

## CASE STUDY

# GREATER MIAMI – INTERNATIONAL AIR SERVICE FOR REGIONAL DEVELOPMENT

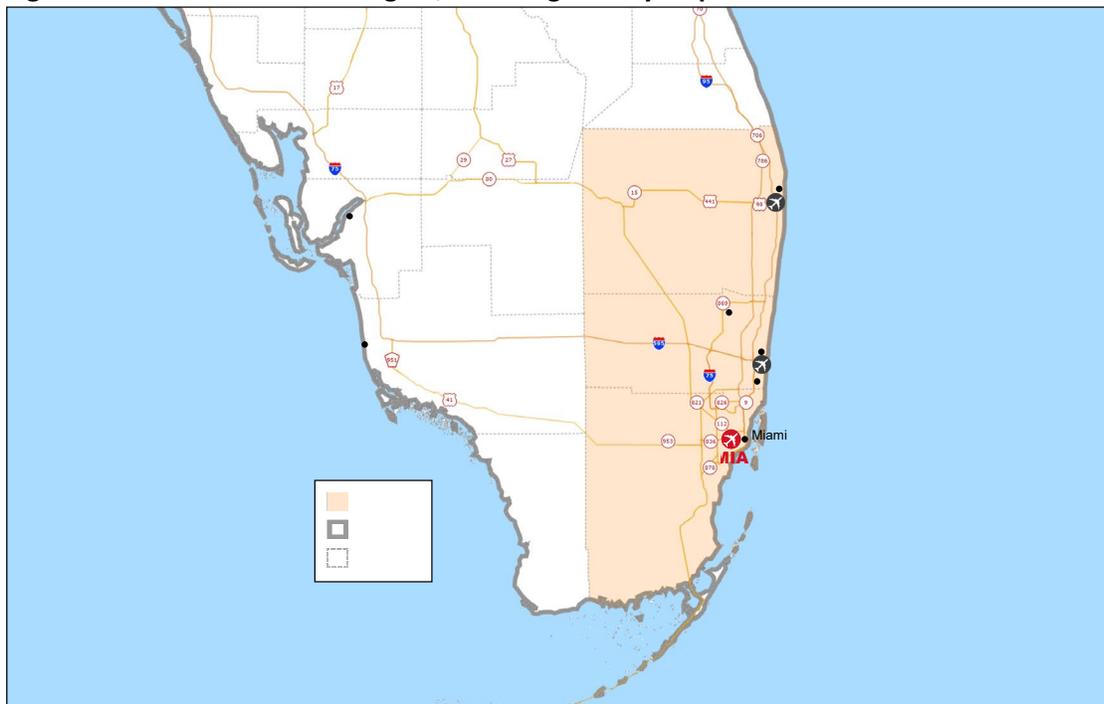
Like other large population centers in the U.S., the South Florida region around Miami is served by multiple general aviation airports and more than one commercial airport. The largest commercial facility is Miami International Airport (MIA or the Airport), a hub for American Airlines. Owned by the Miami-Dade County government and operated by the Miami-Dade Aviation Department, MIA offers more flights to Latin America and the Caribbean than any other U.S. airport. It is the country's third-busiest airport for international passengers and is the top U.S. airport for international freight.<sup>1</sup>

The Miami region is included as a case study because of its international operations and the related regional economic activity.

### Introduction to the Region and its Economy

The Miami-Port St. Lucie-Fort Lauderdale Combined Statistical Area ("Greater Miami," "Metro Miami," the region or CSA) is the seventh-largest metropolitan area in the United States. The area includes the Miami-Dade, Broward, and Palm Beach counties which are the three most populous counties in Florida. Anchored by the City of Miami, other major cities in the area include Fort Lauderdale, West Palm Beach, and Boca Raton. Bounded on the west by the Everglades, the east by the Atlantic Ocean, and the south by the Florida Keys, the area is known collectively as the "Gold Coast."

**Figure 1: The Greater Miami Region, Including Nearby Airports**



<sup>1</sup> [http://www.iflymia.com/about\\_us.asp](http://www.iflymia.com/about_us.asp)



The region has undergone significant growth in population and employment since 2008. Table 1 summarizes the changes in key socio-economic characteristics for the period. As shown, from 2008 through 2019:

- Total population rose by over 800,000 (13 percent). The population of the entire state of Florida rose slightly more, 16 percent.
- Total employment increased by more than 1 million (29 percent). By contrast, total Florida employment rose by 25 percent.
- Average per capita income (nominal dollars) rose from \$44,700 to \$61,500 (38 percent). This PCPI ranked 39th in the United States and was 109 percent of the national average, \$56,490. The Miami area's per capita income also rose by more than the average for the state of Florida, which increased by 33 percent over the same time period.
- The number of establishments operating in the region grew. Between 2015 and 2019 alone, the establishment count increased by over 20,000 (9 percent).<sup>2</sup> Data for 2008 were unavailable.

**Table 1: Change in Major Socio-Economic Variables, Greater Miami 2008-2019**

|                             | 2008   | 2015   | 2019   | 2008-15 |      | 2015-19 |     | 2008-19 |      |
|-----------------------------|--------|--------|--------|---------|------|---------|-----|---------|------|
|                             |        |        |        | Chg     | %    | Chg     | %   | Chg     | %    |
| Population                  | 6,081  | 6,646  | 6,890  | 565     | 9%   | 244     | 4%  | 809     | 13%  |
| Total Employment            | 3,549  | 4,093  | 4,585  | 545     | 15%  | 492     | 12% | 1,037   | 29%  |
| Private Non-farm Employment | 3,156  | 3,729  | 4,205  | 573     | 18%  | 476     | 13% | 1,049   | 33%  |
| Gov't Employment            | 377    | 350    | 365    | (28)    | -7%  | 15      | 4%  | (12)    | -3%  |
| Income per Capita (\$)      | 44,715 | 51,725 | 61,486 | 7,010   | 16%  | 9,761   | 19% | 16,771  | 38%  |
| Number of Establishments    | #N/A   | 231    | 252    | #N/A    | #N/A | 21      | 9%  | #N/A    | #N/A |

Source: U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics.

Notes: All figures in '000s except for income per capita, which is shown in nominal dollars. Government employment includes military and civilian. Data may be unavailable for certain years.

From 1998 through 2019, the region's population grew faster than the U.S. average, increasing by 1.16 percent annually compared to 0.83 percent. According to the U.S. Bureau of Economic Analysis (BEA), in 2019, Greater Miami had the 7<sup>th</sup> largest population in the country. In 2019, Miami-Fort Lauderdale-Pompano Beach produced \$377.5 billion in current-dollar total GDP. This GDP ranked 12th among the 384 total MSAs.

Employment growth in the region is especially noteworthy. According to data from the U.S. Cluster Mapping project, for the period 1998 – 2018, private non-agricultural employment growth in the region averaged 4.14 percent annually – the fastest growth in the country. The U.S. national average was 0.96 percent.<sup>3</sup>

The region is a major center of higher education. Greater Miami is the home of the University of Miami, which had a total enrollment of nearly 18,000 in 2019-20. Other large colleges and universities in the

<sup>2</sup> The U.S. Bureau of Economic Analysis (BEA) uses data from the U.S. Census Bureau on "establishments," which it defines as "An establishment is a single physical location at which business is conducted or services or industrial operations are performed. It is not necessarily identical with a company or enterprise, which may consist of one or more establishments. ... Establishment counts represent the number of locations with paid employees any time during the year." The count excludes government establishments except for certain situations, such as state-operated retail liquor stores, local government-owned/operated hospitals, and federally-chartered credit unions. <https://www.census.gov/programs-surveys/susb/about/glossary.html>

<sup>3</sup> <https://www.clustermapping.us/data/report/region/scorecard#/msa/12420/1998/2018/jobs>



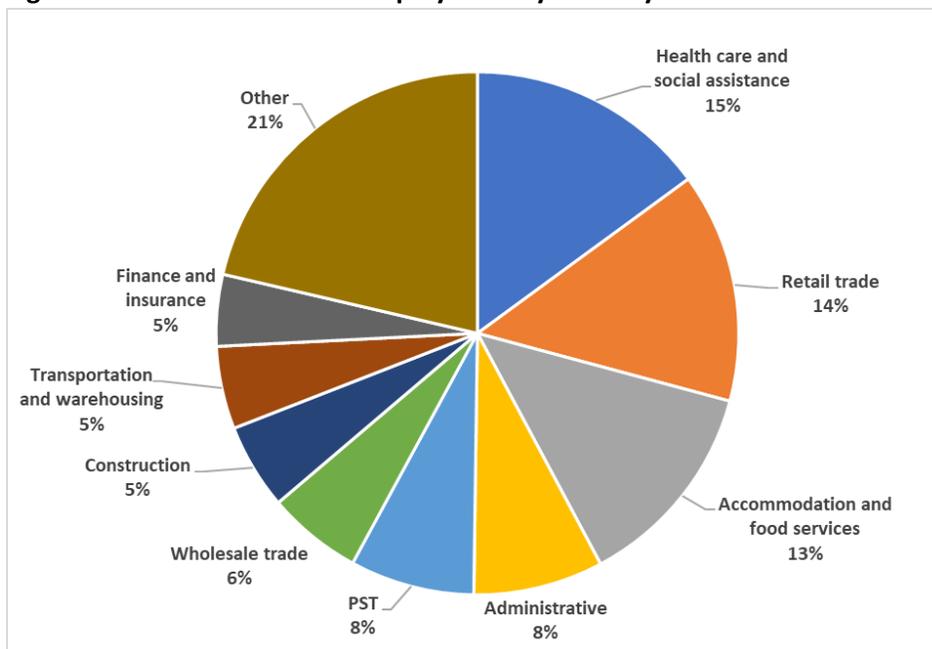
area include Florida Atlantic University in Boca Raton (total enrollment of 37,000) and Florida International University (with an enrollment of around 50,000). Several other colleges and universities are located in the area.

A part percentage of the region's population is foreign-born. In Miami-Dade County, over half of the population is foreign born. For the three-county area, over 40 percent of the total population is foreign born.<sup>4</sup>

### Regional Economic Strengths

Like many large urban areas, the region's economy is diversified. No single sector had more than 15 percent of the region's total employment. In 2019, the largest employment sectors were health care, retail, accommodations and food services, and administrative.

**Figure 2: Distribution of MIA Employment by Industry Sector 2019**



Note: The "Other" category covers 10 industrial sectors. "Administrative" includes comprises establishments performing routine support activities for the day-to-day operations of other organizations. The functions include office administration, hiring and placing of personnel, collection, security services, cleaning, and waste disposal services.

Source: BEA.

However, during the 2008-2019 period, there has been significant changes within the regional economy, with several sectors showing growth at a pace much faster than the regional average. In particular:

- Management of companies rose by 25,000 jobs (80 percent)
- Employment in real estate-related industries rose by almost 150,000 jobs (68 percent)
- Finance and insurance increased by nearly 90,000 jobs (42 percent)
- Hospitality-related employment in accommodations and food service increased by 100,000 (39 percent)
- Professional, scientific, and technical services employment rose by nearly 100,000 (38 percent)

<sup>4</sup> U.S. Census Bureau Quick Facts based on July 2019 estimates.

**Table 2: Change in Employment in Major Industrial Sectors 2008 to 2019**

| Sector  | 2008             | 2019             | Change           | Percent    |
|---|------------------|------------------|------------------|------------|
| Health care and social assistance                   | 368,799          | 481,381          | 112,582          | 31%        |
| Retail trade  | 383,999          | 440,571          | 56,572           | 15%        |
| Administrative and support services                 | 281,670          | 374,045          | 92,375           | 33%        |
| Real estate and rental and leasing                  | 216,212          | 363,507          | 147,295          | 68%        |
| Accommodation and food services                     | 259,493          | 359,697          | 100,204          | 39%        |
| Other services (except gov't and gov't enterprises) | 272,402          | 359,225          | 86,823           | 32%        |
| Professional, scientific, and technical services    | 254,381          | 351,803          | 97,422           | 38%        |
| Finance and insurance                               | 208,501          | 295,157          | 86,656           | 42%        |
| Transportation and warehousing                      | N/A              | 259,278          | N/A              | N/A        |
| Construction  | 215,855          | 251,911          | 36,056           | 17%        |
| Wholesale trade                                     | N/A              | 181,427          | N/A              | N/A        |
| Manufacturing                                       | 110,193          | 120,532          | 10,339           | 9%         |
| Arts, entertainment, and recreation                 | 81,634           | 105,252          | 23,618           | 29%        |
| Educational services                                | 76,954           | 99,691           | 22,737           | 30%        |
| Information   | 65,337           | 70,552           | 5,215            | 8%         |
| Management of companies and enterprises             | 31,903           | 57,315           | 25,412           | 80%        |
| Subtotal Private Nonfarm Employment                 | 3,155,831        | 4,204,757        | 1,048,926        | 33%        |
| Public Sector Employment                            | 377,483          | 364,986          | (12,497)         | -3%        |
| <b>Total Employment</b>                             | <b>3,548,653</b> | <b>4,585,266</b> | <b>1,036,613</b> | <b>29%</b> |

The strength of the regional economy is also reflected in large increases in the number of business establishments. For the Miami-Ft. Lauderdale-West Palm MSA, the total number of establishments increased by over 25,000 (14 percent). (Data were not available for the entire CSA.) Table 3 summarizes the changes in the number of establishments between 2008 and 2019, sorted based on the sectors with the largest absolute amount of growth. Notably, businesses in the sectors with relatively high propensities to depend on commercial aviation – Professional, Scientific, and Technical Services along with Real Estate – had the largest growth.

**Table 3: Change in Establishments 2008-2019**

| Sector   | 2008-2019     | %          |
|--|---------------|------------|
| Professional, scientific, and technical services | 6,679         | 24%        |
| Real estate and rental and leasing               | 3,618         | 36%        |
| Health care and social assistance                | 3,120         | 16%        |
| Accommodation and food services                  | 2,591         | 24%        |
| Construction                                     | 2,183         | 16%        |
| Other services (except public administration)    | 1,811         | 13%        |
| Transportation and warehousing                   | 1,562         | 31%        |
| Administrative                                   | 1,417         | 13%        |
| Arts, entertainment, and recreation              | 776           | 30%        |
| Educational services                             | 742           | 38%        |
| Retail trade                                     | 537           | 2%         |
| Information                                      | 396           | 13%        |
| Management of companies and enterprises          | 119           | 14%        |
| Agriculture, forestry, fishing and hunting       | 91            | 53%        |
| Industries not classified                        | 85            | 45%        |
| Finance and insurance                            | 68            | 1%         |
| Mining, quarrying, and oil and gas extraction    | (16)          | -30%       |
| Wholesale trade                                  | (357)         | -2%        |
| Manufacturing                                    | (422)         | -9%        |
| <b>Total</b>                                     | <b>25,114</b> | <b>14%</b> |

Note: Data for Miami-Fort Lauderdale-West Palm Beach, FL Metro Area only.

Source: BEA

### Economic Clusters

The U.S. Cluster Mapping Project’s analysis of the Greater Miami region highlights its broad economic strength. A “cluster” is a concentration of related industries in a particular region. Clusters consist of companies, suppliers, and service providers, as well as government agencies and other institutions that provide specialized training and education, information, research, and technical support. *Traded clusters* are groups of related industries that serve markets beyond the region in which they are located and therefore require some form of transport connectivity. Examples include financial service or information technology. By contrast, *local clusters* consist of industries that serve the local market. Examples include local grocery stores or restaurants.<sup>5</sup>

The area’s economy features multiple traded clusters that are among the top performers in the country. Those include Marketing, Apparel, and Performing Arts.

- The Marketing, Design, and Publishing Cluster includes advertising, design services, and other marketing services (e.g., media buying services, market research and polling, public relations) all of which are among the top ranked in the country. The sector had nearly 28,000 employed in 2018.
- Information Technology and Analytical Instruments includes software publishing, semiconductor manufacturing and machinery, and computer and peripherals manufacturing. The region’s LQ for this sector was 3.52.

Table 4 shows the strongest traded clusters by total employment in 2018 along with changes in employment in each since 2008. The largest growth occurred in the Business Services cluster, which

<sup>55</sup> <https://www.clustermapping.us/about/clusters-101>



increased by over 25,000 jobs (18 percent). The Transportation and Logistics cluster grew by the greatest percentage (+16,000 jobs, or 43 percent). Others with notable increases were Information Technology (+2,900 or 32 percent), and Marketing, Design, and Publishing (+3,600 or 15 percent). Conversely, total employment dropped from 2008 to 2018 in Financial Services (-10,000 or 24 percent).

**Table 4: Changes in Employment in Major Industry Sectors 2008-2018**

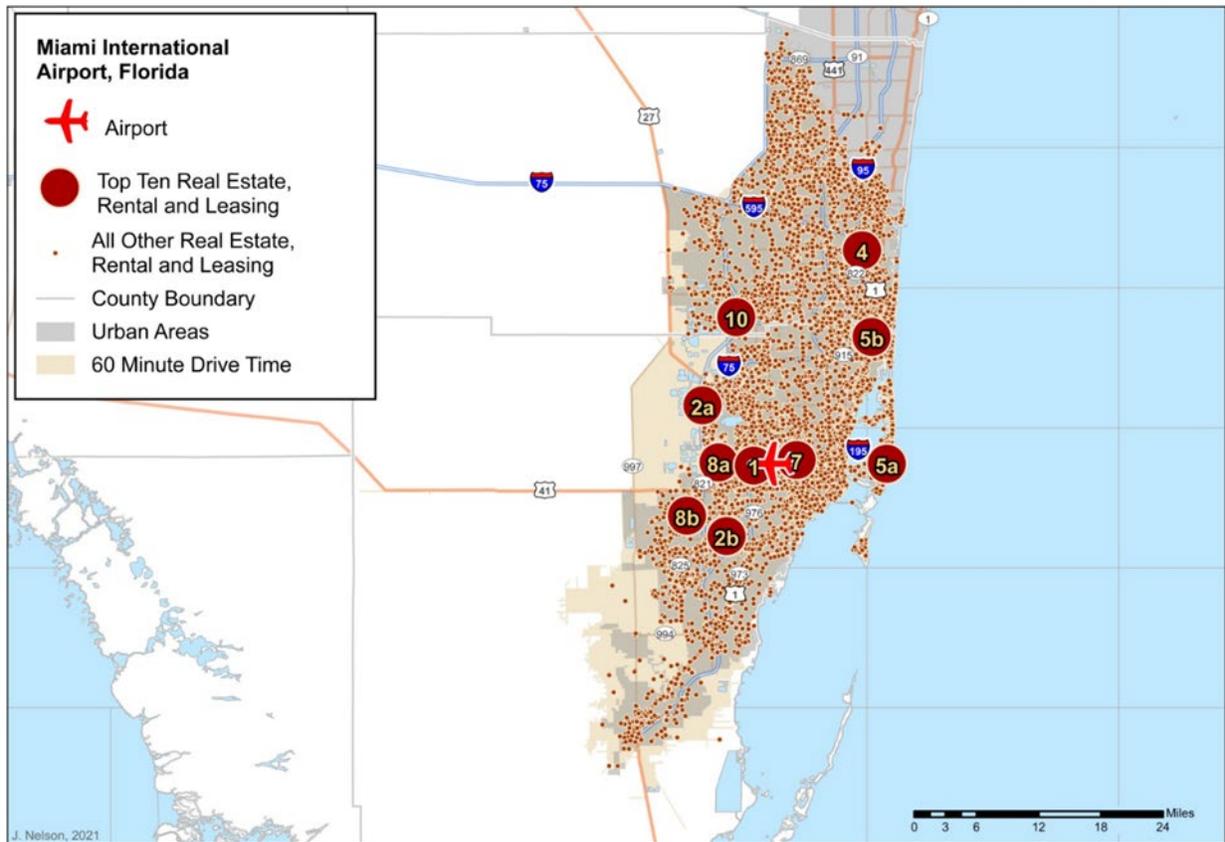
| Cluster Name                                      | 2008    | 2018    | Change   |         |
|---|---------|---------|----------|---------|
|   |         |         | Number   | Percent |
| Business Services                                 | 142,754 | 168,235 | 25,481   | 18%     |
| Distribution and Electronic Commerce              | 117,746 | 123,462 | 5,716    | 5%      |
| Hospitality and Tourism                           | 85,591  | 89,111  | 3,520    | 4%      |
| Transportation and Logistics                      | 38,384  | 54,782  | 16,398   | 43%     |
| Education and Knowledge Creation                  | 39,482  | 48,077  | 8,595    | 22%     |
| Financial Services                                | 44,081  | 33,687  | (10,394) | -24%    |
| Marketing, Design, and Publishing                 | 24,244  | 27,856  | 3,612    | 15%     |
| Insurance Services                                | 18,917  | 21,911  | 2,994    | 16%     |
| Water Transportation                              | 17,851  | 18,102  | 251      | 1%      |
| Information Technology and Analytical Instruments | 9,128   | 12,068  | 2,940    | 32%     |
| Communications Equipment and Services             | 7,883   | 9,743   | 1,860    | 24%     |
| Performing Arts                                   | 7,005   | 8,854   | 1,849    | 26%     |
| Food Processing and Manufacturing                 | 6,037   | 6,524   | 487      | 8%      |
| Construction Products and Services                | 6,436   | 6,236   | (200)    | -3%     |
| Printing Services                                 | 7,392   | 5,537   | (1,855)  | -25%    |

Source: U.S. Cluster Mapping Project (<http://clustermapping.us/>), Institute for Strategy and Competitiveness, Harvard Business School. Data Sources (<http://clustermapping.us/content/data-sources-and-limitations>)

Another insight into regional employment is available by examining changes in population and economic activity within a given drive time from the airport. Figure 3 illustrates a 60-minute drive time around AUS and the location of T&W businesses within that area. The largest are all within the urban area.



**Figure 3: Spatial Distribution of Real Estate, Rental and Leasing Firms (NAICS 53) in the MIA Airport One-Hour Drive Time Trade Area**



Key highlights of socio-economic activity within the 60-minute drive of the airport:

- The total estimated 2019 population was 4.16 million. Of that, 2.61 million (63 percent) were considered “working age” (between the ages of 18 and 64).
- The economy supported over 234,000 businesses employing over 1,800,000. In terms of major industry sectors (defined by NAICS codes), the largest based on total employment was Finance, Insurance and Real Estate (FIRE) (184,000 employees) followed by Professional, Scientific & Technical Services (PST) with over 168,000. Another 77,000 employees worked in the Manufacturing Sector, and 55,000 in Transportation and Warehousing.
- Of the total population, 19.7 percent held a Bachelor’s degree and another 11.2 percent held a Graduate or Professional degree.



## Foreign Direct Investment

The Miami-Dade area is home to approximately 1,300 multinational companies, of which over 500 firms are headquartered outside of the U.S. These companies cover over 50 nations in North America, South America, Caribbean, Asia, Europe and the Middle East. The top 10 countries cover over 70 percent of firms that are headquartered outside of the U.S., as follows in **Table 5**. Data from BEA show that, for Florida as a whole, employment in multinational enterprises rose 40 percent from 2008 through 2018 (the latest available data), with the fastest growth in the PST and real estate sectors.

**Table 5: Number of Multinationals with HQ Outside of the U.S.**

| Rank         | World Region              | Country        | # of firms | % Share     |
|--------------|---------------------------|----------------|------------|-------------|
| 1            | Europe                    | Spain          | 74         | 14%         |
| 2            | Europe                    | United Kingdom | 57         | 11%         |
| 3            | Europe                    | France         | 42         | 8%          |
| 4            | North America             | Canada         | 35         | 7%          |
| 5            | Europe                    | Netherlands    | 34         | 7%          |
| 6            | Europe                    | Germany        | 33         | 6%          |
| 7            | Europe                    | Switzerland    | 32         | 6%          |
| 8            | Asia                      | Japan          | 26         | 5%          |
| 9            | Europe                    | Italy          | 22         | 4%          |
| 10           | South America             | Brazil         | 19         | 4%          |
|              | <i>41 Other Countries</i> |                | 146        | 28%         |
| <b>Total</b> |                           |                | <b>520</b> | <b>100%</b> |

Source: The Beacon Council.

## Overview of the Airport and its Air Service

Owned by the Miami-Dade County government and operated by the Miami-Dade Aviation Department, MIA offers more flights to Latin America and the Caribbean than any other U.S. airport. Among U.S. airports for 2019, it is a “top ten” airport based on multiple metrics:

- 1<sup>st</sup> International Freight
- 3<sup>rd</sup> International Passengers (behind New York JFK and Los Angeles International)
- 3<sup>rd</sup> Total Cargo (Freight + Mail)
- 3<sup>rd</sup> Total Freight<sup>6</sup>

According to MIA’s Comprehensive Annual Financial Report for 2019, MIA offered an extensive air service network, enhanced by multiple daily scheduled and non-scheduled flights covering over 160 cities on five continents. MIA’s stronghold market, the Latin America / Caribbean region, was served by more passenger flights from the airport than from any other U.S. airport. MIA was Florida’s busiest airport, and the premier international gateway to Florida, having handled nearly 60 percent of Florida’s total international passenger traffic.<sup>7</sup>

MIA is a major transshipment point by air for the Americas. During calendar year 2018, the most recent year for which such information is available, the Airport handled 79 percent of all air imports and 77 percent of all air exports between the U.S. and the Latin American/Caribbean region. In 2015, IATA designated MIA as the first pharmaceuticals (pharma) freight hub in the U.S. and only the second in the

<sup>6</sup> [http://www.iflymia.com/about\\_us.asp](http://www.iflymia.com/about_us.asp)

<sup>7</sup> Miami-Dade Aviation Department, Comprehensive Annual Financial Report, Fiscal Year ending Sept. 30, 2019, p. ii.



world at that time. This certification brands the airport to pharmaceutical manufacturers as a trusted industry leader that transports their products in accordance with global best practices.

In 2018, MDAD gained final approval from the U.S. Department of Commerce to designate MIA as a Foreign Trade Zone (FTZ) magnet site. This will assist MIA to attract new types of business, increase trade, enhance air service development, and diversify the airport’s revenue stream.

MIA is American Airline’s (American) largest international hub operation, both for international passengers and international cargo. American accounted for approximately 60 percent of the enplaned passengers at the Airport during fiscal year 2019, and together with its affiliate, Envoy (previously known as American Eagle), approximately 67 percent of all enplaned passengers during such period. Table 6 summarizes the share of MIA’s enplaned passenger market for the major airlines in 2019.

**Table 6: Passenger Market Share by Carrier 2019**

| Marketing Airline | Total passenger enplanements (1,000s) | Percent     |
|-------------------|---------------------------------------|-------------|
| American Airlines | 15,176                                | 67%         |
| Delta Air Lines   | 1,348                                 | 6%          |
| United Airlines   | 632                                   | 3%          |
| Swift Air         | 418                                   | 2%          |
| Avianca Airlines  | 404                                   | 2%          |
| TAM Linhas Aereas | 354                                   | 2%          |
| British Airways   | 335                                   | 1%          |
| COPA Airlines     | 300                                   | 1%          |
| Air Canada        | 199                                   | 1%          |
| All others        | 3,520                                 | 16%         |
| <b>Total</b>      | <b>22,685</b>                         | <b>100%</b> |

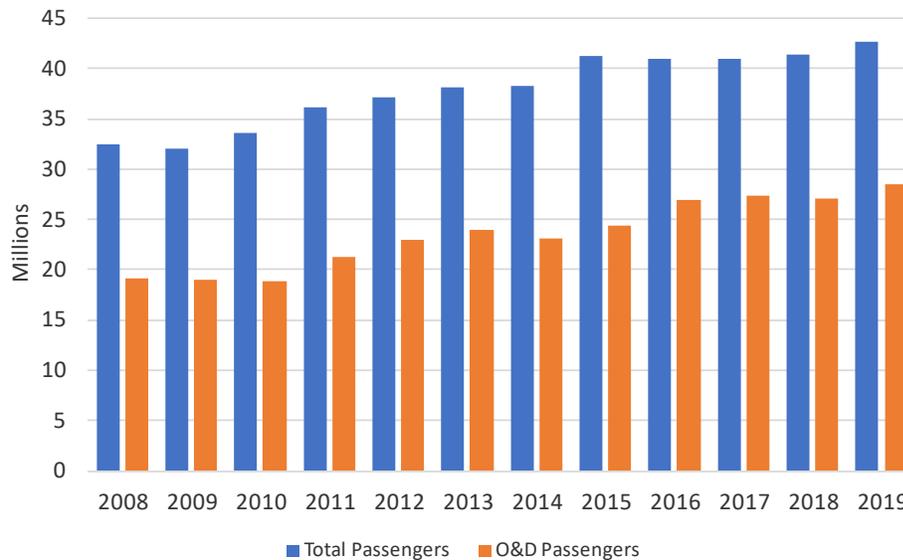
Source: MIA CAFR 2019 for fiscal year ending Sept. 30, 2019.

For the period 2008-2019, there are three major trends that have been occurring with MIA’s passenger traffic.

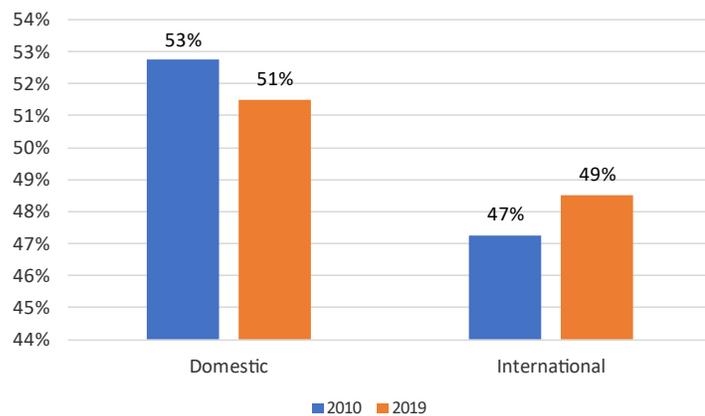
- First, total passenger volumes have been increasing steadily over time. From 2008 through 2019, total passenger traffic increased by over 10 million (31 percent), rising from 32.5 million to 42.7 million.
- Second, much of that increase can be attributed to local rather than connecting traffic. Origin and destination (O&D) traffic increased by over 9 million for the period (48 percent). Of MIA’s total traffic, the percentage represented by O&D traffic rose from 59 percent to 67 percent. This would seem to reflect changes in American’s hub operations along with the growing strength of the local economy. Figure 5 summarizes the changes in total and O&D traffic over the period.



Figure 4: Total Passenger Onboards and O&D Traffic at MIA, 2008-2019



- Third, the balance of MIA's passenger traffic has been shifting to become increasingly international over time. In 2010, the ratio of MIA's domestic to international enplanements was 53:47. By 2019, it had become 51:49.



### Cargo Activities

MIA remains the number one airport in the U.S. for international freight. From 2010 through 2019, total cargo (mail and freight) tonnage rose 18 percent, from 2.0 million tons to 2.3 million tons.

In 2019, MIA was the 4<sup>th</sup> largest airport in the country in terms of total (domestic and international) cargo and freight landed weight, trailing only Memphis, Louisville, and Anchorage. In 2019, MIA accounted for 9.2 million lbs. of cargo and freight, an increase of 2.2 million lbs. (32 percent) over the 7.0 million lbs. handled in 2008.

### Connectivity

“Connectivity” generally means the ability to reach a wide range of places in a short amount of time. Although connectivity is influenced by the magnitude of service, it is not only a matter of the number of routes or number of frequencies operated. Connectivity is fundamentally about access to markets and regions. In this way, connectivity and the transportation infrastructure of a community are vital for its economic development because they enable productivity growth, particularly by facilitating improvements in trade, foreign investment, and innovative activity. For instance, a country or region that has continental and intercontinental linkages only to a limited number of destinations will be a



costlier (and less desirable) place to do business, whereas a community with direct access to a broad range of markets – especially the fastest growing markets – will have a lower cost of doing business.

MIA offers a particularly unique form of connectivity because it is the nation’s international gateway to the Southern Hemisphere; MIA offers more flights to Latin America and the Caribbean than anywhere else in the U.S. Based on a method developed by the International Air Transport Association (IATA) for quantifying connectivity,<sup>8</sup> MIA offers among the highest levels of international air connectivity in the world. **Table 7** shows that on the basis international service only (i.e., excluding domestic capacity), MIA ranked sixth in the U.S. (70<sup>th</sup> in the world) for international connectivity in 2019, behind only major airline hubs situated in the nation’s largest population centers in New York (JFK, EWR), Los Angeles (LAX), Chicago (ORD), and San Francisco (SFO).

**Table 7: Top 10 U.S. Airports based on the IATA Connectivity Index, 2019**

**International Service Only**

| U.S. Airport Code | Airport Name                    | No. of Intl Destinations | Total Intl Seats (Millions) | Intl Connectivity Index | Intl Connectivity Global Rank |
|-------------------|---------------------------------|--------------------------|-----------------------------|-------------------------|-------------------------------|
| JFK               | New York John F Kennedy Intl    | 131                      | 21                          | 139                     | 14                            |
| LAX               | Los Angeles Intl                | 91                       | 15                          | 100                     | 29                            |
| SFO               | San Francisco Intl              | 53                       | 9                           | 78                      | 40                            |
| ORD               | Chicago O'Hare Intl             | 76                       | 8                           | 62                      | 57                            |
| EWR               | Newark Liberty Intl             | 91                       | 9                           | 50                      | 65                            |
| <b>MIA</b>        | <b>Miami Intl</b>               | <b>115</b>               | <b>13</b>                   | <b>46</b>               | <b>70</b>                     |
| IAD               | Dulles Intl                     | 60                       | 5                           | 43                      | 80                            |
| ATL               | Atlanta Hartsfield Jackson Intl | 76                       | 7                           | 43                      | 81                            |
| BOS               | Boston Logan Intl               | 59                       | 5                           | 40                      | 85                            |
| DFW               | Dallas/Fort Worth Intl          | 66                       | 6                           | 35                      | 97                            |

Source: InterVISTAS analysis of Innovata schedule data from Diio Mii.

Continued growth and improvement in connectivity can also facilitate sustained economic growth. As shown in **Figure 6** below, air service development at MIA has produced steady incremental growth in air connectivity in most years over the past decade. Between 2008 and 2019, connectivity at MIA (domestic and international) grew at an average rate of 2.6 percent per annum. The largest single-year gains in

<sup>8</sup> The IATA connectivity index estimates the quality of air service at an airport based on the degree of service to other airports with the largest and most diverse route networks, as a proxy for how accessible the local economy is to the rest of the world. This involves measuring the number and size of destinations served, as well as the frequency of service to each destination and the number of onward connections available from those destinations. Service to airports with the highest total seat capacity (e.g., ATL) receive the highest weighting. Thus, the index recognises that connections to major global gateways provide greater global connectivity than connections to the same number of spoke ends. The formula for the index is calculated as follows:

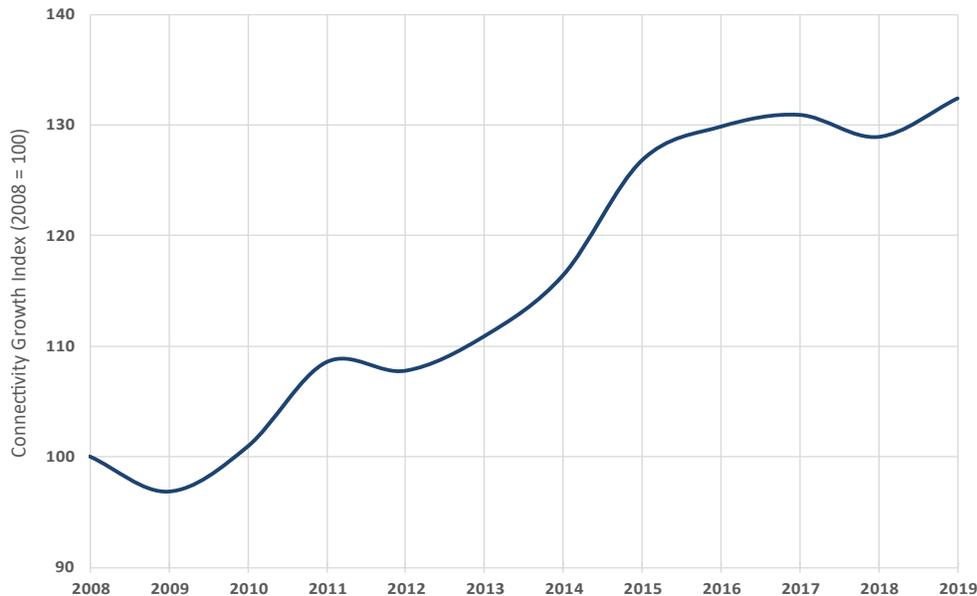
$$\frac{[ \text{Number of destinations} \times \text{Weekly Frequency} \times \text{Seats per flight} ]}{\text{Weighted by the Size of the Destination Airport}}$$

Scalar factor of 1000



connectivity occurred in 2011 and 2015; in 2011, a significant number of new flights were added to several major hubs including New York John F. Kennedy International Airport and London Heathrow Airport, while 2015 saw the largest single-year increase in the number of destinations.

**Figure 6: MIA Connectivity Growth Index (2008=100)**

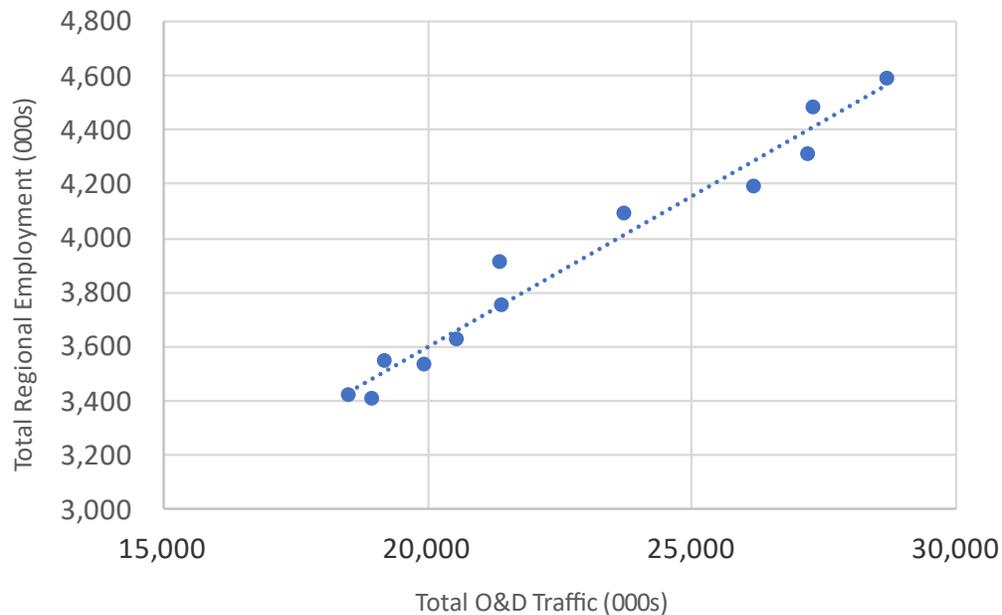


Note: Chart shows the IATA Connectivity Index for MIA, indexed against 2008 (2008 = 100).

Source: InterVISTAS analysis of Innovata schedule data from Diio Mii.

### Change in Air Service and Economic Activity

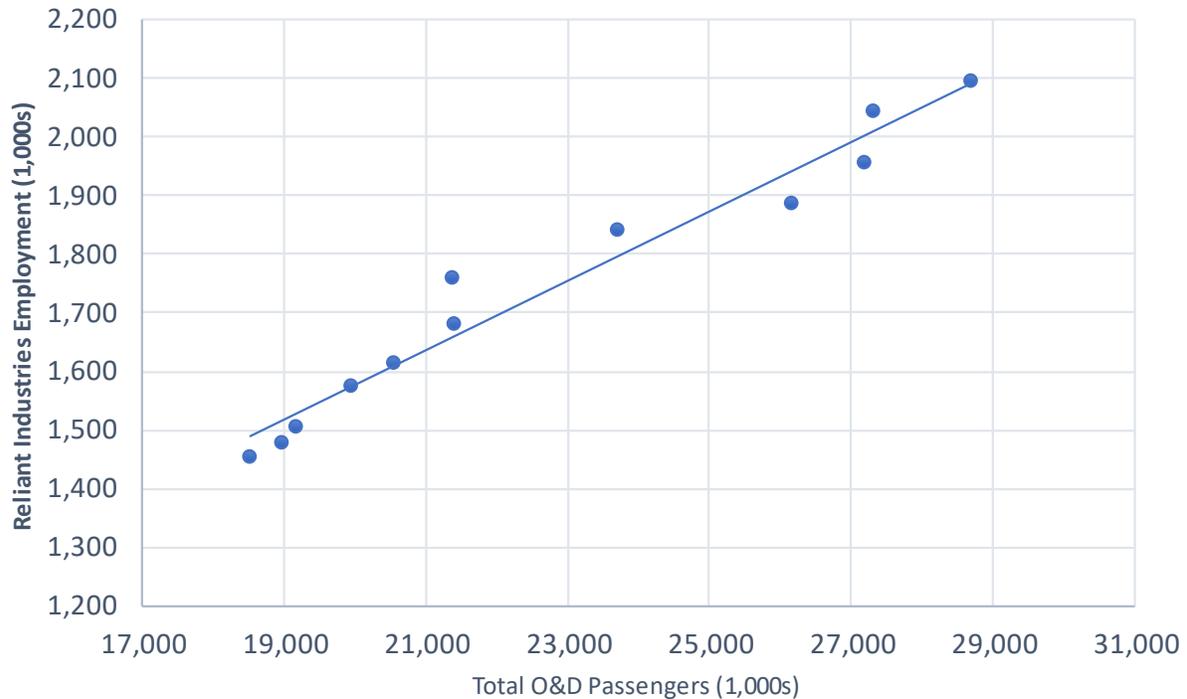
MIA's O&D traffic is highly correlated with total local employment. Figure 6 summarizes how changes in total O&D traffic have aligned with changes in regional employment. The line indicates a strong positive relationship between the two. As total employment increases, total O&D increases. The correlation coefficient between the two is 0.98. However, correlation does not establish causation. That is, it is not evident whether rising total employment levels leads to more air traffic, or whether more air traffic leads to more total employment.

**Figure 7: Relationship between Total Regional Employment and Total O&D Traffic**

If the analysis is limited to changes in total O&D passengers and employment in sectors that tend to be somewhat more “aviation-reliant,” the correlation remains 0.98. Figure 7 summarizes the relationship between O&D passenger traffic and employment in multiple sectors: Information Technology; Finance and Insurance; Real Estate; PST; Management of Companies; Administrative and support services; Educational services; and health care. As before however, it is important to recognize that correlation does not establish causation. Although the two variables change in the same direction and in a linear manner, it is not possible to conclude that changes in one variable necessarily create changes in the other.



**Figure 8: Relationship between Total O&D Traffic and Regional Employment in Aviation-Reliant Sectors**



### Stakeholders Perspectives on Contributions of Air Service to Economic Development

The Greater Miami Chamber of Commerce mission is “To grow, improve and protect the Greater Miami Business Community by advocating, educating and convening.” The Chamber’s vision is “To be the champion for the Greater Miami Business Community in times of prosperity and hardship.” The organization’s membership represents businesses that employ more than 400,000 employees in the Miami-Dade County area.

The Chamber has had a close ongoing working relationship with the airport, working collaboratively and supporting each other to ensure the mutual benefit of air connectivity for the area’s business community. The Chamber has a seat on all of the MIA’s working committees to ensure that the voice of the business community is heard and present. The airport also continues to support the Chamber by actively participating in meetings, conferences, and webinars to actively convey a consistent message to the Chamber’s membership. The Chamber further supports the area’s business development through Foreign Trade Zone #32.

The Beacon Council is a public-private partnership that is the official economic development organization for Miami-Dade County. Their mission is to increase jobs and investment in Miami-Dade. The Beacon Council works in concert with the initiatives of the Greater Miami Chamber of Commerce to bring the area’s economic development activities to fruition. The work of the Beacon Council focuses on seven target industries that have been identified as “high wage” and “high growth” industries for the area, as follows:



1. **Aviation** – *the strength of the aviation industry is directly tied to the passenger and air cargo performance of MIA. MIA is one of the world’s busiest passenger and air cargo hubs in the U.S. for both domestic and international traffic. MIA is the busiest U.S. airport handling international freight.*
2. **Banking & Finance** – *Miami is known as the financial capital of Latin America. The community’s strong ties to other geographies strengthens the bond.*
3. **Creative Design** – *home to a diverse creative community, the talent pool connects with customers in various languages (Spanish, Portuguese, French, Italian and other languages), air connectivity helps to maintain these important client relationships,*
4. **Hospitality & Tourism** – *known widely as a tourism destination for land, sea and air visitors.*
5. **Technology** – *the tech sector is thriving in the area, home to many entrepreneurial start-ups that cut across several different industry sectors. Professionals in the industry frequent the growing number of industry conferences and networking events that bring people together from around the world.*
6. **Life Sciences & Healthcare** – *global leaders in the biomedical, medical device and pharmaceutical sciences operate in Miami-Dade and with strategic connection to the University of Miami’s Life Science Park.*
7. **Trade & Logistics** – *attracting global supply chain companies to take advantage of Miami’s strategic location as a gateway to Latin America, which is supported by strong connections via air and sea.*

### Communicating the Airport’s Economic Impact

The State of Florida’s Department of Transportation issued an economic impact study covering the state’s public airports in March 2019. That report relied upon a prior study of the economic impact of MIA based on airport operations for 2016. There has been no update published since then. The March 2019 report included only high-level summary metrics for MIA:

- \$17.3 billion in on-airport impacts
- \$13.0 billion in related visitor spending
- \$2.9 billion in multiplier impacts
- \$33.2 billion in total output
- 264,000 jobs
- \$11.4 billion in total payroll.

The airport’s website summarizes these figures, noting that MIA is the leading economic engine for Miami-Dade County and the state of Florida, generating business revenue of \$31.9 billion annually and approximately 60 percent of all international visitors to Florida.<sup>9</sup>

<sup>9</sup> [http://www.iflymia.com/about\\_us.asp](http://www.iflymia.com/about_us.asp)