

Data Visualization Project

Topic: Flight Delays and Cancellations

This report gives the insight on dataset of 2015 flight delays and cancellations.

The Full **Story** link:

<https://public.tableau.com/profile/kasthuri.prabhulingam#!/vizhome/StoryonFlightDelaysandCancellation/StoryonFlightDelaysandCancellation>

The Final **Dashboards** link:

Cancellation Dashboard -

https://public.tableau.com/profile/kasthuri.prabhulingam#!/vizhome/FlightCancellationDashboard_1/FlightCancellationDashboard?publish=yes

Delay Dashboard -

https://public.tableau.com/profile/kasthuri.prabhulingam#!/vizhome/FlightDelayDashboard_2/FlightDelayDashboard

For both the Story and Dashboard Month Filter is added to sort the data in All visualization in a year 2015.

Insight I: Number of flights cancelled per Airport

- **Link:**
<https://public.tableau.com/profile/kasthuri.prabhulingam#!/vizhome/NumberofflightscancelledbyAirport/FlightCancellationbyAirport>
- **Summary:** The Bar graph visualization describes that the Chicago O'Hare International Airport had the highest number of Flight Cancellation which was 454, Dallas/Fort Worth Airport had the second highest count of cancellations which was 342 and so on.
- **Design:** I have chosen Bar graph (suitable for Categorical data vs Quantitative data) to visualize this Insight I, because the number of flights cancelled is Quantitative data where airport is categorical data. The graph in Blue to make sure color palettes should work for colorblindness.

Insight II: Average Arrival/Departure Delay per Airport

- **Link:**
<https://public.tableau.com/profile/kasthuri.prabhulingam#!/vizhome/AverageArrivalDepartureDelay/AverageArrivalDepartureDelay>
- **Summary:** The Side-by-side bar graph visualization illustrates that the Sawyer International airport had the highest Arrival and Departure Delay Average which was 83.42 & 89.9, Ithaca Tompkins Regional Airport had the second highest Arrival delay which was 52.0 and its departure delay was 24.0 and so on.
- **Design:** I have chosen Side-by-side bar to visualize this Insight II, because this graph is suitable for comparing two variables. The graph in Blue and Orange color to make sure color palettes should work for colorblindness.

Insight III: Cancellation Number by State

- **Link:**
<https://public.tableau.com/profile/kasthuri.prabhulingam#!/vizhome/FlightCancellationbyState4/FlightCancellationbyState4>
- **Summary:** The Map depicts that the Texas and Illinois states have the highest number of flight cancellations of 668 and 563 numbers respectively. The lowest amount of flight delayed number is 0 at Delaware state then Montana, and West Virginia states with 3 flights cancellation in the year 2015.
- **Design:** I have chosen Map to visualize this Insight III, because the geographical data like Country, State, City can be visualized effectively than other graphs. The Map in Blue shades highlights with darker the number of flight cancellation number increases; the blue color is the way to make sure color palettes should work for color blindness.

Insight IV: Flight Cancellation by Month

- **Link:**
<https://public.tableau.com/profile/kasthuri.prabhulingam#!/vizhome/FlightCancellationbyMonth/FlightCancellationbyMonth>
- **Summary:** The Line graph visualization illustrates that on the 2nd month that is February had the highest number of cancellations which was 1,058 and on the 9th month that is September it was 108 cancellations which is lowest compared to other months cancellations.

- **Design:** : I have chosen line graph to visualize this Insight IV, because this works best to view trend of data over the time(Continuous data). The graph in Blue to make sure color palettes should work for colorblindness also added one tooltip that is sum of diverted Airlines.

Resource: Udacity Data Visualization Classroom Content

References: N/A