

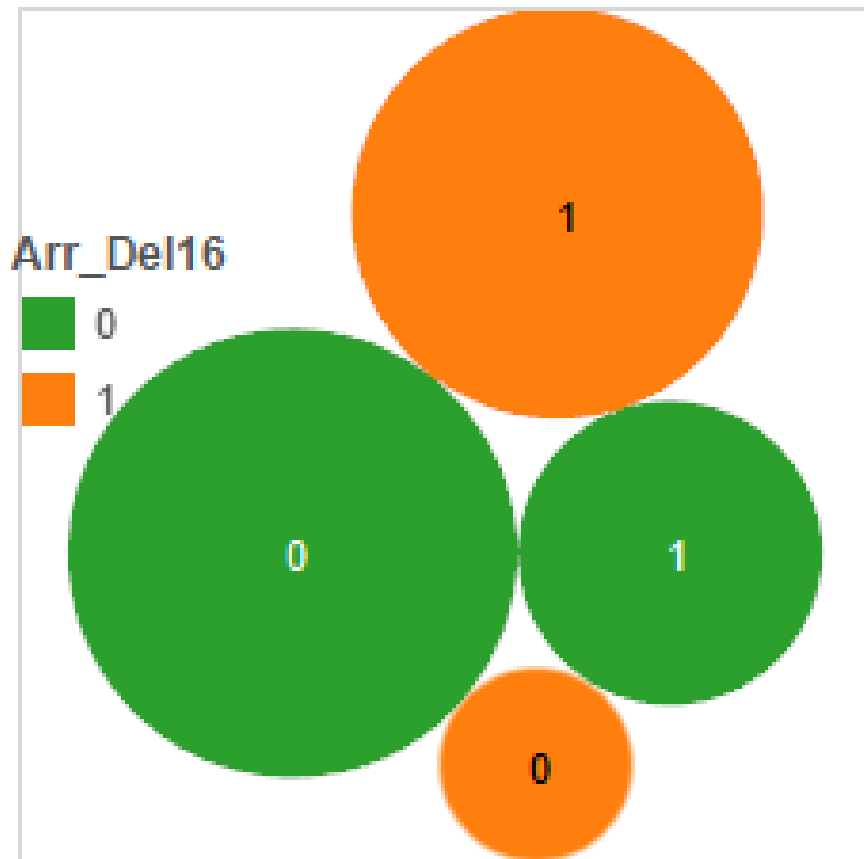
# On Time Performance Analysis of United Airlines

# Introduction

- Visualisations for depictions of patterns between metrics that help explain on-time performance.
- On-Time performance based on several factors like Arrival delay, departure delay, cancellation with respect to time and space.
- Data visualization practices to compare United Airline against the other airlines.

# Arrival Vs Departure Delay

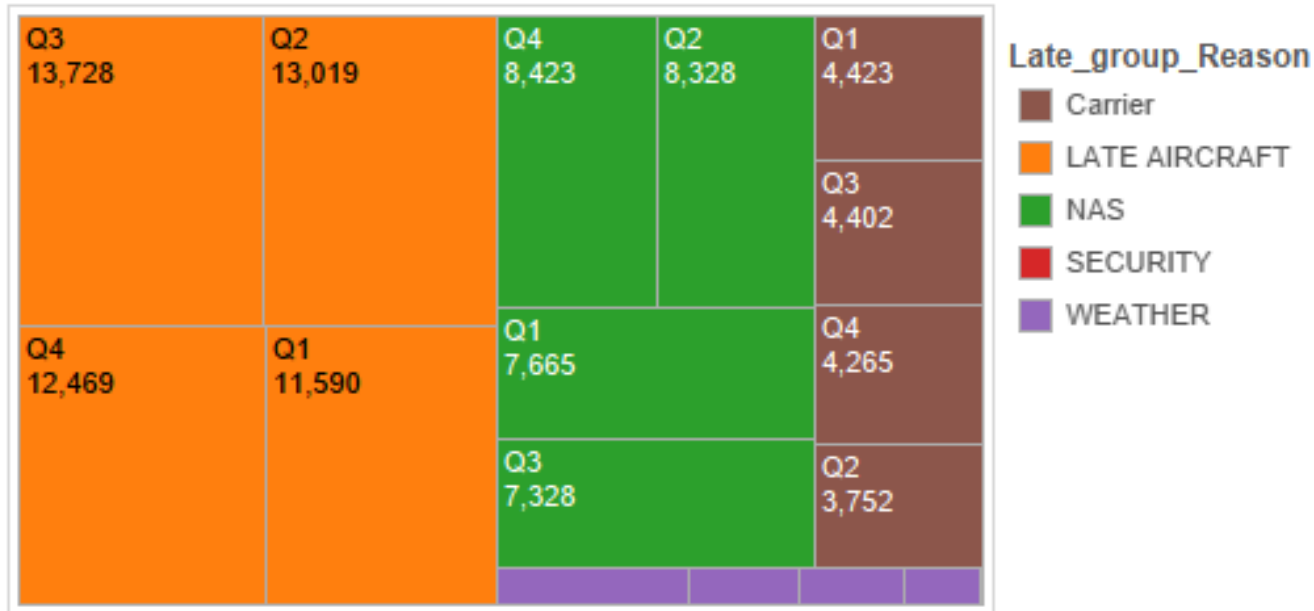
No. of UA flights with arrival  
and departure delay



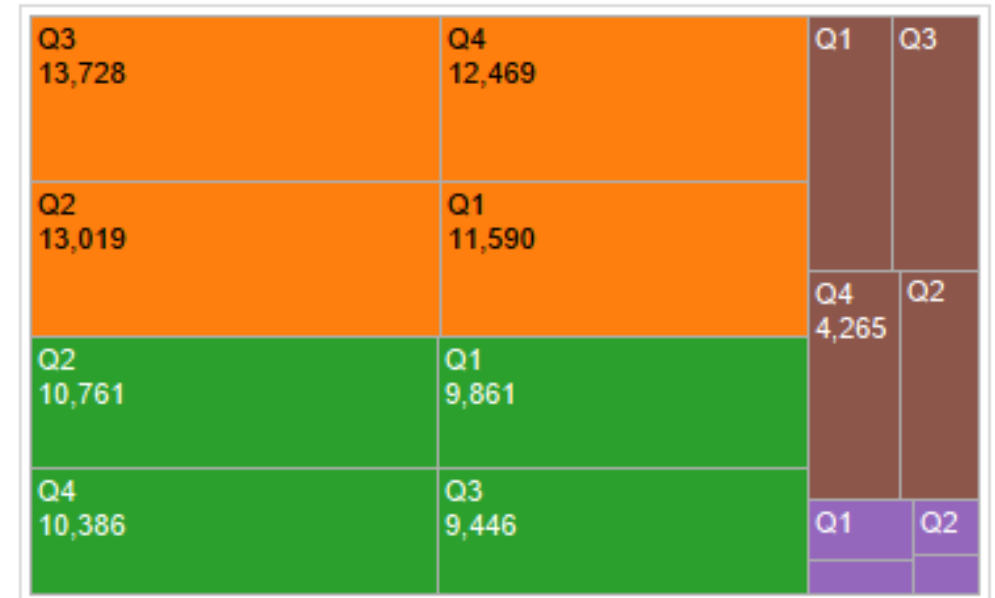
- Departure Delay – Label
- Arrival Delay – Colour
- Most of the flights have Arrival & Departure delay

# Departure and arrival delay with respect to causes during quarters

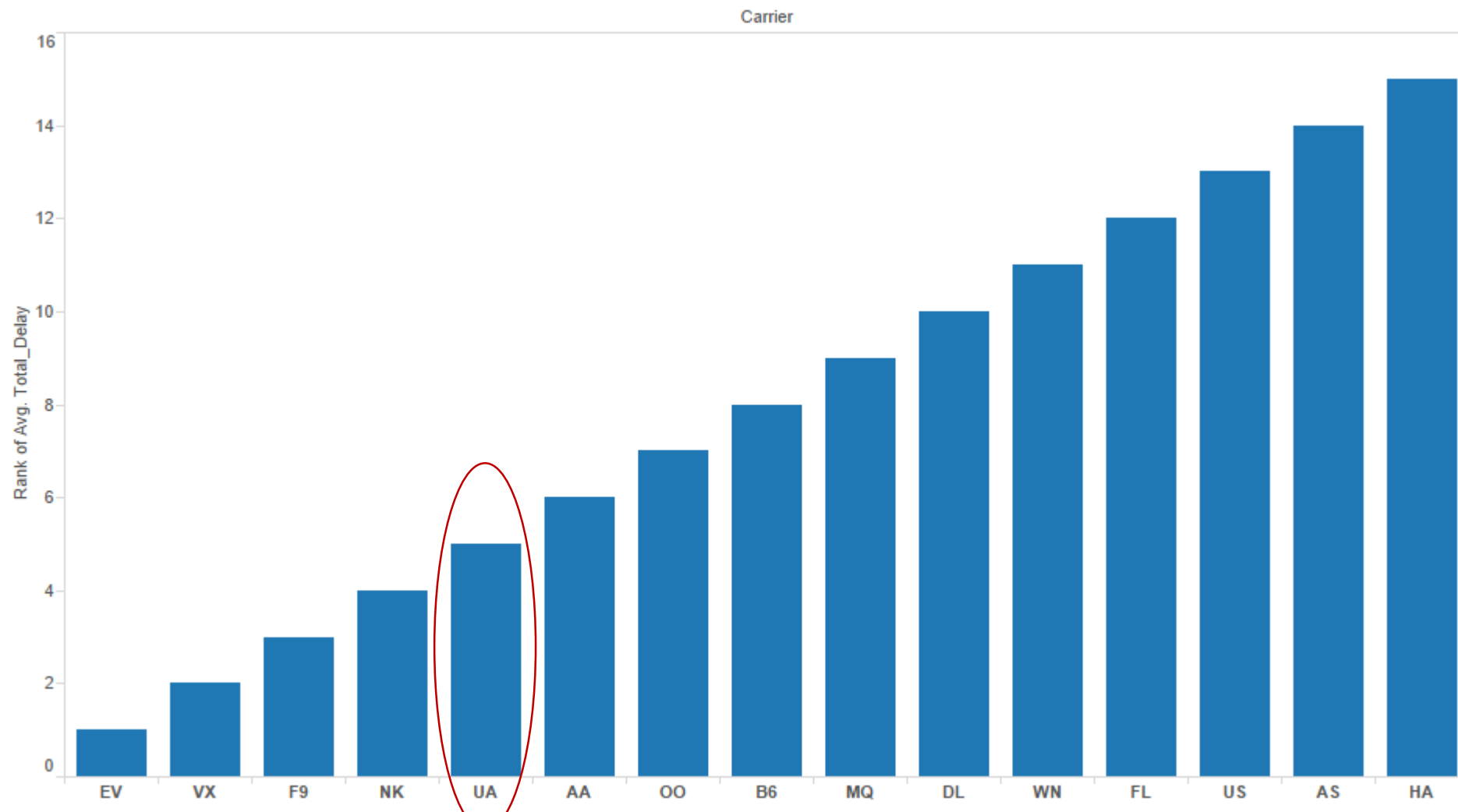
Departure Delay



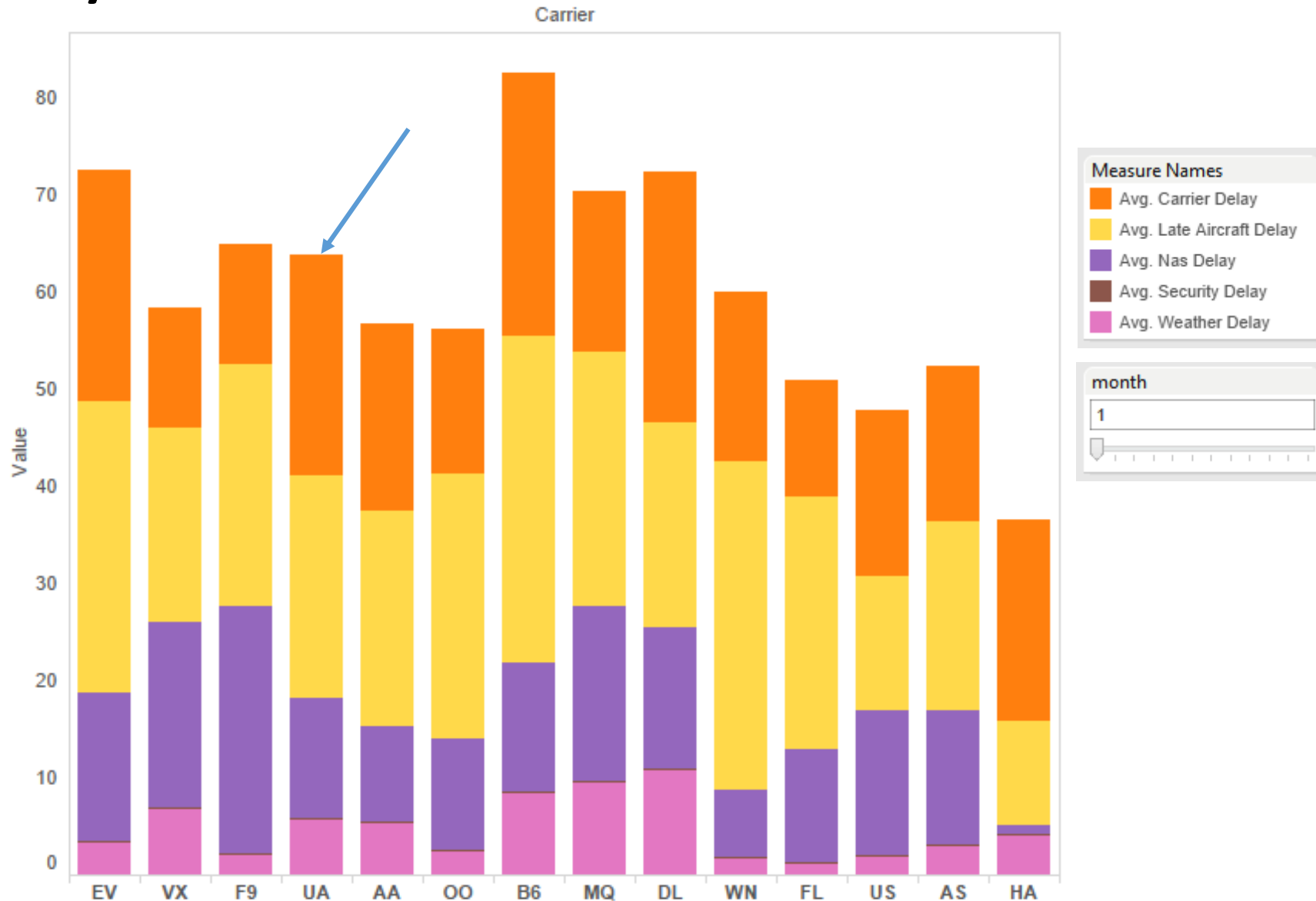
Arrival Delay



# Ranking based on Average Total Delay

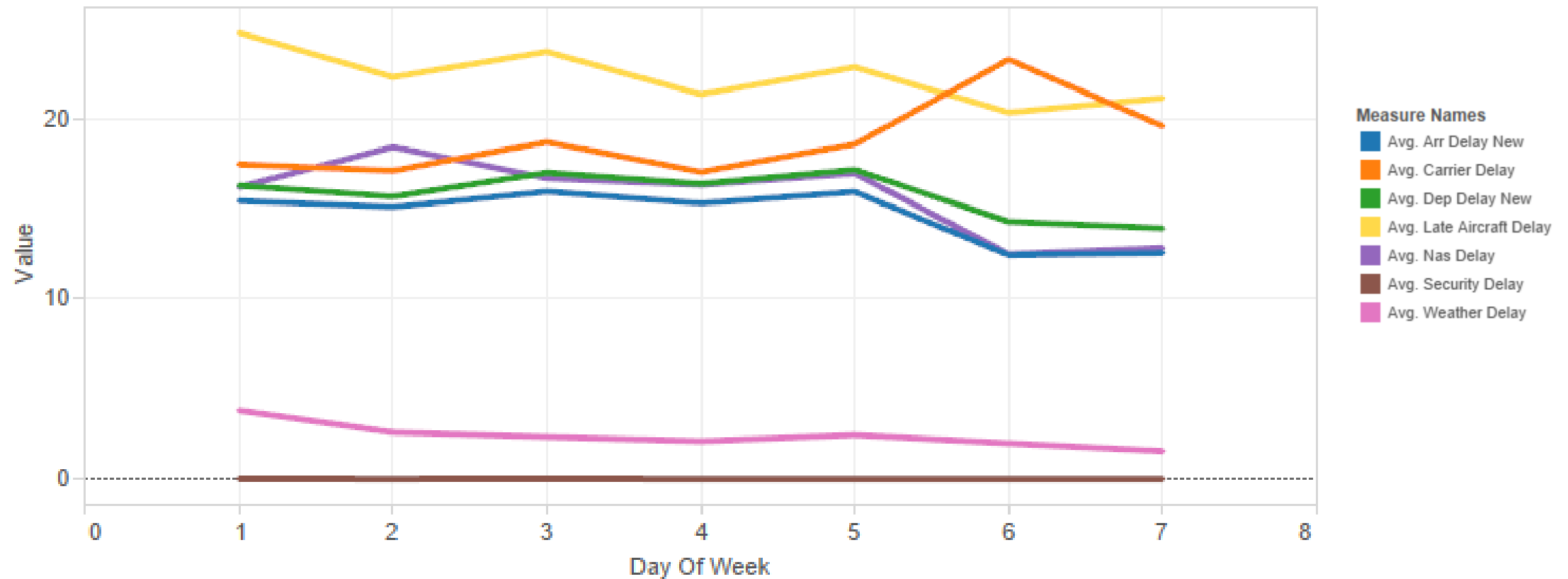


# Delay factors for all Airlines With Time



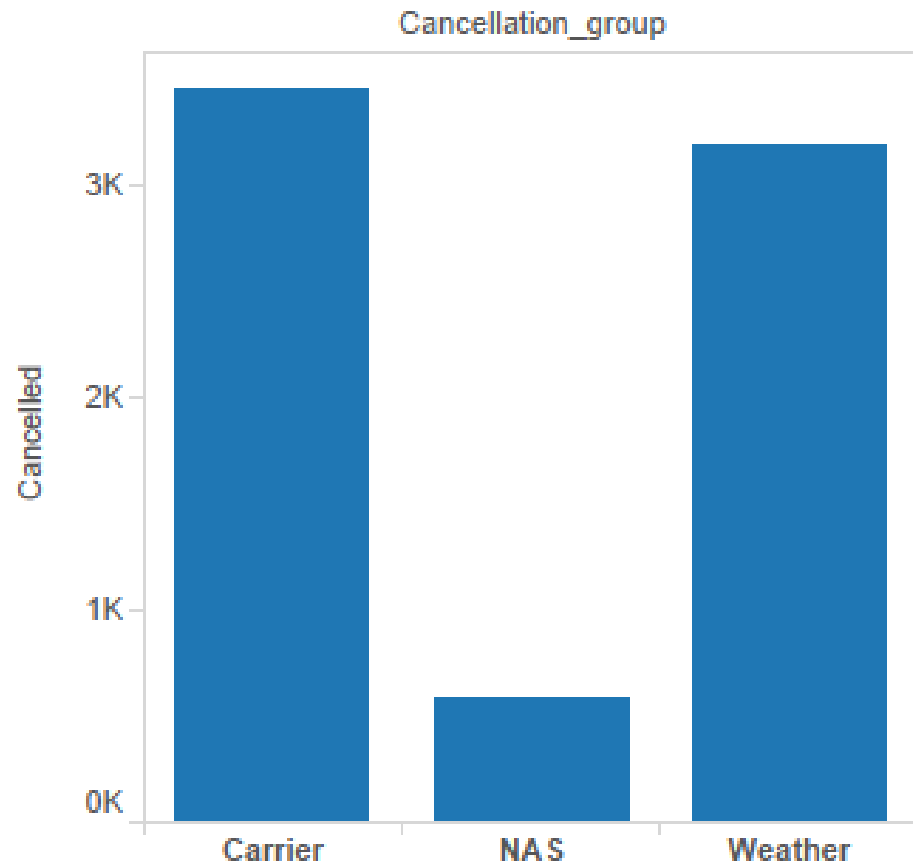
# The different delay caused during a week

All Delay\_DayOfWeek



# Cancellation Factors for UA

Cancellation Factors-UA

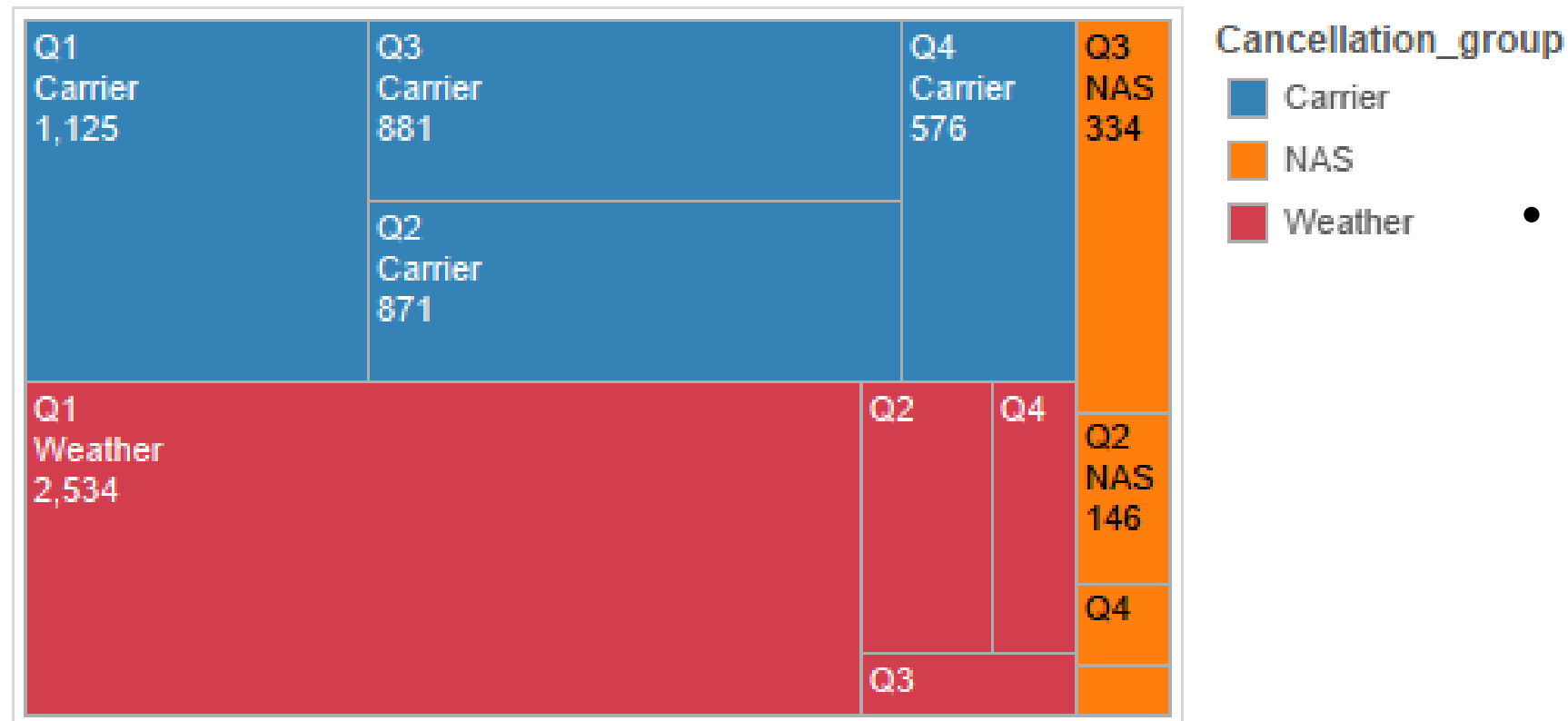


- “Carrier” Cancellations were high
- No “Security” cancellations



# Cancellation Factors during 4 quarters For UA

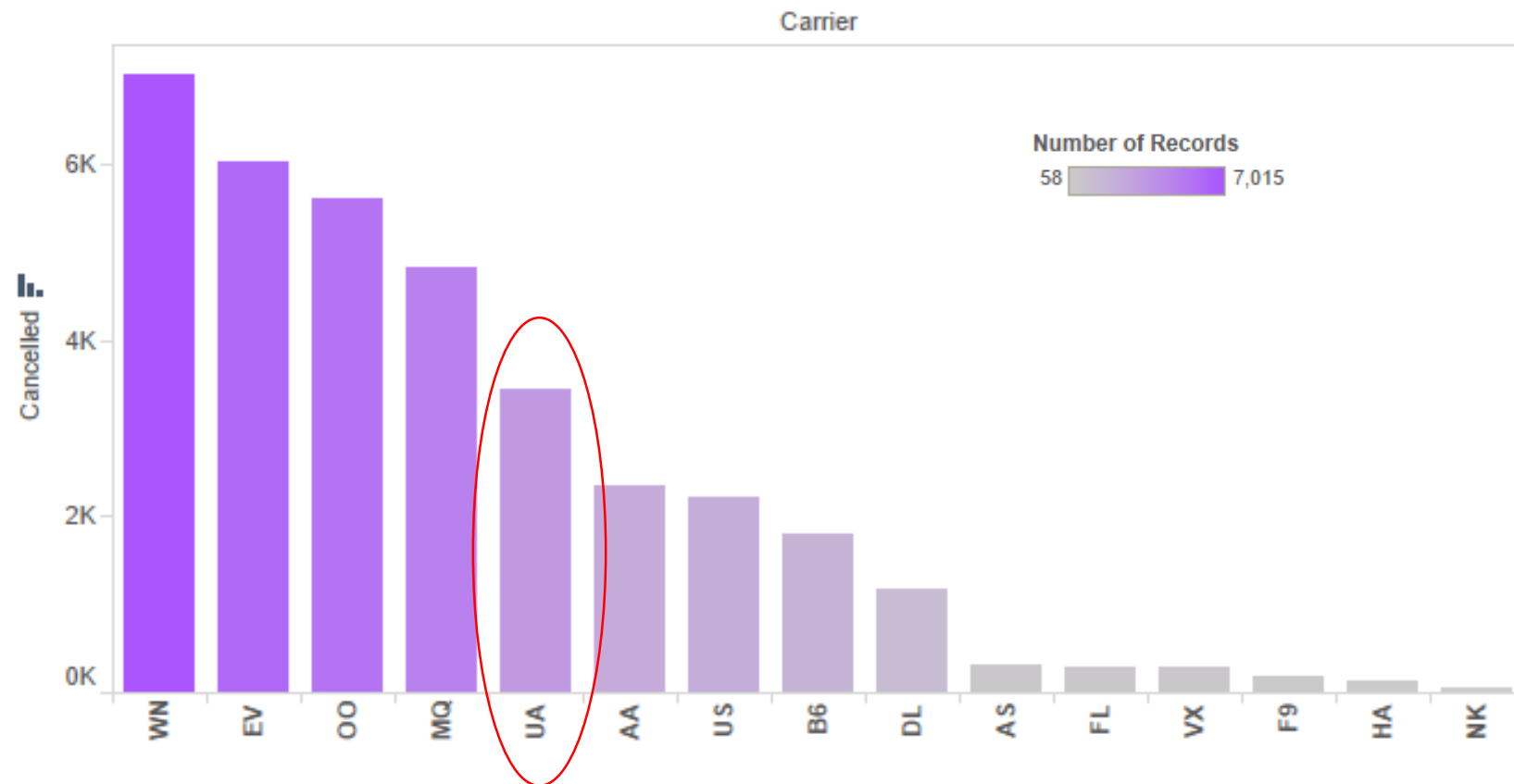
Cancellation\_UA\_Quart\_Factors



- “WEATHER” cancellations are high in the first quarter

# Cancellation Records for all airlines

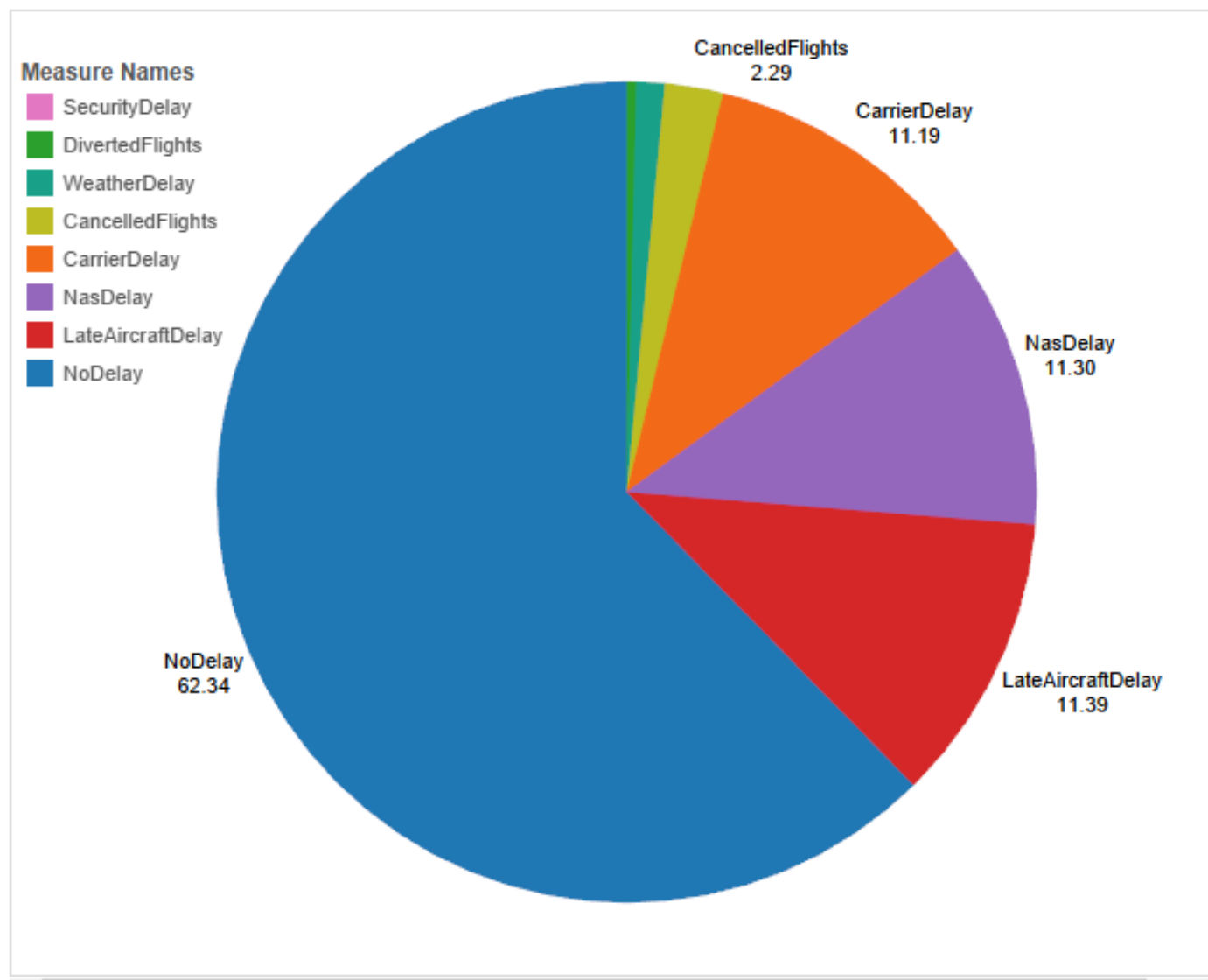
Cancellation\_comparison



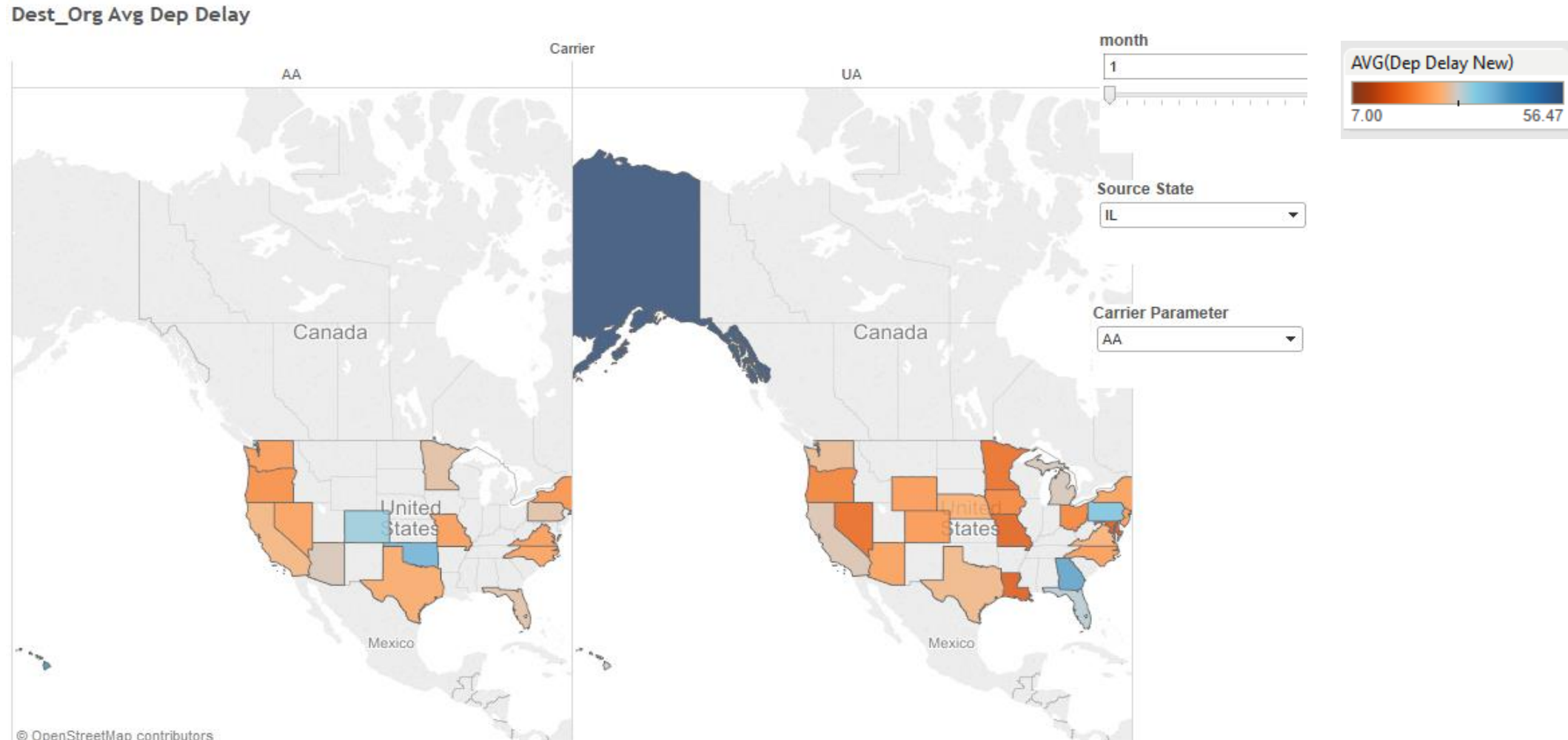
- UA stands 5<sup>th</sup> in comparison to other airlines

# On-time performance

On time performance\_UA

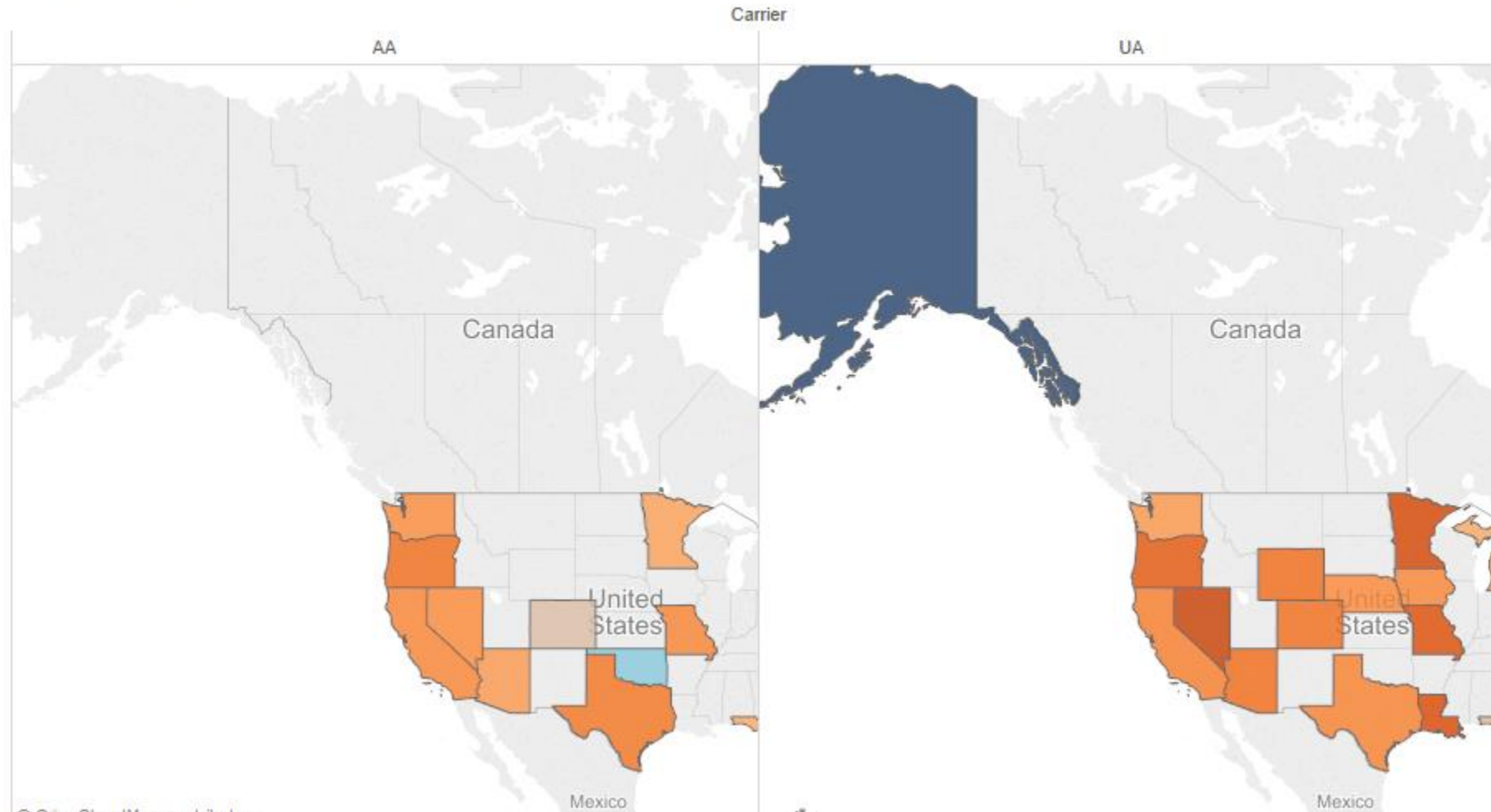


# Time & Space Incorporated with Departure Delay



# Time & Space Incorporated with Arrival Delay

Dest\_org\_avg\_arr\_delay



month

1

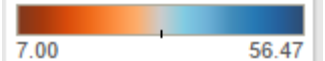
Source State

IL

Carrier Parameter

AA

AVG(Dep Delay New)



# Conclusions & Recommendations