Airport Arrivals and Delays: Tableau Story Project

1. Cancelled Arrivals Story:

https://public.tableau.com/views/CancelledArrivalsperAirportTableauStoryProject/CancelledArrivalsStory?:embed=y&:display_count=yes&publish=yes

- Cancelled Arrivals per Airport Sheet:
 https://public.tableau.com/views/CancelledArrivalsperAirportTableauStoryProject
 /CancelledArrivalsStory?:embed=y&:display count=yes&publish=yes
- 2. Arrival Delays Story:

https://public.tableau.com/views/CancelledArrivalsperAirportTableauSheet/ArrivalDelaysStory?:embed=y&:display_count=yes&publish=yes

- a. Cancelled Arrivals by State:
 <a href="https://public.tableau.com/views/ArrivalDelaysperStateTableauSheet/
- b. Cancelled Arrivals by State (2):
 https://public.tableau.com/views/ArrivalDelaysperState2TableauSheet/ArrivalDelaysperState2?:embed=y&:display_count=yes&publish=yes
- c. Cancelled Arrivals by City:
 <a href="https://public.tableau.com/views/ArrivalDelaysperCityTableauSheet/ArrivalDelaysperCityTablea
- d. Cancelled Arrivals by City (2):
 https://public.tableau.com/views/ArrivalDelaysperCity2TableauSheet/ArrivalDelaysperCity27:embed=y&:display_count=yes&publish=yes

Original Cancelled Arrivals:

 $\frac{https://public.tableau.com/views/CancelledArrivalsperAirportTableauStoryProjectORIGINAL/CancelledArrivalsStory?:embed=y\&:display_count=yes\&publish=yes$

Original Arrival Delays:

https://public.tableau.com/shared/M989SX423?:display_count=yes

Summary

Two stories are used to display the data. The first story shows arrival cancellations per airport across time, colored by carriers, while the second story depicts arrival delays by state and city across time and by carrier. These stories are aimed at determining which airports have the most cancellations, and where they are located across the country. This is so travelers can conduct expectation management at these airports, and we can begin to discern what may be causing high volume cancellations in certain regions.

Design

In the Arrival Cancellations Story, airports are placed on the x axis, and arrival cancellations along the y axis. This demonstrates that the key takeaway is in the airports with the highest

cancellation count. Airline Carriers are shown in color, filling out the descending bar chart. This element was added to make clear which colors are trending throughout the airports in cancellations. Years were also added to the pages section in order to add an animation to the story and offer a change-through-the-years visual.

In the Arrival Delays Story, delays were plotted on a map by state to show which states have the highest concentration of delays. A drill-down technique is used as the next story block shows arrival delays by city. Years were also added to the pages section here too in order to add an animation to the story and offer a change-through-the-years visual. The following two blocks are filtered by carrier to demonstrate the locations that each carrier struggles with. An interesting fact this illustrates, is that problem states are not always depicted in the city map.

Feedback

I consulted with a peer who has recently taken a college course that necessitated frequent Tableau usage. He pointed out several grammatical issues that I corrected, as well as a suggestion that I change the two final blocks in the Arrival Delays Story. I originally had the Carrier Drop-Down Menu with "All" selected. He suggested that I select AirTran, as that is one of the carriers I highlighted in my commentary, in order to improve clarity. Additionally, he suggested I add animation to both stories in order to add an element of interest.

Resources

- 1. Beaureau of Transportation Statistics: https://www.transtats.bts.gov/OT_Delay/OT_DelayCause1.asp
- 2. ASA Sections on Statistical Grouping, Statistical Computing http://stat-computing.org/dataexpo/2009/the-data.html