

- **Summary:** in no more than 4 sentences, briefly introduce your data visualization and add any context that can help readers understand it

I will be using tableau to create visualizations on a dataset containing data on 11 airlines over 4 years. This dataset includes delay categories (weather, NAS, security, carrier, and late), cancelations, arrivals, dates, airport names, and carrier names. I found that total flight cancelations varied with the seasons. The design should help describe this.

- **Design:** explain any design choices you made including changes to the visualization after collecting feedback

#### **Slide 1:**

First, I started with a map of the continental United States and overlaid the airports from the data on to the map. The size of the point designates the amount of incoming flights and the color shading designates how many flights were canceled due to weather.

#### **Slide 2:**

This slide uses the same basic design but instead of using the total number of canceled flights due to weather it uses a ratio of weather cancelations per incoming flight. This leveled how each point was shaded so that small airports were more equally represented in comparison to large international airports. I also implemented a drop-down where you could change the month, so the user could see how the points change across the United States.

#### **Slide 3:**

This slide shows a line graph where x is time displayed in months and each line represents a major airport in each major region in the United States (Northeast, Southeast, Midwest, Southwest, Pacific). I also included a drop-down option where you can select different years.

- **Resources:** N/A
- **Feedback:**

#### **Slide 1:**

After the first review I updated the acronyms and short hand used in the data to make the labels and titles clear to any user that is unfamiliar with the data. This was implemented to Slide 2 and Slide 3 as well.

#### **Slide 2:**

After receiving feedback, I change the month drop down option to a sliding function for better usability. I also implemented seasonal groups. With this update, as you slide through the months it will also display what season it is (winter, spring, summer, and fall).

#### **Slide 3:**

After receiving feedback, again I changed the drop-down menu to a sliding bar for more intuitive use. I also used annotations to color/highlight the seasons on the graph. This helps the user recognize the variations as the seasons change.

*Additional update to slide 3:*

I have updated the colors to a more color blind friendly palette. I have also included borders along the annotated seasonal barriers, this was used to again aid color blind users.

- **Links:**

- **Version 1:**

- [https://public.tableau.com/profile/matthew.adkins#!/vizhome/Flight Weather V1/Sheet4?publish=yes](https://public.tableau.com/profile/matthew.adkins#!/vizhome/Flight_Weather_V1/Sheet4?publish=yes)

- **Final version:**

- [https://public.tableau.com/profile/matthew.adkins#!/vizhome/Flight Weather/Story1](https://public.tableau.com/profile/matthew.adkins#!/vizhome/Flight_Weather/Story1)