

Insight 1

Links: https://public.tableau.com/views/flights_16602409658170/Dashboard2?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Summary: Percentage of delayed arriving flights or cancelled flights to the total number of flights that are mainly caused by the airline that the cause of the cancellation or delay was due to circumstances within the airline's control (e.g. maintenance or crew problems, aircraft cleaning, baggage loading, fueling, etc.).

Hawaiian Airlines (HA) is maybe the worst as it has made 3,565 flights with 34.8% has been delayed, while Delta Airlines is maybe the best as it has made 41,516 flights with only 14.8 % of them has been delayed.

Resources: <https://www.bts.gov/topics/airlines-and-airports/understanding-reporting-causes-flight-delays-and-cancellations#:~:text=Delays%20or%20cancellations%20coded%20%22NAS,of%20total%20delays%20in%202020.>

Insight 2

Links: https://public.tableau.com/views/flights_16602409658170/Sheet3?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Summary: The median time duration elapsed between wheels-on and gate arrival at the destination airport (taxi in) plus the time duration elapsed between departure from the origin airport gate and wheels off (taxi out) by each airport at each month.

I chose the median as a measure of central tendency because the data is skewed.

This visualization shows how much time each airport is responsible for what could be delayed flights.

Resources: N/A

Insight 3

Links: https://public.tableau.com/views/flights_16602409658170/Sheet7?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Summary: From last of January to March is the least active period while from June to August is the most active period. There was a huge drop on November 26 because it was Thanksgiving holiday.

Resources: <https://www.onthisday.com/date/2015/november/26>

Insight 4

Links: https://public.tableau.com/views/flights_16602409658170/Dashboard1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Summary:

Cancellations:

98.11% of flights arrived safely and less than 2% were diverted or cancelled, most of the cancellations (54.07%) were caused by weather.

Delays and its causes:

- **Airline Delay:** As it has been said they are the cancellations or delays that was due to circumstances within the airline's control (e.g. maintenance or crew problems, aircraft cleaning, baggage loading, fueling, etc.).
- **Weather Delay:** Significant meteorological conditions (actual or forecasted) that, in the judgment of the carrier, delays or prevents the operation of a flight such as tornado, blizzard or hurricane.
- **National Air System (Air System Delay):** Delays and cancellations attributable to the national aviation system that refer to a broad set of conditions, such as non-extreme weather conditions, airport operations, heavy traffic volume, and air traffic control.
- **Late-arriving aircraft:** A previous flight with same aircraft arrived late, causing the present flight to depart late.
- **Security:** Delays or cancellations caused by evacuation of a terminal or concourse, re-boarding of aircraft because of security breach, inoperative screening equipment and/or long lines in excess of 29 minutes at screening areas.

Resources:

<https://www.bts.gov/topics/airlines-and-airports/understanding-reporting-causes-flight-delays-and-cancellations#:~:text=Delays%20or%20cancellations%20coded%20%22NAS,of%20total%20delays%20in%202020.>