Write-up: Flight Performance Visualization

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Link to tableau public workbooks:

First version:

https://public.tableau.com/profile/hervandip#!/vizhome/ProjectTableau_7/Story1?publish=yes

Final version:

https://public.tableau.com/profile/hervandip#!/vizhome/ProjectTableaufinal/FlightStory?publish=yes

Summary

The dataset contains information about United State flight performance in 2017, I used unique carrier as flight identity. This project shows what kind of flight with most canceled and or diverted in 2017, and what flight with the most freequent delay. There are 4 reasons for cancelation (A = carrier, B = weather, C = NAS, D = security), and 5 reasons of delay (carrier delay, weather delay, National Aviation System(NAS) delay, security delay, late-arriving aircraft delay). Because there is NAS factor of delay, this project also shows what airports with the most frequent delay.

Design

- I choose the bar chart to see unque carrier and number of records, then i can get number of flights based on unique carrier.
- I used bar chart to show how much flight canceled and diverted based on unique carrier.
- I used line chart to see when is the most canceled flight and the most diverted flight.
- For the reasons of cancelation, I used bar chart to see what is the most reason to cancel the flight.
- For further information about flight performance, I also used bar chart to see what flight with the most arrival delay.
- Whether there is relationship between distance and delay, I created scatter plot to check relationship between distance and arrival delay.

- I used average calculation to see the most contribute factor of delay and created it into bar chart.
- For the last, I created map diagram for airport then put departure delay and arrival delay as the measurement of delay, and size of diagram to shows which airport with the most frequent delay.

Feedback

- Date with the most canceled and diverted part, can't you make it into 2 graphs? Because it has 2 Y axis (2 different size) kinda hard to read.
- How about just use vertical bar chart instead of horizontal? Because there is enough space for it.
- How about flight with the most frequent delay?
- Which airport with the most frequent delay since there is NAS delay?
- Rearrange your story, like cancel & diverted part then delay part. Your story was like cancel & diverted part then delay part then back to cancel & delay and back to delay part again, it was hard to read.

Resouce

Data downloaded from:

https://www.transtats.bts.gov/DL_SelectFields.asp?Table_ID=236

https://digitalduquette.com/digital/2017/2/7/tableau-tips-combine-strings-to-create-a-date-field