

Data Visualization in Tableau

Arrival airport delays in the United States

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Final version:

https://public.tableau.com/profile/vist5571#!/vizhome/delays_3/Story1?publish=yes

Summary:

In this Tableau story, I explored the arrival delays at the airports of the United States. The story shows some aspects of this delays, the connection between delays and airport traffic, airline and month of the year. The user can filter the information on the last dashboard by airline and year for more specific information. The original data didn't contain per flight information what is mostly used in the Tableau story, I used the "calculated field" option to get this data.

Design:

I began this story with a preconception. I thought that there must be a strong connection between the arriving flight number and the average delay. But I found there isn't a strong correlation. High traffic airports can have good or average delay time as well. Because for me this was a small surprise, I thought that I will start my story with this discovery. Later I showed other aspects of flights and delays, and in the last page the user can further explore the data with the filters.

My feedback was my wife, I resisted her suggestion to make a very very colorful story, but her other suggestions were implemented.

Maybe my last page a bit crowded, but I wanted to make a playground, tried multiple variations, this is the last one.

The original opening map on the first page showed all the Pacific Ocean because of some small airports. For the opening I zoomed into the core part of the United States.

I dropped the filter in the third page. I have only a few years, so zooming in isn't necessary, we can check the information of a particular year easily without a filter. But I think this doesn't really matter.

I dropped the Delay/Flights – Cancelled/Flights scatter plot because it didn't fit the continuity of the Tableau story.

Feedbacks:

"This bluish theme is boring, you should use far more color."

"I don't like the layout of the last page, don't know how would it be good, but this isn't."

"Maybe you shouldn't show the ocean because of some islands, zoom in!"

"I think the filter on the third page is unnecessary."

"Hm . . .are you sure you don't want more color?"

“This page doesn’t fit the story.”

Resources:

For this Tableau story I downloaded the data from https://www.transtats.bts.gov/OT_Delay/OT_DelayCause1.asp. For downloading the “Airline On-Time Statistics and Delay Causes” there was an option to filter the carriers, airports and years. I downloaded the data for all available carriers and airport between 2010 and 2017.