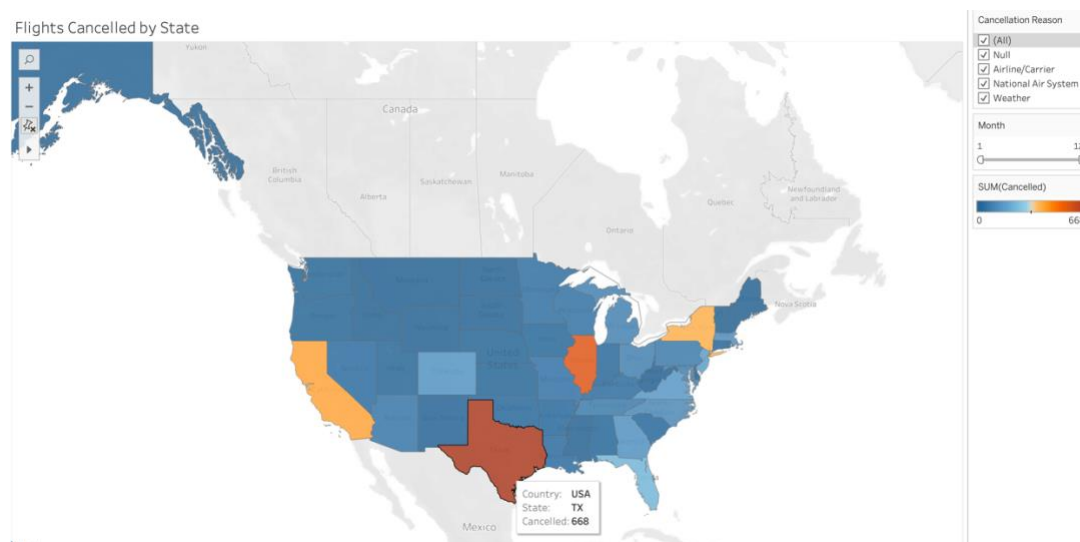# Data Dashboards on US Flight Delays and Cancellations in 2015

Insight 1: Total Number of Flights Cancelled by State

- **Link:**https://public.tableau.com/profile/shreya.reddy3426#!/vizhome/FlightsDelays_15913766218850/FlightsCancelledbyState

- **Summary:** This map visualization shows which state had the most cancelled flights in 2015. From the visualization we can see that Texas (668) colored in dark brown had the most flights cancelled followed by Illinois (563) in orange-brown color.
  States like Delaware, Virgin Islands had 0 flight cancellations and Montana had 3 flight cancellations which is shown in dark blue color.

- **Design:** The flight delay dataset is from Kaggle which contains 3 tables (flights, airports, airlines). I combined all the three tables using the inner join.
  I used the state dimension to get the map visualization and used Cancelled measures to get the number of flights cancelled by each state.
  I used two filters in the map to get more accurate information. I used a month filter, so that we can could check in which month there were more flight cancellations. I have also added the cancellation reason as a filter so that we could see which was the most reason that the flights got cancelled in each state. I also used the blue-orange color palette for people with colorblindness.
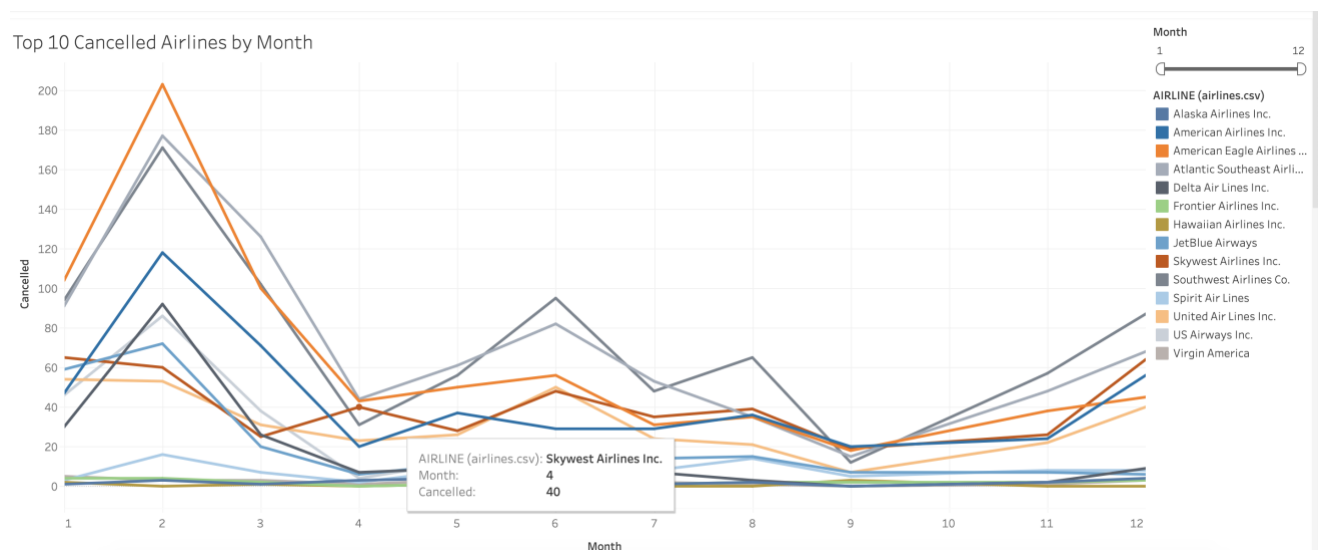
  For example: In the month of September (9), Illinois (94) has recorded the most cancelled flights due to weather conditions. But in January (1), Texas (422) recorded the most cancelled flights due to weather conditions.

Insight 2: Top 10 cancelled airlines by month

- **Link:**https://public.tableau.com/profile/shreya.reddy3426#!/vizhome/FlightsDelays_159 13766218850/Top10CancelledAirlinesbyMonth?publish=yes

- **Summary:** This line chart visualization shows us the top 10 airlines that were cancelled for every month. We can notice that in the month of January (1), Southwest Airlines (54) had the most cancelled flights shown in dark gray color. Spirit Air Lines (3) had the least cancelled flight which is shown in light blue color.
  The greatest number of cancelled flights were recorded in the month of February (2) from American Eagle Airlines (153).

  Design: I chose the line graph because it's easier to see a trend in the data. I have used filtered the line chart to display the top 10 airlines that were cancelled. I have also used the month filter so that as we change the month we can see which month had the most cancelled flights. I again assigned a blue-orange color palette for people with colorblindness.
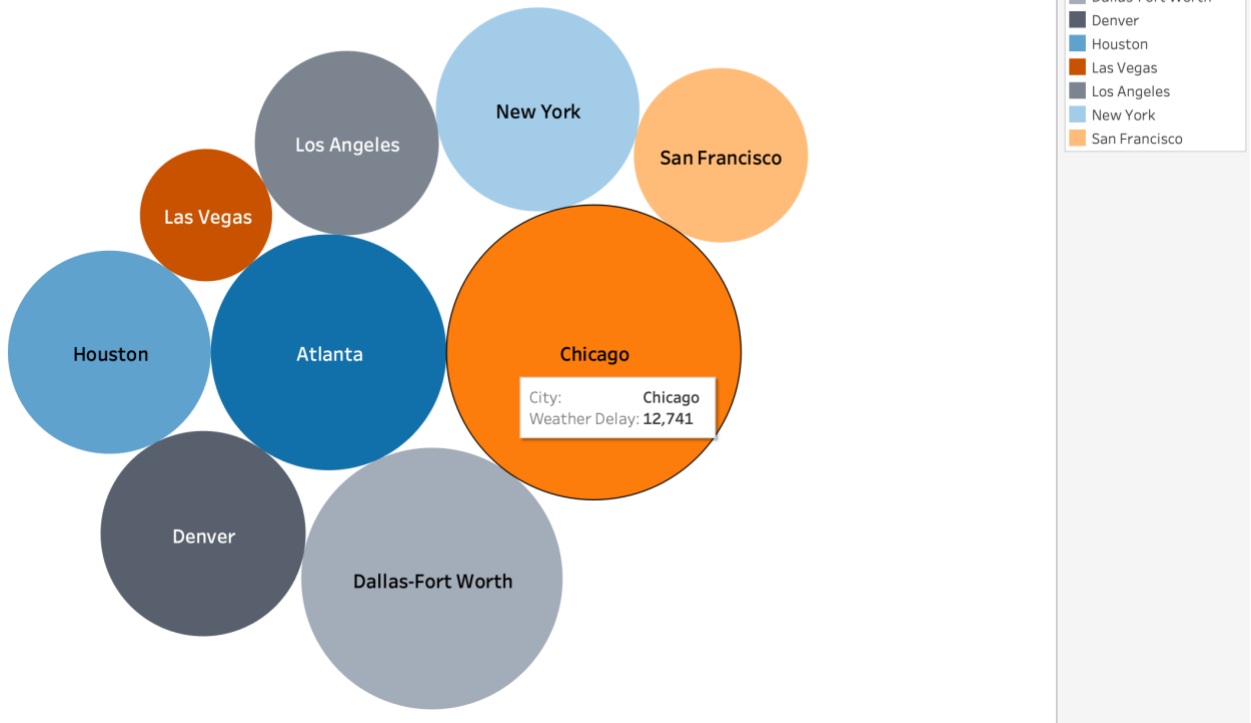

Insight 3: Top 10 cities in the US having the most Weather Delay

- **Link:**https://public.tableau.com/profile/shreya.reddy3426#!/vizhome/FlightsDelays_159 13766218850/Top10citiesintheUShavingthemostWeatherDelay?publish=yes

- **Summary:** This bubble chart visualization displays the cities that had the most cancelled flights due to weather conditions. The bigger the bubble means the city had the greatest number of cancelled flights due to weather conditions. For example, Chicago (12,741)

has a bigger bubble which implies more flights were cancelled from this city. And Las Vegas (2,566) has a smaller bubble with fewer cancellations.

Top 10 cities in the US having the most Weather Delay

- **Design:** I filtered the city so that it would display the top 10 which had the most cancellations. I have also used the colorblindness palette to make the visualizations appear better.

- **Resources:** https://www.youtube.com/watch?v=9xqHA732LMA

- **Link to dashboard:** https://public.tableau.com/profile/shreya.reddy3426#!/vizhome/FlightDelay-DashBoard/Dashboard1?publish=yes