

Charlie Levitz, Jason Mares, Ian Lightfoot, Andrew Lai
Group C
Professor Thomas Brambor
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Airline Industry in 2020 (Working Title)

Abstract

Our group is interested in how the airline industry was affected by Covid-19 in 2020. Utilizing two data-sources, we explore how flight-patterns and itineraries were influenced by the pandemic.

Possible Questions to Visualize:

- International/Domestic travel: For domestic travel, we will primarily focus on the United States and their airline traffic. How does the U.S compare throughout 2020 with other countries? How does domestic/international travel compare to past years?
- Commercial flights/ Cargo flights: Look at a comparison in flight traffic between commercial flights and their supply flight counterparts. Were cargo flights as affected as commercial flights?
- Airline impact: Explore different airlines and their air-traffic throughout 2020. Possible domestic/international airline differences (Continent Differences)? Airline differences based on cost/affordability of the airline?

Techniques

ggplot2, interactivity in charts/graphs, network analysis, text analysis, spatial analysis

Data Sources

- [Bureau of Transportation Statistics](#)
 - Includes multiple years, can isolate by airport, isolate by state, isolate by airlines
- [The OpenSky Network - Free ADS-B and Mode S data for Research](#)
 - Multiple data-sets for analysis (specifically Covid-19 dataset)
 - International in scale
 - Isolate by country, airline, destination
 - Has dedicated API for updated/real-time analysis
- [Twitter API](#)
 - We thought it would be interesting to take a look at the social media of certain airlines and direct consumers for possible text-analysis