# 2012

# AIRPORT AIR SERVICE PROFILE

Orlando-Sanford International Airport





#### Purpose

Airport Air Service Profiles have been developed for Florida's 19 commercial service airports. The purpose of the Airport Air Service Profiles is to inform Florida's airports of the travel patterns of their communities, so they can operate their airports more efficiently and to communicate this information to the airline industry, allowing them to make improved service delivery decisions.

### **Data Explanation**

For this report, three key data sources were used: *Passenger Origin-Destination Survey* from the U.S. Department of Transportation, the Official Airline Guide (OAG) and Airline Reporting Corporation (ARC). In this profile, data are combined and compared in order to identify general trends about the airport, as well as offer certain analysis on the findings. A description of these data sources are presented below. Throughout the text, the data sources will be further explained, but this section provides a general overview of the data used in the development of this Airport Air Service Profile.

#### AIR PASSENGER ORIGIN AND DESTINATION (O&D) SURVEY

<u>DB1B COUPON:</u> The Airline Origin and Destination Survey (DB1B) is a 10% sample of airline tickets from reporting carriers collected by the Office of Airline Information of the Bureau of Transportation Statistics. Data from this source provides coupon-specific information for each domestic itinerary of the Origin and Destination Survey.

<u>T-100 DOMESTIC MARKET:</u> This data source contains domestic market data reported by both U.S. and foreign air carriers, including carrier, origin, destination, and service class for enplaned passengers, freight and mail when both origin and destination airports are located within the boundaries of the United States and its territories.

#### OFFICIAL AIRLINE GUIDE (OAG)

OAG data were summarized as weekly averages for the reported year. All OAG data are for direct flights and represents statistically significant samples of data.

#### AIRLINE REPORTING CORPORATION (ARC)

The data provided by this source represent a statistically significant and representative sample of airline tickets purchased with a consumer form of payment through an ARC-accredited agency, including major online travel agencies (OTAs), such as Expedia, Orbitz, and Travelocity.

The data represent a 10 percent sample, and industry standard sample size, of passengers from participating agencies. This amount can vary significantly by individual market depending on several factors, including but not limited to the following: 1) the overall composition of air travelers (leisure vs. business); 2) the presence of carriers whose distribution is more heavily weighted toward the direct vs. agency channel (e.g. low cost carriers); and 3) the presence of carriers with limited participation in the ARC settlement system (e.g. Southwest Airlines).

The data used represent passengers and zip codes from where in Florida tickets were purchased. The data include purchases from Florida zip codes only. Because the data in this document represent consumer purchases of airline tickets, there is a natural bias toward leisure and unmanaged business travel behavior and may not account for all business travel. There also may be limitations due to misrepresentation of the passenger information in instances where a person from one zip code purchased a ticket for another person in a different zip code.

Airline Reporting Corporation (ARC) did not assist in the preparation of this analysis. All analyses disclosed herein were performed by Kimley-Horn and Associates, Inc., the consultant to the Florida Department of Transportation, Central Aviation Office.

## **Table of Contents**

Orlando-Sanford International Airport Air Service Summary	1
Airport Information and History	1
Analysis	1
Total Enplanements	1
Domestic Origination and Destination (O&D) Travel Patterns	2
Destinations Served	4
Intrastate Summary	4
International Flight Departures	6
Seasonal Flight Comparison	6
Hubs Served	6
Average Load Factors	7
On-Flight Market Freight Statistics	7
On-Flight Market Mail Statistics	7
Market Leakage Study	8
Introduction	8
Metropolitan Statistical Area (MSA)	8
Population Trends and Projections	8
Income Levels	9
Employment by Industry	10
Routing	11
Nearby Airports	11
Market Analysis	11
Findings	11
Appendix	Following Page 14

## Figures

Figure 1: Orlando-Sanford International Airport Total Annual Enplanements	1
Figure 2: Summary of Outbound O&D Passengers and Average One-Way Fares	
Figure 3: Intrastate Service	
Figure 4: Orlando-Sanford International Airport – Seasonal Flight Comparison	
Figure 5: Historical, Current, and Future Population Projections Seminole County	
Figure 6: Historical Populations – Orlando-Kissimmee-Sanford MSA	
Figure 7: Income Brackets – Orlando-Kissimmee-Sanford MSA	
Figure 8: Jobs by Industry – Seminole County	10
Figure 9: Market Leakage	
Maps	
Map 1: Orlando-Sanford Domestic Destination Airports and Regions, 2010	3
Map 2: Orlando-Sanford Intrastate Flights, 2011	5
Map 3: Orlando-Sanford International Airport Top Ten Routes, 2011	
Map 4: Orlando-Sanford International Airport, 2010 – Market Leakage Analysis	
Map 5: Orlando-Sanford International Airport, 2011 – Market Leakage Analysis	
Tables	
Table 1: Average Load Factors Per Year	7
Table 2: Total Freight (lbs.) Per Year	7
Table 3: Top 10 Private Employers: Seminole County	

May 2012

#### ORLANDO-SANFORD INTERNATIONAL AIRPORT AIR SERVICE SUMMARY

#### **AIRPORT INFORMATION AND HISTORY**

Originally commissioned as a naval air station in 1942, Orlando-Sanford International Airport (SFB) is currently managed by the Sanford Airport Authority. Orlando-Sanford International Airport has four runways measuring 3,578 feet, 6,002 feet, 6,647 feet, and one at 9,600 feet in length. Orlando-Sanford International Airport served 581,566 total enplanements in 2010. Although the airport has seen large fluctuations in terms of enplaned passengers, Orlando-Sanford International Airport continues to serve destinations that differ from other commercial service airport in Florida.

#### **ANALYSIS**

Orlando-Sanford International Airport is located in the East Central Continuing Florida Aviation System Planning Process (CFASPP) region. Also included in this region are Daytona Beach International Airport, Melbourne International Airport, and Orlando International Airport. In this analysis, baseline conditions for the airport are reported using 2010 and 2011 data. In some instances, historical data are shown for years 2000 to 2010. The main sources of information are from the United States Department of Transportation (U.S.DOT), the Official Airline Guide (OAG), and the Airline Reporting Corporation (ARC). Specific data sources are described where appropriate.

#### **TOTAL ENPLANEMENTS**

In 2010, Orlando-Sanford International Airport had 581,566 total enplanements, making it the second busiest airport in the East Central CFASPP region with Orlando International being the busiest. enplanements at Orlando-Sanford have significantly throughout decade, fluctuating as much as 30 percent from year to year. The 2010 enplanement level was the lowest since 2001. In 2011, Orlando-Sanford International Airport reported 785.897 having total Trends enplanements. total in enplanements at Orlando-Sanford International Airport are shown in in Figure 1. Data for this figure were taken from 2000 - 2010 Enplanements in Florida's Commercial Airports, annual airport passenger traffic reports.

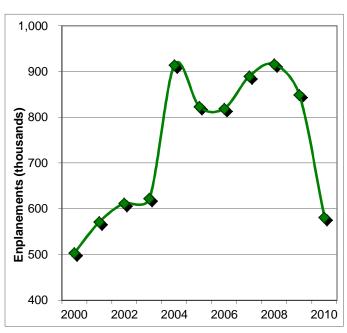


Figure 1: Orlando-Sanford International Airport Total Annual Enplanements

#### DOMESTIC ORIGINATION AND DESTINATION (O&D) TRAVEL PATTERNS

In 2010, Orlando-Sanford International Airport had 367,410 domestic origination and destination (O&D) passengers, the second highest of all airports in the East Central CFASPP region. Based on limited available data the average one-way domestic fares at Orlando-Sanford International Airport is \$90.51. Due to underreporting by the airlines serving Orlando-Sanford International Airport, this average domestic fare data may be significantly misrepresented and should not be used to form conclusions about the airport. O&D passenger and fare data were collected from the U.S. Department of Transportation (U.S. DOT) Bureau of Transportation Statistics (BTS) O&D Survey and summarized from schedule T-100 Domestic Market All Carriers. Fare data were taken from U.S.DOT BTS DB1B Market Data. Summarized data for each year were taken from all months of the respective year. A graphical summary of O&D passenger and fare data can be seen in *Figure 2* below. *Map 1* shows the domestic destinations served by Orlando-Sanford International Airport, the U.S. regions used for analysis in this report, and a table that shows how average one-way fares and domestic passenger totals vary across U.S. regions, based on the limited data reported by the airlines that serve Orlando-Sanford International Airport.

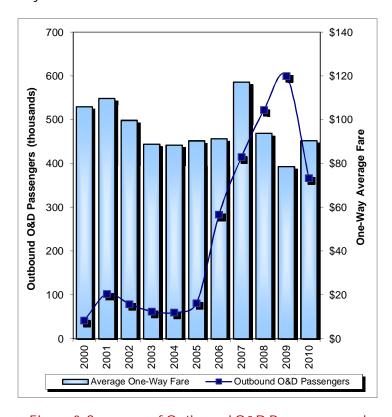
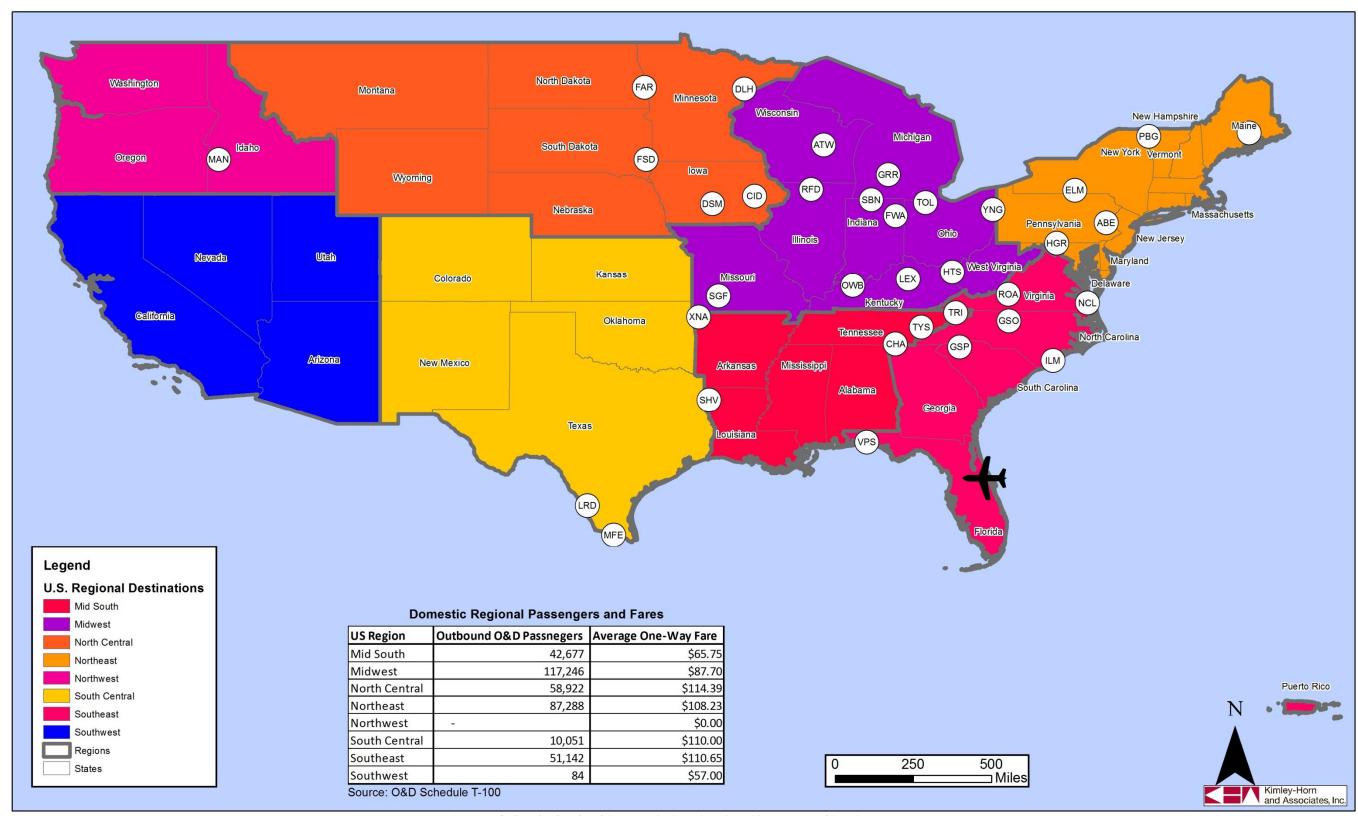


Figure 2: Summary of Outbound O&D Passengers and Average One-Way Fares



Map 1: Orlando-Sanford Domestic Destination Airports and Regions, 2010 Final destination airports for flights leaving Orlando-Sanford International Airport

#### **DESTINATIONS SERVED**

In 2011, Orlando-Sanford International Airport serves 31 domestic airport locations throughout the U.S. with direct flights. Of the 31 destinations, all are served by large jet aircraft and one is served by a turboprop plane. In recent years, there has been a significant increase in the use of large jets which means that the average number of seats per flight has increased. Currently, Orlando-Sanford has an average of 163 seats per flight for domestic destinations and 94 domestic departures per week. Most recent 2012 data shows that the airport has increased the number of destinations served to 42. Data used to compile this information are from the Official Airline Guide (OAG) and are presented as a weekly summary taken during July 2011. A summary of airports served, number of flights, and serving airlines is provided in the *Appendix*. The destinations that an airport is able to serve are directly affected by the airlines that provide service. Airlines often enter into code sharing agreements so that they are able to expand their service without investing in the necessary resources. The *Appendix* provides a list of contract airlines and the airports that have code sharing agreements with them.

#### **INTRASTATE SUMMARY**

Orlando-Sanford International Airport offers limited flight service to intrastate destinations with four weekly flights to Northwest Florida Regional Airport. Data displayed for intrastate flights were taken from the Official Airline Guide (OAG) and show the weekly average number of flights from data collected in July of 2011. Intrastate service is summarized below in *Figure 3* and on *Map 2* on the following page. Although intrastate service was offered in 2011, service has since been terminated due to Vision Airlines discontinuing its service.

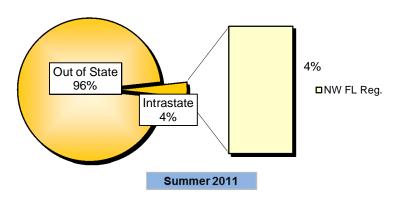
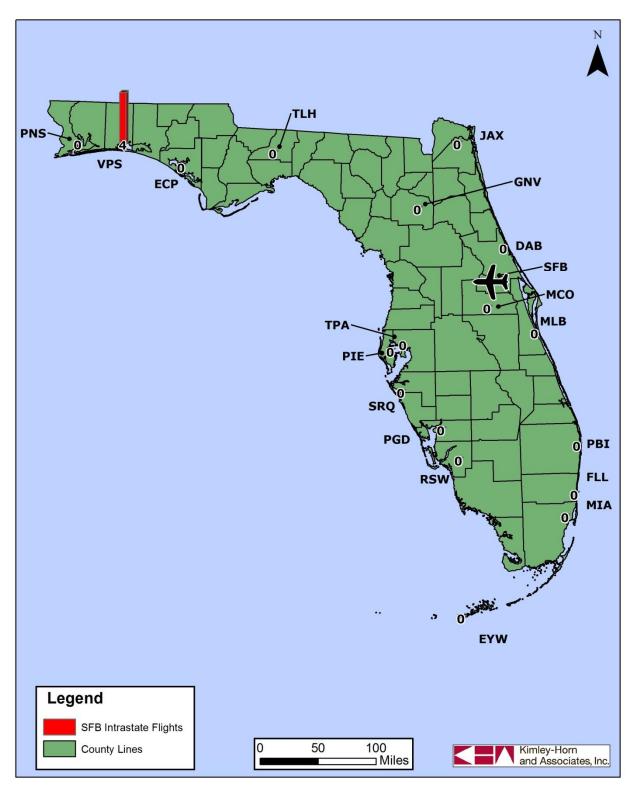


Figure 3: Intrastate Service

Intrastate passengers as a percent of the total



Map 2: Orlando-Sanford Intrastate Flights, 2011

Average Number of Weekly Flights

#### **INTERNATIONAL FLIGHT DEPARTURES**

International service was limited to seven commercial airports in Florida. For its size, Orlando-Sanford International Airport offers a high number of international flights. Orlando-Sanford International Airport currently offers direct service to destinations in Europe with 21 weekly flights to England, Ireland, and Scotland. Orlando-Sanford has long served international destinations with direct service and with unique flight offerings from Icelandair and Allegiant Airlines. Due to this unique service Orlando-Sanford can be seen as a major airport for international flights in Florida. International flight data were compiled from the Official Airline Guide (OAG) and represent a weekly average with data being compiled from July 2011.

#### SEASONAL FLIGHT COMPARISON

Scheduled service showed high levels of variability during different seasons in 2011. Destinations in the Midwest were served with a much higher percentage of flights in the spring, the Mid-South region was served with more flights in the summer, and the North Central region was served with the most flights in the winter. Seasonal flight information is from the Official Airline Guide (OAG) and summarized as a weekly average with winter months being December 2010 and January 2011, spring months being March and April 2011, and summer months being July and August 2011. A summary of the seasonal comparison for Orlando-Sanford International Airport can be seen below in *Figure 4*.

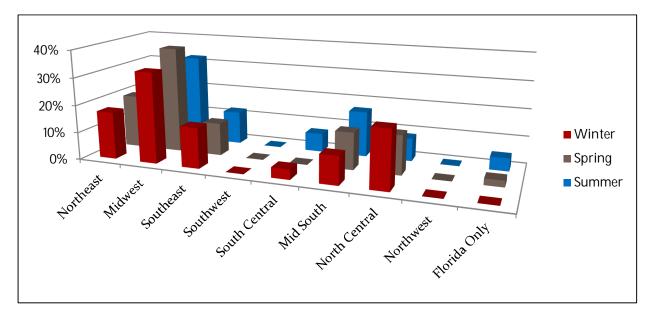


Figure 4: Orlando-Sanford International Airport – Seasonal Flight Comparison

Seasons presented are from a representative sample.

#### **HUBS SERVED**

Orlando-Sanford International Airport is one of twelve hub airports in the state of Florida. On a national level, it is considered a small hub airport. A small hub airport is one that enplanes between 0.05 and 0.24 percent of total enplaned passengers from all U.S. airports. Orlando-Sanford had 367,410 domestic enplanements and offered flights to 13 domestic hub airports. To be considered a hub airport, an airport must serve at least 0.05 percent of all enplaned passengers in

the U.S. Hub information is from the U.S. Department of Transportation (U.S.DOT) Research and Innovative Technology Administration (RITA) using Bureau of Transportation Statistics (BTS) data as of June 2011.

#### **AVERAGE LOAD FACTORS**

Average load factors represent the number of passenger miles traveled as a proportion of available seat miles. Higher average load factors represent more total passengers boarding. The average load factor at Orlando-Sanford International Airport is 89.46 which was much higher than the U.S. average of 81.73 for 2011. Load factor data were found using Bureau of Transportation Statistics (BTS) T-100 segment data for the years 2010 and 2011. A summary of 2010 and 2011 average load factors can be seen in Table 2.

Table 1: Average Load Factors Per Year

Year	Domestic	International	Total	
	Orlando-Sanford International			
2010	88.75	93.57	89.71	
2011	91.03	87.4	89.46	
All U.S. Airports				
2010	82.18	81.59	81.9	
2011	83.03	80.41	81.73	

#### **ON-FLIGHT MARKET FREIGHT STATISTICS**

Freight statistics represent the total number of pounds of freight, property other than mail and passenger baggage transported, transported by air from a given airport. Orlando-Sanford International Airport has the lowest freight total of all commercial service airports in Florida with

Table 2: Total Freight (lbs.) Per Year

Year	Freight (in pounds)
2010 (Jan-Dec)	0
2011 (Jan-Sept)	220

220 pounds of freight shipped between the months of January and September 2011. A summary of 2010 and 2011 on-flight market freight statistics are shown in *Table 3*. Due to delay in reporting periods by airlines and airports to the Bureau of Transportation Statistics

(BTS), not all 2011 data have been reported. Therefore, comparisons cannot be made between 2010 and 2011, but comparisons can be made between airports for the same years. Freight statistics were determined using BTS T-100 domestic market data.

#### **ON-FLIGHT MARKET MAIL STATISTICS**

No on-flight mail information was reported for Orlando-Sanford International Airport.

#### MARKET LEAKAGE STUDY

#### **INTRODUCTION**

Florida has the most large hub airports (4) of any state in the U.S. Florida also has a large number of commercial service airports (19), which compete over the same potential passengers. There are many factors that play into the decision-making of passengers, ranging from cost to airport proximity to how direct a flight is. Because of these factors, many smaller commercial airports in Florida experience market leakage, or a loss of passengers who choose to drive further distances to airports for various reasons, such as less expensive flights or more convenient flight options. For large airports located in large metropolitan areas leakage may be a less significant factor due to the fact that they still carry large numbers of passengers. Conversely for smaller airports the loss of passengers to larger airports may potentially be more significant. This analysis looks at tickets purchased in Florida zip codes to see which Florida airports lose business due to market leakage. The market leakage study analyzed zip codes from where a ticket was purchased and subsequently which airport was departed from for that purchase. This analysis determined how many passengers leaving a county with commercial air service to use an airport located within another county. In order to better understand the market leakage findings, key demographic data are presented as part of the market leakage study.

#### METROPOLITAN STATISTICAL AREA (MSA)

Orlando-Sanford International Airport is one of two commercial airports located in the Orlando-Sanford-Kissimmee-Sanford MSA. This MSA is the third largest in the state in population and is a world-wide tourist destination. According to the U.S. Census, an MSA is "a geographic entity based on the concept of a core area with a large population nucleus, plus adjacent communities having a high degree of economic and social integration with that core." Per this definition, looking at populations, employment, and other important factors at the level of an MSA, should prove beneficial in better understanding the area. Data are also be analyzed at the county level where appropriate.

#### POPULATION TRENDS AND PROJECTIONS

The Orlando-Sanford-Kissimmee-Sanford MSA has a current population of 2.1 million people. The airport is located in Seminole County, which has a current population of 422,718 people. Historical, current, and future population projections for the County can be seen in *Figure 5* and historical population data for the MSA can be seen in *Figure 6*. Historical and current population data are from the 2010 census and population projections were obtained from the Bureau of Economic and Business Research (BEBR) 2010.

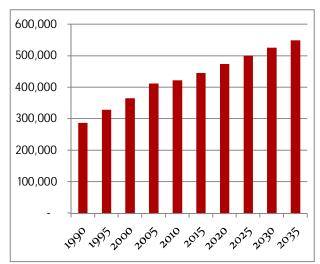


Figure 5: Historical, Current, and Future Population Projections Seminole County

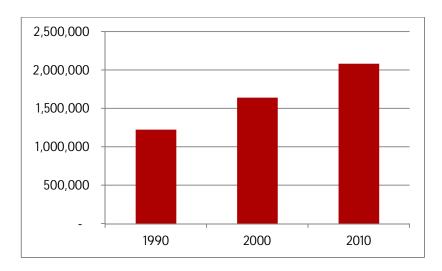


Figure 6: Historical Populations –Orlando-Kissimmee-Sanford MSA

#### **INCOME LEVELS**

Income levels for Seminole County are high when compared to the state average. In the county, the average per capita income is \$42,340 while the Florida average is \$38,965. Income in the Orlando-Sanford-Kissimmee-Sanford MSA follow normal trends, but show that more people fall into a higher income bracket than in other MSAs in the state. The income in an area may impact the demand for air travel in an area. In an area that has a relatively high number of upper income households, more people may be willing to pay more in order to travel a shorter distance to the airport increases. In lower income areas, people may be likely to drive a greater distance for air travel in order to capture reduced fares. A summary of income brackets for the MSA are below in *Figure 7*. Income data for the county are from Enterprise Florida while income data for the MSA are from the U.S. Census American Fact Finder.

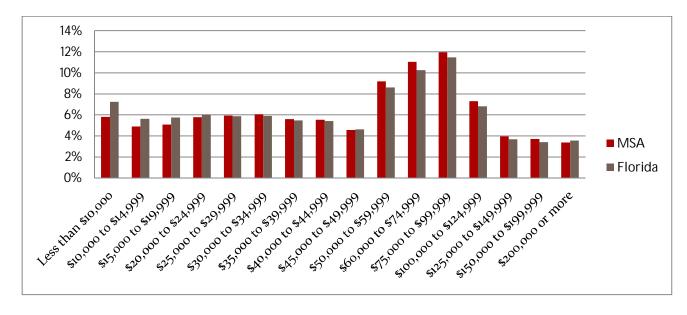


Figure 7: Income Brackets - Orlando-Kissimmee-Sanford MSA

#### **EMPLOYMENT BY INDUSTRY**

The type of employment that is located in an area may also have an effect on airline travel. For areas that have a large number of companies that participate in professional and financial services demand for local air travel will likely increase because they are generally less concerned about the cost of flights and more concerned about ease of access to the airport. In most cases, differences will exist between the county and the state averages, but these discrepancies are generally not large enough to impact commercial air service demand. Seminole County shows moderate variation in employment industries, with a higher percent of hospitality jobs and professional/business services and a much lower amount of education and higher levels of professional and business services. A summary of employment by industry can be seen below in *Figure 8.* A list of the county's top employers can be seen in *Table 3* below. Employment information was taken from the 2009 U.S. Economic Census and top employer information was taken from Enterprise Florida and contains data from 2010.

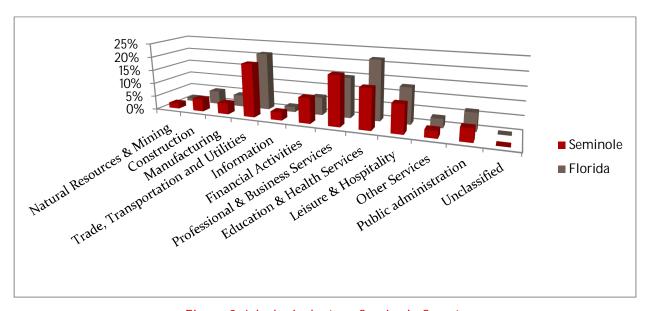


Figure 8: Jobs by Industry – Seminole County

Table 3: Top 10 Private Employers: Seminole County

Major Employers	Number of Employees
Cingular Wireless LLC	2,500
Hilton Hotels	2,100
Florida Hospital	1,530
Convergys Corporation	1,355
Orlando Health	1,072
Sears Home Improvement Products	1,029
American Automobile Association	867
Fiserv Inc.	800
Tri City Electrical Contractors	706
Symantec Software Global LLC	671

#### **ROUTING**

Due to the airlines that reported data for the leakage study, limited data were available for flights leaving Orlando-Sanford. Of the data reported, one domestic route and multiple destinations in Europe were identified. Based on available data, no conclusions can be made with regards to routing information for this airport. The limited available routing data can be seen in *Map 3*.

#### **NEARBY AIRPORTS**

Three airports are located within a reasonable driving distance of Orlando-Sanford International: Orlando International, Melbourne International, and Daytona Beach International.

#### MARKET ANALYSIS

A market leakage analysis was completed for Orlando-Sanford International Airport for 2010 and 2011. The market leakage analysis evaluates the zip codes from where tickets were purchased for flights departing Orlando-Sanford International Airport. Data for this analysis were obtained from Airline Reporting Corporation (ARC)\* and can be seen in *Maps 4 and 5*. The market leakage analysis also looks at tickets purchased from a Seminole County zip code departing from Orlando International to determine if Orlando-Sanford International loses passengers to nearby airports.

#### **FINDINGS**

Based on the 2011 market leakage Orlando-Sanford analysis, the International Airport market leaks a large number of passengers to Orlando International Airport. Based on the analysis, of all passengers departing from Orlando International Airport, 12.9 percent were from Seminole County. Due to the limited amount of data reported for Orlando-Sanford International Airport, it is not possible determine if Orlando-Sanford International Airport receives passengers from other counties in the surrounding area that have commercial air service. Figure 9 illustrates the three top airports that receive leaked

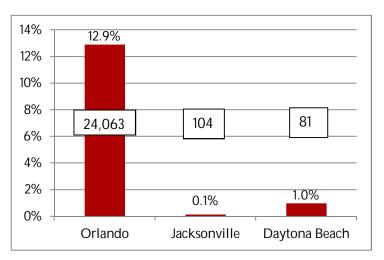
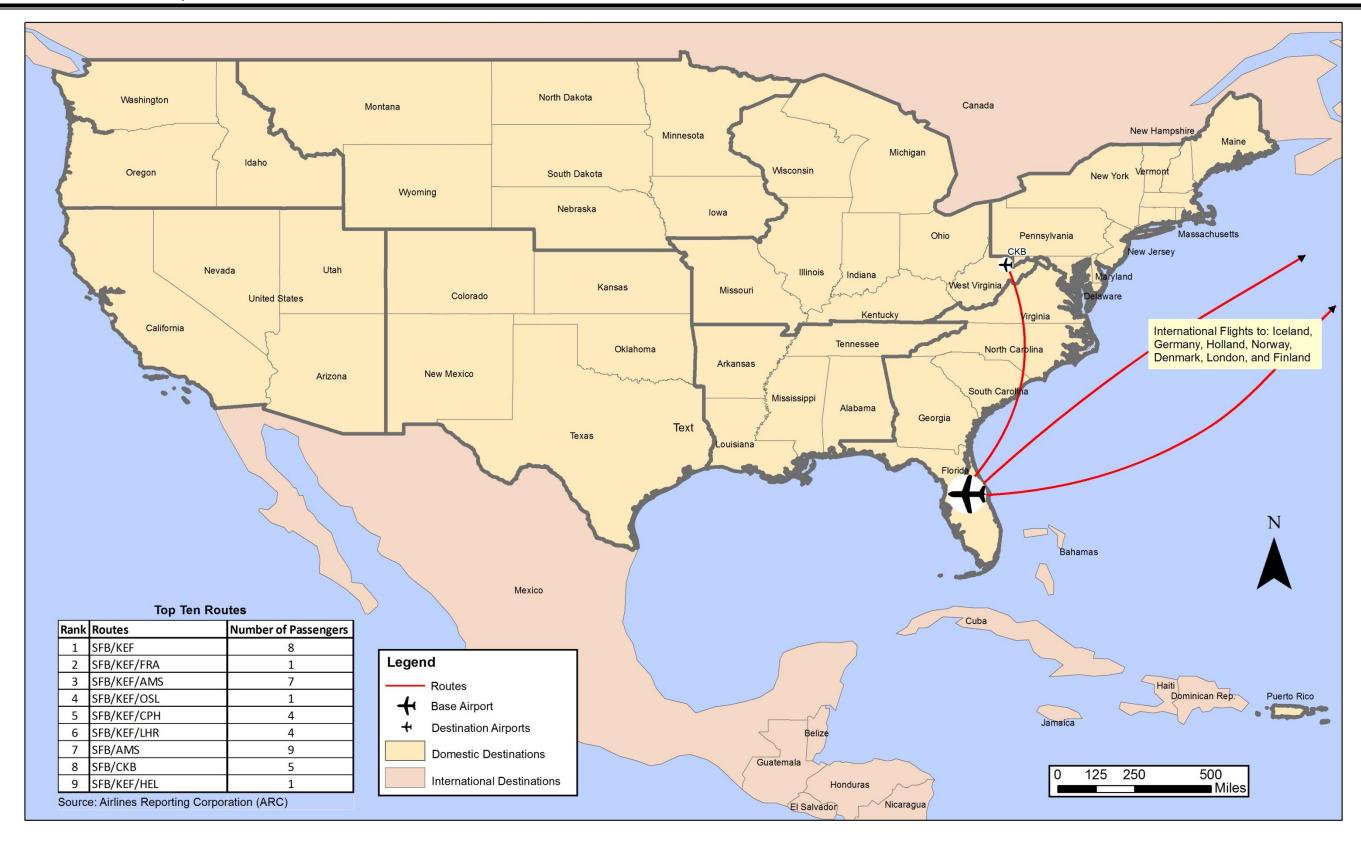


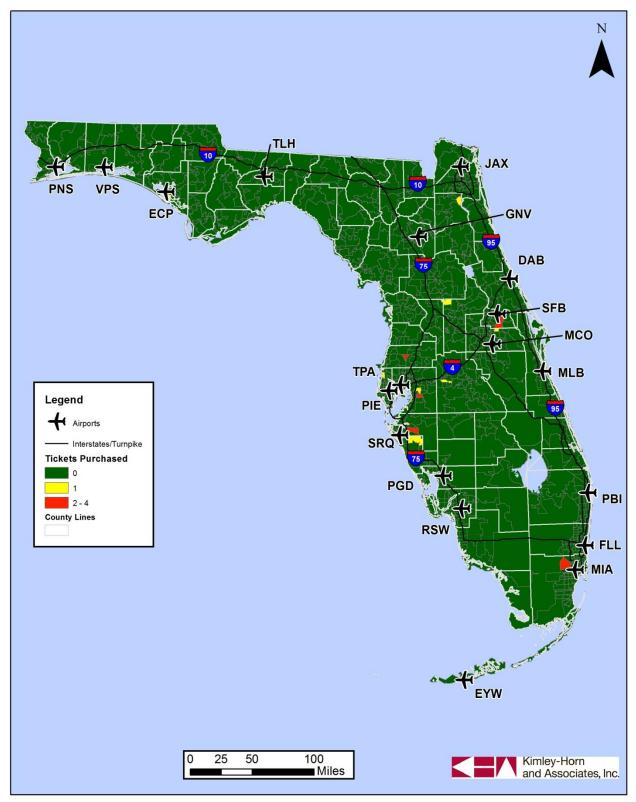
Figure 9: Market Leakage Represented as a Percentage of the Departing Airport's Total Passenger Volumes in 2011

passengers from Orlando-Sanford International Airport. The values presented represent the number and percent of passengers who purchased their ticket from a Seminole County zip code but flew out of an alternative airport. Data presented are from a 10 percent sample from all months of 2011.

<sup>\*</sup> Disclaimer: Airline Reporting Corporation (ARC) did not assist in the preparation of this analysis. All analyses disclosed herein were performed by Kimley-Horn and Associates, Inc.

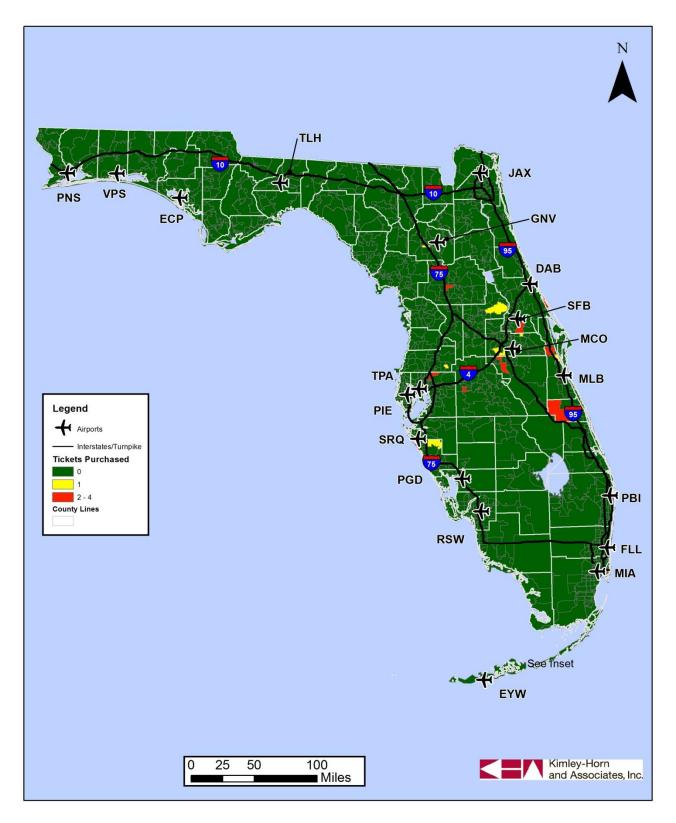


Map 3: Orlando-Sanford International Airport Top Ten Routes, 2011
Routing information is based on a 10% sample of ARC-accredited Online Travel Agencies (OTA) and represents tickets purchased from Florida zip codes



Map 4: Orlando-Sanford International Airport, 2010 – Market Leakage Analysis

Market leakage information is based on a 10% sample of ARC-accredited Online Travel Agencies (OTA) and
represents tickets purchased from Florida zip codes



Map 5: Orlando-Sanford International Airport, 2011 – Market Leakage Analysis

Market leakage information is based on a 10% sample of ARC-accredited Online Travel Agencies (OTA) and
represents tickets purchased from Florida zip codes

# **APPENDIX**

#### Summary of Domestic Airport Activity Orlando Sanford Airport (SFB) As of Summer 2011

	Weekly D	epartures	Car	riers
Destination Served	2010	2011	2010	2011
Allentown	0	6	-	G4
McAllen	4	6	G4	G4
Knoxville	0	6	-	G4
Plattsburgh NY	4	5	G4	G4
Greenville/Spartanburg	0	5	-	G4
Huntington	0	5	-	G4
Springfield	0	5	-	G4
Bangor	4	4	G4	G4
Chattanooga	5	4	G4	G4
Grand Rapids	0	4	-	G4
Ft. Walton Beach	0	4	-	V2
Tri-City Airport TN	0	4	-	G4
South Bend	3	3	G4	G4
Chicago(Rockford)	4	3	G4	G4
Des Moines	0	3	-	G4
Lexington	0	3	-	G4
Roanoke	3	3	G4	G4
Fayetteville	2	3	G4	G4
Youngstown	0	2	-	G4
Appleton	2	2	G4	G4
Cedar Rapids/Iowa City	2	2	G4	G4
Elmira	2	2	G4	G4
Fargo	2	2	G4	G4
Sioux Falls	2	2	G4	G4
Ft. Wayne	2	2	G4	G4
Greensboro/H.Pt/Win-Salem	3	2	G4	G4
Wilmington	2	2	G4	G4
Laredo	0	2	-	G4
Owensboro	3	2	G4	G4
Shreveport	0	2	-	G4
Toledo	2	2	G4	G4
Duluth	2	0	G4	-
Hagerstown	2	0	G4	-
Total	55	102		

Source: Official Airline Guide, July 2011

Carrier Legend: G4 Allegiant Air, V2- Vision Airlines

#### Commercial Agreements

as of February 2012

1		ao o o.o. aa. j 20.2	
US Airways	Delta	American Airlines	United Airlines
PSA	Aeromexico	Cathay Pacific Airways	Colgan Airlines
Republic Airways	Air France	British Airways	Mesa Air Group
Piedmont	AF Regional	Japan Airlines	Republic Airways
Chautauqua	Brit Air (AF)	Jalways	Shuttle America
Colgan	City Jet (AF)	Brussels Airlines	Sky West Airlines
Trans States	Alitalia	Finnair	Trans States Airlines
Mesa Airlines	Avianca	Iberia	Go Jet
Air Wisconsin	Atlantic Southeast Airlines	Gulf Air	Express Jet
Asiana	Alaska Airlines	Qantas	All Nippon Airways
Singapore Airlines	Horizon Air	Royal Jordanian Airlines	Atlantic Southeast
	China Airlines	Malev Hungarian Airlines	Lufthansa German Airlines
Alaska Airlines	China Southern	Trans States Airlines	Continental Airlines
Peninsula Airways	Comair	Chautauqua Airlines	Air Lingus
Horizon	Compass Airlines	China Eastern Airlines	Asiana
ERA Aviation	CSA Czech Airlines	EVA Air	City Line
	KLM Royal Dutch Airlines	Jet Airways	Air Dolimiti
Continental Airlines	KLM City Hopper	LAN Airlines	EuroWings
United Airlines	Korean Airlines	Mexicana	Contact
Air Doliminti	Olympic Air		Augsburg
Euro Wings	Royal Air Maroc	Frontier	
Contact	Masaha Airlines	Chautaugua Airlines	letRlue

# United Airlines Air Doliminti Euro Wings Contact Augsburg Korean Airlines Olympic Air Royal Air Maroc Masaba Airlines Sky West Chautauqua Airlines Freedom Pinnacle Shuttle America Vietnam Airlines

Virgin Blue Virgin Australia

Chautauqua Airlines
Republic d/b/a/ Midwest Airlines
Republic Airlines

	JOIDIGO	
Cape Air		
	AirTran	

Sky West