

# USA Carrier Performance in 2018

## Links to Tableau Story

- story\_v1: <https://public.tableau.com/profile/taghreed.fayez#!/vizhome/CarrierOn-TimePerformance2018/Story1>
- story\_final: <https://public.tableau.com/profile/taghreed.fayez#!/vizhome/CarrierOn-TimePerformance2018/Storyfinal>

## Summary

### USA Carrier Performance in 2018

- 79.38% of flights arrive on time while 18.75% of flights have Delay Cases.
- July & August have the highest number of flights and August shows the highest arrival delay about 17min in average.
- Late Aircraft Delay & Carrier Delay have the most affect on delayed flights, which are above 15min in average.
- Southwest Airlines Co. (WN), Delta Airlines Inc. (DL), American Airlines Inc. (AA) & Skywest Airlines Inc. (OO) have the highest flights density and the highest minutes delay.
- (WN) carrier has highest cancelled & diverted flights, followed by (AA, OO) carrier.
- 53.17% of cancelled flights are due to weather.

## Design

- Use line chart to view data over time (months in 2018) identifying overall trends & peaks.
- Use bar chart to view categorical data (carrier, types of delays).

### Changes after feedback:

- Start the y-axis at higher value (not zero) to view ups & downs more clearly.
- View cancelled & diverted flights by carrier side-by-side bars & use color to filter.
- Use scatter plot to view cancelled flights by distance.
- Add more description in story headers.

## Feedback

First panel,

Count of flights/ month: It's better to start the y-axis at higher value (not zero) to focus on the relative variations across different months.

Avg Array Delay/ month: You may highlight the maximum value with a different color (green or orange), also try to fit the plot (not necessarily starting with 0 at the y-axis) so that variation are clear to eye.

You may also include all names of months on the x-axis, try using abbreviation, and reorganize the dashboard so that every plot is clear.

General Reorganization of plots and focus of investigation will be good. For example, try split the investigation to groups of problem, investigate each group individually creating plots & discovering insights, then collect important plots of this group in one dashboard, so every panel in the story panel is one logical explanatory unit.

Include different types of filters.

your Tableau story is very clear and we can find insights easily

I can't find something you can update it but you can add more descriptions in the story headers

## Resources

- Understand different between delays time ([https://aspmhelp.faa.gov/index.php/Types\\_of\\_Delay](https://aspmhelp.faa.gov/index.php/Types_of_Delay) )
- Return to Tableau Help sometimes.

## Download data

([https://www.transtats.bts.gov/tables.asp?DB\\_ID=120&DB\\_Name=&DB\\_Short\\_Name=](https://www.transtats.bts.gov/tables.asp?DB_ID=120&DB_Name=&DB_Short_Name=) )

- choosing download for table name (Reporting Carrier On-Time Performance (1987-present)).
- pick the months & attributes needed.
- Carrier.csv file from (<http://stat-computing.org/dataexpo/2009/supplemental-data.html> )