

Introduction:

The following comprises four worksheets(insight 1-4), two dashboards and a story depicting delays experienced by travelers in the US for the year 2015 through their destination airports.

Insight 1: Delays per Airline

By hovering over the dashboard, I clicked on the bar chart labelled Delays per Airline. This showed the total number of delays experienced by travelers per airline for the year 2015. Total delays is a calculated field which comprises airline, arrival, departure, late aircraft, air system, security and weather delays.

When I first did this visualization, I attempted to use tooltips for each type of delay, but I used a calculated field after my findings showed that the data was easily analyzed and viewed using this format.

A bar chart was used to display the analysis since it was based on a set of data. In this chart I used blue to avoid distractions by using bright colors.

Southwest Airlines Co. had the largest total delays(1,546,569) and Hawaiian Airlines Inc. had the least number of delays(21,815).

The following is a link to the visualization:

https://public.tableau.com/app/profile/herma.cornibert.francis/viz/Airlinedelaystory_16893491760370/DelaysperAirline?publish=yes

Insight 2: Causes of delays per Airline

By hovering over the dashboard, I clicked on the table labelled Causes of delays per Airline. This showed the different causes of delays experienced by travelers per airline for the year 2015.

A table was used to display a comparative analysis of the different causes of delays.

Southwest Airlines Co. had the largest departure delays(648,419) and Hawaiian Airlines Inc. had the least number of departure delays(589).

The following is a link to the visualization:

https://public.tableau.com/app/profile/herma.cornibert.francis/viz/Airlinedelaystory_16893491760370/CausesofdelaysperAirline?publish=yes

Insight 3: Departure delay per month

By hovering over the dashboard, I clicked on the line plot labelled Departure Delay per Airline. This showed the number of departure delays experienced by travelers per airline for the year 2015. The data can be viewed on a month-by-month basis.

When I first did this visualization, I used the airlines as a column. The data was easily viewed; however, it was not the best option for the display on the dashboard due to its size. I decided to use a filter to make the visualization more suitable for viewing.

A line plot was used to display data over time. In this graph I also used blue to avoid distractions by using bright colors.

The highest number of departure delays was in June (360,568) and the lowest in September (114,342).

The following is a link to the visualization:

https://public.tableau.com/app/profile/herma.cornibert.francis/viz/Airlinedelaystory_16893491760370/Departuredelaypermonth?publish=yes

Insight 4: Total delay per State

By hovering over the dashboard, I clicked on the map labelled Total delay per State. This showed the total number of delays and departure delays per State for the year 2015.

When I first did this visualization, I attempted to filter by both month and airline. However, filtering by only the airline was more suitable for the analysis of this visualization. I also included the departure delay as a tooltip.

A map was used to understand the trends and patterns in the data source. In this map I also used blue to avoid distractions by using bright colors. The darker color signifies higher departure delays and the lighter colors are lower.

California had the highest number of total delays (886,502) and Texas the second highest (859,998).

The following is a link to the visualization:

https://public.tableau.com/app/profile/herma.cornibert.francis/viz/Airlinedelaystory_16893491760370/TotaldelayperState?publish=yes

Dashboard:

This dashboard is a combination of the visualizations from the insights above.

The following are links to the visualization:

https://public.tableau.com/app/profile/herma.cornibert.francis/viz/Airlinedelaystory_16893491760370/Airlinedelaydashboard?publish=yes

https://public.tableau.com/app/profile/herma.cornibert.francis/viz/Airlinedelaystory_16893491760370/AirlinedelayDashboard2?publish=yes

Story:

This story gives a summary of the findings of these analyses. Travelers experienced significant delays when flying with specific airlines. This was largely due to departure delays. Overall travelers will continue to experience delays irrespective of their location, destination airport or airline used.

The following is a link to the visualization:

https://public.tableau.com/app/profile/herma.cornibert.francis/viz/Airlinedelaystory_16893491760370/Airlinedelaystory?publish=yes