Insight 1

https://public.tableau.com/authoring/AhmedSamir/AirportAvg_ArrivalDelay#1

From this view, we can see the average time delay for each airport in the year 2015 in descending order. The maximum average arrival delay was in Sawyer International airport with 83 minutes average delay, while the Northeast Florida region airport has an early average of 16 minutes before the flight's estimated arrival time.

The most design straight and give the direct message of the arrival delays per airport is the bar chart, as there are only two variables. I added a color mark with the average time delay to distinguish between the positive and negative delays. Negative delays here mean arriving before the estimated arrival time.

Insight 2

https://public.tableau.com/authoring/AhmedSamir/AirlineAvg_Delays#1

In terms of Airline arrival-Departure time delays, Spirit Airlines had the max average delay time in 2015 with almost 5400 flights (not too many flights in 2015), while Delta Airlines had just half-minute arrival time delays with its 41500 flights in 2015. Alaska and Hawaiian Airlines both have low delay times with a small share in the whole flight market in the USA in 2015.

Here I used the scatter plot chart with a count of airlines as a third variable in a size mark to determine the airline's flight market share, and the relationship between average delay arrival and departure times on each axis to denote the performance of each airline company in 2015.

Insight 3

https://public.tableau.com/authoring/AhmedSamir/Dashboard1#1

From that dashboard, a map with each state colored in terms of destination airport of the flights in our dataset, Shows that the most states flights went to in 2015 were Texas and California.

We can select any of the states on the map to show their airport's average delay arrival times and each Airline company's performance in terms of average time delays and its number of flights.

We can use the month filter to see in-depth each month in 2015 airports and airlines' average arrival time delays in a selected state.

The design here is shown as a map of the states linked to and used as a filter for both other sheets, to see the state-specific airline and airport delays.

Resources:

Udacity Lessons.

Data Viz Project Walkthrough DAF Final Josh's Video.