# **Airline Industry Analysis & Data Visualization**

Brandeis University Ilter Cakmak, Michelle Guan, Cyndi Ng, Tony Yu

# **WHO YOU ARE:**

- Airline Carriers
- Airline Services Providers
- Investors
- Travel Agency
- Airport Developers

## **Our Focus:**

We want to help you make informed decisions as air travel regenerates after the pandemic.

### **Data Sources:**

# **Bureau of Transportation Statistics**

- Delay Table
- Table 5

U.S. City-Pairs, <750 miles

## **Airline Categories:**

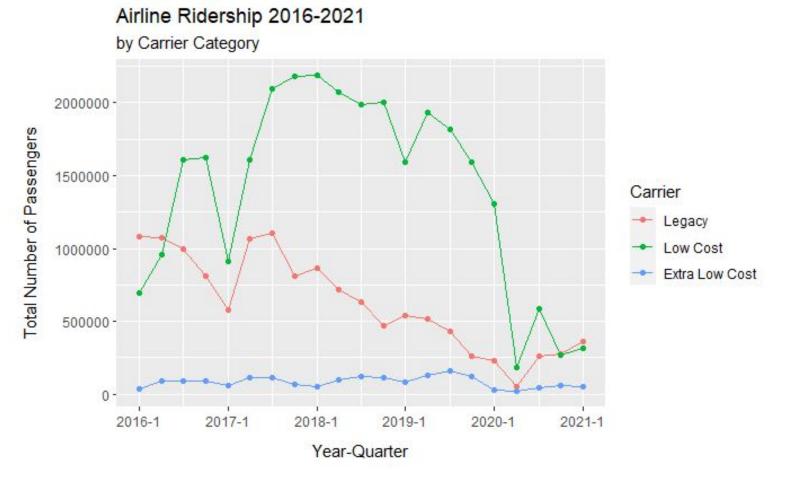
	Legacy	Low-Cost	Extra Low-Cost
Airlines	American Delta United	Alaska Jetblue Southwest	Allegiant Frontier Spirit
Average Fare Range	\$200+	\$120-150	\$70-\$100

# How has the pandemic affected the airline industry?

# \$120 Billion

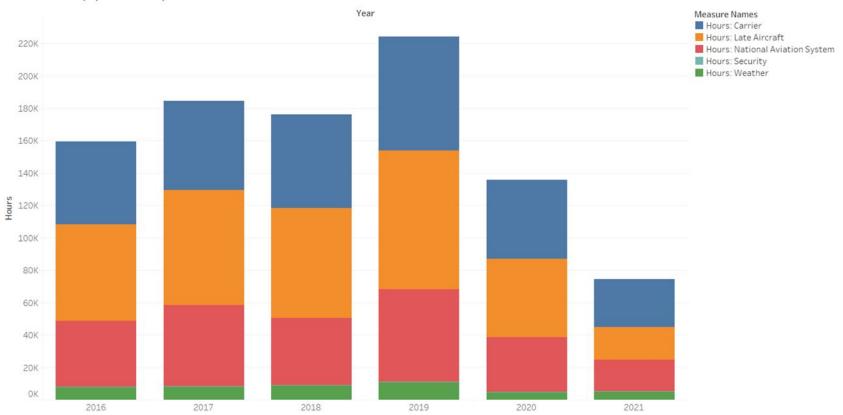
Lost in Revenue for Domestic Flights alone.

Over 7% decrease in number of industry employees from Dec 2019 to Dec 2020.



Overall ridership has been trending downward since before the pandemic...

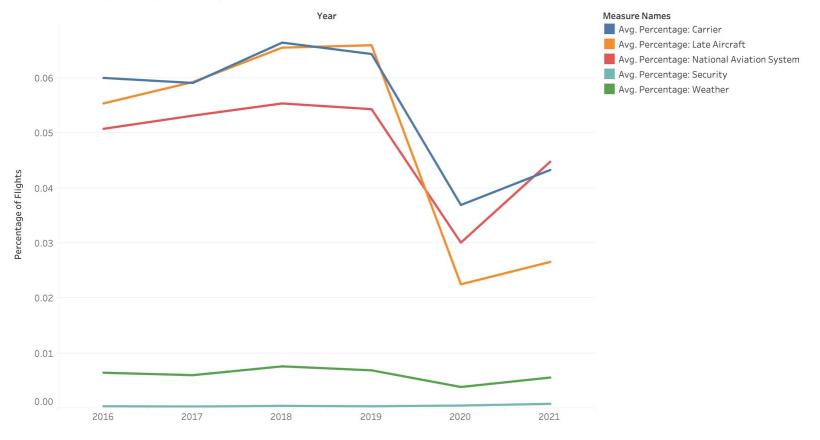
#### Time of Delay (Quarter 1)



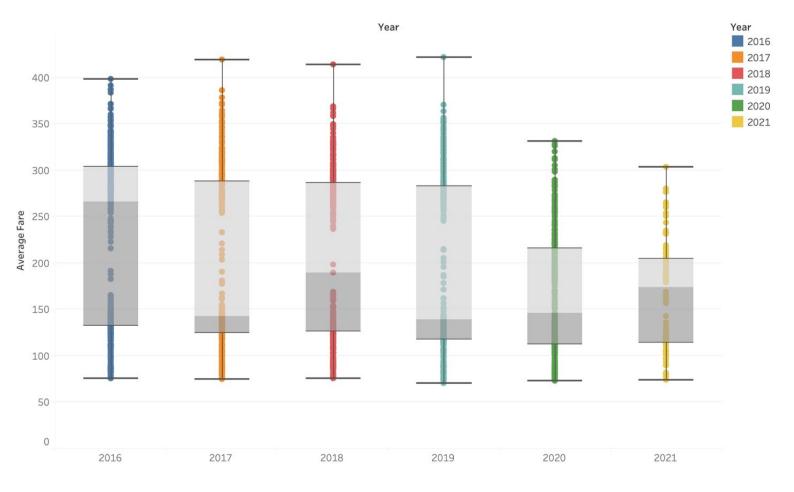
Hours: Carrier, Hours: Late Aircraft, Hours: National Aviation System, Hours: Security and Hours: Weather for each Year. Color shows details about Hours: Carrier, Hours: Late Aircraft, Hours: National Aviation System, Hours: Security and Hours: Weather. The data is filtered on Quarter, which keeps 1.

#### Delay reasons and the opportunity cost of time

The percentage of flights delayed due to specific reason

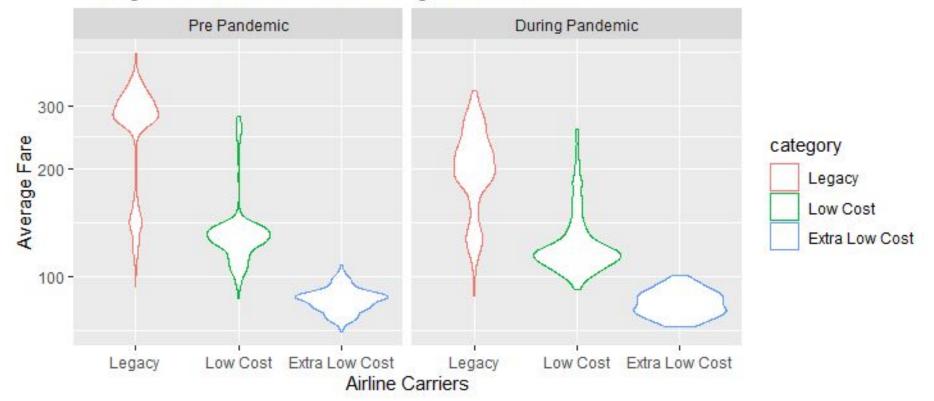


The percentage of flights being delayed has decreased after the pandemic.

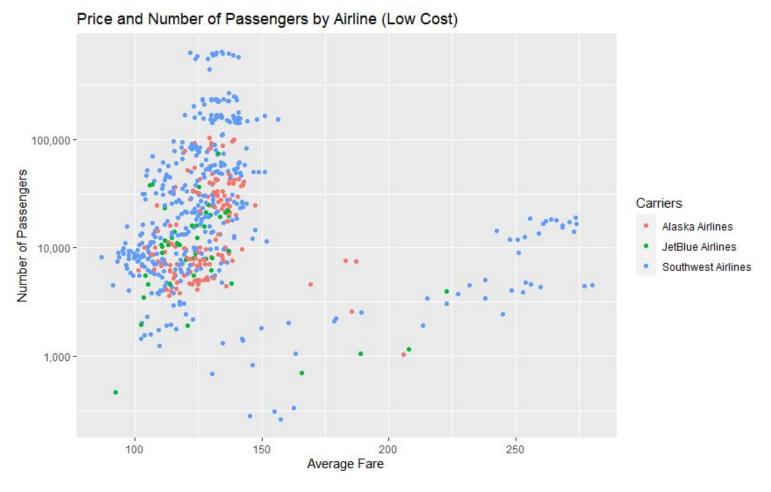


Since the pandemic, the range of average airfares has decreased across all airlines.

#### Change in Price Distribution during the Pandemic



Legacy and Low Cost were able to adjust... But Extra Low Cost couldn't.



Southwest notably has the most number of flights, and the most outliers.

## **Strategy & Suggestions**

- Airlines should prepare for innovation and competition.
- Airlines should pay attention to their target market.
- Expect new marketing strategies

### **Going Forward:**

- Investigate relationship between airfare and demand
- Gauging customer satisfaction
- Research factors affecting labor
- Gathering data from neighboring sectors

# **Questions?**

# **Thank You!**

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