Project 2 Proposal

Team Members: Kynan Langenbeck, Adam Maksimovich, Scott Ricketts, and Rob Welling

Topic: Domestic Airline Travel During the Pandemic

<u>Proposal</u>

We would like to investigate how the pandemic has changed where people in the United States are traveling by air. We intend to investigate which locations have increased inbound flights and which locations have lost the most in-bound flights in comparison to pre-Pandemic travel. We would like to corroborate that information with occupancy rates for hotels in those same destinations.

Additionally, we will investigate if those locations with the largest increase in inbound travel have seen a commensurate increase in COVID19 positivity.

Finally, we will investigate if a connection exists between median household income and the Volatility Index and a willingness to travel.

<u>Questions</u>

1. Where are people traveling by air in the United States during the pandemic?
   a. Which locations have had an increase/decrease in incoming flights?
   b. Which locations have had an increase/decrease in hotel occupancy rates?
2. Are there any connections between the most traveled-to destinations and a spike in local COVID-19 occurrences?
3. Is there a relationship between household income and VIX and a willingness to travel during the Pandemic?
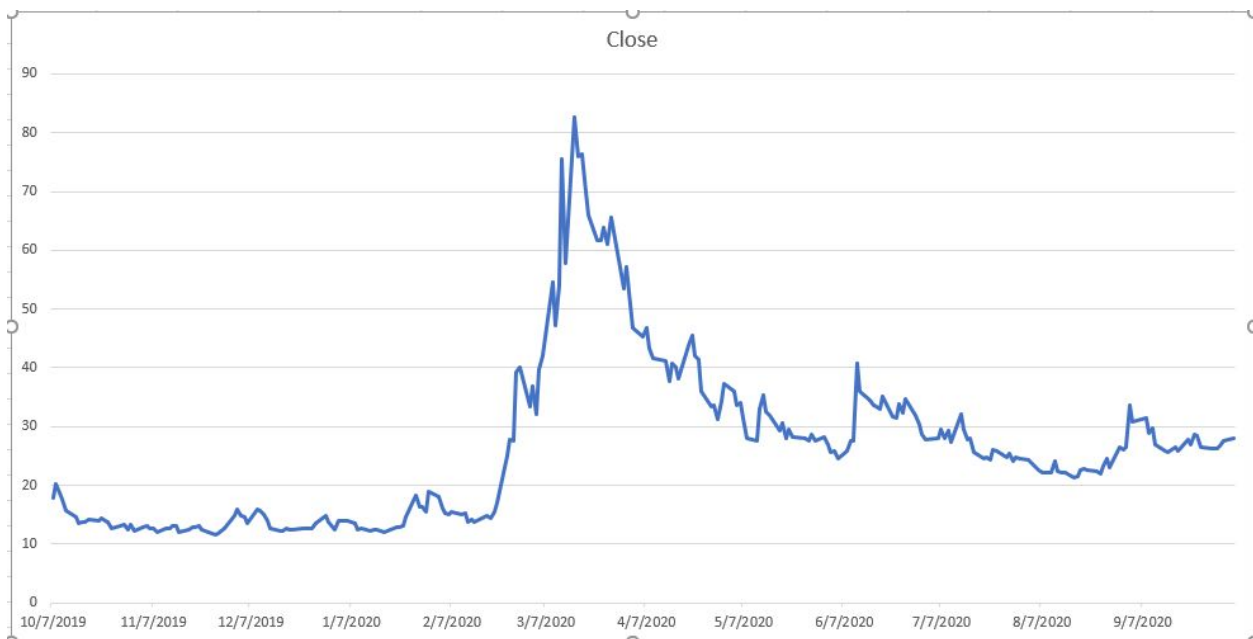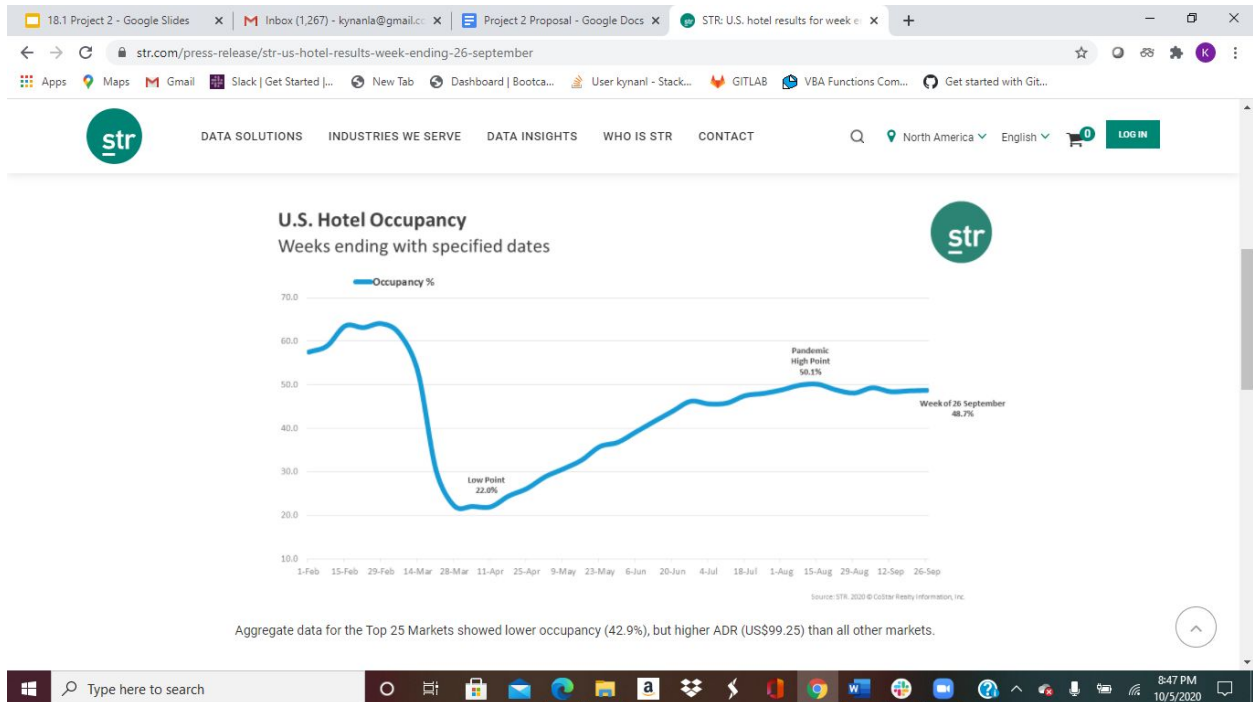
<u>Links</u>

Flight Data Information: https://www.oag.com/
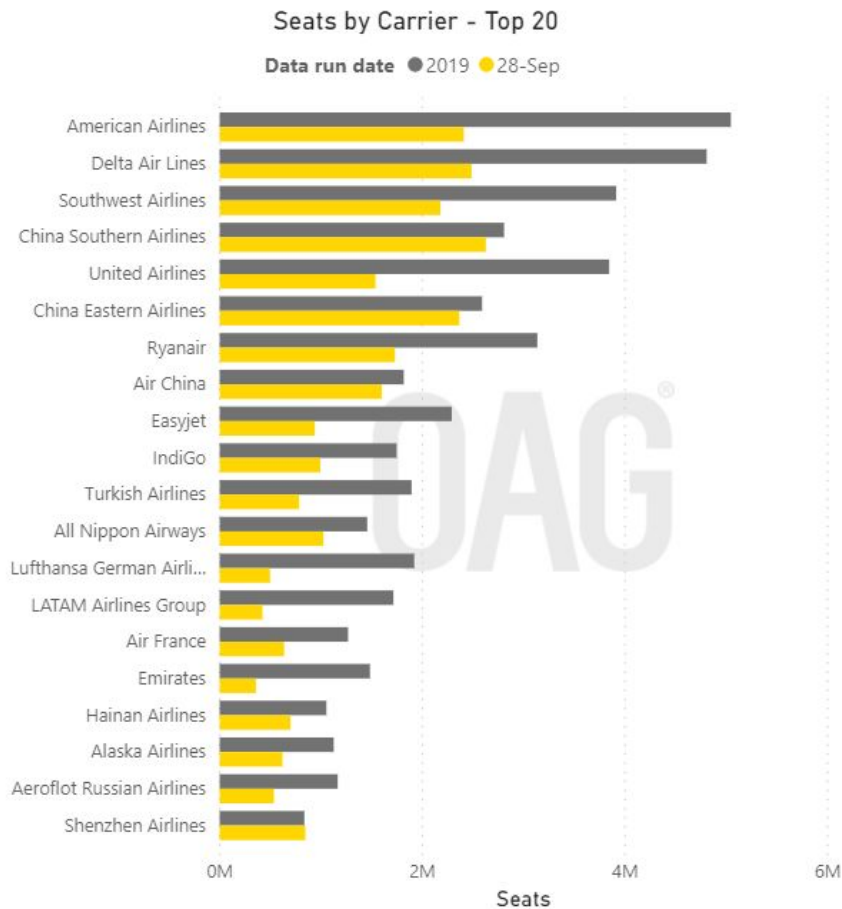Hotel Data: https://str.com/
VIX: https://finance.yahoo.com/quote/%5EVIX/history/
COVID19: https://usafacts.org/visualizations/coronavirus-covid-19-spread-map/
Household Income: https://www.census.gov/data/datasets.html

Screenshots

Seats by Carrier - Top 20

Data run date ● 2019 ● 28-Sep

(Carriers listed top to bottom: American Airlines, Delta Air Lines, Southwest Airlines, China Southern Airlines, United Airlines, China Eastern Airlines, Ryanair, Air China, Easyjet, IndiGo, Turkish Airlines, All Nippon Airways, Lufthansa German Airli..., LATAM Airlines Group, Air France, Emirates, Hainan Airlines, Alaska Airlines, Aeroflot Russian Airlines, Shenzhen Airlines)

X-axis: Seats — 0M, 2M, 4M, 6M

Proposed Design

We envision a dashboard featuring a leaflet map featuring the top travel markets for both air travel and hotels. The map will have an additional layer at either the county or state level displaying COVID19 positivity rates.

Our dashboard will include a secondary chart that visualizes the relationship between VIX, number of flights, and COVID19 positivity rates.

GitHub Link: https://github.com/rew0809/NW_BootCamp_Proj2