

Tableau Data Visualizations of Flight delays



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DATA ANALYST

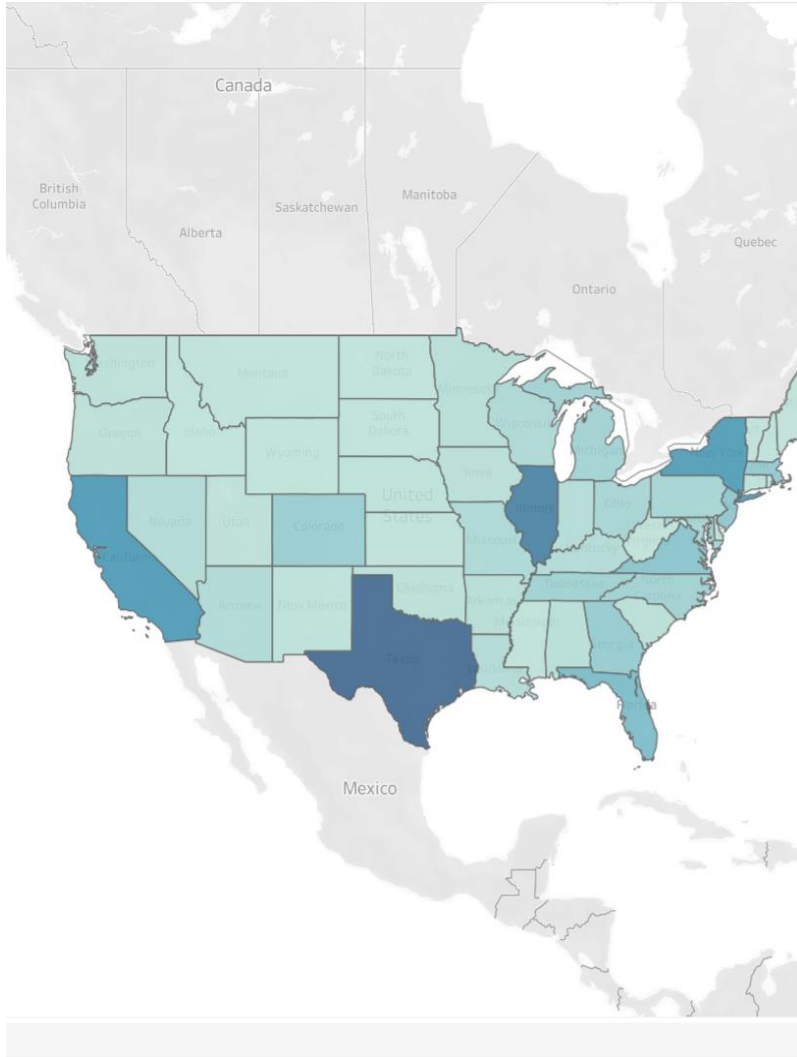
EDA and Data Cleaning

Before I went to tableau, I looked at the data trying to know more about it

Here's what I did:

- removed 3 unnamed columns that weren't in the [Kaggle dataset](#)
- renamed values in the 'CANCELLATION_REASON' column in the "flights" dataset from A,B,C to understandable reasons which can be more useful
- an HTML file (jupyter notebook) is provided for all mentioned above

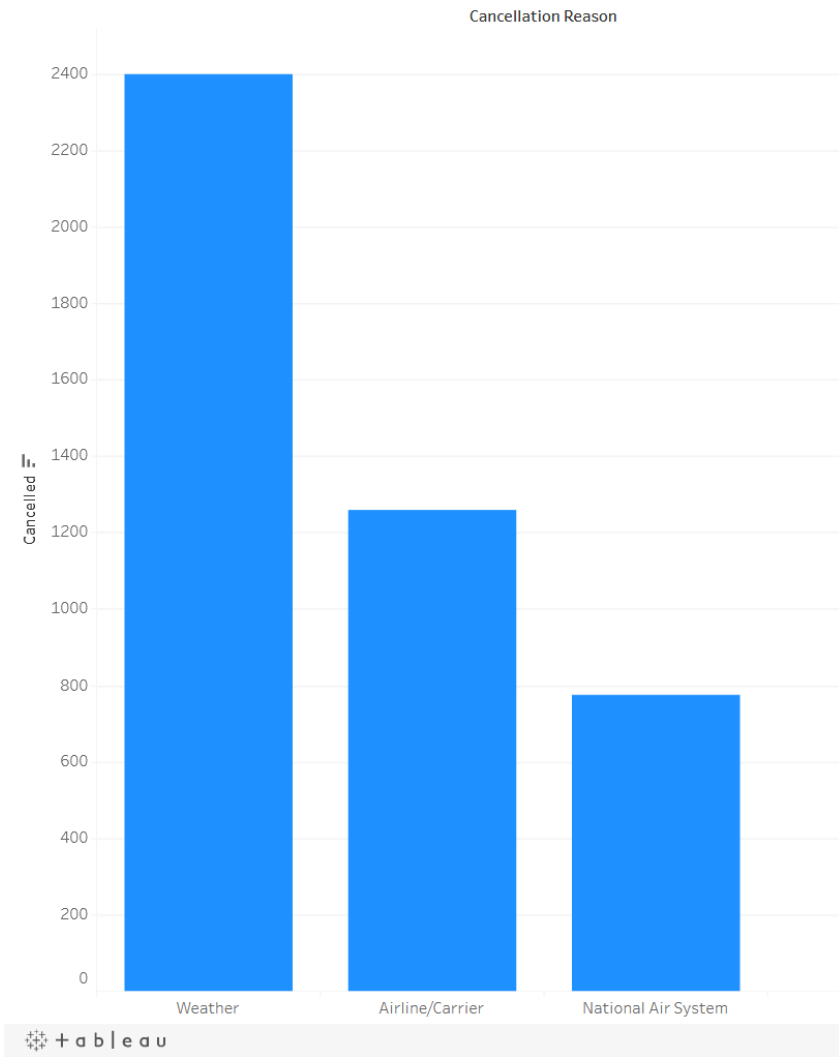
cancellations



Sheet 1

- First, I looked at the relationship between states and cancellations, to find that **Texas has the most flight cancellations** while **West Virginia has the least flight cancellations**
- Sheet 1 [link](#)

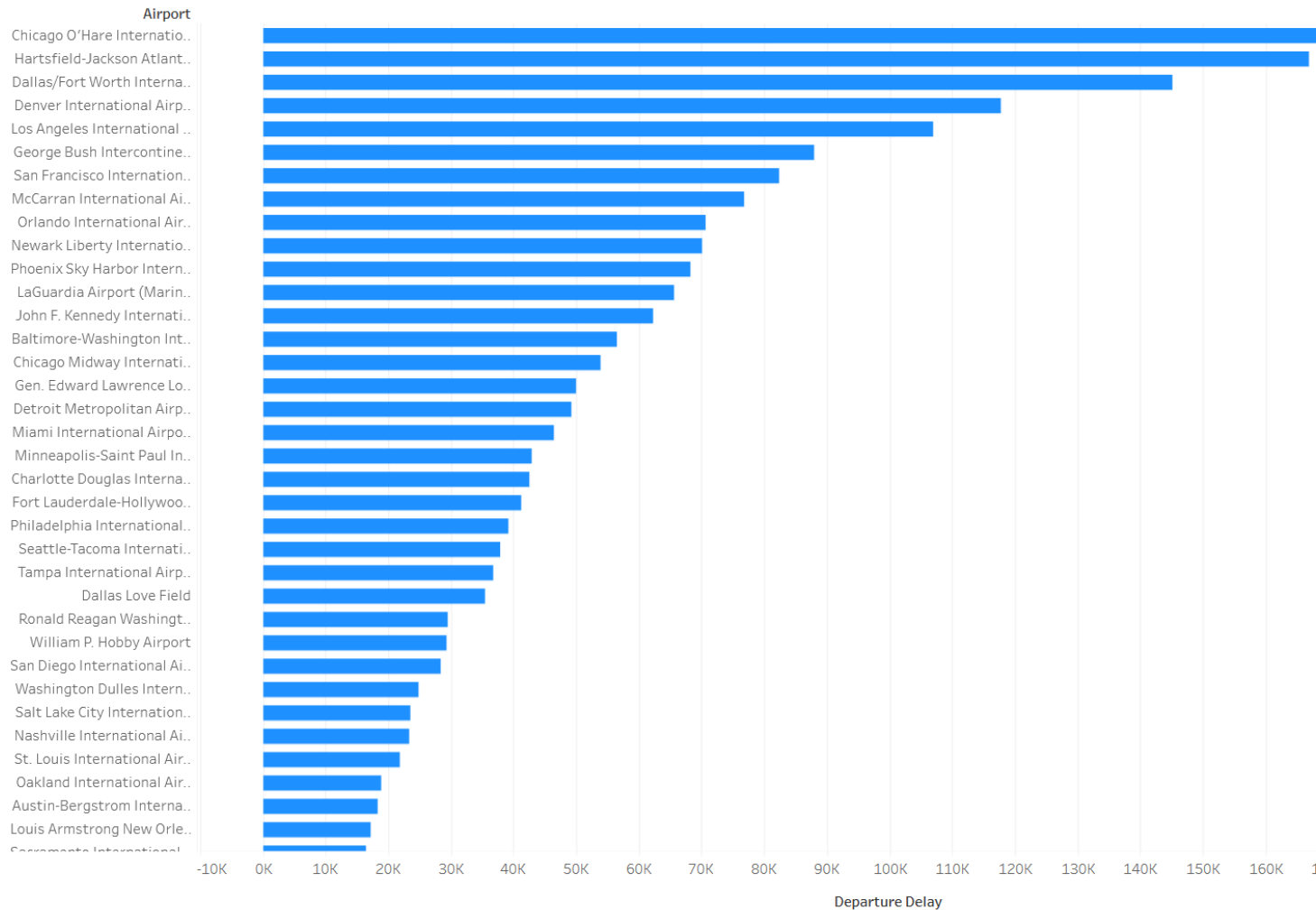
what causes cancellations?



Sheet 2

- Then, I got curious to know what caused these cancellations to find out that the **weather** was the biggest reason
- Sheet 2 [link](#)

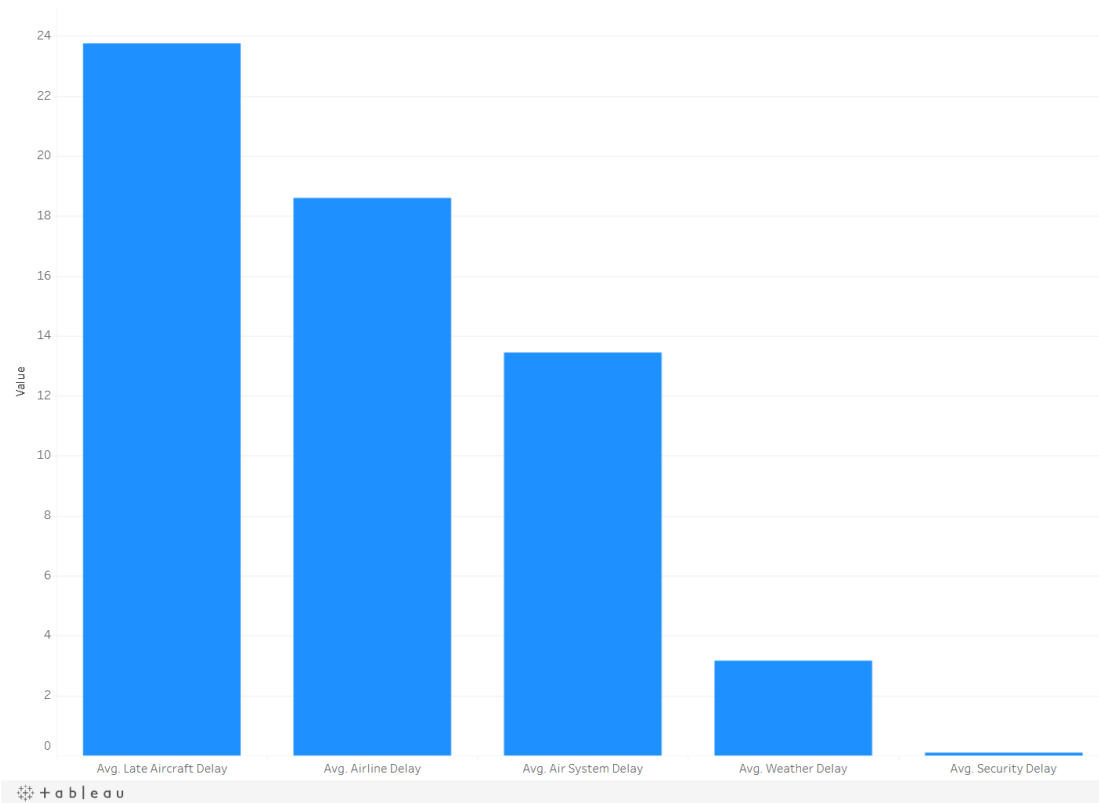
Airports and average departure delay times



Sheet 3

- After that, I looked at airports and average departure delay times and the worst airport in terms of departure delay was [Chicago O'Hare International Airport](#)
- Sheet 3 [link](#)

What causes Flight delays?



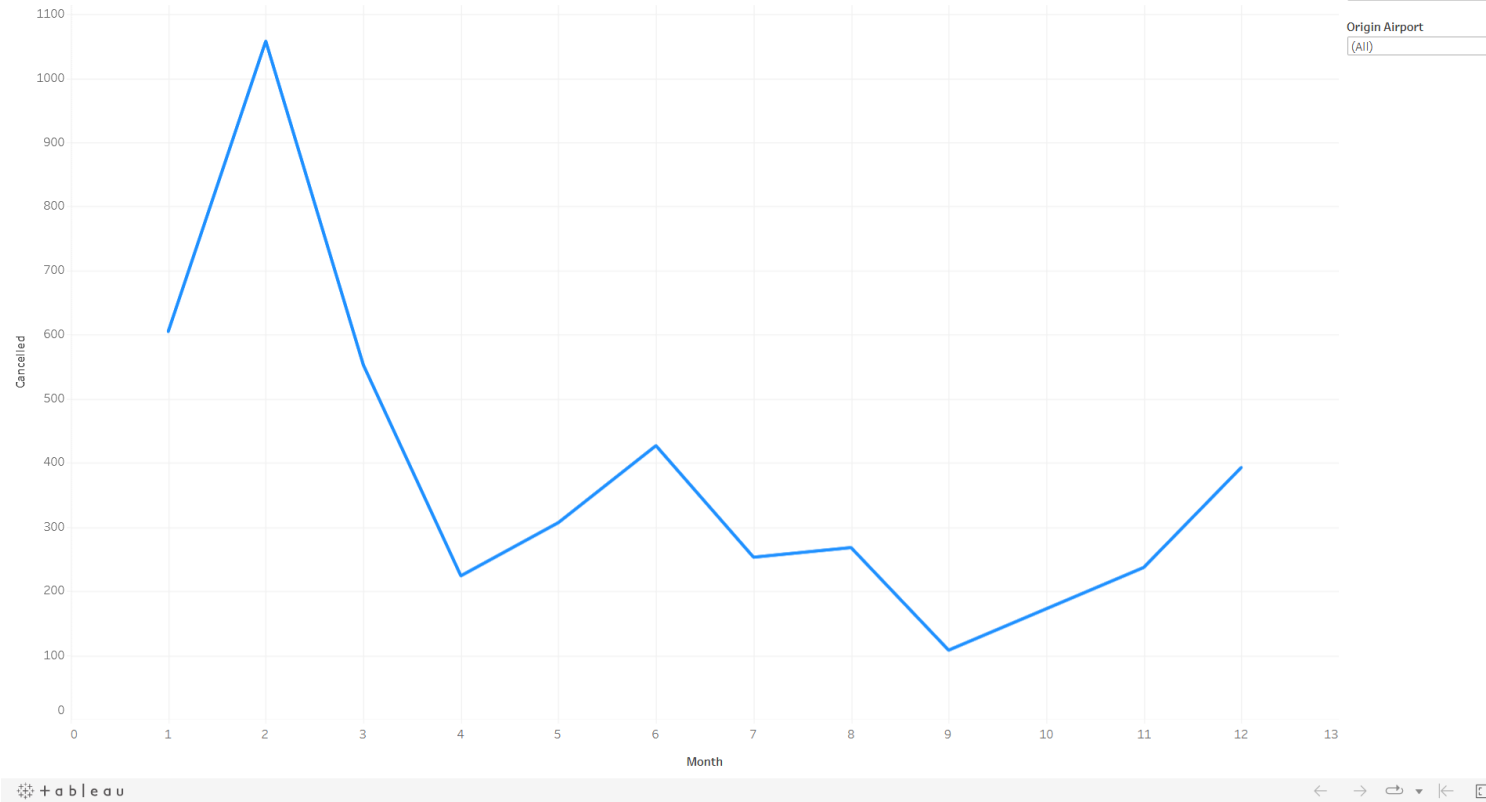
Month
(All)

Origin Airport
(All)

Sheet 4

- Then, I looked at the reasons of these delays and what causes delays, and I found out that what caused delay the most was **late aircraft delay**
- Sheet 4 [link](#)

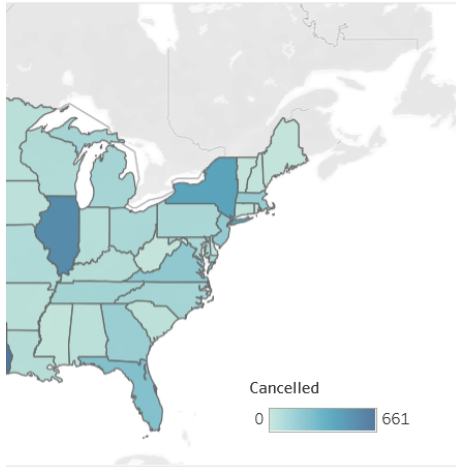
Cancellations and time of year



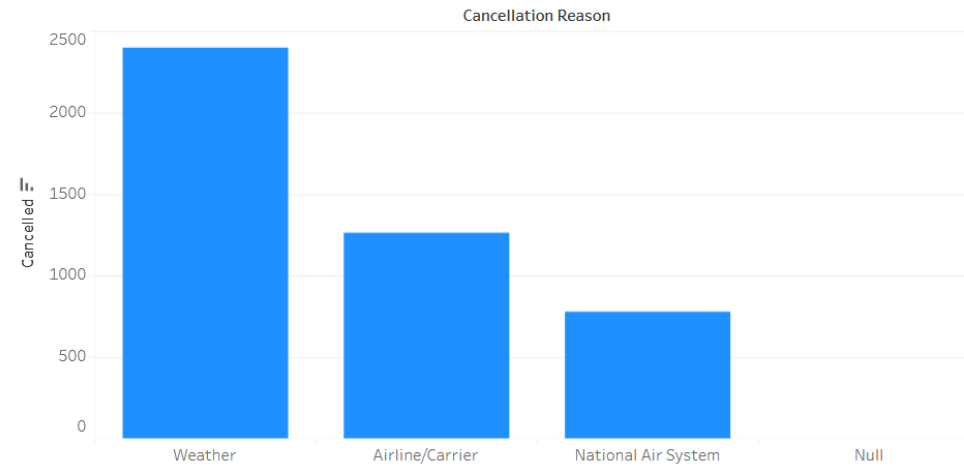
Sheet 5

- Lastly, I wanted to know what time of year has most cancellations, and I found that at **February** flights get cancelled the most (**1058 cancelled flights**)
- Sheet 5 [link](#)

tions



what causes cancellations?

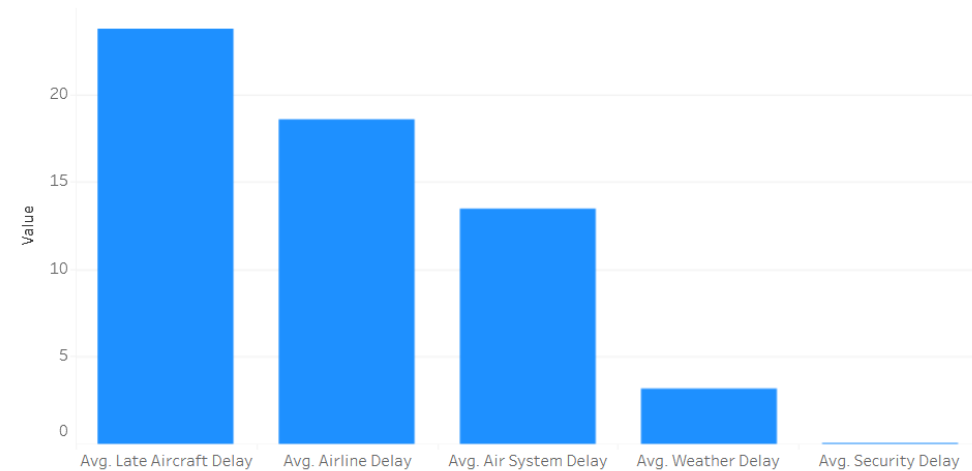
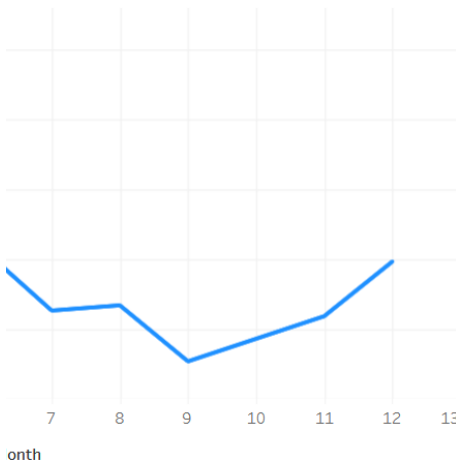


Dashboard

And I put everything together into a useful, clean dashboard

- dashboard [link](#)

What causes Flight delays?



Design

- In all of my visualizations I went with the **dodger blue** color as it's a cool color, comfortable to look at and won't be a problem for colorblindness
- Didn't use 3D plots as they can be misleading and not very helpful
- Used a color legend in map plot to determine max from min
- didn't use multiple colors for each bar in bar plots
- overall tried my best to make the visualizations as clean, simple and informative as possible

Resources

N/A