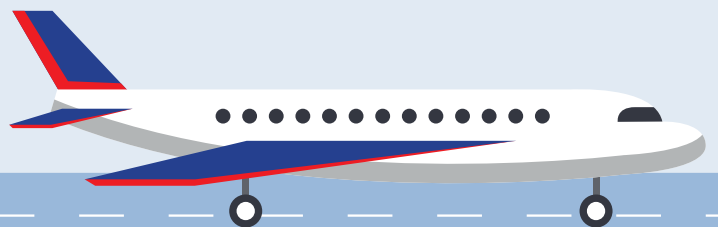


# ELEVATE

2020 ANNUAL REPORT



Florida Department of Transportation  
Aviation Office



# CHARTING THE COURSE FOR SUCCESS

The aviation industry is constantly evolving. Shifting aviation technologies, regulations, global economic conditions, and demands for air service bring both challenges and opportunities to Florida's airports. Together, the Florida Department of Transportation (FDOT), the Continuing Florida Aviation System Planning Process (CFASPP), and our airports are committed to ensure that our aviation system remains safe, highly advanced, and responsive to the state's transportation needs—both today and well into the future.

In support of this commitment, FDOT completed the Florida Aviation System Plan 2035 Update (FASP 2035) in 2017. An aviation-specific extension of the Florida Transportation Plan (FTP), the FASP 2035 is the long-term strategic plan guiding Florida's aviation future over the 20-year planning horizon. This report updates the key measures used to evaluate the system's performance in order to understand how the system has progressed since the FASP 2035 was completed.

The FASP Update can be accessed online at [www.fdot.gov/aviation/FASP2035.shtm](http://www.fdot.gov/aviation/FASP2035.shtm). The FTP is available at [www.floridatransportationplan.com](http://www.floridatransportationplan.com).

## Aviation System Goals

The future of Florida's aviation system is rooted in the decisions we make today. Founded upon this forward-thinking approach, FDOT, CFASPP, and other aviation partners defined seven goals of the Florida aviation system (shown to the right). These key principles serve as the FDOT's compass as it works to ensure Florida's continued aviation leadership.

### Performance Monitoring

These goals have been translated to actionable and informational metrics known as performance measures and indicators (respectively). First assessed during the FASP 2035 Update, these metrics will be regularly evaluated to identify changes over time and support ongoing system improvement.

A summary of the FASP performance measures and indicators are provided on the following page. Additional details of this data are available in the FASP 2035 Technical Report at [www.fdot.gov/aviation/FASP2035.shtm](http://www.fdot.gov/aviation/FASP2035.shtm).

- 1.** Provide safe, efficient, secure, and convenient service to Florida's citizens, businesses, and visitors.
- 2.** Contribute to operational efficiency, economic growth, and competitiveness while remaining sensitive to Florida's natural environment.
- 3.** Support and enhance the national position of leadership and prominence held by Florida's aviation industry.
- 4.** Protect airspace and promote compatible land uses around airports.
- 5.** Foster technological innovation and support the implementation of new technologies.
- 6.** Promote support for aviation from business, government, and the public.
- 7.** Foster Florida's reputation as a military- and aerospace-friendly state.



# FLORIDA AVIATION & SOCIOECONOMICS

**AIRPORTS**

**nine** National Asset General Aviation Airports

General Aviation **109** Airports

**Direct, Non-Stop Service To 132 domestic destinations**

**20** PRIMARY COMMERCIAL SERVICE AIRPORTS including **4** large hub facilities

*More than any other state!*

**TOP PROVIDER OF FLIGHT INSTRUCTION IN THE U.S.**

*Leads the nation in six categories of pilot certificates:*

Student | Sport | Airline Transport Pilot (ATP) | Flight Instructor | Total Pilots | Commercial

**AVIATION'S FUTURE**

**BASED AIRCRAFT**

2014: 12,628 | 2035: 16,579

**1.49% ANNUAL GROWTH**

*Currently home to approximately 6% of the nation's general aviation aircraft fleet.*

**EXPECTED TO GROW BY MORE THAN 1.5M OPERATIONS**

**GENERAL AVIATION OPERATIONS**

6,626,339 in 2014 | 8,201,794 in 2035



**RESIDENTS**

**Third most-populous state** IN THE NATION WITH **over 20 million residents**



**PASSENGERS**

**7% increase in enplanements**

84,943,045 in 2017 | 91,179,499 in 2018

**56M**

*Domestic and international visitors arrived through Florida's airports in 2017—almost half of all of Florida's out of state visitors!*

**NATIONALLY RANKED #2** for total commercial airline passengers — 91,179,499 passengers —

**AIR CARGO**

**Largest gateway into the U.S. for Latin American air cargo**

**2.1% ANNUAL GROWTH** → **4.1 TONS** by 2035

**IMPORTED INTO THE U.S. THROUGH FLORIDA**

About **90%** of all flowers | About **2/3** of all perishables



This graphic depicts the percent of Florida's system airports that currently achieve the performance measures and indicators of the FASP 2035 (2020).

### Weather Reporting

**67%**  
of airports have either an automated weather observing station (AWOS) or automated surface observing station (ASOS)

of airports have mapping compatible with the FAA's electronic Airport Layout Plan (eALP) standards

**eALP**  
**41%**

### Master Plan or Sustainability Plan

**80%**  
of airports have a plan on file with FDOT

**ATCT**  
**47**

airports have an air traffic control tower (ATCT)

**GPS**  
**64%**

of airports have at least a GPS approach

### Wildlife Hazard Plans

**54%**  
of airports have some form of wildlife hazard plan completed

### Terminal Development

**26%**  
of airports have an ongoing or planning terminal-related development

### Statewide Aviation Annual Economic Impact

2010 2014 2018  
**\$115B → \$144B → \$175B**

### FACT Report

**0.8%**  
percent of Florida airports with capacity concerns identified in the FAA Future Airport Capacity Task (FACT) reports

### Runway Incursions

percent of airport reporting runway incursions

Direct Access Conflicts  
**76%**

Wide Expansion of Pavement  
**23%**

Three-node Conflicts  
**17%**

FAA Designated Hot Spots  
**17%**

### Based Aircraft

**11,239**

registered in the state of Florida

### Security Plan

**73%**  
of airports have a security plan

### Demand Capacity

**11%**  
of airports have a demand capacity ratio of 60%+

**7%**  
of airports have a demand capacity ratio of 80%+

**18%**

Primary runways

### Runway Safety Area Deficiencies

percent of Florida airports that do not meet relevant federal and state Runway Safety Area (RSA) standards

Non-primary runways

**19%**

### Taxiway Design Standards

**78%** of airports do not meet current taxiway standards

### Standby Emergency Power

percent of airports have standby emergency power for terminals, airfield lighting, and fuel.

**45%**

**55%**

**36%**

Terminal

Airfield Lighting

Fuel

**Pilot Training**  
**68%**

of airports offer flight training services

**Total Pilots**  
**69,339**

with 101,613 total certificates

### Strategic Intermodal System (SIS) Airports

These airports are critical for the mobility of passengers and freight.

Bus System Connection  
**60%**

Passenger Rail System Connection  
**20%**

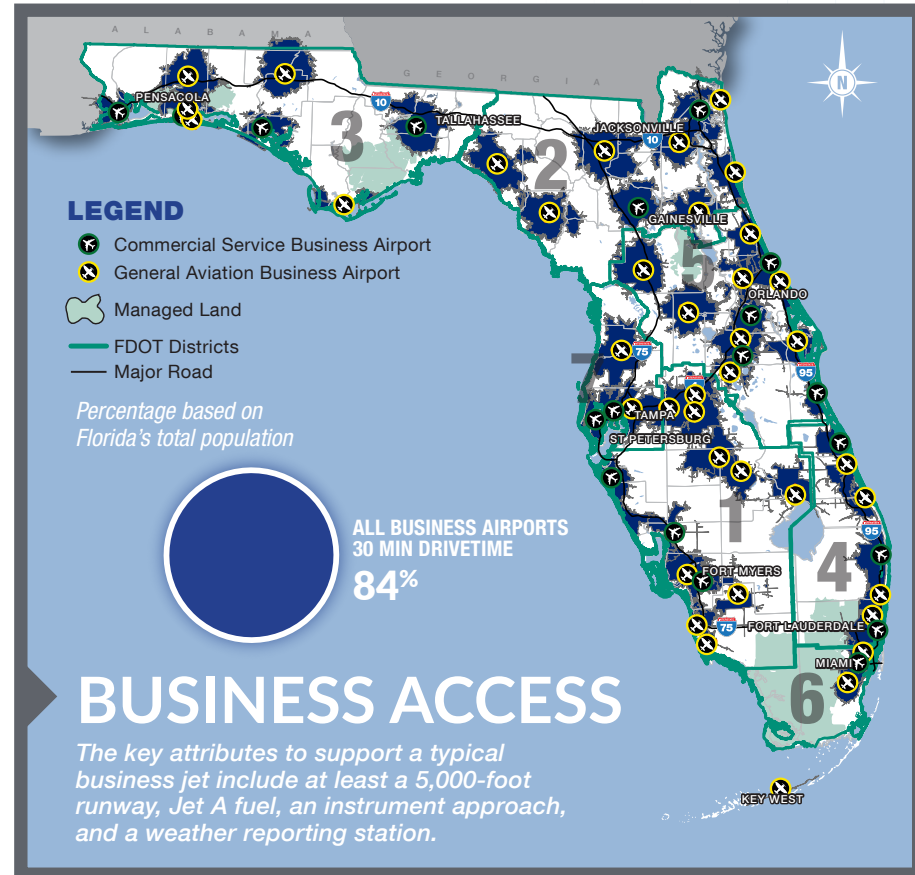
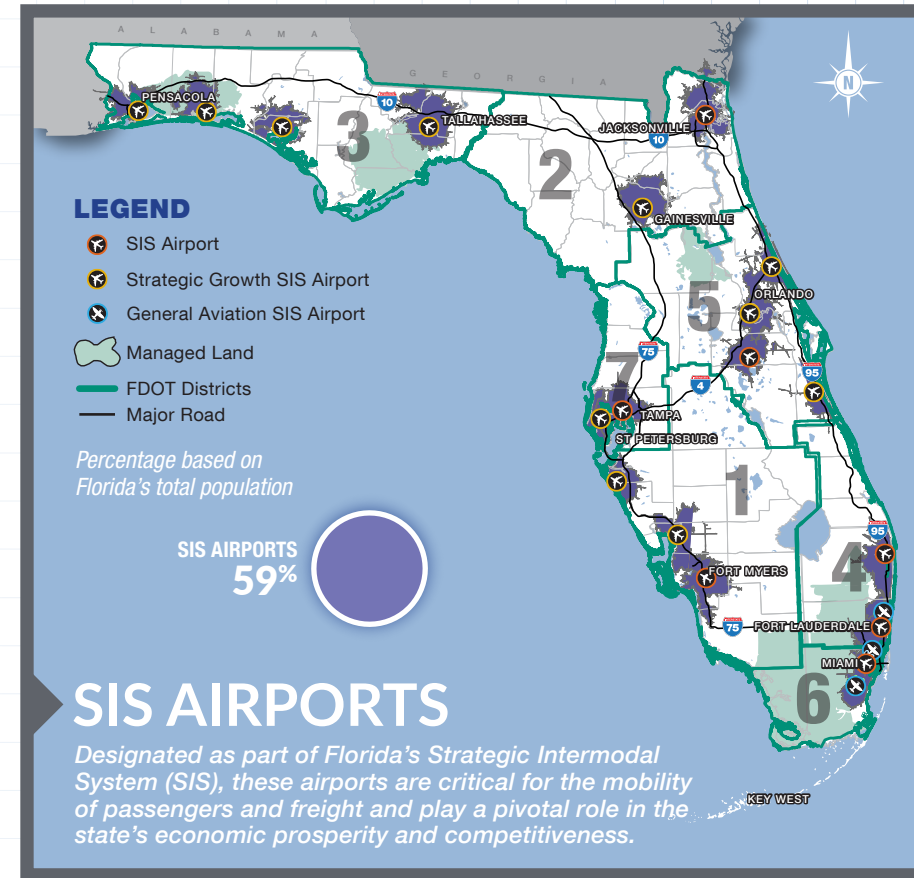
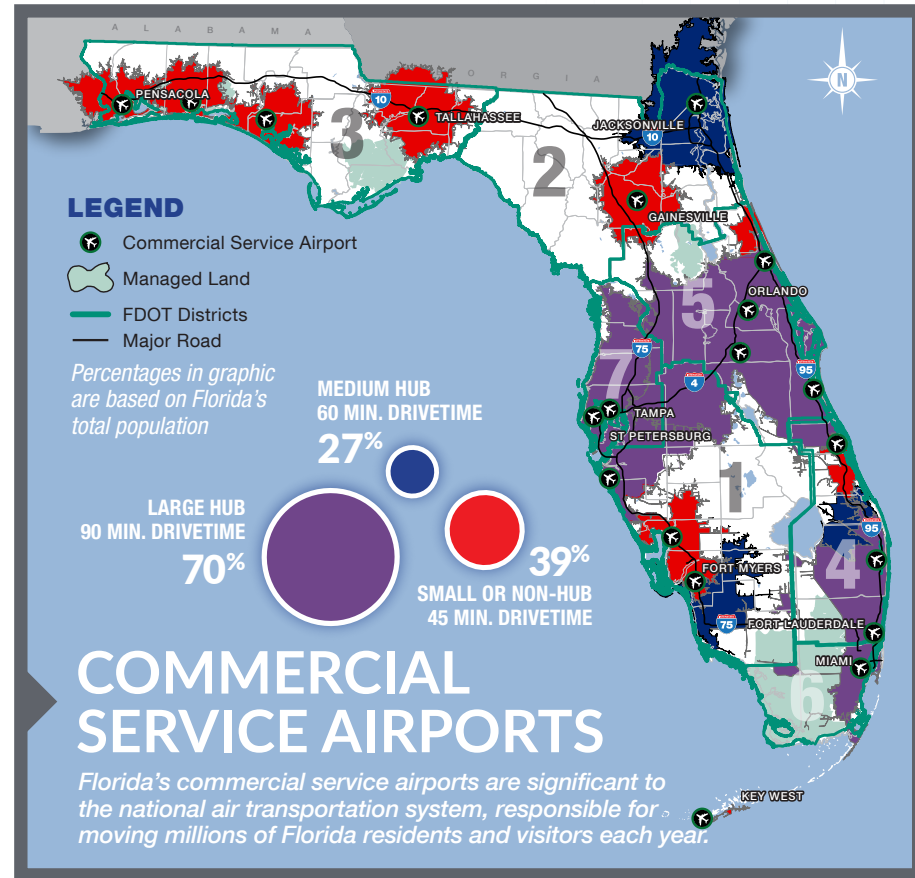
# AVIATION ACCESS

Airports vary widely in terms of the facilities and services available to aircraft, pilots, and their passengers. Airports such as Orlando International, Tampa International, and Miami International have the capability to support demanding passenger and cargo aircraft traveling to global destinations. These commercial service airports require long runways, air traffic control towers (ATCTs), Jet A fuel, and other features to support safe and efficient operations.

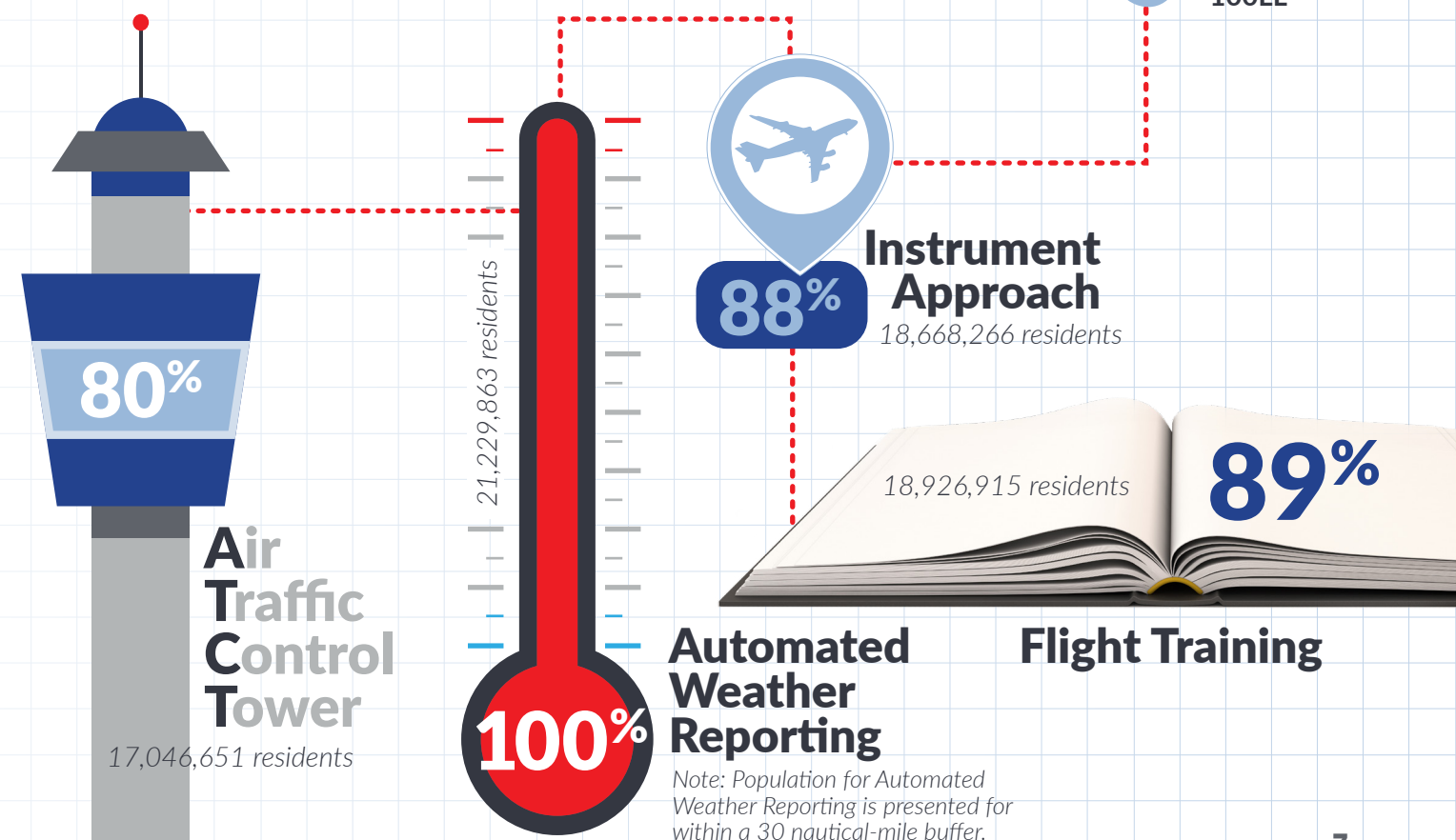
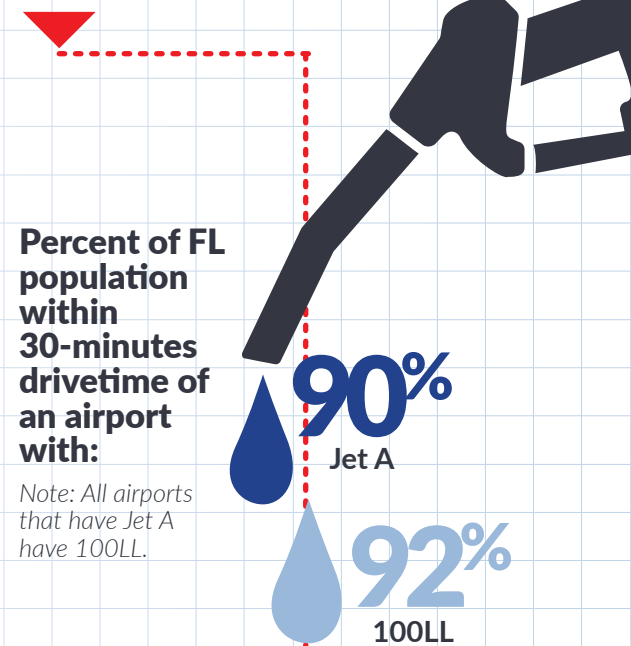
On the other end of the spectrum, some general aviation airports offer shorter runways and fewer support facilities. These airports are designed for small jet- and piston-powered aircraft typically operated by recreational aviators. Furthermore, certain activities such as business flying and flight training demand their own unique sets of airport attributes.

A truly robust aviation system provides residents with reasonable access to the entire spectrum of aviation facilities, services, and activities. As such, FDOT conducted a series of analyses to determine the percent of Florida's population within a 30-minute drive-time of various types of airports. These analyses help identify areas of comprehensive airport coverage and pinpoint the regions that could most significantly benefit from additional investments in Florida's aviation assets.

**With 94% of the population having access to a public-use airport within a 30-minute drive, Florida's residents have exceptional access to the benefits of air transportation.**



Additional drivetime reports were conducted for other attributes of Florida's aviation system to determine population coverage and access within a 30-minute drivetime of Florida's airports. This data is summarized in the graphics below.





# AIRPORT PAVEMENT REPORT

Airfield pavement is a critical element of safe aircraft operations and is often one of the most significant expenses an airport faces each year. On a continuous 3-year cycle, the FDOT Aviation Office evaluates the pavement condition index (PCI) of airfields across the state. As an indicator of the general surface condition of pavement, the PCI assessment helps the FDOT Aviation Office and airports know when and where maintenance is required to prioritize project funds and keep airports safe.

**LEGEND**

- Number of Airports
- Runway
- Overall Airfield <sup>1</sup>

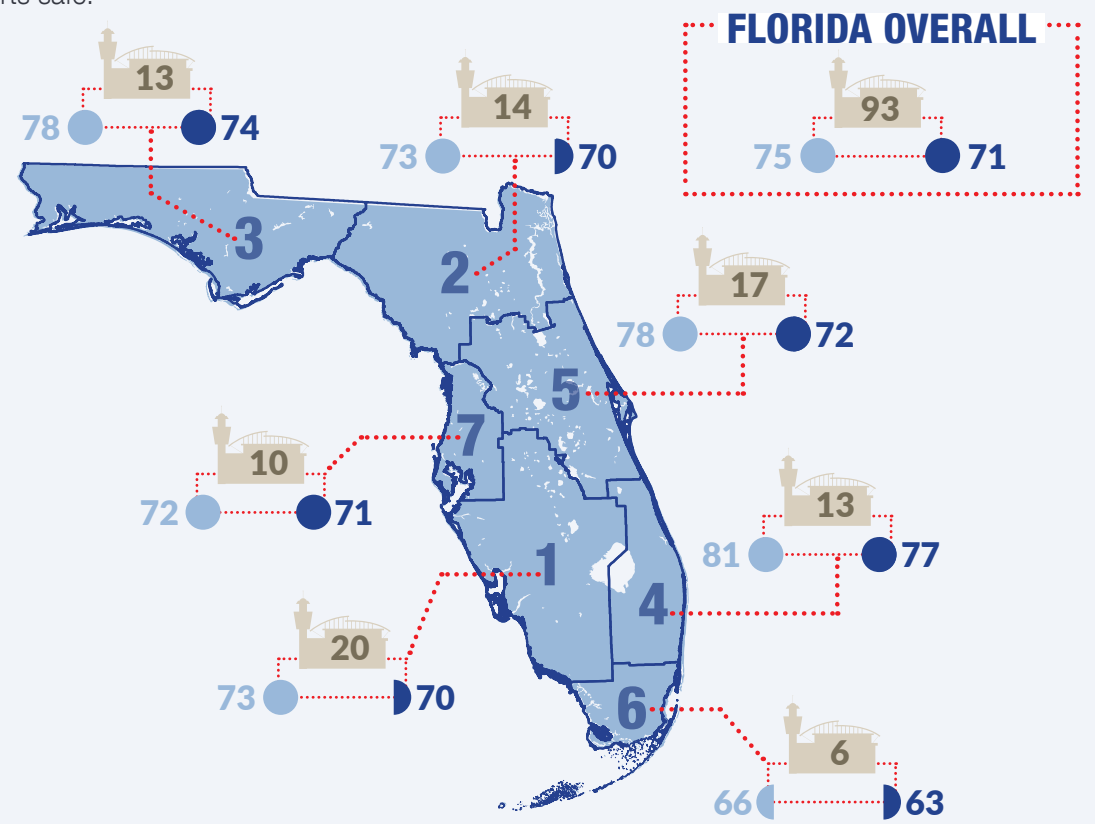
**PCI Rating:**

- Satisfactory
- Fair

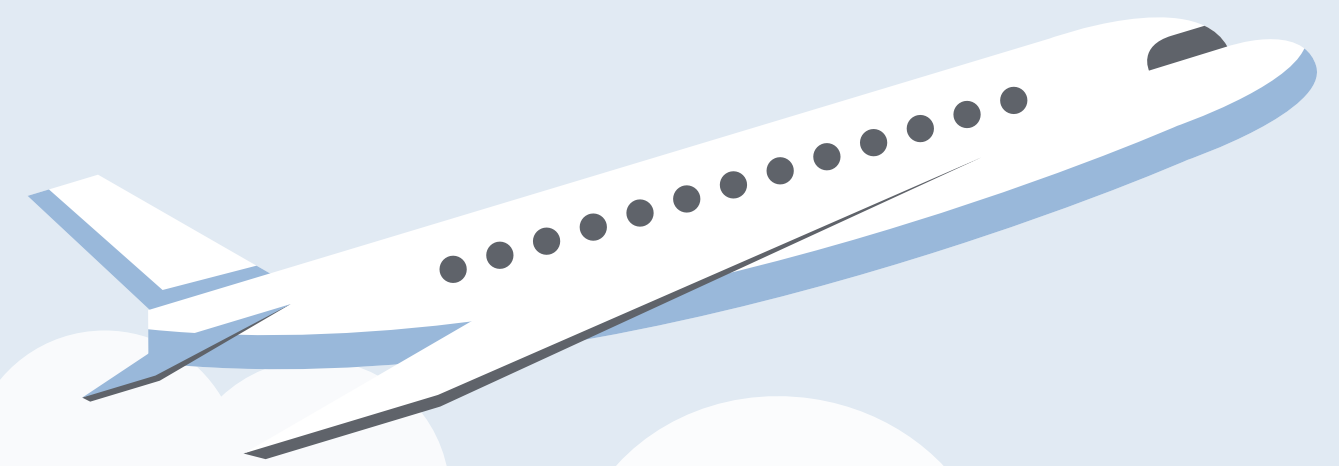
**PCI Range:**

- 65-85 Fair to satisfactory
- 40-64 Very poor to fair
- 0-39 Failed to very poor

<sup>1</sup> Individual analyses were conducted for runways, taxiways, and aprons, as not all surfaces require the same PCI for safe aircraft operations. Results are summarized here for brevity.



## DATA DICTIONARY



### Work Program

The FDOT's Work Program has programmed and planned funding of \$7.6 billion for Florida's airports for projects beginning in 2014 and running through to 2025. The chart below shows the breakdown for funding.

PROJECT TYPE	2014-2025	PERCENT
Pavement	\$1,726,918,258	23%
Buildings	\$1,643,517,478	22%
Planning	\$436,672,585	6%
Roadway	\$271,543,134	4%
Other <sup>1</sup>	\$141,511,986	2%
Misc. <sup>2</sup>	\$3,353,035,302	44%
<b>TOTALS</b>	<b>\$7,573,198,743*</b>	<b>100%</b>



<sup>1</sup> Other: ARFF Facilities, Security, Weather (AWOS/ASOS), and Land Acquisition.  
<sup>2</sup> Misc: Various Airport Improvement Projects.  
 \* Totals include FDOT, FAA and local funds.

Data Element	Page of Report	2020 Value	2019 Value	Change from 2019 to 2020 *	Updated Data Collection Effort	2020 Data Source	2019 Data Source	Data Source Change
National Asset General Aviation Airports	3	9	Unchanged	N/A	No		ASSET Report	N/A
Non-stop Service	3	132 domestic destinations	Unchanged	N/A	No		Air Service Study	N/A
General Aviation Airports	3	109	Unchanged	N/A	No		FAD	N/A
Commercial Service Airports	3	20	Unchanged	N/A	No		FAD	N/A
Large Hub Commercial Service Airports	3	4	Unchanged	N/A	No		NPIAS	N/A
Based Aircraft Projection	3	1.49%	Unchanged	N/A	No		basedaircraft.com, projection calculation	N/A
Pilot Categories	3	Top in 6 categories	Unchanged	N/A	Yes	<a href="https://registry.faa.gov/activeairmen/#">https://registry.faa.gov/activeairmen/#</a>	<a href="https://registry.faa.gov/activeairmen/#">https://registry.faa.gov/activeairmen/#</a>	No
GA Operations Projection	3	1.5 million	Unchanged	N/A	No		2017 FASP Survey, projection calculation	
Percent Increase in Enplanements	3	7%	4.48%	2.52%	Yes	<a href="https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/">https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/</a>	<a href="https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/">https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/</a>	No
National Rank for Airline Passengers	3	#2	#2	None	Yes	<a href="https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/">https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/</a>	<a href="https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/">https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/</a>	No
Air Cargo Growth	3	2.1% annual growth	Unchanged	N/A	No		FDOT Air Cargo Study	N/A
Weather Reporting	4	67%	66%	1%	Yes	<a href="https://www.faa.gov/air_traffic/weather/asos/">https://www.faa.gov/air_traffic/weather/asos/</a>	AirNav	Yes
eALP	4	41%	Unchanged	N/A	No		2017 FASP Survey	N/A
Master Plan or Sustainability Plan	4	80%	Unchanged	N/A	No		FDOT Aviation office Internal List	N/A
GPS	4	64%	64%	None	Yes	<a href="https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/navservices/gnss/approaches/">https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/navservices/gnss/approaches/</a>	AirNav	Yes
ATCT	4	37%	Unchanged	N/A	No		2017 FASP Survey	N/A
Direct Access Conflicts	4	76%	78%	-2%	Yes	Aerial inspection	Aerial inspection	No
Wide Expansion of Pavement	4	23%	33%	-10%	Yes	Aerial inspection	Aerial inspection	No

\*One airport was added to the study between 2019 and 2020.

Data Element	Page of Report	2020 Value	2019 Value	Change from 2019 to 2020 *	Updated Data Collection Effort	2020 Data Source	2019 Data Source	Data Source Change
Three-Node Conflicts	4	17%	22%	-5%	Yes	Aerial inspection	Aerial inspection	No
FAA Designated Hot Spots	4	17%	16%	1%	Yes	<a href="https://www.faa.gov/airports/runway_safety/hotspots/hotspots_list/">https://www.faa.gov/airports/runway_safety/hotspots/hotspots_list/</a>	<a href="https://www.faa.gov/airports/runway_safety/hotspots/hotspots_list/">https://www.faa.gov/airports/runway_safety/hotspots/hotspots_list/</a>	No
Taxiway Design Standards	4	78%	81%	-3%	Yes	Aerial inspection	Aerial inspection	No
Based Aircraft	4	11,239	11,897	-658	Yes	Basedaircraft.com, NPIAS; 5010, non-NPIAS	5010	Yes
Standby Emergency - Terminal	4	45%	Unchanged	N/A	No		2017 FASP Survey	N/A
Standby Emergency - Airfield Lighting	4	55%	Unchanged	N/A	No		2018 FASP Survey	N/A
Standby Emergency - Fuel	4	36%	Unchanged	N/A	No		2019 FASP Survey	N/A
Pilot Training	4	68%	65%	3%	Yes	5010	AirNav	Yes
Total Pilots	4	69,339	63,450	5,889	Yes	<a href="https://registry.faa.gov/activeairmen/#">https://registry.faa.gov/activeairmen/#</a>	<a href="https://registry.faa.gov/activeairmen/#">https://registry.faa.gov/activeairmen/#</a>	No
Total Certificates	4	101,613	90,233	11,380	Yes	<a href="https://registry.faa.gov/activeairmen/#">https://registry.faa.gov/activeairmen/#</a>	<a href="https://registry.faa.gov/activeairmen/#">https://registry.faa.gov/activeairmen/#</a>	No
Wildlife Hazard Plans	5	54%	Unchanged	N/A	No		2017 FASP Survey	N/A
Statewide Aviation Annual Economic Impact	5	\$175 billion	Unchanged	N/A	No		2017 Economic Impact Study	N/A
Terminal Development	5	26%	48%	-22%	Yes	FDOT Work Program	FDOT Work Program	No
FACT Report	5	0.80%	Unchanged	N/A	No		FACT3 Report	N/A
Security Plan	5	73%	73%	0%	Yes	FAD	FAD	No
Demand Capacity, 60%	5	11%	Unchanged	N/A	No		2017 FASP Survey	N/A
Demand Capacity, 80%	5	7%	Unchanged	N/A	No		2018 FASP Survey	N/A
Primary Runway RSA Deficiency	5	18%	13%	5%	Yes	Inspection Reports	Inspection Reports	No

**\*One airport was added to the study between 2019 and 2020.**

Data Element	Page of Report	2020 Value	2019 Value	Change from 2019 to 2020 *	Updated Data Collection Effort	2020 Data Source	2019 Data Source	Data Source Change
Non-primary Runway RSA Deficiency	5	19%	10%	9%	Yes	Inspection Reports	Inspection Reports	No
Bus System Connectivity	5	60%	70%	-10%	Yes	Route maps	Route maps	No
Rail System Connectivity	5	20%	15%	5%	Yes	Route maps	Route maps	No
Jet A Population Percentage	7	90%	90%	0%	Yes	AirNav, ArcGIS Drivetime Analysis	AirNav, ArcGIS Drivetime Analysis	No
100 LL Population Percentage	7	92%	96%	-4%	Yes	AirNav, ArcGIS Drivetime Analysis	AirNav, ArcGIS Drivetime Analysis	No
Instrument Approach Percentage	7	88%	85%	3%	Yes	<a href="https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/navservices/gnss/approaches/">https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/navservices/gnss/approaches/</a> , ArcGIS Drivetime Analysis	AirNav, ArcGIS Drivetime Analysis	Yes
Instrument Approach Population	7	18,668,266	17,117,941	1,550,325	Yes	<a href="https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/navservices/gnss/approaches/">https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/navservices/gnss/approaches/</a> , ArcGIS Drivetime Analysis	AirNav, ArcGIS Drivetime Analysis	Yes
Flight Training Percentage	7	89%	94%	-5%	Yes	5010, ArcGIS Drivetime Analysis	AirNav, ArcGIS Drivetime Analysis	Yes
Flight Training Population	7	18,926,915	19,633,691	-706,776	Yes	5010, ArcGIS Drivetime Analysis	AirNav, ArcGIS Drivetime Analysis	Yes
Weather Reporting Percentage	7	100%	100%	0%	Yes	<a href="https://www.faa.gov/air_traffic/weather/asos/">https://www.faa.gov/air_traffic/weather/asos/</a> , ArcGIS Drivetime Analysis	AirNav, ArcGIS Drivetime Analysis	Yes
Weather Reporting Population	7	21,229,863	20,852,312	377,551	Yes	<a href="https://www.faa.gov/air_traffic/weather/asos/">https://www.faa.gov/air_traffic/weather/asos/</a> , ArcGIS Drivetime Analysis	AirNav, ArcGIS Drivetime Analysis	Yes
ATCT Percentage	7	80%	80%	0%	Yes	2017 FASP Survey, ArcGIS Drivetime Analysis	2017 FASP Survey, ArcGIS Drivetime Analysis	No
ATCT Population	7	17,046,651	16,794,300	252,351	Yes	2017 FASP Survey, ArcGIS Drivetime Analysis	2017 FASP Survey, ArcGIS Analysis	No
Florida Overall Airports in Pavement Report	8	93	92	1	Yes	FDOT Pavement Report	FDOT Pavement Report	No
Florida Overall Average Runway PCI	8	75/ Satisfactory	76/ Satisfactory	-1	Yes	FDOT Pavement Report	FDOT Pavement Report	No
Florida Overall Average Airfield PCI	8	71/ Satisfactory	74/ Satisfactory	-3	Yes	FDOT Pavement Report	FDOT Pavement Report	No
Work Program Project Funding - Total	8	\$7,573,198,743	\$5,677,420,967	\$1,895,777,776	Yes	FDOT Work Program	FDOT Work Program	No

**\*One airport was added to the study between 2019 and 2020.**