Insight 1:

https://public.tableau.com/views/CancelledflightsDashboard_USflights_2015/CancelledflightsDashboard?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Design and summary:

My question is to find out which state has the most cancelled flights and for what reason.

I created an interactive dashboard for this.

I added latitude, longitude in rows and columns appropriately. Then added the cancelled sum to the colour in Marks tab. Then added Month as filter. Before that I changed the Month data type from Number to String and created aliases for numbers such that 1-Jan 2-feb and so on till 12-Dec. This filter allows us to view the number of cancelled flights per month.

Then, I added cancellation reason in rows. I also renamed the Aliases such that A – Airline, B-Weather, C-Air system.

I created another horizontal bar chart that shows the cancellation reasons count. Depending on how you filter out these state-wise as well as month-wise, both the map as well as the horizontal bar changes accordingly.

From this, of all months and all states, I can conclude that the state with the most cancelled flights is Texas with a total of 668 of which 422 is due to Weather and 202 is due to airline and 44 due to air system.

Insight 2:

https://public.tableau.com/views/Averagedepartureстatus_USflights_2015/Departurestatus?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Design and summary:

My question is to find the average departure status (on time or delayed) of the flights from the origin airport.

To find this, I looked up at the Departure Delay field. I created a new calculated field called ‘Departure status’ with the following calculation

if AVG ([Departure Delay]) <=0 then 'On time'

else 'Delay'

End

I added airport and departure status as a filter. I also added Average Departure delay to the tooltip in the Marks tab.

From the data, I can conclude that only around 37 airports have the average departure status of ‘on time’. Most of the airports has the average departure status as ‘Delay’.

Insight 3:

https://public.tableau.com/views/Mostbusiestairport_USflights_2015/Busiestairport?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Design and summary:

My question is to find the busiest airport based on the total number of flights that took off from each airport.

I added origin airport as rows and count of flights as columns and designed it as a circle chart type. I also created a group with the first 10 airports as the Top 10 busiest airport and added a filter for the same.

I also added state in the tooltip so that we know the state where the airport is located as well.

From the visual, I can conclude that the airport with the greatest number of flights (count - 18,056) is from ATL (Hartsfield-Jackson Atlanta International Airport) airport. The least being MVY (Martha's Vineyard Airport) with a count of 2 flights. From the tooltip, we can say that the state with the greatest number of flights is GA.

Resources: N/A