Air Passenger Transportation: Hartsfield-Jackson Atlanta International Airport

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Abstract— In 2015, Hartsfield-Jackson Atlanta International Airport (ATL), was the first airport to reach the incredible mark of 100 million passengers transported in one year, setting an undefeated global record on air passenger transport, until this article is written. Located at Georgia State (USA), ATL is a global hub, generating near \$35 billion economic impacts in the state's economy annually. The present case investigated the N=10 busiest airports worldwide, being ATL the unit of analysis. Data were collected through extensive archival research and content analysis. Key findings pointed out an ever-increasing activity of ATL in the last decade, with more than 110 million passengers transported to date. Currently, ATL generates more than 63,000 direct jobs. Moreover, ATL offers 150 domestic and 70 international destinations, serving major commercial centers in Asia, Africa, Europe, as well as the Caribbean, Central, and South America. Discussion and future research compile the present study.

Keywords— Aviation, passenger transportation, Atlanta International Airport, IATA.

I. INTRODUCTION

This study investigated the world's busiest airport by passenger traffic, the Hartsfield-Jackson Atlanta International Airport or only Atlanta International Airport (ATL) ATL is the International Air Transport Association's (IATA) airport code. IATA is the trade association for the airlines, worldwide sector representatives, present in 117 countries.

This article aimed at deepening the understanding on civil air passenger transportation worldwide. Multiple methods approaches were employed, such as content and case analysis, as well as extensive archival research. We compared the N=10 busiest airports throughout the last decade, detecting an increase in activities of ATL, in comparison to the other nine busiest airports. We presented the research findings, analysis, and discussion within the following sections.

Recent body of research attracted scholar attention on civil air transportation: (i) Brazil: Congonhas Airport - CGH (Dias, M.O. 2020); Guarulhos International Airport - GRU (Dias, M.O.; 2019); Brasilia International Airport - BSB (Dias, M.O.; 2019b); Rio de Janeiro International Airport Galeão/Tom Jobim - GIG (Dias, M.O. & Albergarias, 2019, 2019b); Santos Dumont Airport - SDU (Dias, M.O., 2019c, 2019d); (ii) Latin America (Dias, M.O. & Pessanha, M. T., 2019). Also, aircraft manufacturer industry (Cruz, B. & Dias, M.O., 2020; Dias, M.O., Teles, and Duzert, 2018; Dias, M.O. and Duzert, 2018)

In 2019, Hartsfield-Jackson transported 110,531,300 passengers in 150 domestic and 70 international destinations, with Nine hundred four thousand three hundred one aircraft operations, also transporting 639,276 t of cargo. ATL is the hub for Delta Airlines and was founded in 1926.

Why do Hartsfield-Jackson airport (ATL) is the busiest airport in the world? Neither Georgia state is the most relevant economic state (Georgia is the 11th GDP in America - California is the first), according to the International Monetary Fund (IMF, 2020), nor Atlanta the most visited destination in America (New York is the most visited state in America while Atlanta is the fourth most visited state), according to the World Tourism Organization (WTO, 2020).

The answer, thus, may be partially explained by the Hartsfield-Jackson's location: observe in Figure 1 that ATL is located two hours away from 80 percent of the entire population in the USA, near 260 million people, are within reach of the airport via a short flight. Besides, the proximity to the east coast favors transatlantic flights to Europe.



Figure 1 Current destinations offered by Hartsfield-Jackson (ATL). Source: ATL, 2020.

Alsoo, observe in Figure 1 that the international destinations include major commercial centers in Europe, Asia, the Caribbean, Africa, and South and Central America.

Moreover, ATL has five runways made of concrete, operating simultaneously, while the average of the airports worldwide has two runways (ATL, 2020). In comparison, the busiest airport in Latin America, MEX, has only two asphalt runways, for instance (Dias & Pessanha, 2019).

The ten busiest Airports in the world, by passenger traffic, are illustrated in the following Figure 2:

#	Airport	Location	Country	Passenger/year
1	Atlanta Airport International	Atlanta, Georgia	USA	110 531 300
2	Beijing Airport International	Beijing	China	100 983 280
3	Dubai Airport International	Dubai	UEA	89 149 388
4	Los Angeles International Airport	Los Angeles	USA	88 068 013
5	Airport International Haneda	Tokyo	Japan	87 098 683
6	O'Hare Airport International	Chicago	USA	83 245 872
7	London Heathrow Airport	Hillingdon	UK	80 844 310
8	Charles de Gaulle Airport International	Paris	France	76 150 007
9	Shanghai Pudong Airport International	Shanghai	China	74 006 331
10	Hong Kong Airport International	Hong Kong	China	71 541 000

Figure 2 Ten busiest airport by passenger traffic (2019). Source: IATA, 2020

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II.METHODS AND LIMITATIONS

This article is a qualitative, descriptive single case study, in which unit of analysis is the Hartsfield-Jackson Atlanta International Airport (ATL) (Yin, 1988). This article also combined the inductive reasoning and interpretive approach.

This research is limited to air passenger transportation, regardless of other air transport modals, such as cargo freight transportation. Military airports are not the scope of the present study, which is limited to civil airports.

Other airport activities, such as (i) parking lot administration; (ii) food court administration; (iii) shopping center, among others, are not investigated in this study. This research is also limited to the N=10 busiest airports by passenger traffic in 2019 (See Figure 2).

Finally, this study is limited to the international Federal Aviation Administration's (FAA) and the International Air Transport Association's (IATA) international regulations.

III. HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT

Hartsfield-Jackson Atlanta International Airport was founded on September 15, 1926, by mayor Walter Slims. ATL received its name from two former Atlanta mayors: William B. Hartsfield and Maynard Jackson.

The airport currently has five runways, 192 gates, two terminals: (i) the Domestic Terminal and (ii) the Maynard H. Jackson Jr. International Terminal (ATL, 2020). The domestic terminal, in turn, is divided into two terminals North and South, which is destined to the Delta Airlines (ATL, 2020). The major domestic destinations in 2019 are illustrated in the following Figure 3:

#	Domestic destination	Passengers	Airline
1	Orlando, Florida	1,494,110	Delta, Frontier, JetBlue, Southwest, Spirit
2	Chicago, Illinois	1,296,520	American, Delta, Southwest, Spirit, United
3	Fort Lauderdale, Florida	1,354,200	Delta, JetBlue, Southwest, Spirit
4	New York–LaGuardia, New York	1,202,350	American, Delta, Frontier, Southwest
5	Los Angeles, California	1,141,840	American, Delta, Frontier, Southwest, Spirit
6	Tampa, Florida	1,041,250	Delta, Southwest, Spirit, Frontier
7	Boston, Massachusetts	979,52	Delta, JetBlue, Southwest, Spirit
8	Dallas/Fort Worth, Texas	900,62	American, Delta, Spirit
9	Miami, Florida	896,66	American, Delta, Frontier
10	Baltimore, Maryland	864,76	Delta, Southwest, Spirit

Figure 3 ATL'S Domestic destinations in 2019. Source: ATL, 2019.

The ten major international destinations in Hartsfield-Jackson Atlanta International Airport (ATL) are depicted in Figure 4, as follows:

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#	International destination	Passengers	Airline
1	Amsterdam, Netherlands	812,286	Delta, KLM
2	Paris, France	787,756	Air France, Delta
3	Cancún, Mexico	740,837	Delta, Southwest
4	London-Heathrow, United Kingdom	644,081	British Airways, Delta, Virgin Atlantic
5	Toronto-Pearson, Canada	547,882	Air Canada, Delta
6	Mexico City, Mexico	450,045	Delta
7	Punta Cana, Dominican Republic	389,304	Delta, Southwest
8	Montego Bay, Jamaica	356,408	Delta
9	Nassau, Bahamas	317,594	Delta
10	Frankfurt, Germany	291,45	Delta, Lufthansa

Figure 4: ATL'S Principal international destinations in 2019. Source: ATL, 2019.

To date, as illustrated in the following 5, the air market share in ATL are the following:

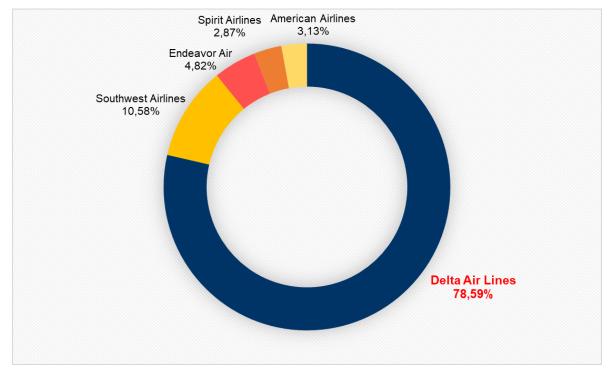


Figure 5 ATL market share. Source: ATL, 2020

Observe in Figure 5 that 78.59 percent of the entire ATL operation is conducted by Delta Airlines, followed by Southwest Airlines, the second airline in ATL airport market share.

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3.1 Hartsfield-Jackson Atlanta International Airport: Background and performance

Passenger traffic in Hartsfield-Jackson Airport (ATL) in the last decade (2009 to 2019) is depicted in Figure 6, as follows:

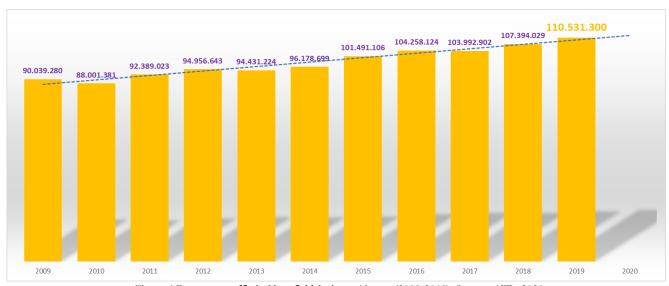


Figure 6 Passenger traffic in Hartsfield-Jackson Airport (2009-2019). Source: ATL, 2020

In 2017, ATL was awarded as the busiest World's Busiest Airport – 20th year, according to the Airports Council International (ATL,2020).

Back in 1957, ATL claimed to be the country's busiest airport, with more than two million passengers passing through in 1957 (ATL, 2020). On May 3, 1961, a new terminal was built, with \$21 million expenses (ATL, 2020). In March 1962 the longest runway was built. Later, in 1971, the Atlanta airport gained the name William B. Hartsfield Atlanta Airport, celebrating former Atlanta mayor William B. Hartsfield passing.

In December 1984, a 2,700 m runway, the second one, was completed. In 2001, the fifth runway was built (2,700 m). It cost \$ 1.28 billion and was inaugurated on May 27, 2006. (ATL, 2020).

ATL employs about 63,000 people to date, the largest employer in the Georgia state, with a payroll of \$2.4 billion. (ATL, 2020).

IV.IMPLICATIONS AND DISCUSSION

One of the critical success factors of the Hartsfield-Jackson Atlanta International Airport is the location, as depicted in Figure 1.

The present study implicates in the following fields of research: (i) aircraft manufacturer industry (Cruz, B.S. & Dias, M.O., 2020; Dias, M.O., Teles, and Duzert, 2018; Dias, M.O. and Duzert, 2018), (ii) mining industry (Dias, M.O., & Davila, 2018); (iii) e-business negotiation (Dias, M.O. & Duzert, 2017); (iv) automobile industry (Dias, M.O., Navarro and Valle, 2013, Dias, M.O., et al., 2014; Dias, M.O., et al., 2013); (v) non-market forces (Dias, M.O. & Navarro, 2018); craft beer industry (Dias, M.O. & Falconi, 2018; Dias, M.O., 2018); (vi) public administration (Dias, M.O., 2018); (vi) Non-governmental organizations (Paradela, Dias, M.O.; Assis; O., J.; Fonseca, R. (2019); (vii) governmental negotiations (Dias, M.O. & Navarro, 2017); (viii) copier manufacturer industry (Dias, M.O., 2012); (ix) streaming film industry (Dias, M.O., & Navarro, 2018), (x) craft beer industry (Dias, M.O., 2020; Dias, M.O. & Falconi, 2018), among others.

The analysis suggested that ATL will increase its activities by 3.3 percent to 2020. The pandemics caused by the CVID-19 (Corona Virus) in early 2020 may present negative impacts in 2020 Chinese airports, once the outbreak of Corona Virus is exactly located at Wuhan, province of China, in December 2019.

Finally, this research, in comparison to the previous body of research, has the merit of compiling sparse data regarding air passenger transportation worldwide, providing an understandable and comprehensive overview of the civil aviation sector. This article will be useful not only to academics, but also to students, decision-makers in the air passenger transportation sector, managers, and other practitioners.

V. Future Research

Future research is encouraged to investigate the evolution of passenger transportation between 2020-2010. The Corona virus's impact on passenger transportation is stimulated. Performance analysis on air passenger transportation in the United States of America, as well as other world regions, are also recommended.

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