

Analysis of flights data set

First insight:

❖ **Link:**

[https://public.tableau.com/views/Desinationsanddelaytimethroughthemothsofyear/Dashboa rd1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link]

❖ **Summary:**

- Texas and California have the most delay time in total.
- June has the most delay time in total compared to all other months, and September has the least.

❖ **Design:** we used a map of destination states to show the difference in total delay time among states, and this figure is more suitable to give more information about different states, also the colors used are the grades of blue to be more comfortable to audiences specially those who suffer from colorblindness. A line chart is used to give change in delay among months.

❖ **Resources:** N/A

Second insight:

❖ **Link:** [https://public.tableau.com/views/arrivaldelayofairlines/Sheet2?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link]

❖ **Summary:**

- Southwest Airlines Co is the airline having the most delay time in total compared to all other airlines.
- American Airlines Inc and Delta Airlines Inc come in the 2nd and 3rd stages.
- Virgin America airline has the least total delay time.

❖ **Design:** an ordered bar chart is used to give the relation between a categorical variable (airlines) and a numerical variable (total delay time) and this labeled bar chart is more suitable to give information about every airline.

❖ **Resources:** N/A

Third insight:

❖ **Link:**

[\[https://public.tableau.com/shared/3KQKQQ4TC?:display_count=n&:origin=viz_share_link\]](https://public.tableau.com/shared/3KQKQQ4TC?:display_count=n&:origin=viz_share_link)

❖ **Summary:**

- The same thing as the most delay time, Southwest Airline Co has the most number of canceled flights through the year. Atlantic Southeast Airlines come In the 2nd stage.
- Hawaiian Airline Inc has the least number of flight cancelation.
- For the total number of flights (canceled or not), the number of flights in the weekend days (Saturday and Sunday) is the least and the most number of cancelation is on Monday. However, for canceled flights the least number of cancelation is on Friday and the most is also on Monday.

❖ **Design:** an tree map area chart is used to show the airlines cancelation flights, this chart uses different areas colors to show which airlines have cancelations and the same as the map in the 1st insight blue grades are used to be more comfortable and readable. A line chart is used to show the total number of flights on week days, and a list is used to filter whether we want to show canceled or not canceled flights .

❖ **Resources:** N/A