

Data Foundation Nanodegree Project (Tableau)

Topic - Flight Delay and Cancellation

Story link - [US Flight Delay and Cancellation story Tableau Link](#)

Dashboard link - [US Flight and Cancellation Dashboard Tableau link](#)

Insight 1

[cancellation of flight by Airline](#)

In this, we can clearly see that the maximum number of flight was cancelled by WN airline (SouthWest Airlines Co) and the lowest number of flight was cancelled by HA airline (Hawaiian Airlines Inc.)

Design - In this, I choose the color blue, because choosing multiple color would only distract the viewer (in this case actually). Hovering on the bar it will show the total number of cancelled flight along with airline name.

I used a Bar Chart for this visual as this chart type is very effective for comparisons across categories. I stuck with the default color scheme for this chart, as each bar was effectively illustrating the cancellations. I didn't feel any additional color or changes to the style were needed for this illustration.

Insight 2

[Cancellation of flight by Month](#)

In this, it's clearly shows that on the 2nd month i.e, February had the maximum number of flight cancellation (total of 1,058) and the lowest number of flight cancellation was in the 9th month i.e, September (total of 108).

Design - I choose the Blue color. And added filter and tooltip. With the help of filter you can change the starting point. Say, we fix the initial value at 2 (i.e month). Then the plot will start from second month till the last one (we can change that too in filter).

I used a **Line Chart** for this visual as this chart type is most frequently used to show trends and analyse how the data has changed over time.. I stuck with the default blue color for this chart because I didn't feel any additional color or changes to the style were needed for this illustration. I also added a month filter for this this visual to facilitate interaction.

Insight 3

Link - [Cancellation of flight reason](#)

In this, we can see that the reason for cancellation of flight is maximum because of “Weather” (2397 cancel because of weather) and then “Airline” (1260) and at the last it’s “National Air system” (776).

Design - I choose 3 color as it’ll give more visuality to the viewer and also I created a filter with the name “Cancellation Reason”. On selecting any of them them (say on “weather” It’ll highlight the “Weather” Section.

I used 'packed bubble. Packed bubble is used to show relational value without regards to axes. The bubbles are packed in as tightly as possible to make efficient use of space. I changed the default color to “Color Blind” in the select color palette option.

Note: In the original dataset the cancellation reason is given as A, B, C, D (which have coded value. Also mentioned in Project section). So for finding the cancellation reason I followed this kaggle dataset <https://www.kaggle.com/usdot/flight-delays/data>

Insight 4

Link - [Airline Average Delay](#)

In this it’s clearly showing that the Airline average delay is maximum for Hawaiian Airlines (22.712) and than on second number it’s Atlantic Southeast Airline (21.939). And the least/minimum average delay is for Virgin America (13.119)

Design - I used a Bar Chart/graph for this visual as this chart type is very effective for comparisons across categories. I stuck with the default color scheme for this chart, as each bar was effectively illustrating the average . I didn’t feel any additional color or changes to the style were needed for this illustration. Also blue color will help people with colorblindness

Dashboard Insight

Link - [Dashboard Insight](#)

In dashboard, I added three worksheet. Those are “Cancellation of flight reason”, “Cancellation of flight by Month” and “Airline Average Delay”. I’ve added the filter to the “cancellation of flight reason” and “cancellation of flight by month” to sort the data for visualization in year 2015.

External Resource

[Walkthrough](#)

Tableau Tutorial

Tutorial 2