$437,630,000	$840,695,000
Mid-Florida Airport	X55	7	$184,000	$254,000	$492,000
Naples Airport	APF	5,454	$261,264,000	$427,194,000	$780,928,000
New Hibiscus Airpark	X52	1	$41,000	$70,000	$129,000
New Smyrna Beach Municipal Airport	EVB	1,701	$79,507,000	$129,131,000	$240,612,000
North Palm Beach County General Aviation Airport	F45	467	$22,435,000	$36,466,000	$77,344,000
North Perry Airport	HWO	2,089	$93,933,000	$149,811,000	$284,706,000
Northeast Florida Regional Airport	SGJ	3,888	$285,237,000	$465,449,000	$1,350,886,000
Northwest Florida Beaches International Airport	ECP	11,570	$447,408,000	$785,395,000	$1,479,508,000
Oak Tree Landing Airport	6J8	3	$36,000	$57,000	$156,000
Ocala International-Jim Taylor Field	OCF	1,274	$56,056,000	$95,867,000	$181,158,000
Okeechobee County Airport	OBE	894	$43,053,000	$73,276,000	$152,725,000
Orlando Apopka Airport	X04	56	$2,879,000	$4,246,000	$8,211,000
Orlando International Airport	MCO	309,918	$13,018,421,000	$23,008,211,000	$41,433,119,000
Orlando Sanford International Airport	SFB	24,224	$1,084,158,000	$1,872,642,000	$3,482,567,000
Ormond Beach Municipal Airport	OMN	515	$23,462,000	$37,857,000	$73,549,000
Page Field	FMY	3,442	$156,718,000	$249,604,000	$464,985,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
Palatka Municipal-Lt Kay Larkin Field	28J	89	$4,953,000	$7,973,000	$19,271,000
Palm Beach County Glades Airport	PHK	34	$1,736,000	$2,632,000	$5,714,000
Palm Beach County Park Airport	LNA	773	$41,749,000	$67,688,000	$144,332,000
Palm Beach International Airport	PBI	31,597	$1,505,711,000	$2,538,247,000	$4,606,878,000
Pensacola International Airport	PNS	16,217	$692,801,000	$1,200,131,000	$2,330,295,000
Perry-Foley Airport	FPY	34	$1,447,000	$2,363,000	$4,640,000
Peter O Knight Airport	TPF	758	$31,803,000	$52,528,000	$101,771,000
Peter Prince Field	2R4	365	$15,612,000	$25,594,000	$53,396,000
Pierson Municipal Airport	2J8	6	$205,000	$255,000	$364,000
Pilot Country Airport	X05	48	$2,296,000	$3,392,000	$8,222,000
Plant City Airport	PCM	214	$9,459,000	$14,827,000	$27,436,000
Pompano Beach Airpark	PMP	2,598	$126,256,000	$210,240,000	$409,953,000
Punta Gorda Airport	PGD	11,319	$540,874,000	$901,694,000	$1,650,485,000
Quincy Municipal Airport	2J9	72	$3,167,000	$5,112,000	$10,597,000
River Ranch Resort Airport	2RR	4	$282,000	$377,000	$649,000
Roscoe Field	82J	83	$4,151,000	$5,999,000	$11,918,000
Sarasota/Bradenton International Airport	SRQ	23,008	$1,013,808,000	$1,737,263,000	$3,197,603,000
Sebastian Municipal Airport	X26	281	$16,070,000	$24,555,000	$54,187,000
Sebring Regional Airport	SEF	2,303	$106,700,000	$193,809,000	$420,917,000
Shell Creek Airpark	F13	42	$3,562,000	$4,549,000	$7,670,000
South Lakeland Airport	X49	13	$692,000	$1,003,000	$2,430,000
Southwest Florida International Airport	RSW	60,484	$2,692,458,000	$4,543,852,000	$8,274,308,000
Space Coast Regional Airport	TIX	2,589	$113,117,000	$188,654,000	$345,918,000

Airport Name	FAA ID	Jobs	Payroll	Value Added	Total Economic Impact (Output)
St. Cloud Seaplane Base	3FL	2	$142,000	$197,000	$388,000
St. George Island Airport	F47	2	$84,000	$145,000	$285,000
St. Pete-Clearwater International Airport	PIE	20,774	$1,020,924,000	$1,756,065,000	$3,350,040,000
Suwannee County Airport	24J	356	$19,463,000	$29,915,000	$46,853,000
Tallahassee International Airport	TLH	3,772	$160,772,000	$276,512,000	$527,355,000
Tampa Executive Airport	VDF	3,410	$132,541,000	$226,281,000	$433,907,000
Tampa International Airport	TPA	82,137	$3,673,174,000	$6,306,156,000	$11,318,090,000
Tavares Seaplane Base	FA1	38	$1,901,000	$2,674,000	$5,347,000
The Florida Keys Marathon International Airport	MTH	1,713	$80,193,000	$130,929,000	$235,375,000
Treasure Coast International Airport	FPR	3,356	$163,875,000	$268,805,000	$546,746,000
Tri-County Airport	BCR	38	$1,937,000	$2,878,000	$6,240,000
Umatilla Municipal Airport	X23	129	$8,844,000	$17,719,000	$30,997,000
Valkaria Airport	X59	644	$27,845,000	$45,996,000	$81,401,000
Venice Municipal Airport	VNC	1,398	$61,931,000	$101,649,000	$197,729,000
Vero Beach Regional Airport	VRB	5,913	$317,174,000	$488,367,000	$933,066,000
Wakulla County Airport	2J0	1	$46,000	$66,000	$113,000
Wauchula Municipal Airport	CHN	58	$2,908,000	$4,560,000	$8,557,000
Williston Municipal Airport	X60	3,312	$203,329,000	$377,073,000	$858,684,000
Winter Haven Regional Airport	GIF	600	$27,037,000	$46,222,000	$88,139,000
Witham Field	SUA	6,858	$361,753,000	$598,639,000	$1,317,608,000
Zephyrhills Municipal Airport	ZPH	491	$28,306,000	$43,495,000	$89,647,000

Note: Totals may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

Appendix B. Economic Impacts by FDOT District

The following tables summarizes the aviation economic impacts by each of the five categories generated at each FDOT district, as well as a total for the district and the state.

Table B-1: Economic Impact Categories by FDOT District

District	On-Airport	Visitor Spending	Off-Airport Air Cargo	Military[24]	Total Economic Impact (Output)[25]
District 1	$5,921,723,000	$11,511,641,000	$11,878,768,000	$0	$29,312,132,000
District 2	$6,360,626,000	$2,997,953,000	$11,563,518,000	$2,947,550,000	$23,869,647,000
District 3	$2,969,125,000	$4,512,993,000	$6,258,064,000	$5,135,405,000	$18,875,588,000
District 4	$13,435,336,000	$15,035,640,000	$31,976,249,000	$0	$60,447,225,000
District 5	$17,233,792,000	$36,149,335,000	$38,563,792,000	$1,050,103,000	$92,997,023,000
District 6	$23,448,442,000	$14,994,322,000	$21,706,453,000	$719,578,000	$60,868,795,000
District 7	$7,807,653,000	$9,151,161,000	$28,055,943,000	$3,087,538,000	$48,102,295,000
TOTAL	$77,176,697,000	$94,353,045,000	$150,002,788,000	$12,940,174,000	$334,472,704,000

Note: Totals may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

Table B-2: Total Economic Impact by FDOT District by Jobs, Payroll, Value Added, and Total Output

District	Jobs	Payroll	Value Added	Total Output
District 1	182,369	$9,062,134,000	$15,167,787,000	$29,333,359,000
District 2	137,568	$8,088,709,000	$10,839,040,000	$23,906,129,000
District 3	145,793	$7,895,360,000	$7,704,200,000	$18,917,516,000
District 4	335,622	$18,937,614,000	$31,999,104,000	$60,470,973,000
District 5	575,951	$28,662,427,000	$49,171,459,000	$93,033,249,000
District 6	352,970	$19,250,407,000	$32,780,951,000	$60,862,343,000
District 7	278,815	$16,343,117,000	$24,276,364,000	$48,155,977,000
TOTAL	2,009,088	$108,239,768,000	$171,938,905,000	$334,679,546,000

Note: Totals may not sum due to rounding.
Sources: EBP US, 2022; Kimley-Horn, 2022

[24] Districts 1 and 4 do not have military aviation facilities that generate military impacts.
[25] Total output by FDOT district excludes industry reliance which was only calculated and reported at a statewide level. Refer to **Section 6.5** for the statewide industry reliance impacts.

Appendix C. Off-Airport Air Cargo

Florida's airports offer tremendous benefits to the state's economy, social fabric, as well as the national and local economies. The airports themselves, as well as businesses located at airports, employ thousands of people who spend their wages in the local economy, which eventually circulate throughout the region, state, nation, and sometimes worldwide. Florida's airports also welcome millions of out-of-state visitors, bringing with them money that ultimately supports additional Florida businesses and economies. Local off-airport businesses are often anchored by airports, as the airport accommodates the transport of their goods and people to maintain their business operations.

Across Florida, airports deliver critical support to industries by enabling businesses to transport commodities and finished goods both from suppliers and to customers. Air cargo services provided by Florida's airports connect long-distance domestic and international markets to companies in the state – positioning Florida as a global business leader. These services enable Florida-based companies to expand customer markets and acquire commodities used for production or to create opportunities for sales around the world.

*A **commodity** is a basic good that is interchangeable with other goods of the same type. A single commodity type can be used as inputs to multiple industries. For example, plastic (a commodity) can be used as an input in construction, manufacturing, and retail (all industries).*

Expanding customer markets through outgoing air cargo generates increases business sales, which in turn brings dollars from other states or nations into Florida. Product acquisition through incoming air cargo enables Florida-based companies to shop for the best commodity prices in the global marketplace, provide competitive pricing, and ensure timely deliveries. The markets available to Florida-based companies would be decreased without access to air cargo services, as the time required for transportation and commodity prices would increase. Additional economic impacts (as measured in terms of output), jobs, and payroll result from the lower costs and expanded sales reach realized by Florida-based businesses as the result of access to air cargo services.

To quantify the role that airports play in positioning Florida as a global business power, *this analysis assessed the reliance of Florida's off-airport industries on cargo that is transported through Florida's airports and, specifically, the air cargo that directly interacts with Florida businesses.* This analysis also calculates the wider economic contributions of air cargo to off-airport businesses at both the statewide as well as FDOT District levels.[26] The overall results of this analysis are illustrated in **Figure C-1**: Off-Airport Air Cargo Impacts. As shown, the analysis determined that off-airport air cargo services support over 700,000 jobs (direct and multiplier impacts). These jobs represent approximately $45 billion in payroll and provide a value added of over $75 billion – all yielding a total economic impact of $150 billion.

[26] This analysis does not include the impacts of on-airport air cargo jobs, which are captured under the On-Airport economic impact analysis.

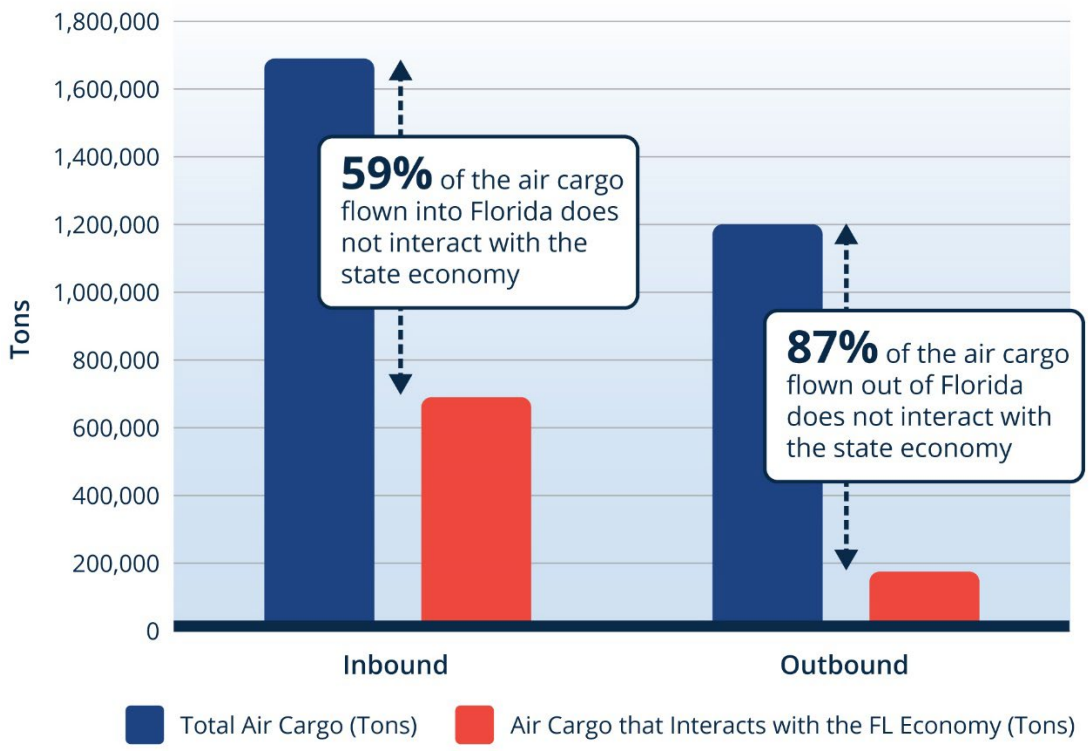
Figure C-1: Off-Airport Air Cargo Impacts

Source: Kimley-Horn, 2022

Overall, approximately 2.9 million tons of air cargo passed through Florida's airports in 2020, the most recent data year available.[27] Approximately 839,000 tons of this cargo, valued at $46 billion, are used as inputs or otherwise interact with Florida businesses. The remainder of this cargo passes through Florida airports without interacting with the state's economy. The 839,000 tons account for approximately 41 percent of total imported air cargo and 13 percent of all exported air cargo that directly interacts with businesses located in Florida communities (see **Figure C-2**).[28]

[27] Unless otherwise noted, all data are from 2020 and are presented in 2021 values.
[28] Source: Bureau of Transportation Statistics, T-100, All Carrier Statistics Database, 2020

Figure C-2: Total Air Cargo Flow into and Out of Florida (2020)

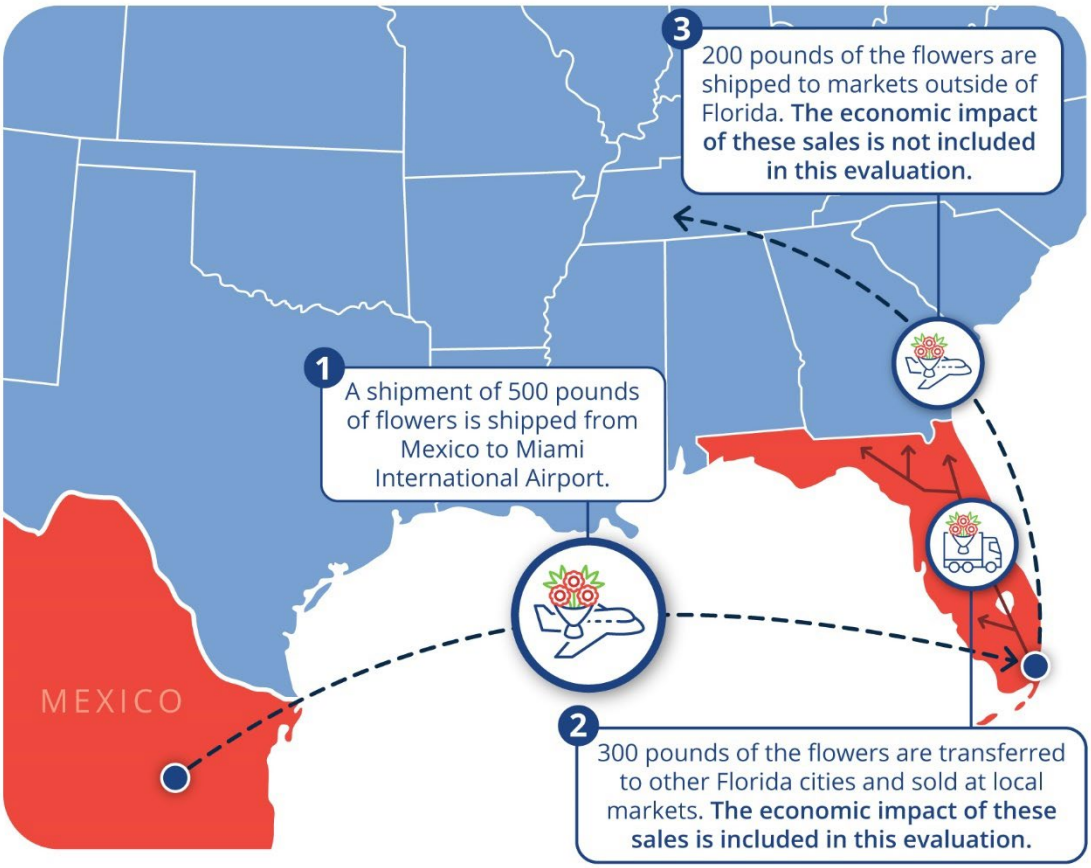


Sources: vFreight™, 2022; T-100, 2022

As previously noted, and illustrated in **Figure C-2**, air cargo that flows though Florida's airports but does not otherwise interact with the state economy is not considered in this analysis. For example, goods that arrive at Miami International Airport (MIA) and are then immediately flown or trucked to other states are excluded because they do not contribute to the industrial base of the state.[29] This example is depicted in **Figure C-3**.

[29] Air cargo carriers operating at MIA are measured in on-airport activities (tenant employment) and reported in the airport's economic impact summarized in **Section A.1.**

Figure C-3: Example of Air Cargo Activity Measured in 2022 AEIS



Source: Kimley-Horn, 2022

This analysis is presented across five major sections, provided below.

- Summary of Statewide Air Cargo Dependency
- International and Domestic Air Cargo Flows
- Air Cargo Dependency by FDOT District
- Air Cargo Dependency by Industry Source
- Summary

This appendix also includes two additional sections detailing the data sources and methodology: **Section C.7. Data Sources** and **Section C.8. Methodology**.

C.1. Summary of Statewide Air Cargo Dependency

This analysis focuses on imports and exports of air cargo that are transported through Florida's airports and interact directly with Florida businesses. This analysis does not include on-airport air cargo activity, as that is included with on-airport impacts. As illustrated previously in , off-airport air cargo dependency contributes a total of 700,738 jobs, over $44 billion in payroll, over $75 billion in value added, and $150 billion in total economic impact (output) to the state's economy.[30] The $150 billion in total economic impact (output) is a result of both off-airport air cargo supporting industry production processes as well as airports being used to support long-distance sales by Florida companies.

***Value added** produced by a company or an industry to the Florida economy consists of compensation of employees, taxes paid on production and imports, and gross operating surplus. Value added equals the difference between an industry's gross output and the cost of its intermediate inputs.*

Table C-1 provides a summary of the economic impacts of Florida's statewide air cargo dependency.

Table C-1: Economic Impacts of Statewide Air Cargo Dependency

Impact	Jobs	Payroll (Billions of $)	Value Added (Billions of $)	Economic Impact (Output) (Billions of $)
Direct	285,246	$22.3	$36.4	$77.9
Multiplier	415,493	22.4	$39.0	$72.1
TOTAL	700,738	$44.7	$75.4	$150.0

Note: Totals may not equal the sum of rows due to rounding.
Sources: vFreight™, 2022; IMPLAN assembled and calculated by EBP, 2022

C.1.1.1. International and Domestic Air Cargo Flows

This section provides an overview of international and domestic air cargo flows by commodity and by points of origin and destination (O&D). It also includes several illustrative maps to depict the results. It should be emphasized that these impacts are presented at the FDOT District level only, **not** the individual airport level.[31]

C.1.1.2. Statewide International Air Cargo

With its proximate location near Central and Latin America, Florida is in a prime geographic location to export and import international goods from these regions. Roughly 742,000 tons of international air cargo (both exports and imports), valued at $31 billion, were transported through Florida airports in

[30] Jobs, payroll, value added in economic impact (output) have the same definitions as defined in Chapter 1. Study Overview.
[31] Analysis was completed at the county level and aggregated to the FDOT District level for presentation.

2020, the most recent reporting year. The following two subsections detail the value of international air cargo by FDOT District, as well as the top commodities imported and exported internationally to and from Florida.

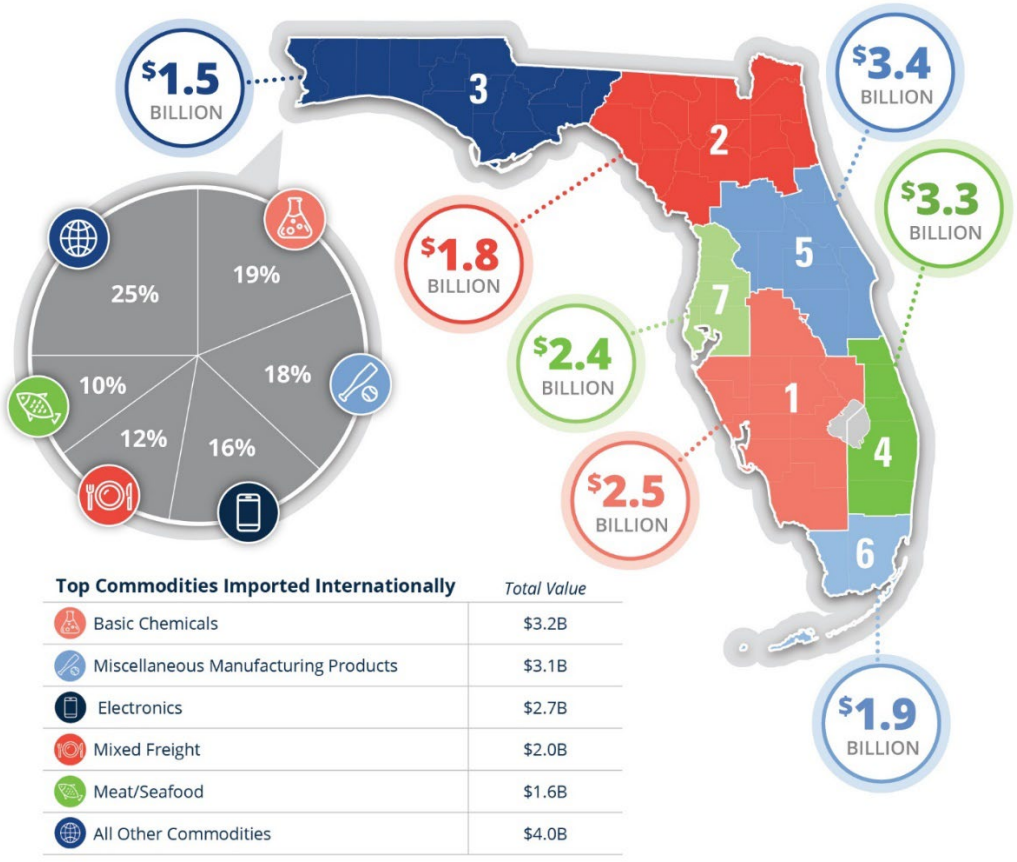
C.1.1.3. International Air Cargo Imports

illustrates the total value of international air cargo imported into Florida, by FDOT District. As shown, airports in District 5 imported the greatest value of international air cargo at $3.4 billion. This is followed closely by airports in District 4, which collectively imported $3.3 billion in international air cargo imports.

Figure C-4 also shows the top five commodities internationally imported into Florida, with all remaining commodities categorized in the "All Other" category. The "all other" category represents the highest value at 25 percent, but reflects a mix of many individual commodities. As shown, basic chemicals accounted for 19 percent of the value share, followed by miscellaneous manufacturing products (e.g., jewelry and toys) accounting for 18 percent. A review of commodity consumption by major industries revealed that the chemical manufacturing and transportation equipment manufacturing industries consume the greatest value of international air cargo imports.[32]

[32] Identifying the top industries for international air cargo imports was based on a review of select Florida counties that recorded the greatest share of international imports into Florida by value.

Figure C-4: Total Value of International Air Cargo Imports by FDOT District and Top Five International Air Commodity Imports by Value (2021 Dollars)



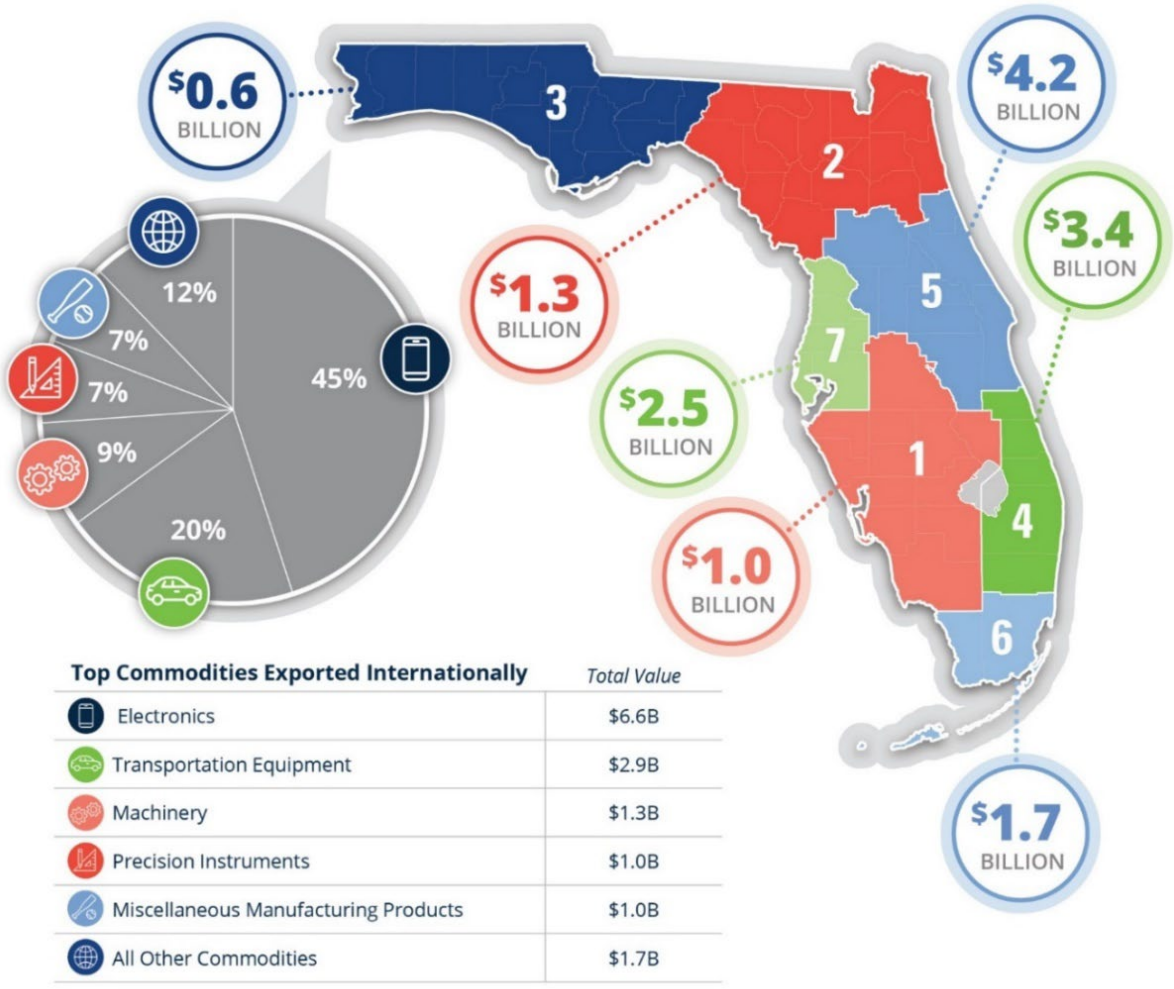
Sources: vFreight™, 2022; EBP US, 2022; Kimley-Horn, 2022

C.1.1.4. International Air Cargo Exports

Figure C-5 illustrates the total value of international air cargo exported from Florida, by FDOT District. As shown, airports in District 5 exported the greatest value of international air cargo at $4.2 billion. This is followed by airports in District 4, which contributed $3.4 billion in international air cargo exports. **Figure C-5** also shows the top five commodities internationally exported from Florida, with all remaining commodities categorized in the "All Other" category. As shown, electronics account for almost half of the value of all international cargo exported from Florida's airports. A review of commodity uses by major industries revealed that the wholesale trade and transportation equipment manufacturing industries distribute the greatest value of international air cargo exports.[33]

[33] Identifying the top industries for international air cargo exports was based on a review of select Florida counties that recorded the greatest share of international exports from Florida by value.

Figure C-5: Total Value of International Air Cargo Exports by FDOT District and Top Five International Air Commodity Exports by Value (2021 Dollars)



Top Commodities Exported Internationally	Total Value
Electronics	$6.6B
Transportation Equipment	$2.9B
Machinery	$1.3B
Precision Instruments	$1.0B
Miscellaneous Manufacturing Products	$1.0B
All Other Commodities	$1.7B

Sources: vFreight™, 2022; Kimley-Horn, 2022

C.1.1.5. Statewide Domestic Air Cargo

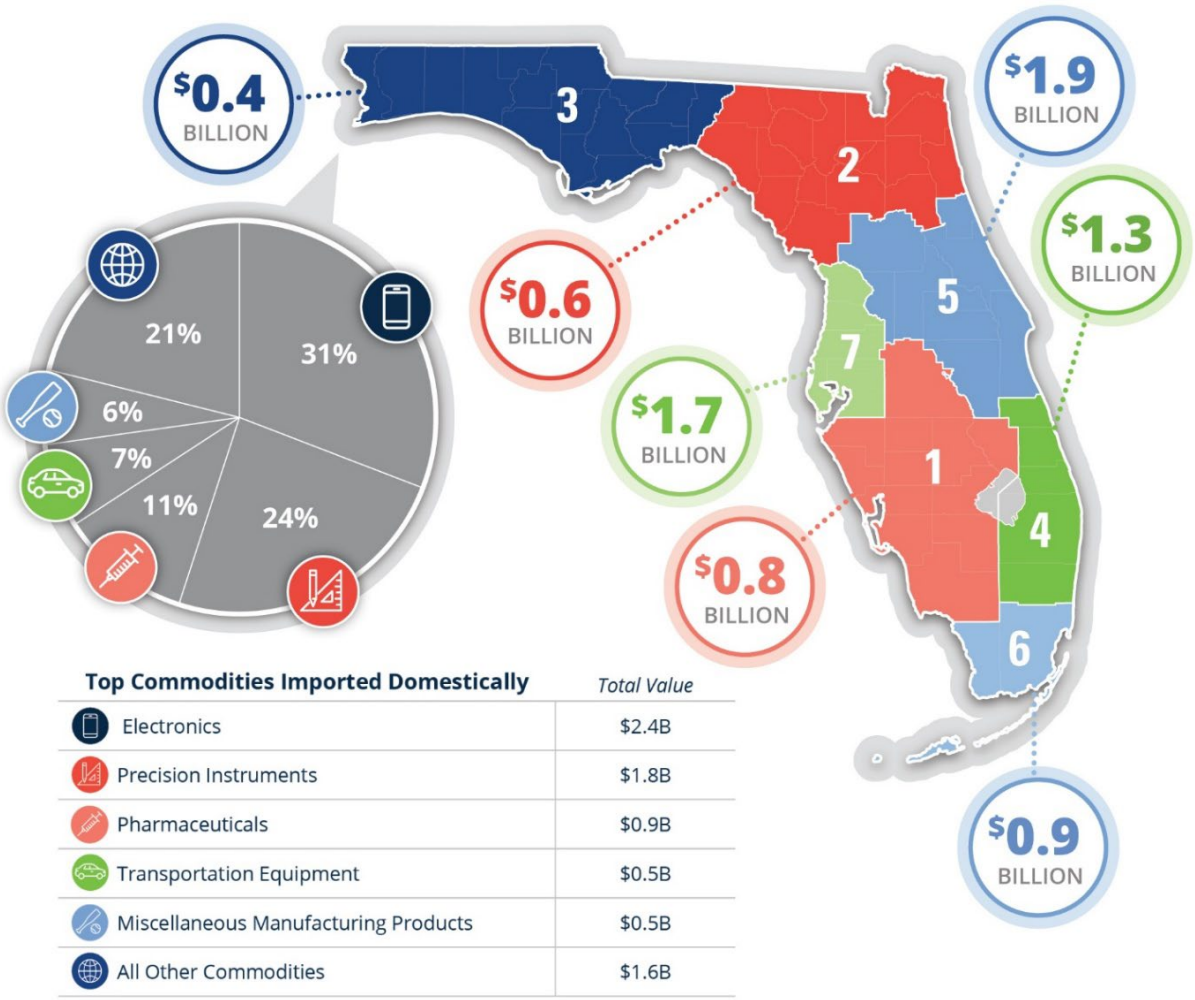
Florida is a major national business hub and supports considerable amounts of domestic air cargo on an annual basis. Approximately 96,000 tons of domestic air cargo valued at almost $15 billion was transported as exports and imports via the state's airports to and from Florida businesses in 2020, the most recent reporting year. The following two subsections detail the value of domestic air cargo by FDOT District as well as the top commodities imported and exported nationally to and from Florida.

C.1.1.6. Domestic Air Cargo Imports

Figure C-6 illustrates the total value of domestic air cargo imported to Florida, by FDOT District. As shown, airports in District 5 imported the greatest value of domestic air cargo at $1.9 billion. This is followed closely by airports in District 7 that collectively contributed $1.7 billion in domestic air cargo imports. **Figure C-6** also shows the top five commodities domestically imported into Florida, with all

remaining commodities categorized in the "All Other" category. Electronics account for 31 percent of the value of all domestic cargo imports, with the next greatest commodity value being precision instruments at 24 percent. A review of commodity consumption by major industries revealed that the construction and transportation equipment manufacturing industries consume the greatest value of domestic air cargo imports.[34]

Figure C-6: Total Value of Domestic Air Cargo Imports by FDOT District and Top Five Domestic Air Commodity Imports by Value (2021 Dollars)



Top Commodities Imported Domestically	Total Value
Electronics	$2.4B
Precision Instruments	$1.8B
Pharmaceuticals	$0.9B
Transportation Equipment	$0.5B
Miscellaneous Manufacturing Products	$0.5B
All Other Commodities	$1.6B

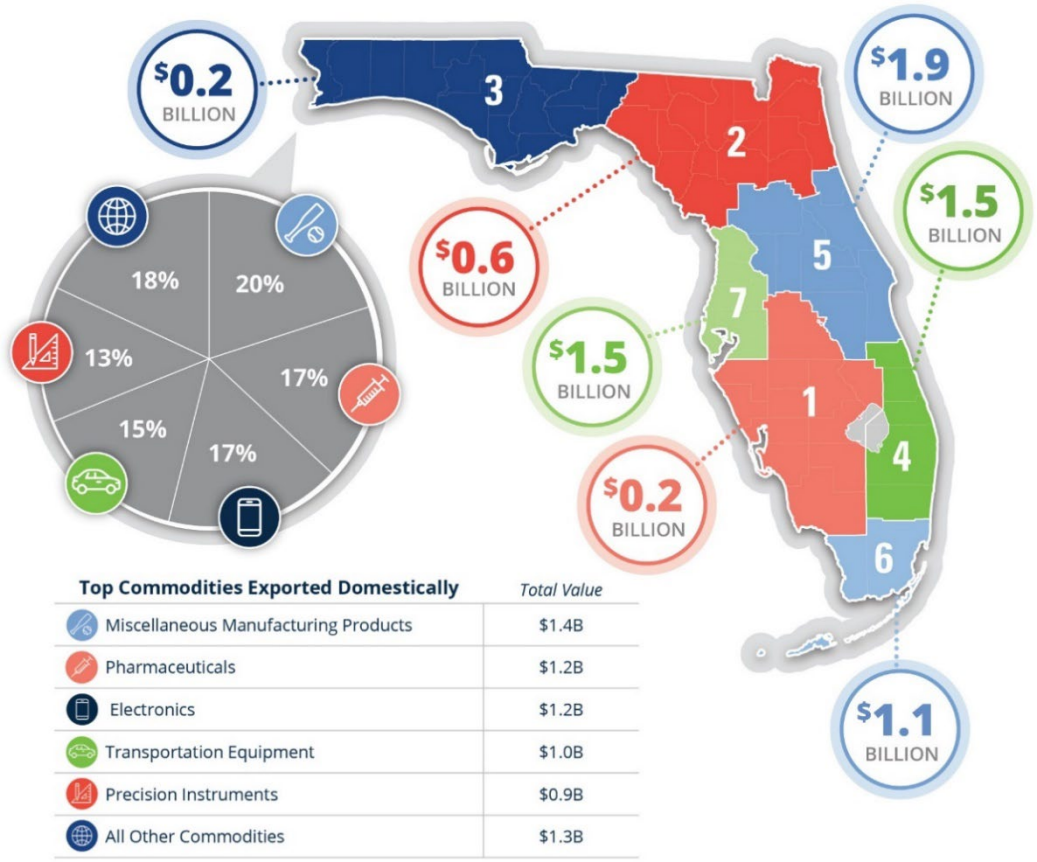
Sources: vFreight™, 2022; Kimley-Horn, 2022

[34] Identifying the top industries for domestic air cargo imports was based on a review of select Florida counties that recorded the greatest share of domestic imports to Florida by value.

C.1.1.7. Domestic Air Cargo Exports

Figure C-7 illustrates the total value of domestic air cargo exported from Florida, by FDOT District. As shown, airports in District 5 exported the greatest value at $1.9 billion. This is followed by airports in District 4 and District 7, each exporting $1.5 billion. **Figure C-7** also shows the top five commodities domestically exported, with all remaining commodities categorized in the "All Other" category. Miscellaneous manufacturing products, which includes items like jewelry and toys, account for the largest percentage (20 percent) of the value of all domestic air cargo exports. Pharmaceuticals account for the second largest percentage at 17 percent. A review of commodity use by major industries revealed that the wholesale trade and fabricated metal manufacturing industries distribute the greatest value of domestic air cargo exports.[35]

Figure C-7: Total Value of Domestic Air Cargo Exports by FDOT District and Top Five Domestic Air Commodity Exports by Value (2021 Dollars)



Sources: vFreight™, 2022; Kimley-Horn, 2022

[35] Identifying the top industries for domestic air cargo exports was based on a review of select Florida counties that recorded the greatest share of domestic exports from Florida by value.

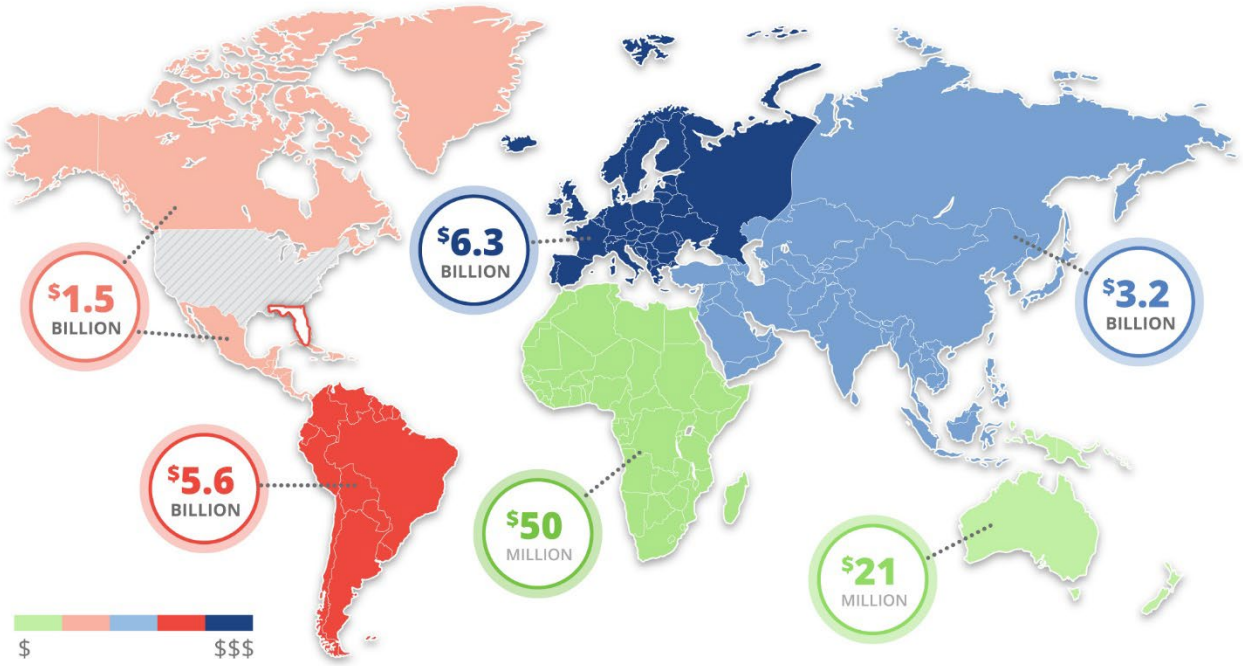
C.1.1.8. Air Cargo Origins and Destinations

Florida sends and receives air cargo shipments to and from locations around the world for a variety of commodities, which enable Florida's industries to conduct business. The following subsections detail the origins and destinations of air cargo received and sent from Florida at both the international and domestic levels.

C.1.1.9. International Air Cargo Imports

Figure C-8 shows the origins of international air cargo received in Florida by continent. As shown, most of the international air cargo received into Florida originates from Europe and South America. Cumulatively, both continents account for over 71 percent of all air cargo imported into Florida. As noted previously, a review of commodity consumption by major industries revealed that the chemical manufacturing and transportation equipment manufacturing industries consume the greatest value of international air cargo imports.[36]

Figure C-8: Origins of Imported International Air Cargo Received in Florida by Value (2021 Dollars)



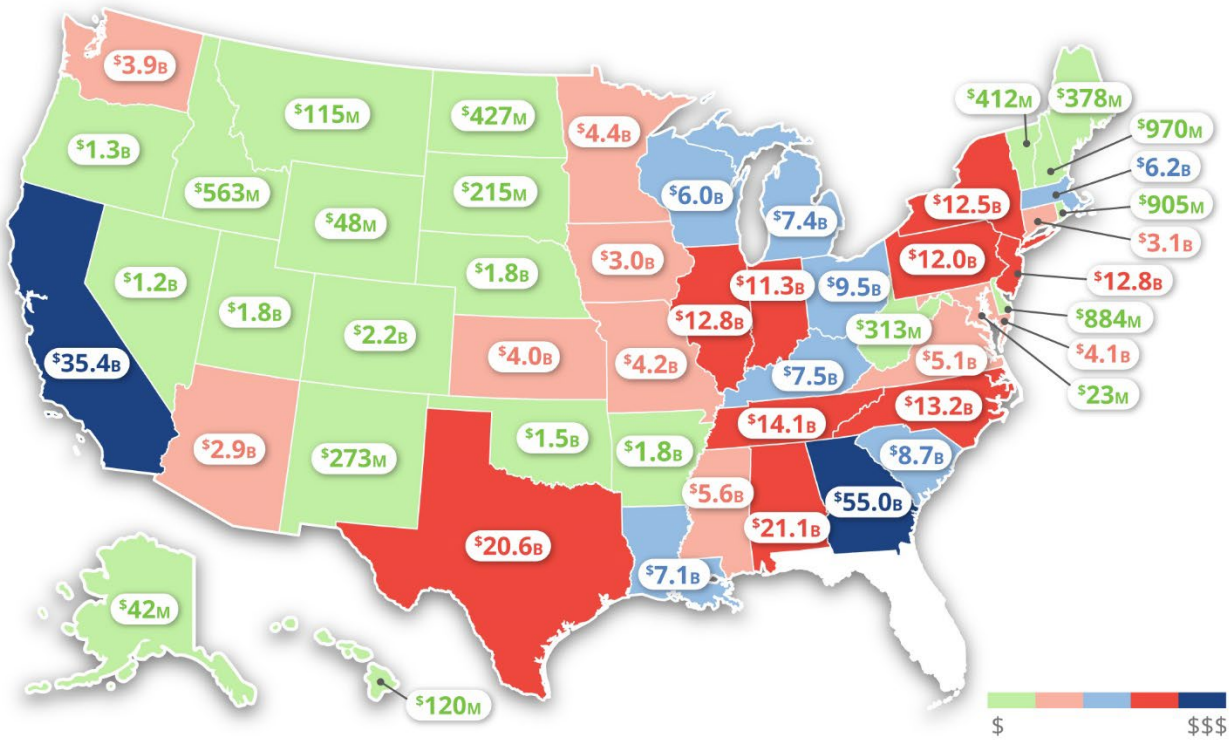
Note: State of Florida geographic area enlarged for reference only.
Sources: vFreight™, 2022; EBP US 2022; Kimley-Horn, 2022

[36] Identifying the top industries for international air cargo imports was based on a review of select Florida counties that recorded the greatest share of international imports into Florida by value.

C.1.1.10. Domestic Air Cargo Imports

Similarly, Florida industries relies on domestic imports to conduct their business. **Figure C-9** shows the origins of domestic air cargo received in Florida by state. As shown, the major sources of domestic air cargo received in Florida are from Georgia, California, Alabama, and Texas. As shown, Florida imports over $55 billion of domestic cargo from Georgia. As noted previously, a review of commodity consumption by major industries revealed that the construction and transportation equipment manufacturing industries consume the greatest value of domestic air cargo imports.

Figure C-9: Origins of Imported Domestic Air Cargo Received in Florida by Value (2021 Dollars)

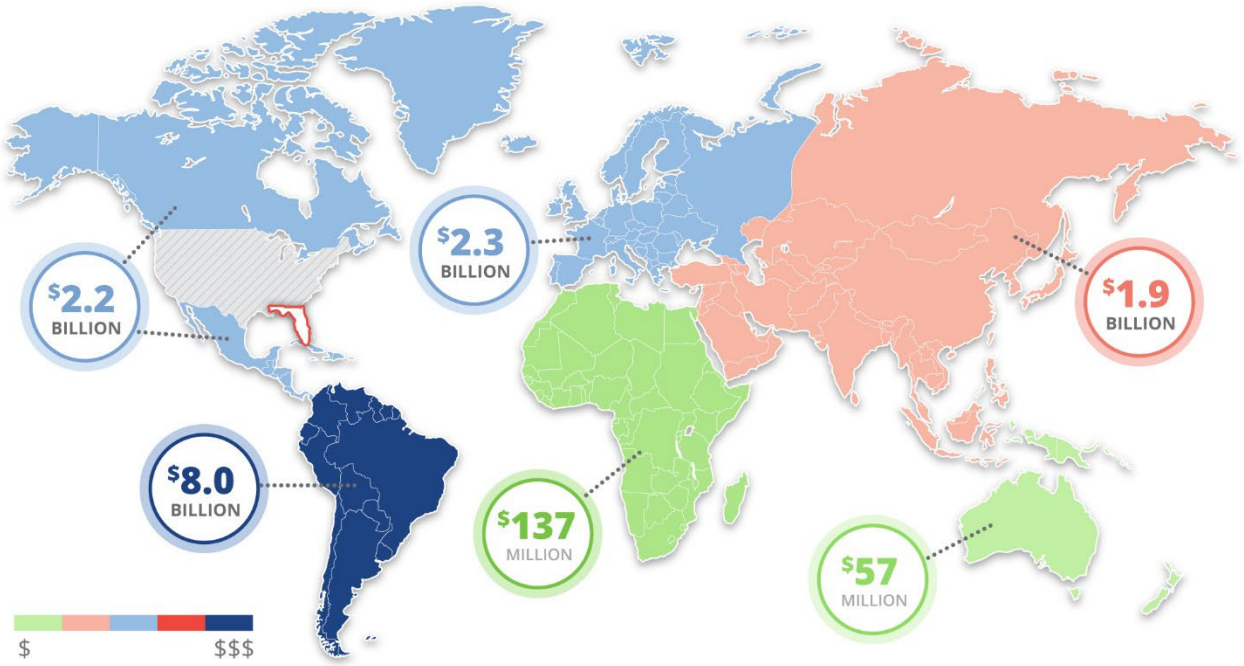


Sources: vFreight™, 2022; Kimley-Horn, 2022

C.1.1.11. International Air Cargo Exports

Florida also manufactures and ships commodities to businesses around the world, with industries in Florida being an important part of the global economy. **Figure C-10** shows the destinations of international air cargo by continent shipped from Florida. As shown, most of Florida's air cargo is exported to South America, which can largely be attributed to the continent's close geographic proximity. Exports to South America account for over 50 percent of all international air cargo from Florida. As noted previously, a review of commodity consumption by major industries revealed that the wholesale trade and transportation equipment manufacturing industries distribute the greatest value of international air cargo exports.

Figure C-10: Destinations of Exported International Air Cargo Received in Florida by Value (2021 Dollars)

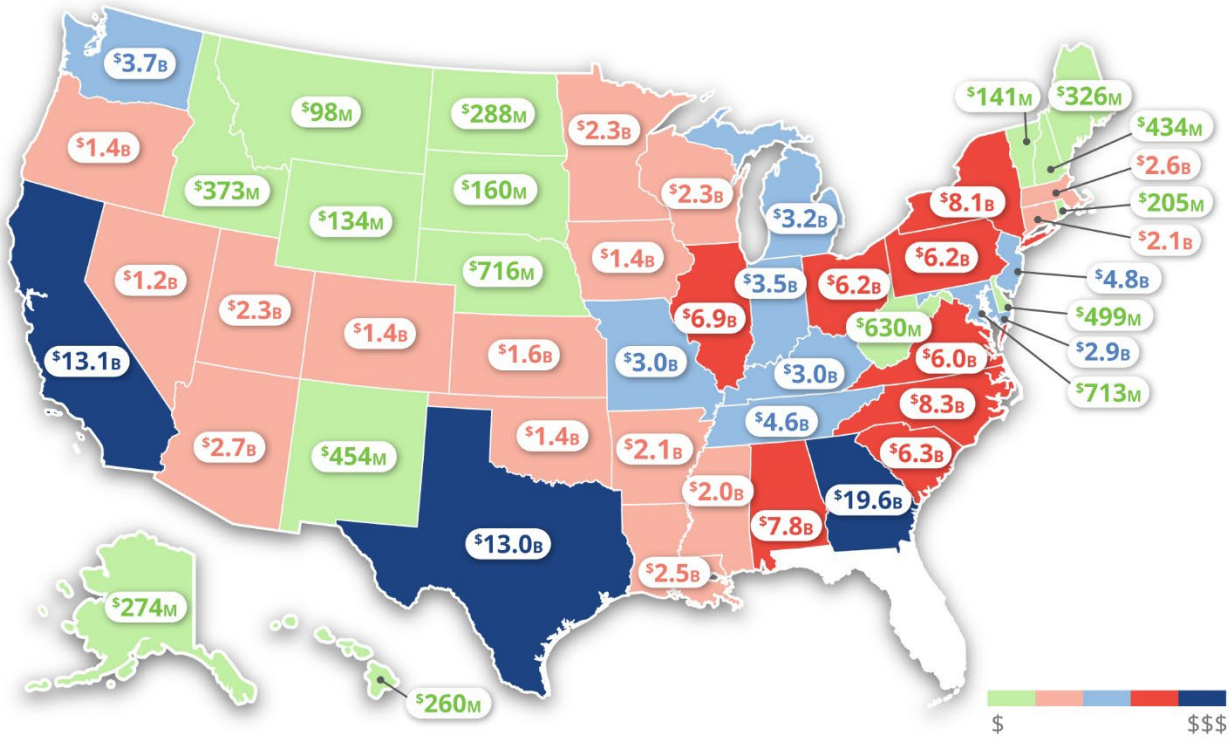


Note: State of Florida geographic area enlarged for reference only.
Sources: vFreight™, 2022; Kimley-Horn, 2022

C.1.1.12. Domestic Air Cargo Exports

Florida industries also export a significant volume of air cargo nationally. **Figure C-11** shows the destinations of domestic air cargo shipped from Florida to each state. As shown, major destinations for domestic air cargo shipped from Florida include Georgia, California, and Texas. Florida exports over $19 billion in air cargo to Georgia alone. As noted previously, a review of commodity consumption by major industries revealed that the wholesale trade and fabricated metal manufacturing industries consume the greatest value of domestic air cargo exports.

Figure C-11: Destinations of Exported Domestic Air Cargo Received in Florida by Value (2021 Dollars)



Sources: vFreight™, 2022; Kimley-Horn, 2022

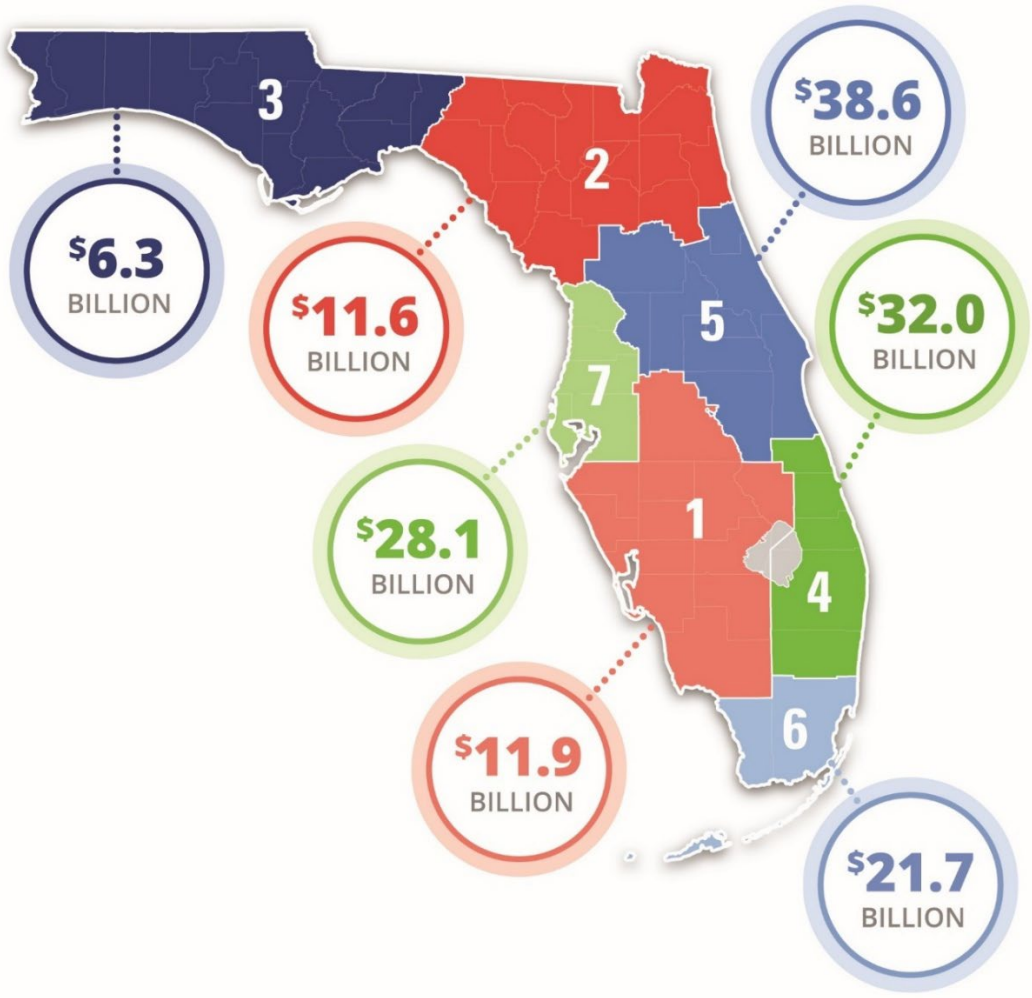
C.1.1.13. Air Cargo Impact by FDOT District

Florida's airports support the transfer of a wide variety of commodities, both internationally and domestically. This air cargo dependency results in considerable economic impact across Florida. This section summarizes these impacts at the FDOT District level.

Figure C-12 illustrates the total economic impact (output), which includes direct and multiplier impacts, by FDOT District, while **Table C-2** displays the total air cargo impacts, including jobs, payroll, value added, and total economic impact (output) by FDOT District.

The impacts per FDOT District are based on the location of industries that are air-cargo reliant, **not** on airport locations. This is because the impacts are based on business location and their activities. As shown, the total economic impact (output) of District 5, which includes Flagler, Marion, Volusia, Lake, Sumter, Seminole, Orange, Osceola, and Brevard counties, is the greatest of all of Districts at $38.6 billion, followed by District 4, which includes Broward, Indian River, Martin, Palm Beach, and St. Lucie counties, at $32.0 billion.

Figure C-12: Total Economic Impact by FDOT District (2021 Dollars)



Sources: vFreight™, 2022; IMPLAN assembled and calculated by EBP, 2022; Kimley-Horn, 2022

Table C-2: Total Air Cargo Economic Impacts by FDOT District (2021 Dollars)

District	Impact	Jobs	Payroll (Billions of $)	Value Added (Billions of $)	Economic Impact (Output) (Billions of $)
District 1: Southwest Florida	Direct	26,875	$1.7	$2.8	$6.2
	Multiplier	33,338	$1.8	$3.0	$5.7
	Total	**60,213**	**$3.5**	**$5.8**	**$11.9**
District 2: Northeast Florida	Direct	20,236	$1.5	$2.4	$5.5
	Multiplier	33,776	$1.9	$3.3	$6.1
	Total	**54,012**	**$3.3**	**$5.7**	**$11.6**
District 3: Northwest Florida	Direct	11,967	$0.7	$1.2	$2.9
	Multiplier	20,685	$1.0	$1.7	$3.4
	Total	**32,652**	**$1.7**	**$2.9**	**$6.3**
District 4: Southeast Florida	Direct	61,058	$5.2	$8.4	$17.4
	Multiplier	82,620	$4.6	$7.9	$14.6
	Total	**143,678**	**$9.8**	**$16.4**	**$32.0**
District 5: Central Florida	Direct	68,804	$5.8	$9.3	$20.5
	Multiplier	106,645	$5.7	$9.8	$18.0
	Total	**175,449**	**$11.5**	**$19.1**	**$38.6**
District 6: South Florida	Direct	44,810	$3.3	$5.5	$11.5
	Multiplier	58,329	$3.2	$5.5	$10.2
	Total	**103,138**	**$6.5**	**$11.0**	**$21.7**
District 7: West Central Florida	Direct	51,497	$4.1	$6.8	$14.0
	Multiplier	80,099	$4.4	$7.7	$14.0
	Total	**131,596**	**$8.5**	**$14.5**	**$28.1**
Statewide Total	Direct	285,246	$22.3	$36.4	$77.9
	Multiplier	415,493	$22.4	$39.0	$72.1
	TOTAL	700,738	$44.7	$75.4	$150.0

Note: Totals may not equal the sum of rows due to rounding.
Sources: vFreight™, 2022; IMPLAN assembled and calculated by EBP, 2022

C.1.1.14. Air Cargo Dependency by Industry Source

Florida's air cargo dependency can also be described by the industries that most benefit from the movement of air cargo through Florida's airports. As with other impact categories, the combination of direct and multiplier impacts results in total impacts. Statewide total impacts by industry are shown in **Figure C-13**. The direct, multiplier (supplier sales and income re-spending), and total economic impacts (output) of air cargo on the 14 major industry groups are shown in **Table C-3**.[37]

Figure C-13: Total Economic Impact of Air Cargo Dependency by Industry (2021 Dollars)

Sources: vFreight™, 2022; IMPLAN assembled and calculated by EBP, 2022

[37] The 14 industry groups are based on the two-digit sectors as defined in NAICS. These 14 groups are then sub-categorized with the three-digit, four-digit, etc. of the NAICS. Industries differ from commodities. A single commodity can be used as an input in multiple different industries.

Table C-3: Total Air Cargo Impacts by 14 Major Industry Groups (2021 Dollars)

Industry	Impacts	Jobs	Payroll (Billions of $)	Value Added (Billions of $)	Economic Impact (Output) (Billions of $)
Agriculture & Extraction	Direct	7,041	$0.2	$0.4	$1.1
	Multiplier	6,416	$0.24	$0.4	$0.7
	Total	**13,457**	**$0.4**	**$0.8**	**$1.9**
Utilities	Direct	182	$0.03	$0.1	$0.3
	Multiplier	1,478	$0.19	$1.0	$1.8
	Total	**1,660**	**$0.3**	**$1.1**	**$2.2**
Construction	Direct	23,934	$1.4	$2.0	$3.7
	Multiplier	3,330	$0.19	$0.4	$0.8
	Total	**27,265**	**$1.5**	**$2.3**	**$4.4**
Manufacturing	Direct	82,691	$7.8	$12.3	$36.1
	Multiplier	9,364	$0.6	$1.2	$3.5
	Total	**92,055**	**$8.4**	**$13.5**	**$39.6**
Wholesale Trade	Direct	69,967	$7.7	$13.2	$22.4
	Multiplier	19,647	$1.9	$4.0	$6.7
	Total	**89,614**	**$9.6**	**$17.2**	**$29.1**
Retail Trade	Direct	8,604	$0.3	$0.5	$0.9
	Multiplier	37,900	$1.4	$2.3	$3.8
	Total	**46,503**	**$1.7**	**$2.8**	**$4.6**
Transportation	Direct	3,205	$0.2	$0.3	$0.6
	Multiplier	19,882	$0.9	$1.2	$2.6
	Total	**23,087**	**$1.1**	**$1.5**	**$3.2**
Postal & Warehousing	Direct	1,612	$0.06	$0.07	$0.1
	Multiplier	23,402	$0.9	$1.1	$1.9
	Total	**25,015**	**$0.9**	**$1.1**	**$2.1**
	Direct	4,561	$0.4	$0.9	$1.5

Industry	Impacts	Jobs	Payroll (Billions of $)	Value Added (Billions of $)	Economic Impact (Output) (Billions of $)
Media and Information	Multiplier	8,601	$0.9	$2.0	$4.5
	Total	**13,061**	**$1.3**	**$2.9**	**$6.0**
Financial Activities	Direct	7,602	$0.4	$1.4	$2.6
	Multiplier	62,673	$3.0	$9.8	$19.2
	Total	**70,276**	**$3.4**	**$11.1**	**$21.9**
Professional & Business Services	Direct	25,731	$1.6	$1.9	$3.4
	Multiplier	108,761	$7.1	$8.9	$14.8
	Total	**134,492**	**$8.6**	**$10.8**	**$18.2**
Education & Health Services	Direct	22,003	$1.4	$1.7	$2.8
	Multiplier	45,494	$2.8	$3.3	$5.4
	Total	**67,497**	**$4.2**	**$5.0**	**$8.2**
Other Services	Direct	27,830	$0.9	$1.5	$2.4
	Multiplier	67,128	$2.2	$3.3	$5.5
	Total	**94,958**	**$3.2**	**$4.8**	**$7.9**
Government	Direct	283	$0.02	$0.06	$0.1
	Multiplier	1,516	$1.3	$0.3	$0.6
	Total	**1,799**	**$0.1**	**$0.4**	**$0.7**
Statewide Total	Direct	285,246	$22.3	$36.4	$77.9
	Multiplier	415,493	$22.4	$39.0	$72.1
	TOTAL	**700,738**	**$44.7**	**$75.4**	**$150.0**

Note: Totals may not equal the sum of rows due to rounding.
Sources: vFreight™, 2022; IMPLAN assembled and calculated by EBP, 2022

C.1.1.15. Summary

In total, off-airport air cargo dependency contributes over 700,700 jobs, over $44.7 billion in payroll, almost $75.4 billion in value added, and over $150 billion in total economic impact (output). Florida's airports facilitate the domestic and international import and export of a variety of commodities, including electronics, transportation equipment, and miscellaneous manufacturing products. Industries located in

counties within FDOT District 4 and District 5 are the primary importers and exporters of these goods, although air cargo reaches every corner of the state. Internationally, Florida imports most of its goods from South America and Europe and exports a majority of its goods to South America. The manufacturing industry in Florida has the greatest economic impact with regards to air cargo of all industries. As previously noted, these findings are for off-airport air cargo *only* and do not account for on-airport air cargo activities.

C.1.1.16. Data Sources

Two air cargo data sources were used to conduct the analysis of off-airport air cargo economic impacts, including the U.S. Census Bureau's Foreign Trade Division (collected by WISERTrade) and the Freight Analysis Framework (FAF), produced by the Bureau of Transportation Statistics (BTS) and the Federal Highway Administration (FHWA). These sources are summarized below.

- **WISERTrade** reports weights and values of each commodity shipped to or from international destinations that are collected by the U.S. Foreign Trade Division of the U.S. Census Bureau. These reports are specific to airports but are limited to international trade. Commodities are classified according to the Harmonized System.[38] WISERTrade contains international trade data for 23 airports in Florida: Boca Raton Airport (BCT), Daytona Beach International Airport (DAB), Fernandina Beach Municipal Airport (FHB), Fort Lauderdale-Hollywood International Airport (FLL), Page Field (FMY), Treasure Coast International Airport (FPR), Jacksonville International Airport (JAX), Key West International Airport (EYW), Melbourne International Airport (MLB), Miami International Airport (MIA), Miami Executive Airport (TMB), Naples Municipal Airport (APF), Orlando Executive Airport (ORL), Orlando International Airport (MCO), Orlando Sanford International Airport (SFB), St Pete-Clearwater International Airport (PIE), Northwest Florida Beaches International Airport (ECP), Pensacola International Airport (PNS), Sarasota-Bradenton International Airport (SRQ), Tampa International Airport (TPA), and Palm Beach International Airport (PBI). WISERTrade distinguishes between pass-through cargo and goods that interact with the local economy.
- **FAF** uses a variety of sources to integrate and accurately map cargo movement between different regions of the United States. These regions are defined by major metropolitan areas and by the nonmetropolitan areas outside of them. All modes of transportation, including aviation, are represented in the FAF. Commodities are described at the two-digit level of the Standard Classification of Transported Goods (SCTG) codes. The FAF is primarily based on the 2012 Commodity Flow Survey and was last updated in 2020.

[38] The Harmonized System is the predominant international commodity classification usage for international trade and is used by over 200 countries for assessing tariffs. EBP has developed a crosswalk between the two commodity codes for cohesive reporting and analysis.

C.1.1.17. Data Product: vFreight™

vFreight™ is a data product developed by EBP that calculates the economic impacts of domestic and international freight on county, regional, and state economies. Along with the WISERTrade and FAF freight data sets, vFreight™ takes IMPLAN-aggregated county-level economic data and incorporates it to spatially allocate freight flows to industries that produce and consume each commodity.[39] Industry data include total jobs, payroll, value added, and sales (output) by industry per Florida county, as well as the structure of each industry. This structure is defined as the value of commodity inputs that are used per industry. Commodities are reported using the two-digit SCTG commodity classification. The SCTG commodity classification is consistent with the FAF for seven different modes, including an "air and truck" combination, with county detail for domestic freight flows and port detail for international freight flows. This level of detail is essential for estimating economic impacts at a customized regional level such as the seven multi-county FDOT Districts.[40]

An example of an **intermediate input** may be a circuit board produced in Texas and flown to Florida where the product is integrated into a computer.

An example of a product shipped for **final demand** is a pharmaceutical product manufactured in Florida and flown to Illinois (the product itself may be handled by wholesalers and retailers, but it is purchased directly by consumers at drug stores without further processing).

vFreight™ can be used to estimate the tonnage and value of air cargo flows among Florida airports and Florida-based industries. vFreight™ is also used to identify the portion of industry activity that is reliant on-airport cargo by overlaying commodity flows, economic geography, and industries' production processes, which together provide an assessment of the reliance of the state economy on air cargo.

C.1.1.18. Methodology

This section provides a brief overview of the methodology used for calculating the economic impact of off-airport business reliance on air cargo and then provides a detailed example of this calculation for one commodity group, electronics, and electrical components.[41]

Commodities are consumed in two different ways after they are shipped to destinations. They are consumed as intermediate inputs, where industries use the commodities as input in the production of subsequent commodities, or they are consumed on final demand by households. **Figure C-14** illustrates the relationships between industries and commodities, which illustrates air cargo's importance in Florida.

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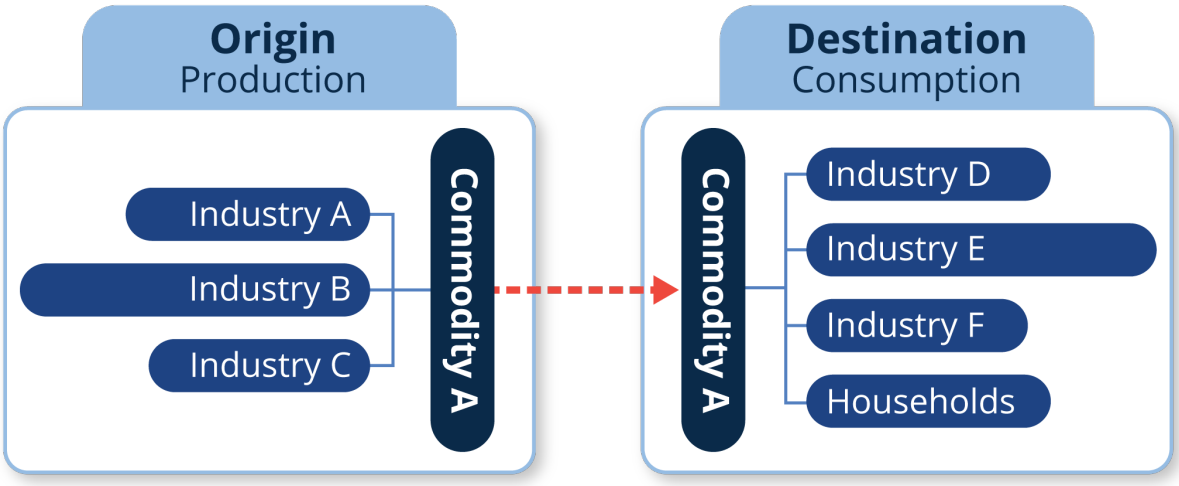
[39] IMPLAN is the most widely used input-output software system in the United States, and maps buyer-seller relationships for up to 546 industries and 538 commodities in every county in the nation. The main data sources used in IMPLAN are the U.S. Bureau of Economic Analysis, the U.S. Department of Agriculture, the U.S. Bureau of Labor Statistics, and the U.S. Census Bureau.
[40] Florida's 67 counties are divided into seven FDOT districts.
[41] This broad category includes appliances, such as televisions and blenders, as well as electronic components such as batteries, motors, circuits, and lightbulbs.

Figure C-14: Schematic Presentation of Inter-industry Commodity Flows (Cargo Flows)



Source: EBP, 2022

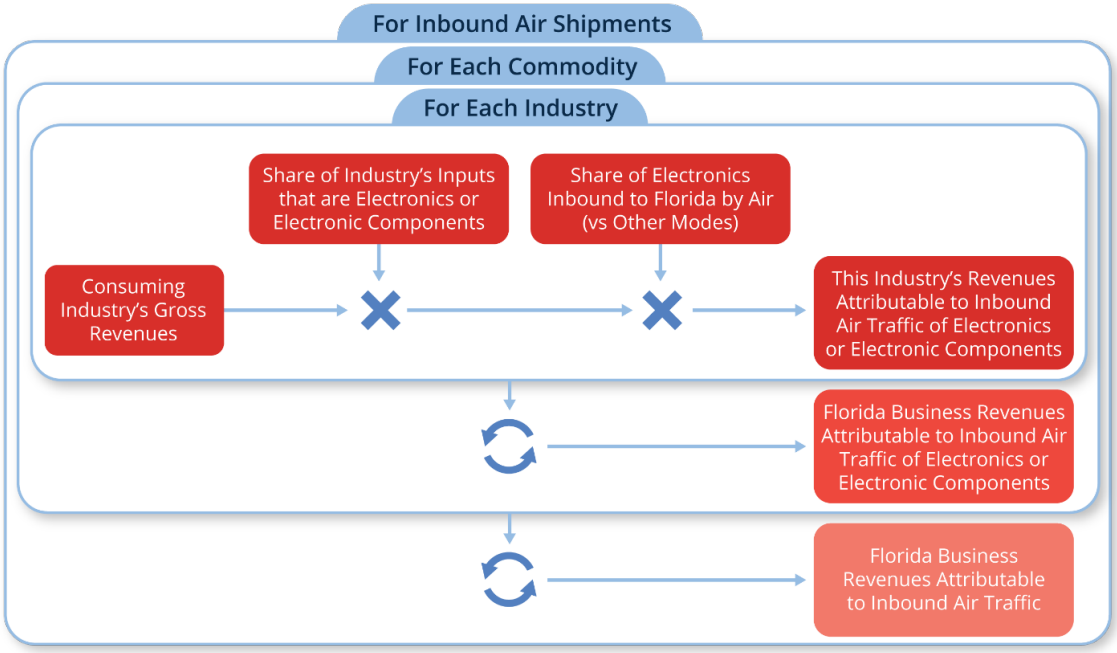
This analysis examines both import and export flows of air cargo. Import flows are defined as air cargo deplaned or offloaded at airports in Florida. Export flows are defined as air cargo enplaned or loaded onto planes at Florida airports. The inclusion of both import and export flows illustrates the Florida economy's dependence on air cargo. Commodities shipped in or produced in Florida each stimulate the state's economy. Commodities may be produced outside the state and flown in, to be consumed as intermediate inputs or final demand, as previously described. Commodities produced in Florida and flown out of the state represent income accumulating to the state's economy.

The methodology described in this section is based on non-mode specific and mode-specific analyses. Economic data about the relationship between industries and commodities (such as how much a certain industry may consume a commodity as an intermediate input) is not mode-specific or dependent. However, trade data about the type of transport used for different commodities *is* mode specific. Therefore, a key step in the methodology is adjusting industry dependence on commodities depending on how aviation-reliant that commodity ultimately is.[42] This process is repeated for many commodities, which are in turn consumed and produced by many industries. The data components of the import air cargo analysis and their relationship throughout the repetitions are shown in the flowchart in **Figure C-15**. To take the previous example of electronics and electrical components, the flowchart follows this commodity through the process of being consumed by one example industry, manufacturing. Manufacturing is just one of 14 major industry groups. The flowchart then shows how this analysis, using

[42] Alternative freight modes to air cargo include truck, rail, or barge movements. The economy also depends on those modes. This analysis focuses only on air cargo's role.

the same commodity of electronics and electrical components, is repeated for each of the 13 other industry groups. The final darkest box represents a repeating of this analysis for each commodity type.

Figure C-15: Analysis Flow Chart for Imported Air Shipments



Source: EBP, 2022

The impacts of exported cargo flows are calculated using a methodology nearly identical to the process used to determine the impact of imported air cargo (see **Figure C-15)**. The only difference is the utilization of industry value added instead of total sales values.[43]

The import and export analyses are repeated for each commodity to represent the proportion of the Florida economy that is supported by air cargo services. The following section walks through an example of the methodology to demonstrate the process.

C.1.1.19. Example

This section provides a walk-through of the methodology used to calculate the economic impacts of electronics, which is one of the 43 commodity groups identified in this analysis.[44] **Table C-4** shows the value of electronics imported to and exported from Florida for all modes or in sum (i.e., via air, land, and sea) and what percent of that total value is represented specifically by air cargo. Although over $64 billion

[43] Using value added avoids double counting imported and exported air cargo flows. This is because some imported air cargo flows are used by industries that produced commodities that become exported flows. Value added is an economic concept that removes the value of intermediate inputs from business sales. This allows complete accounting of benefits to Florida's economy without inflating values.

[44] Commodities differ from industry categories. A single commodity can be used as inputs to multiple industries.

of total electronic cargo shipments are imported to Florida, this only includes eight percent transported by air, or just over $5 billion in goods. Comparatively, over $42 billion of total electronic cargo shipments are exported from Florida, from which 18 percent is transported by air, or nearly $8 billion in goods.

Table C-4: Value and Percent of Electronics and Electrical Components Shipped In and Out of Florida

Type of Cargo	Value of Shipments (Billions of $)	Air Value of Shipments (Billions of $)	Percent of Value by Air
Import Cargo	$64.4	$5.2	8%
Export Cargo	$42.8	$7.9	18%

Source: EBP using vFreight™, 2022

Table C-5 shows that for industries that use electronics and other electrical components, the total value added is roughly $1.2 trillion, while the total economic impact (output) is greater than $2 trillion.

Table C-5: Profile of Industries in Florida that Acquire Electronics and Other Electrical Components

Industry	Value Added (Billions of $)	Economic Impact (Output) (Billions of $)
Transportation Equipment Manufacturing	$6.3	$24.2
Machinery Manufacturing	$3.6	$12.5
Primary Metal Manufacturing	$2.0	$4.9
Other Industries	$1,150	$2,040
All Consuming Industries	**$1,162**	**$2,082**

Note: Totals may not equal the sum of rows due to rounding.
Source: EBP using IMPLAN 2019 Florida State Model, 2022

Air cargo arriving via Florida's airports and then used by businesses in the state is calculated by the following method:

1. Multiply total economic impact (output) per industry by the percent of electronics and other electrical components production inputs (referred to as "X")
2. "X" is the estimated total value of each industry's production that is attributed to electronics and other electrical components production
3. Multiply "X" by the percent of aviation-originated electronics and other electrical components production

For transportation equipment manufacturing, the calculation specific to electronics is as follows:

$24,213 million	Economic impact (output) from transportation equipment manufacturing in Florida
x 18.9%	Transportation equipment manufacturing production attributed to electronics
x 8.0%	Proportion of electronics that arrive through Florida's airports
= $366 million	Florida transportation equipment manufacturing attributed to electronics arriving via air cargo at state airports

Table C-6 provides a walkthrough of how to estimate only the direct economic impact (output) attributed to electronics and other electrical components and transported as imported air cargo. The sample calculation above is performed for all industry sectors that consume electronic products, as shown in the first column. The second column provides the percent of direct economic impact (output) that can be attributed to the consumption of electronic goods. The third column provides the value of industry production that can be attributed to electronics (value in first column x total production of that industry). The fourth column, which is the same value for all industries, is the share of electronics imported to Florida by air. The final column provides the direct economic impact (output) from imported air cargo by industry.

Table C-6: Industry Production Attributable to Imported Air Cargo

Industry	Production from Electronics	Value of Industry Production from Electronics (Billions of $)	Share of Imported Electronics by Air	Direct Economic Impact (Output) from Imported Air Cargo (Billions of $)
Transportation Equipment Manufacturing	19%	$4.6	8%	$0.4
Machinery Manufacturing	35%	$4.3		$0.3
Primary Metal Manufacturing	8%	$0.4		$0.03
Other Industries	Varies by Industry	$87.8		$7.0
All Industries	**Varies by Industry**	**$97.0**		**$7.8**

Note: Totals may not equal the sum of rows due to rounding.

Sources: WISERTrade, Freight Analysis Framework, and US BEA data assembled by IMPLAN, 2022

The procedure depicted in **Table C-6** for imported air cargo is similar to the procedure depicted in **Table C-7** for exported air cargo. The total value added for industries using electronics in Florida is pulled from IMPLAN.[45] Next, data assembled in vFreight™ from FAF and WISERTrade are used to identify the total value of electronics exported from Florida. The percent of total value shipped by air compared to other modes is lastly determined using vFreight™.

Similar to the imported air cargo procedure displayed in **Table C-6**, **Table C-7** is broken down into four columns per industry. The explanation for the calculation presented in **Table C-7** remains the same.

Table C-7: Industry Production Attributable to Exported Air Cargo

Producing Industry	Value Added from Electronics	Value of Industry Production from Electronics (Billions of $)	Share of Exported Electronics by Air	Direct Economic Impact (Output) from Exported Air Cargo (Billions of $)
Transportation Equipment Manufacturing	0.3%	$0.02		$0.004
Machinery Manufacturing	3%	$0.1		$0.02
Primary Metal Manufacturing	2%	$0.03	18%	$0.006
Other Industries	Varies by Industry	$100.9		$18.5
All Industries	**Varies by Industry**	**$101.1**		**$18.6**

Note: Totals may not equal the sum of rows due to rounding.
Sources: WISERTrade, Freight Analysis Framework, and US BEA data assembled by IMPLAN; calculations by EBP, 2022

The direct impacts of business revenues attributable to imported and exported electronics by air are shown in **Table C-8**. The direct impacts include both the value of commodity imports arriving by air, as well as the value of commodity exports reflected by the value added in Florida prior to shipping.

[45] This analysis includes only the value-added portions of business sales to avoid double counting the value of intermediate goods.

Table C-8: Direct Impacts of Economic Impact (Output) Due to Imported and Exported Air Shipments of Electronics

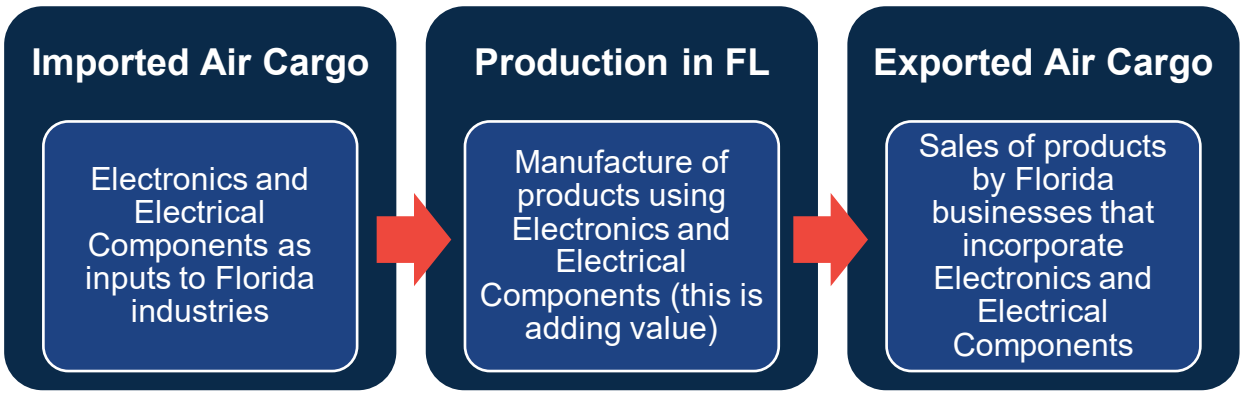
Industry	Direct Economic Impact (Output) from Imported Air Cargo (Billions of $)	Direct Economic Impact (Output) from Exported Air Cargo (Billions of $)	Total
Transportation Equipment Manufacturing	$0.4	$0.004	$0.4
Machinery Manufacturing	$0.3	$0.02	$0.4
Primary Metal Manufacturing	$0.03	$0.006	$0.04
Other Industries	$7.0	$18.5	$25.6
All Industries	**$7.8**	**$18.6**	**$26.3**

Note: Totals may not equal the sum of rows due to rounding.
Sources: WISERTrade, Freight Analysis Framework, and US BEA data assembled by IMPLAN. Calculations by EBP, 2022

Figure C-16 depicts the journey of electronics and electrical components as inputs to industry production and then as commodities bought by customers domestically and internationally. The direct economic impacts (outputs) displayed in **Table C-8** were used as inputs to the IMPLAN model to calculate jobs, payroll, and value added for the state of Florida.

Table C-9 shows the model outputs, which were calculated from the percentage of electronics associated with each air cargo reliant industry to both transport the commodity to support in-state production as well as ship the products for sale to customers out-of-state. These direct impacts resulting from the transport of electronics and electrical components to and from Florida by air are shown in **Table C-9.**

Figure C-16: Flow of Articles of Electronics and Electrical Components in the Florida Economy



Source: EBP, 2022

Table C-9: Direct Impacts Attributed to Air Cargo Shipments of Electronics and Electrical Components

Industry Name	Direct Jobs	Direct Payroll (Billions of $)	Direct Value Added (Billions of $)	Direct Economic Impacts (Output) from Electronics (Billions of $)
Transportation Equipment Manufacturing	726	$0.08	$0.1	$0.4
Machinery Manufacturing	952	$0.08	$0.1	$0.4
Primary Metal Manufacturing	39	$0.003	$0.02	$0.04
Other Industries	87,785	$7.1	$13.7	$25.6
All Industries	**89,502**	**$7.3**	**$13.9**	**$26.3**

Note: Totals may not equal the sum of rows due to rounding.
Sources: Data from FAF, WISERTrade and IMPLAN assembled and calculated by EBP, 2022

To calculate direct economic impacts for each industry in all seven FDOT Districts, the demonstrated direct impacts methodology is applied to all commodities and industries in the state. The resulting impacts are used as inputs to IMPLAN to determine supplier sales and income re-spending impacts, as well. Through this methodology, the total economic contribution to Florida industries of air cargo flown into and out of the state of Florida is calculated.

Appendix D. Military

Military aviation is a critical component of Florida's history, economy, and social fabric. From the Panhandle to the Florida Keys, Florida's military installations serve a critical role in supporting our national defense system and active military troops both at home and abroad, all while contributing greatly to the state's economy. Based on the findings of this analysis, the total economic impact (output) of the 11 military aviation installations that were evaluated was $12.9 billion in 2021, which represents almost a 40 percent increase from the impacts reported as part of the 2019 analysis that was previously completed. In addition to these impacts, these 11 installations employed 143,018 individuals across the state.

With its geographical location, over-water airspace, and favorable year-round weather, Florida is an ideal location for military aviation. Florida also serves a unique role in the national defense infrastructure. On December 20, 2019, the Department of Defense (DoD) established the newest branch of the armed services; the United States Space Force (USSF). Created via the FY 2020 National Defense Authorization Act, USSF was created within the Department of the Air Force and is operated under the auspices of the

Secretary of the Air Force.[46] Currently, only three states have Space Force Bases (SFBs), including Florida. Florida is the proud home to Cape Canaveral Space Force Station and Patrick Space Force Base, two of only eight SFBs in the country.

Tyndall Air Force Base
F-22A Raptor and two F-15C Eagles Participate in Refueling Mission

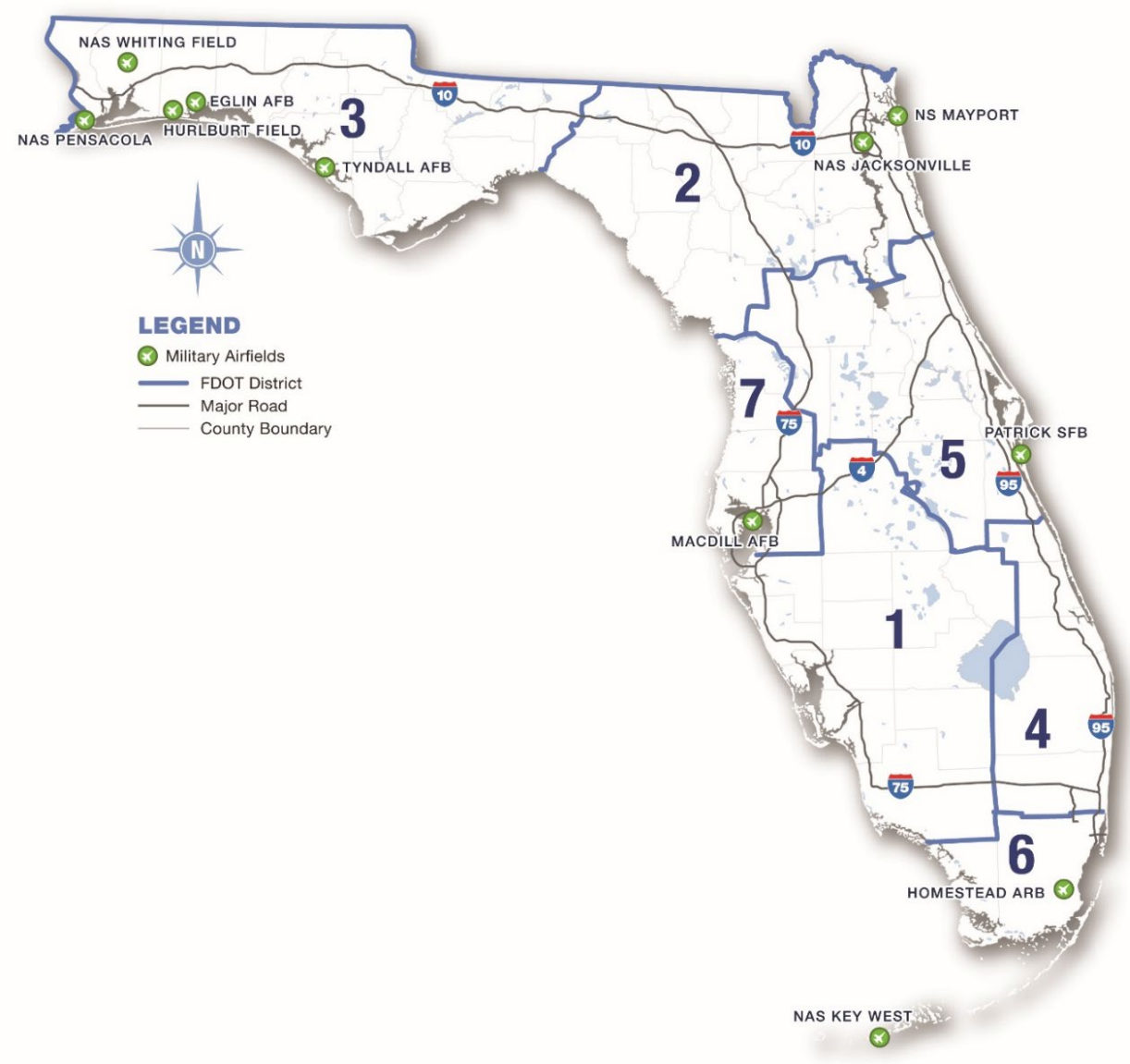
Source: United States Air Force

Military aviation is critical to the fabric of Florida's defense and transportation system. To support the continued importance and emphasis of military aviation in Florida, the Florida Aviation System Plan (FASP), which serves as the state's long-range aviation plan, designated a goal specific to the continued support of military aviation in Florida: "Foster Florida's reputation as a military- and aerospace-friendly state." This goal emphasizes the importance of military to the state's aviation system and prioritizes it for analysis as part of the 2022 AEIS. Florida is home to numerous military aviation installations, including the combined Patrick Space Force Base/Cape Canaveral Space Force Station, as previously noted. The 11 military aviation installations are situated in every corner of the Sunshine State, from the Florida Panhandle to the North Florida Atlantic coast, down the Space Coast, and reaching all the way to the Florida Keys, protecting the southernmost point of the continental United States. These facilities, as included this evaluation, are identified in **Figure D-1**.

This appendix analyzes and summarizes the economic impact of Florida's military installations. As part of the data collection effort, over 20 military airfield installations were reviewed and considered for inclusion in this analysis. Based on data available and the function of each facility, it was determined that several military facilities were required to be consolidated as part of this analysis. For example, the Cape Canaveral Air Force Station (AFS) (now Space Force Station, or SFS) Skid Strip has been combined and is presented as part of Patrick Space Force Base.

[46] https://militarybase.net/space-force-bases/

Figure D-1: Map of Military Installations in the State of Florida

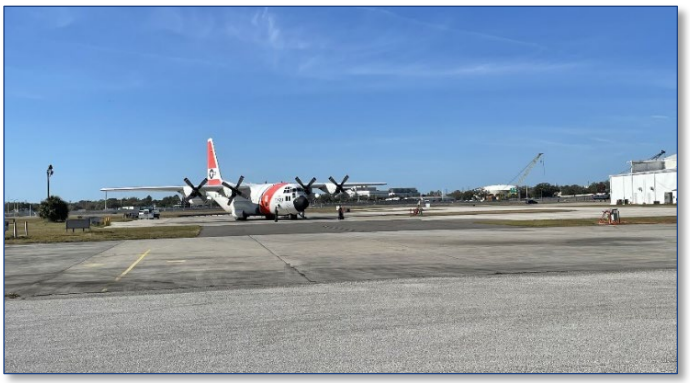


Source: Kimley-Horn Analysis, 2022

The military installations discussed in this section include four NAS, four AFBs, one SFB, one ARB, and one Naval Station (NS), including:

- Eglin Air Force Base
- Homestead Air Reserve Base
- Hurlburt Field
- MacDill Air Force Base
- Naval Air Station Jacksonville
- Naval Air Station Key West
- Naval Air Station Pensacola
- Naval Air Station Whiting Field
- Naval Station Mayport
- Patrick Space Force Base
- Tyndall Air Force Base

U.S. Coast Guard – Aircraft at St. Pete-Clearwater International Airport



It should be noted that these are not the only military installations in Florida that serve aviation. There are many others, such as the US Coast Guard at St. Pete-Clearwater International Airport (PIE), that employ hundreds of people and have significant impacts on the state's economy. These installations were not included in this analysis because they are accounted for as on-airport impacts in the AEIS analysis for each airport.

Unless otherwise noted, military installation economic impacts (payroll and expenditures) were calculated based on publicly available employment data. The current study relied on the proportion of employment to related payroll and expenditures from the previously completed 2019 Statewide Aviation Economic Impact Study as new data was not available for every installation. This proportion was applied to current employment at military installations to calculate their payroll and expenditures. For military installations that had recently completed economic impact studies, employment, payroll, and expenditures from those studies is utilized and sourced. Where applicable, these different methodologies have been noted.

D.2. Eglin Air Force Base

Eglin AFB is located in Okaloosa County and occupies over 455,000 acres of land over north Florida and the Gulf of Mexico. Established in 1935 as a gunnery base, the primary purpose of the base in 2022 is the development, acquisition, testing, deployment, and sustainment of all air-delivered non-nuclear weapons. The squadron in charge of this mission is the 96th Test Wing. Other squadrons utilizing the base include the 33rd Fighter Wing, 53rd Wing, the 350th Spectrum Warfare Wing, 919th Special Operations Wing, and the 7th Special Forces Group.

Eglin Air Force Base
F-35 Lightning II Joint Strike Fighter (JSF)

Under the direction of U.S. Air Force Col. William Young, Jr, the 350th Spectrum Warfare Wing is "responsible for delivering electromagnetic spectrum capabilities to 69 United States and Foreign Partner electromagnetic warfare systems. Additionally, the wing is responsible for electromagnetic warfare reprogramming, modeling and simulation and assessments."

Serving the needs of all active military personnel, these squadrons operate on two runways, 01/19 at 10,001 feet and 12/30 at 11,987 feet.

Table D-1 shows the number of personnel employed by Eglin AFB, as well as the payroll and expenditures during the 2021 fiscal year. In 2021, Eglin AFB employed an estimated 16,465 personnel. The payroll for those jobs is estimated to be over $1.4 billion with more than $631 million in expenditures. These figures represent an increase of approximately 20 percent from the 2019 AEIS. Together, the jobs, payroll, and expenditures accounted for almost $2.1 billion in total economic impact (output).

Table D-1: 2021 Eglin Air Force Base Economic Impact (Output)

Personnel		Spending	
Military	9,470	Payroll	$1,445,691,419
Civilian	4,038	Expenditures	$631,405,019
Contractor	2,957	**Total Economic Impact (Output)**	$2,077,096,438
Total Jobs	16,465		

Sources: www.militarybases.us, 2021; Kimley-Horn calculations, 2022

D.3. Homestead Air Reserve Base

Homestead Air Reserve Base
F-16 Assigned to the 482nd Fighter Wing

Source: United States Air Force

Homestead ARB is located in Miami-Dade County and is the largest military airfield in southern Florida, covering 2,940 acres. Originally opened in 1942, Homestead ARB was closed in 1945 and 1992 after being destroyed by hurricanes but was rebuilt both times. Homestead ARB remained a permanent military installation after the Cuban Missile Crisis in 1962 and is currently home to the 482nd Fighter Wing, along with multiple tenant organizations which utilize the services and infrastructure of the Air Force Reserve installation. The airfield operates with one runway, 06/24 at 11,202 feet. According to Homestead ARB, "the military presence directly impacts the local economy through many subtle, yet important, contributions. Auto fleet maintenance, linen and laundry service, purchases from local beverage distributors, grounds maintenance, and contracted electrical, painting, and plumbing work are other examples of the direct economic impact on the local community, totaling in the millions of dollars."

Table D-2 shows the personnel employed by Homestead ARB, as well as the payroll and expenditures during the 2021 fiscal year. In 2021, Homestead ARB employed 3,200 personnel which resulted in an estimated payroll of $268 million, along with an estimated $95 million of indirect, off-base expenditures. Together, these jobs, payroll, and expenditures accounted for an estimated $363 million in total economic impact (output), representing a 34 percent increase from the 2019 AEIS.

Table D-2: 2021 Homestead Air Reserve Base Economic Impact (Output)

Personnel		Spending	
Military	3,200	Payroll	$268,000,000
Civilian	Not available	Expenditures	$95,000,000
Contractor	Not available	**Total Economic Impact (Output)**	$363,000,000
Total Jobs	3,200		

Source: www.homestead.afrc.af.mil/About-Us/Fact-Sheets/Display/Article/700488/homestead-air-reserve-base-economic-impact, 2021; Kimley-Horn calculations, 2022

D.4. Hurlburt Field

Hurlburt Field is located in Okaloosa County and is a 6,700-acre subsection of the larger Eglin AFB. While originally an auxiliary field for Eglin AFB, the base was separated administratively in 1955. The airfield is home to the United States Air Force 1st Special Operations Wing (1st SOW). The group plans, prepares, and executes special operations and security assistance worldwide in support of theater commanders. The airfield operates on one runway, 18/36 at 9,600 feet, and one helipad.

Hurlburt Field AC-130U Spooky Gunship, 4th Special Operations Squadron

Source: A1C Emily S. Moore - United States Air Force

Within the command of the 1st SOW, the 1st Special Operations Group carries out its charge to "plan, prepare, and execute special operations and security assistance worldwide in support of theater commanders. In order to accomplish its special operations mission, the group employs more than 55 fixed-wing and tilt-rotor aircraft to provide day or night, all-weather access to hostile and/or denied airspace." These highly specialized operations ensure Americans are well protected both at home and abroad.

Table D-3 shows the personnel and spending reported by Hurlburt Field for 2021. According to the Hurlburt Field Economic Impact Statement, Fiscal Year 2021, there were over 13,000 employed individuals, with almost $969 million in payroll, and over $115 million in expenditures. Together, these combined to represent a contribution of almost $1.1 billion to the state and local economy, representing a nominal increase from the 2019 study.

Table D-3: 2021 Hurlburt Field Economic Impact (Output)

Personnel		Spending	
Military	9,048	Payroll	$968,700,000
Civilian	1,863	Expenditures	$115,600,000
Contractor	2,347	**Total Economic Impact (Output)**	$1,084,300,000
Total Jobs	13,258		

Sources: Hurlburt Field Economic Impact Statement, Fiscal Year 2021; Kimley-Horn calculations, 2022

D.5. MacDill Air Force Base

MacDill AFB is located on the tip of the Interbay Peninsula in Tampa and occupies 5,900 acres. The base was established in 1898 during the Spanish-American War, then transitioned to a flight training airfield during WWII. Shifting between B-17 and B-29 training until 1953, MacDill AFB is now the training field for newer tanker and bomber aircraft, primarily Boeing's KC-135 Stratotanker. In 1960, the base was considered for closure, but the Cuban Missile Crisis demonstrated the value of the base's location. The host wing for MacDill AFB is the 6th Air Refueling Wing (6th ARW) who operate on the base's single runway, 05/23 at 11,421 feet. Additional units at MacDill include the Air Force Reserve Command's 927th ARW.

MacDill Air Force Base
F-15E from Seymour Johnson Air Force Base, N.C., receives fuel from a KC-135R from MacDill AFB

Source: United States Air Force/Staff Sgt. Andy Dunaway

Most recently, MacDill AFB served as the training location for airmen from the 24th SOW to participate in their first joint deployment exercise to "validate their ability to provide short-notice civil engineering, force protection and logistics support toward a wide variety of special operation missions across the globe. During the exercise, Airmen secured their cargo, prepared it for loading, and ensured it was ready for a safety inspection."

Table D-4 shows the personnel and spending reported by MacDill AFB in 2021. According to the MacDill Air Force Base 2019 Economic Impact Statement, there were over 30,000 employed individuals, with over $2.5 billion in payroll, and more than $586 million in expenditures. Together, these jobs, payroll, and expenditures accounted for almost $3.1 billion in total economic impact (output).

Table D-4: 2021 MacDill Air Force Base Economic Impact (Output)

Personnel		Spending	
Military	24,125	Payroll	$2,500,980,551
Civilian	6,088	Expenditures	$586,557,010
Contractor	431	**Total Economic Impact (Output)**	$3,087,537,561
Total Jobs	30,644		

Source: MacDill Air Force Base 2019 Economic Impact Statement, 2019; Kimley-Horn calculations, 2022

D.6. Naval Air Station Jacksonville

NAS Jacksonville is located in Duval County, approximately eight miles south of Jacksonville, and occupies slightly less than 25,000 acres. The base was opened initially in 1917 and changed hands between the Navy and National Guard before being officially commissioned in 1940 as NAS Jacksonville. The base currently hosts Patrol Squadron Thirty (VP-30), Helicopter Maritime Strike Squadrons (HSM-46, -60, -70, -72, -74), Fleet Logistic Support Wings (Navy Reserve), and Maritime Support Wings (VR), among many other operational squadrons. NAS Jacksonville operations utilize two runways, 10/28 at 9,003 feet and 14/32 at 5,978 feet.

Naval Air Station Jacksonville
Blue Angels take flight during the annual air show

Source: U.S. Navy Photo by Photographer's Mate 1st Class Darryl S. Herring.

NAS Jacksonville prides itself on its size and scope, being the largest Navy base in the Southeast Region and third largest in the nation. The facility serves "as a master air and industrial base" while supporting "U.S. and allied forces specializing in anti-submarine warfare and training of the best aviators in the world."

Table D-5 shows the personnel and spending reported by NAS Jacksonville. NAS Jacksonville employed an estimated 18,700 people, with a total payroll estimated at $1.2 billion and expenditures estimated at almost $345 million. These figures represent an increase of approximately seven percent from the 2019 AEIS. Together, these jobs, payroll, and expenditures accounted for over $1.5 billion in total economic impact (output).

Table D-5: 2021 Naval Air Station Jacksonville Economic Impact (Output)

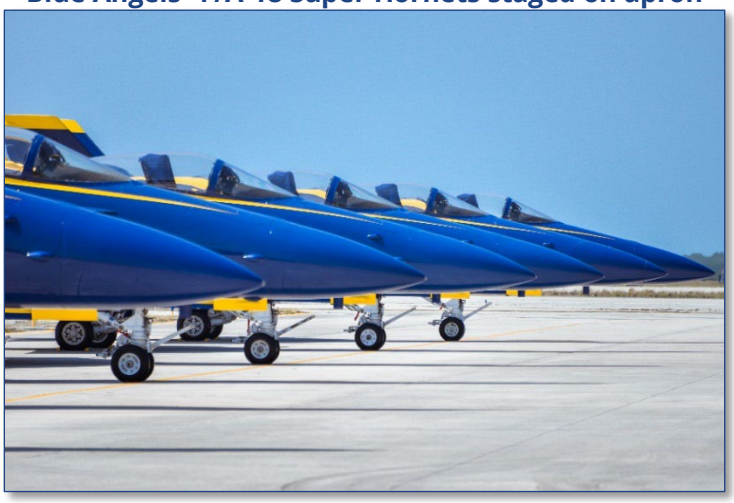
Personnel		Spending	
Military	10,200	Payroll	$1,205,275,963
Civilian	6,000	Expenditures	$344,674,538
Contractor	2,500	**Total Economic Impact (Output)**	$1,549,950,501
Total Jobs	18,700		

Sources: http://www.militarybases.us/navy/nas-jacksonville/; Kimley-Horn calculations, 2022

D.7. Naval Air Station Key West

NAS Key West is located on Boca Chica Key, near Key West, and occupies over 5,600 acres. NAS Key West's national security mission supports operational readiness requirements for the DoD, Department of Homeland Security, Air National Guard and Army National Guard units, allied military forces, and other federal agencies. In addition, NAS Key West is the host facility for numerous tenant activities, including Joint Interagency Task Force South, U.S. Coast Guard, and U.S. Army Special Forces Underwater Training School, to name a few. NAS Key West operates on three runways: 04/22 at 7,002 feet, 08/26 at 10,001 feet, and 14/32 at 7,001 feet. Found at NAS Key West are "the best Sailors, Soldiers, Airmen, Marines and Coast Guardsmen in the world. Each of them working diligently daily to ensure that [NAS Key West personnel] are responsible stewards of human, fiscal, material and environmental resources."

Naval Air Station Key West
"Blue Angels" F/A-18 Super Hornets staged on apron



Source: MaiicPhotos. shutterstock.com

Table D-6 shows the personnel and spending reported by NAS in 2021. In 2021, NAS Key West employed an estimated almost 3,000 service members, with an estimated payroll over $200 million and estimated total expenditures of almost $150 million. Together, these result in over $356 million in total economic impact (output). These figures represent an increase of approximately 18 percent from the 2019 AEIS.

Table D-6: 2021 Naval Air Station Key West Economic Impact (Output)

Personnel		Spending	
Military	1,650	Payroll	$207,718,379
Civilian	1,312	Expenditures	$148,859,123
Contractor	Not available	**Total Economic Impact (Output)**	$356,577,503
Total Jobs	2,962		

Sources: https://militarybases.com/florida/key-west/; Kimley-Horn calculations, 2022

D.8. Naval Air Station Pensacola

NAS Pensacola is located in Escambia County and occupies over 5,000 acres. The base was built in 1913 and is considered "The Cradle of Naval Aviation." NAS Pensacola hosts the 479th Flying Training Group (479th FTG) of the Air Education and Training Command (AETC), the Naval Air and Operational Medical Institute (NAOMI), and hosts Marine and Air Force pilot training units. NAS Pensacola is also the home base of the world-famous "Blue Angels" flight demonstration squadron. Founded in 1946, the unit is the second oldest formal aerobatic team in the world. The base operates on three runways: 01/19 at 7,136 feet, 07L/25R at 8,001 feet, and 07R/25L at 8,000 feet.

Naval Air Station Pensacola, aerial view

Source: Kevin King

NAS Pensacola's primary mission is "to fully support the operational and training missions of tenants assigned and to enhance the readiness of the U.S. Navy, its sister armed services and other customers, thus, enabling them to meet mission requirements."

Table D-7 shows the personnel and spending reported by NAS Pensacola in 2021. In 2021, NAS Pensacola supported over an estimated 23,000 employees, resulting in an estimated $1.1 billion in payroll, and an almost $180 million in estimated expenditures. Together, these result in over $1.3 billion in total economic impact (output). These figures represent an increase of approximately five percent from the 2019 AEIS.

Table D-7: 2021 Naval Air Station Pensacola Economic Impact (Output)

Personnel		Spending	
Military	16,000	Payroll	$1,124,564,026
Civilian	7,400	Expenditures	$177,090,838
Contractor	Not available	**Total Economic Impact (Output)**	$1,301,654,864
Total Jobs	23,400		

Sources: cnic.navy.mil; Kimley-Horn calculations, 2022

D.9. Naval Air Station Whiting Field

NAS Whiting Field is located in the City of Milton in Santa Rosa County and occupies over 3,800 acres. NAS Whiting Field is one of two primary training facilities for U.S. Navy pilots and has two different airfields on the base. North Whiting Field is used primarily for flight training and South Whiting Field is used primarily for advanced helicopter training. NAS Whiting Field supports over 1.5 million operations a year due to the nature of operations conducted. North Whiting Field has two runways: 05/23 at 6,003 feet and 14/32 at 6,001 feet. South Whiting Field also has two runways: 05/23 at 5,996 and 14/32 at 6,002 feet.

Naval Air Station Whiting Field
Training Air Wing Five (TW-5) Helicopters

Source: U.S. Navy/Mr. Tom Thomas

NAS Whiting Field's primary mission is to produce the military's best-trained 'Aviation Warfighter.' This is done through the 21 tenant activities which produce more than 1,200 pilots a year. The facility is home to "the largest air wing in the U.S. Navy and produces 100 percent of all Navy, Marine Corps and Coast Guard helicopter pilots."

Table D-8 shows the personnel and spending reported by NAS Whiting Field in 2021. In 2021, NAS Whiting Field employed an estimated 4,560 individuals, resulting in an estimated payroll of over $291 million, and an estimated additional $66 million in expenditures. Together, these result in over $357 million in total economic impact (output). These figures represent an increase of approximately 49 percent from the 2019 AEIS.

Table D-8: 2021 Naval Air Station Whiting Field Economic Impact (Output)

Personnel		Spending	
Military	2,680	Payroll	$291,037,654
Civilian	1,161	Expenditures	$66,611,065
Contractor	719	**Total Economic Impact (Output)**	$357,648,719
Total Jobs	4,560		

Sources: https://pcsing.com/base/whiting-field-naval-air-station; Kimley-Horn calculations, 2022

D.10. Naval Station Mayport

NS Mayport is located in Duval County 15 miles northeast of Jacksonville and occupies 3,230 acres. Opened in 1942, the base currently hosts the third largest naval fleet in the United States. The base is home to 83 tenant commands on-site, including the U.S. Navy's Atlantic Fleet and Helicopter Maritime Strike Wing. NS Mayport aviation operations utilize the single runway 05/23 at 8,001 feet.

The mission of NS Mayport is to "Sustain and Enhance Warfighter Readiness", providing the "Finest service to the Finest fleet." This is done through the aforementioned tenant commands on-site, along with more than 20 homeported ships and four separate helicopter squadrons.

Naval Station Mayport
USS Saratoga (CV-60, left) and USS Constellation (CV-64) in port

Source: PH1 Slaugenhaupt, USN

Table D-9 shows the personnel and spending reported by Naval Station Mayport in 2021. In 2021, NS Mayport supported an estimated 15,150 jobs, resulting in an estimated $931 million in payroll, and an estimated $467 million in expenditures. Together, these result in almost $1.4 billion in total economic impact (output). These figures represent an increase of approximately 44 percent from the 2019 AEIS.

Table D-9: 2021 Naval Station Mayport Economic Impact (Output)

Personnel		Spending	
Military	15,150	Payroll	$930,637,917
Civilian	Not available	Expenditures	$466,961,469
Contractor	Not available	**Total Economic Impact (Output)**	$1,397,599,387
Total Jobs	15,150		

Sources: http://www.militarybases.us/navy/ns-mayport/https://installations.militaryonesource.mil/in-depth-overview/naval-station-; Kimley-Horn calculations, 2022

D.11. Patrick Space Force Base

Patrick SFB is located in Brevard County on Florida's east coast and occupies approximately 2,300 acres of land. The base is home to the 45th Space Wing (SW), whose mission is to ensure access to space and support global operations. In late 2020, it was announced that Patrick Air Force Base would be renamed to Patrick Space Force Base and is commanded by the Space Launch Delta 45. Patrick SFB operates from two runways, 03/21 at 9,003 feet and 11/29 at 3,992 feet.

Patrick SFB – Air Force HC-130P refuels a HH-60 Pave Hawk

Source: Rob Jenson

The three priorities and commitments set forth by Patrick SFB include 100 percent mission success, shaping the future, and investing in people. These are accomplished through the command of Space Launch Delta 45 along with the 45th Medical Group, Support Group, and Operations Group.

Table D-10 shows the personnel and spending reported by Patrick SFB in 2021. According to the Patrick SFB Fiscal Year 2020 Economic Impact Analysis, the base and station generate almost 11,000 jobs, resulting in a payroll of over $425 million, and nearly $625 million in expenditures. Together, these result in over $1 billion in total economic impact (output). These figures represent an increase of approximately 16 percent from the 2019 AEIS when Patrick SFB was an Air Force Base.

Table D-10. 2021 Patrick Space Force Base Economic Impact (Output)

Personnel		Spending	
Military	3,599	Payroll	$425,312,488
Civilian	2,404	Expenditures	$624,790,917
Contractor	4,835	**Total Economic Impact (Output)**	$1,050,103,405
Total Jobs	10,838		

Sources: Patrick Space Force Base Fiscal Year 2020 Economic Impact Analysis; Kimley-Horn calculations, 2022

D.12. Tyndall Air Force Base

Tyndall AFB is located in Bay County, 12 miles east of Panama City, and occupies almost 9,280 acres. The base was established in 1940 as a gunnery range and was converted to an Air Force Base in 1947. The base is currently the headquarters for the 325th Fighter Wing in addition to eight other tenants. These operators use the airfield's two runways, 14L/32R at 10,008 feet and 14R/32L at 10,114 feet.

Tyndall Air Force Base
F/A-22 Raptor flies over Tyndall AFB

Source: United States Air Force/ Tech. Sgt. Mike Ammons

Tyndall AFB and the 325th Fighter Wing's primary mission is to "develop resourceful and resilient Airmen trained to project unrivaled combat air power on behalf of the United States of America. The wing trains and prepares F-22 Raptor pilots, intelligence officers, and maintainers for assignment to combat Air Force units." In 2018, Tyndall AFB sustained a direct hit from Hurricane Michael. Construction has continued to rebuild and shape the base into the Air Force's first "Installation of the Future.

Table D-11 shows the personnel and spending reported by Tyndall Air Force Base in 2021. In 2021, Tyndall Air Force Base generated over 3,800 jobs, resulting in an estimated $217 million in payroll, with an estimated $97 million in expenditures. Together, these result in over $314 million in total economic impact (output).

Table D-11: 2021 Tyndall Air Force Base Economic Impact (Output)

Personnel		Spending	
Military	3,043	Payroll	$217,463,497
Civilian	798	Expenditures	$97,241,934
Contractor	Not available	**Total Economic Impact (Output)**	$314,705,431
Total Jobs	3,841		

Sources: https://installations.militaryonesource.mil/in-depth-overview/tyndall-afb; Kimley-Horn calculations, 2022

D.13. Summary

Florida is home to numerous military aviation installations which support national defense goals. From Air Force Bases and Naval Stations, to two of only eight of the nation's Space Force Stations, these installations generate over 140,000 jobs and contribute almost $13 billion to the Florida economy. As demonstrated in this analysis, Florida's military installations contribute significantly to the state's economy.

The breakdown of total jobs and total spending by each military installation is shown in **Table D-12**. As shown, the total jobs through aviation-forward military facilities within the state of Florida totals over 143,000, which is nearly double the number of individuals employed at Walt Disney World, the largest single-site employer in the United States. In addition, Florida's military aviation facilities accounted for more than $12.9 billion in total impacts in 2021, with nearly $9.6 billion going directly to payroll, more than three times the total payroll of all employees at Walt Disney World. Military impacts by facility are summarized in **Table D-12**.

Figure D-2: Total Statewide Military Impacts

Sources: Web research completed by Kimley-Horn, 2022

Table D-12: Military Impacts by Facility (Output)

Facility	Total Jobs	Total Payroll	Total Expenditures	Total Economic Impact (Output)
Eglin AFB	16,465	$1,445,691,419	$631,405,019	$2,077,096,438
Homestead ARB	3,200	$268,000,000	$95,000,000	$363,000,000
Hurlburt Field	13,258	$968,700,000	$115,600,000	$1,084,300,000
MacDill AFB	30,644	$2,500,980,551	$586,557,010	$3,087,537,561
NAS Jacksonville	18,700	$1,205,275,963	$344,674,538	$1,549,950,501
NAS Key West	2,962	$207,718,379	$148,859,123	$356,577,503
NAS Pensacola	23,400	$1,124,564,026	$177,090,838	$1,301,654,864
NAS Whiting Field	4,560	$291,037,654	$66,611,065	$357,648,719
NS Mayport	15,150	$930,637,917	$466,961,469	$1,397,599,387
Patrick SFB	10,838	$425,312,488	$624,790,917	$1,050,103,405
Tyndall AFB	3,841	$217,463,497	$97,241,934	$314,705,431
Total	143,018	$9,585,381,895	$3,354,791,914	$12,940,173,809

Sources: Web Research, 2022; Kimley-Horn calculations, 2022

Appendix E. Airport Tenant Sectors

Table E-1: Sectors Used to Categorize Airport Tenants

Airport Tenant Sectors		
Access and Revenue Management	Computer Software Development	Janitorial Service
Access Control and Parking Services	Concert Management	Kitchen Exhaust System Services
Accounting Services	Concession	Lab Services
Administrative Sales Office	Concrete Contractor	Labor Union
Advertising	Construction	Land Lease
Aerial Advertising	Construction Equipment Rentals	Land Survey Provider
Aerial Application	Contract Pilot Services	Landscape Contractor
Aerial Fire Fighting Equipment	Contract Tower	Law Enforcement Driver Training
Aerial Surveying	Contractor	Lawyer
Aerospace Research	Convenience Store	Lease Hangars
Agricultural And Industrial Services	Conveyors	Legal Services
Air Ambulance	Corporate Flight Department	Light Maintenance of Aviation Fuel Tanks; Jet Fuel Delivery
Air Cargo	Corporate Hangar Land Lease	Local/Regional Government
Air Conditioning	Corrosion Protection Services	Local/Regional Police or Firefighting
Air Rescue Helicopter	Counseling	Logistics
Air Transportation	Courier/Overnight Delivery Services	Lounge
Aircraft Administration and Consulting	Cruise Industry	Luggage Services
Aircraft Broker	Custom Aquarium Manufacturer	Mail
Aircraft Cleaning	Customer Service & IT	Maintenance
Aircraft Collection	Das Service Provider	Managed Aircraft
Aircraft Detailing	Data Collection	Management Services
Aircraft Exporting	Debt Relief	Manufacture Medical Devices - Not Airport Related
Aircraft Exterior/Interior Detailing	Defense And Civil Security	Manufacturers' Representative
Aircraft Financing	Defense Contractor	Marketing And Advertising
Aircraft Insurance	Demolition	Mechanic
Aircraft Management	Dentist	Medevac
Aircraft Rental and Leasing	Disaster Recovery & Restoration	Media/ Advertising Firm
Aircraft Repositioning	Distillery	Medical Equipment Safety
Aircraft Sales	Distribution	Medical Sales Office
Aircraft Storage	Doctor	Medical Testing
Aircraft Support Services	Driving Range	Military
Aircraft, Passenger, Security Services	Drone Engine Production	Missionary
Airfield Electrical	Drug & Alcohol Testing	Mobility Services
Airfield Pavement	Drywall Install	Monroe County Airport Staff
Airline Caterer	E-Commerce	Motorsports
Airline Club Staff DI/Ua	Education	Moving And Storage

Airport Tenant Sectors		
Airline Ground Support	Electrical Services	Museum
Airline Services	Elevator/Escalator Contractor	News
Airline Support Operations/Aircraft Fuel Storage and Into-Plane	Emergency Medical Aviation	News/Traffic Reporting
Airline Vendor	Emergency Procedure Training	Non-Profit
Airport Authority	Employee Screening Including Polygraph Services	Not Airport Related Business
Airport Consultant, Design, Baggage	Energy Services	Office
Airport Lounge Management Services	Engine Performance Electronics	On Demand Engineer
Airport Management	Engineering	Other
Airport Operations	Entertainment	Passenger Loading Bridge Provider/Maintenance
Airport Runway and Taxiway Marking	Environmental Consulting and Testing	Passenger, Ramp, And Cargo Handling Services
Airport Staff/Law Enforcement	Environmental, Energy, And Industrial Services	Pest Control
Airport Terminal Services	Equipment Insurance Services	Petroleum Equipment Distributor
Airport Vending Machine Services	Equipment Rentals	Photography
Airport Welcome/Business Center	Equipment Repair	Pilot Practical Test Standards Administration
Ambulance Service	Equipment Supplier	Pipeline Management
Animal Shelter	Event Planning	Porter Services
Architect/Engineering	Experimental Parachute Testing	Power Paragliding
Atm Services	FAA	Powered Parachute Training
Auto And Aircraft Detailing	Facility Management Services	Printing
Auto Auction	Farm	Private Airport/Terminal Operator
Auto Parts/Body Assembly	FBO	Professional Office Administration
Auto Sales and Repair	FBO And Flight School	Professional Services and Property Leases
Automatic Door Contractor	Federal Government	Propane Gas Provider
Automatic Teller Machine	Fencing	Psgr Svc
Automobile Maintenance	Fiber Cable Supplier	Public Storage
Automotive Dealership	Fiber Optics	Pump Manufacturers
Automotive Repairs	Financial Services	Racetracks
Aviation Accounting and Consulting	Fire Protection Services	Radio Station
Aviation Advertising	Fire Safety Contractor	Rc Aircraft Events
Aviation Broadcast Consulting	Fire Suppression	Rc Racing
Aviation Business Services	Fire System Contractor	Real Estate
Aviation Club	Flight Attendant Training	Refrigerant Recovery Equipment Repair
Aviation Insurance and Risk Management Services	Flight Department/Aircraft Storage	Restaurant, Bar, Etc.
Aviation Interior Services	Flight School/Aircraft Rentals/Maintenance/Charters	Retail
Aviation Medicine/Ophthalmology	Flight Shows	Rodeo
Aviation Operations Services	Flight Test and Flight Test Support	Roofing

Airport Tenant Sectors		
Aviation Recovery	Flight Tours	Rv Manufacture & Services
Aviation Recruiter	Flight Training and Aircraft Rental	Rv Parking
Aviation Security Services	Flooring Sales	Sales Marketing
Aviation Service Provider	Flying Club	Scaffold, Insulation, Abatement Contractor
Aviation Support Services	Food Deliveries	School Bus Depot
Aviation Training	Food Service Equipment Parts and Service	Security (Not TSA Or Police)
Aviation Weight Services	Food/Facilities Management	Services
Aviation-Related Manufacturing/Repair	Foreign Government	Shipping Agency
Avionics Sales And Service	Forestry Surveying	Sightseeing And Tours
Avionics Training	Forklift Dealer	Simulator Training
Baggage, Boarding Bridges	Foster Care Service	Skycaps
Bank	Freight Forwarder	Skydiving And Skydiving Instruction
Banner Towing	Fuel Services	Small Engine Shop and Lawn Equipment Sales
Beauty & Fashion Direct Sales Online	Furniture/Interior Design	Social Work
Beverage Dispensing Manufacturer	Gas Station	Specialized Aviation Services
Beverage Distribution	Gas Supplier	Speedway Racetrack
Biometric Security Passenger Services	General Contractor	Sport/Recreation
Biplane Rides	General Manufacturing	Staffing Services
Boat Repair and Storage	General Offices	State Government
Boat Sales	Geospatial Services	Steel Distribution
Building Equipment Contractors	Geotechnical Engineering Services	Storage
Building Services Contractor	Go-Kart Racing	SUE and Survey Services
Business Consultant	Golf Cart Sales	Support Services
Business Management	Golf Course	Surveyor
Business Park	Golf Driving Range & Golf Shop	Taxi Service
Business Services	Govt Agency - Law Enforcement	Tech Security Consultant
Cabinet Sales	Grocery Store	Technology Services
Cabinetry/Carpentry	Ground Equip Rental	Telecommunications
Call Center	Ground Handling and Passenger Support Services	Tenant As Needed Vendor
Capital Management	Ground Services	Terminal Food & Beverage Concessions
Car Rental	Ground Support	T-Hangars and Storage
Career Education (Avionics)	Ground Transportation	Third Party Data Center Maintenance
Cargo Service	Ground Vehicle Maintenance	Tours And Helicopter Flight Instruction
Chamber of Commerce	GSE Equipment Contractor	Tractors/Heavy Equipment
Charter Broker	Gym	Travel Agency
Chemical And Ingredients Distributor	Hair Salon	Trucking
Chicken Egg Production	Hangar Rental/Leasing	TSA
Church	Hangar Storage	University / College / School
Cirrus Flight School and Repair Center	Healthcare	Unknown (Assuming Private Individual)
City Staff	Helicopter Air Ambulance	Utility

Airport Tenant Sectors		
Club	Helicopter Charter	Valve Repair & Testing Equipment
College Flight School	Helicopter Tours	Various Airport Management Services
Commercial Flooring	Hotel (On Airport)	Vehicle Fuel Facility Management
Commercial Helicopter	Housing Developer	Veterinary Clinic
Commercial HVAC Contractor	Humanitarian Mission	Warehouse
Commercial Lighting	HVAC, Plumbing Services	Warehouse Services
Commercial Plumbing	Industrial Equipment Supplier	Waste Management
Commercial Roofing	Industrial Services	Water Conditioning Equipment
Commercial Upholstery Services	Insurance	Welding Shop
Communication Services	Interior Design Consulting Services	Wholesale & Distribution
Communications Infrastructure	Interior Plant Contractor	Yoga Studio
Communications Tower	Internet Provider	Youth Aviation Programs/Disaster Relief Support
Community Facilities	Investment Company	Janitorial Service

Source: Self-identified sector groupings derived from tenant surveys

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