# Flight Delays and Cancellations

## Insight 1 – What causes the Cancellations?

[Link to the public Dashboard](https://public.tableau.com/views/FlightCancellations_15889582888310/Cancelations?:display_count=y&publish=yes&:origin=viz_share_link)

This dashboard gives us an overview of what are the factors surrounding the delays: day of the week, month of the year, airline. It also sees into the most common cancellation reasons.

* Weather is the most common reason why flights get cancelled, causing more than half of the cancellations. 2397 flights were cancelled because of the weather during the year 2015.
* Monday is the day of the week that more cancellation gets, having 630 cancelled flights due to weather reasons only. On the other hand, Friday is the day with the least amount of cancellations, having only 379 in total compared to the 1038 cancellations on Monday.
* February is the month with more cancellations (1058), followed by January with 605, in contrast with the total amount of flights, February is also the month with less flights along the year.
* American Eagle Airlines Inc. has the bigger amount of cancellations in average, a 5% percent of their flights got cancelled during 2015. This is quite high if we compare it with Atlantic Southeast Airlines, that has almost double the amount of flights (14.149 vs 27.172) but almost the same amount of cancellations (723 vs 800), resulting on a percentage of 2.94% cancellations of the total flights.

## Insight 2 – What causes the delays?

This dashboard consists of four worksheets that look at the flight cancellations from different perspectives: Destination, Month, and day of the week.

* Although Arrival delays are seen all over the world in the different destinations, the biggest sum of delays appear in Chicago, IL airport (111,111). It is important to note, that even though we can see delays in different countries around the world, the concentration is in the US because of the nature of the dataset we are analyzing.
* The average delays, both for departure and for arrival, have a similar distribution across the month, both averages peak on June (9.81 average arrival delay and 14.160 average departure delay) and have the lowest point in September.
* By looking at the delays across the days of the week, again can be seen that the behavior of the average delay is similar between the arrival and the departure values. Being Monday the day with the highest averages for both measures (6.578 Avg. Arrival Delay and 11.391 Avg. Departure delay)

## Insight 3

In the month of June, Spirit Airlines has the most average delay (Average Arrival Delay: 36.83 , Average Departure Delay: 37.39) of a total of 497 flights.

In the month June, American Eagle Airlines, has the most percentage of flights diverted (0.76% or 10 diverted flights)

In the month of June, Spirit Airlines, has the most percentage of flights cancelled (4.63% or 23 cancelled flights)