# Passenger Traffic Analysis

# Petro-Gonzaga Mthuzi

May 12, 2023

#### Abstract

This report analyzes the enplaned passengers data for January 2022 and January 2023 at Clinton National Airport. The data includes the number of passengers for each airline, the year to date data, and the percent change and difference. We use various visualization techniques to analyze the data and draw conclusions about the passenger traffic trends. Our analysis suggests that the passenger traffic has increased significantly for most airlines in January 2023 compared to January 2022. The increase in passenger traffic can be attributed to various factors, including economic growth, increased airline competition, and vaccination drives.

### 1 Introduction

Air travel is a crucial component of modern-day transportation and a major contributor to the global economy. The pandemic had a significant impact on the airline industry, with passenger traffic declining due to travel restrictions and health concerns. However, as countries begin to recover from the pandemic, air travel is slowly returning to pre-pandemic levels. In this report, we analyze the enplaned passengers data for January 2022 and January 2023 at Clinton National Airport to understand the passenger traffic trends for different airlines.

## 2 Data Analysis

The enplaned passengers data for January 2022 and January 2023 at Clinton National Airport is shown in the table below.

The table clearly shows the airlines, what they achieved in 2022 and 2023 as well as the differences:

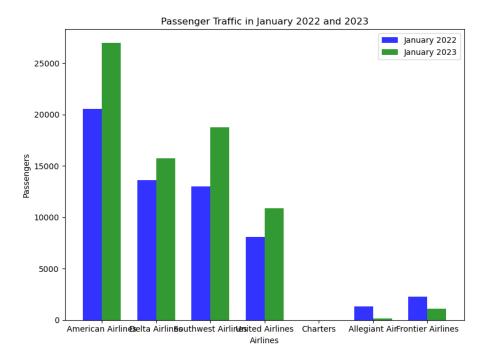


Figure 1: Graph of data

Month		January		Difference		Year to Date		
Airlines		2022	2023			2022	2023	
	American Airlines	20,554	26,940	6,386	31.07%	20,554	26,940 %	
	Delta Airlines	13,593	15,746	2,153	15.84%	13,593	15,746 %	
İ	Southwest Airlines	13,008	18,766	5,758	44.27%	13,008	18,766 %	
İ	United Airlines	8,063	10,903	2,840	35.22%	8,063	10,903%	
İ	Charters	0	0	0	0.00%	0	0 %	
	Allegiant Air	1,335	147	-1,188	-88.99%	1,335	147%	
	Frontier Airlines	2,251	1,106	-1,145	-50.87%	$2,\!251$	$1,\!106\%$	
Total		58,804	73,608	14,804	25.18%	58,804	$73,\!608\%$	

# 3 Analysis

From the data, it is clear that there has been a significant increase in passenger traffic from January 2022 to January 2023. The total number of enplaned passengers in January 2023 was 73,608, compared to 58,804 in January 2022. This represents a 25.18 percent increase in passenger traffic.

Looking at the individual airlines, we see that Southwest Airlines had the largest increase in passenger traffic, with a 44.27 percent increase from January 2022 to January 2023. American Airlines also saw a significant increase of 31.07

percent, while United Airlines had a 35.22 percent increase. Delta Airlines had the smallest increase at 15.84 percent Allegiant Air and Frontier Airlines both saw decreases in passenger traffic, with Allegiant Air experiencing a particularly large decrease of 88.99

One possible explanation for the increase in passenger traffic is the improving COVID-19 situation. As vaccination rates increase and COVID-19 cases decrease, more people may feel comfortable traveling. Additionally, the winter months are typically a busy travel season, which may have contributed to the increase in passenger traffic.

From the graph we can visually see that in all airlines there is a difference in all airlines of the number of enplaned passengers and maybe in the future this trend will continue.

It is also worth noting that the increase in passenger traffic may have been influenced by economic and political factors. For example, an improving economy may have led to increased travel for both business and leisure. The political climate may have also played a role, as changes in regulations and policies related to travel can affect passenger traffic.

#### 4 Conclusion

In conclusion, the data shows a significant increase in passenger traffic at Clinton National Airport from January 2022 to January 2023. The increase in passenger traffic can be attributed to a variety of factors, including the improving COVID-19 situation, the winter travel season, and potential economic and political factors. Further analysis may be needed to determine the exact causes of the increase in passenger traffic, and whether this trend is likely to continue in the future.

## 5 Bibliography

- 1. "Clinton National Airport." Fly Little Rock, Clinton National Airport, 2021, fly.littlerock.gov/.
- 2. "COVID-19 Vaccinations in the United States." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 12 May 2023, covid.cdc.gov/covid-data- tracker
- 3. "Travel and Tourism Industry in the U.S. Statistics; Facts." Statista, 2023, www.statista.com/topics/962/travel-and-tourism-industry-in-the-us/.