

1.Cover	2.Comp Selection	3.Flight Indicator	4.Delay Reason-State	5.Delay time- City and Airport	6.Delay time- Day and Month	7.Airline Average Delay
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Frontier Airlines: On-Time Performance and Competitor Analysis

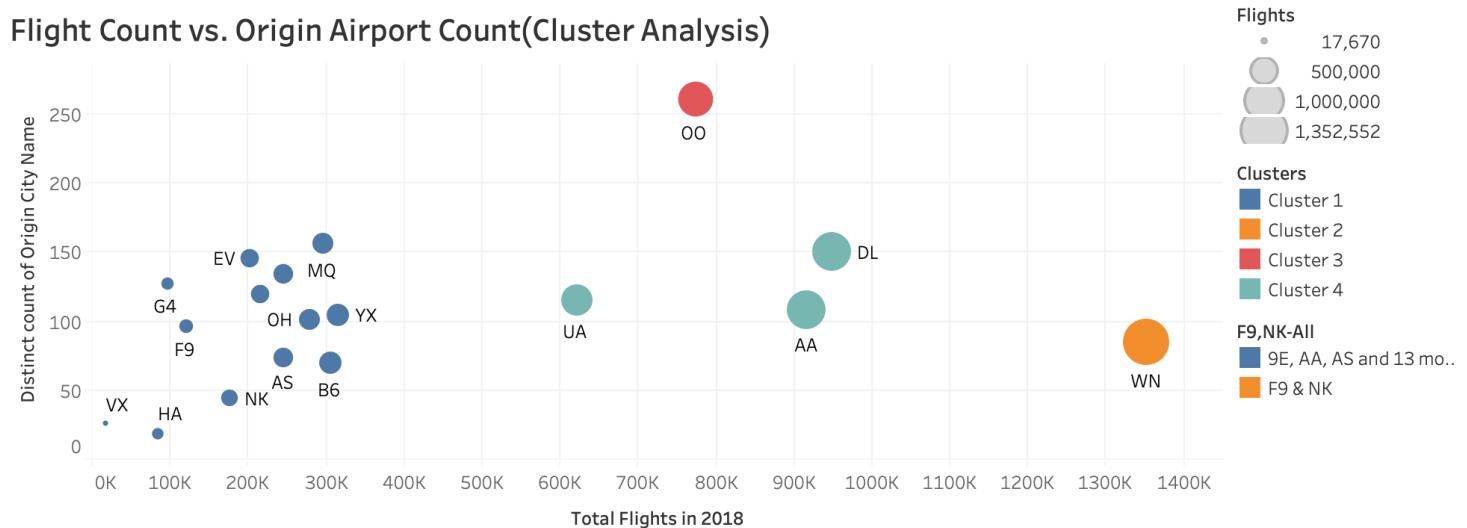
Group Member:Fan Wang| Courtney Vadnais| Gaofeng Zhu| Ritu Singhal| Anuja Harlalka



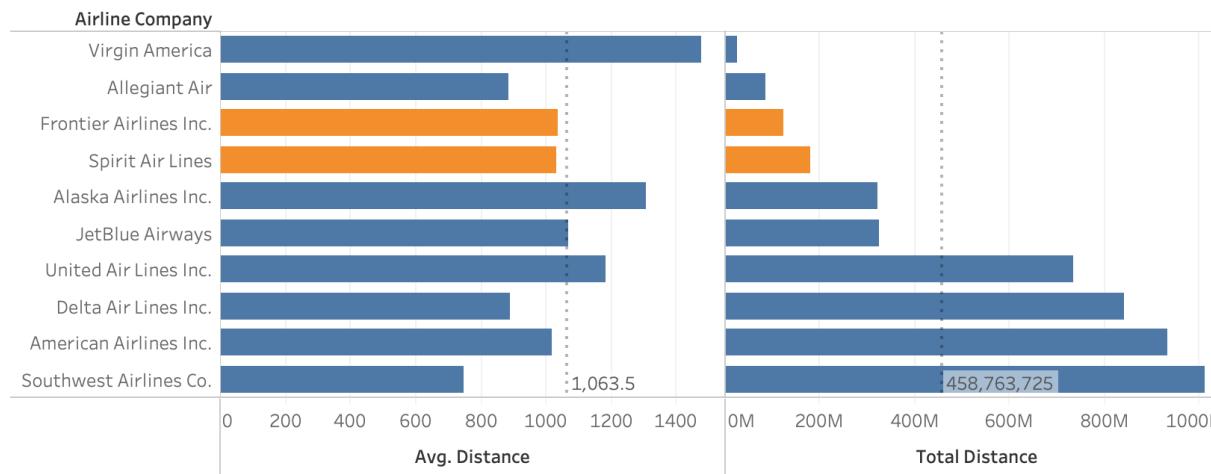
1.Cover	2.Comp Selection	3.Flight Indicator	4.Delay Reason-State	5.Delay time- City and Airport	6.Delay time- Day and Month	7.Airline Average Delay
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Competitor Selection

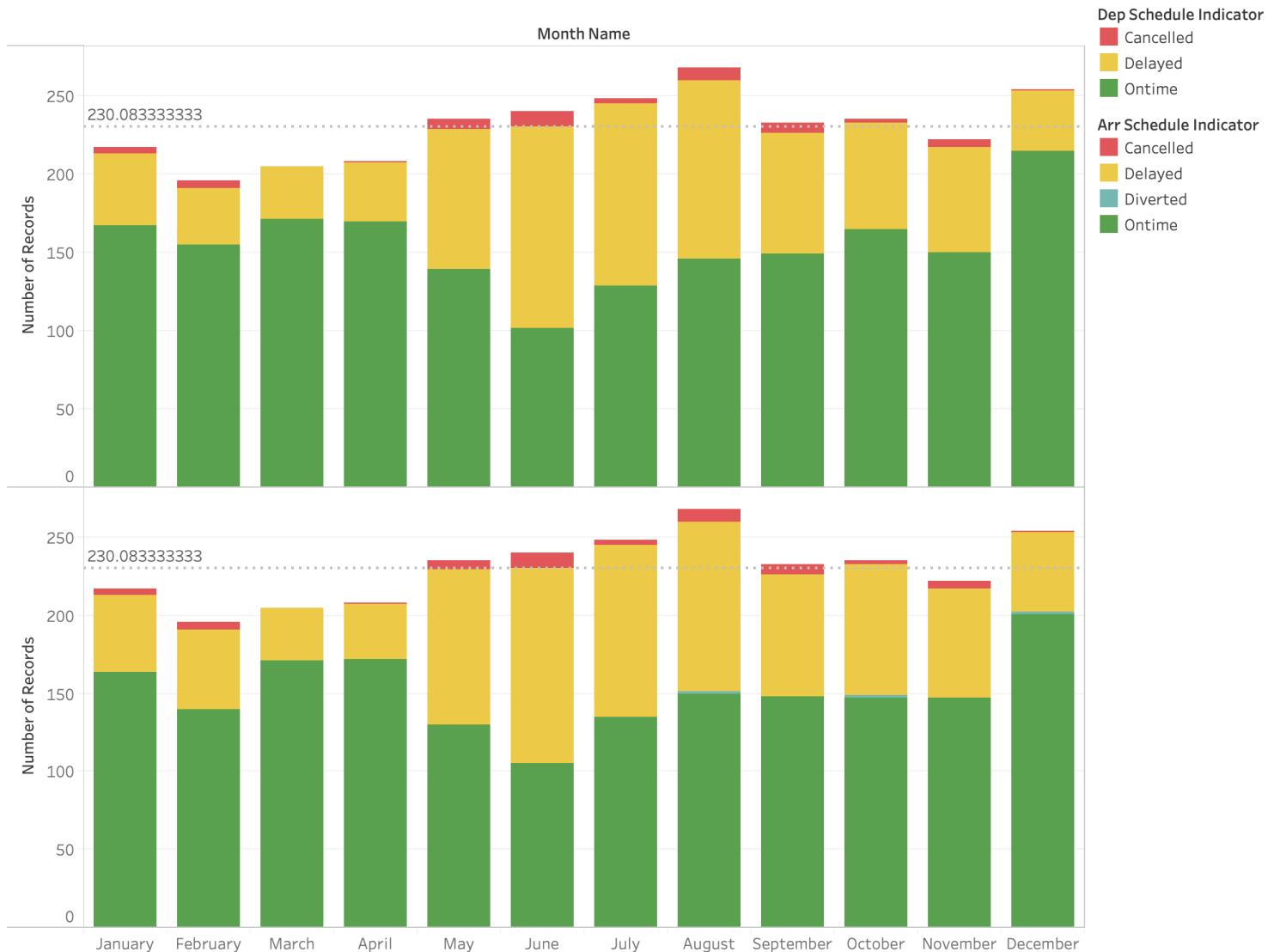
Flight Count vs. Origin Airport Count(Cluster Analysis)



Average Distance vs Total Distance(Top 10 by average)



1.Cover	2.Comp Selection	3.Flight Indicator	4.Delay Reason-State	5.Delay time- City and Airport	6.Delay time- Day and Month	7.Airline Average Delay
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1.Cover

2.Comp Selection

3.Flight Indicator

4.Delay Reason-State

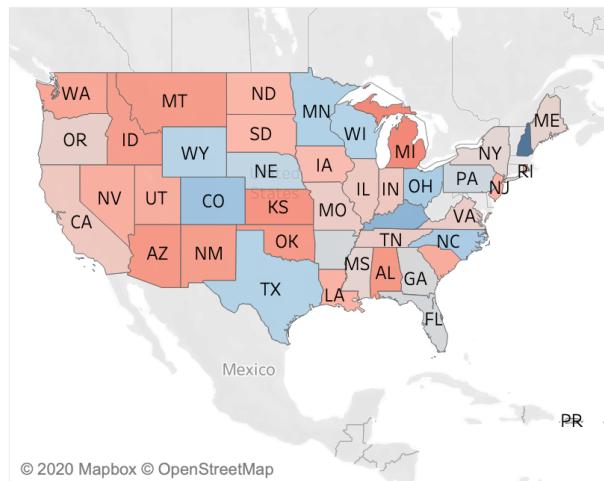
5.Delay time- City and Airport

6.Delay time- Day and Month

7.Airline Average Delay

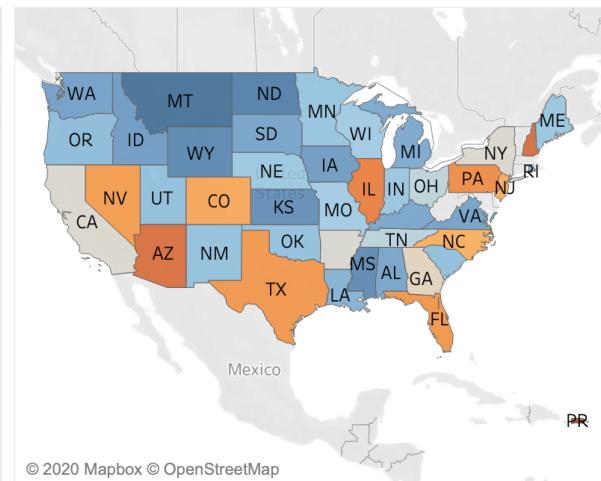
Delay Reason Comparison by State

Late Aircraft Delay



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Carrier Delay



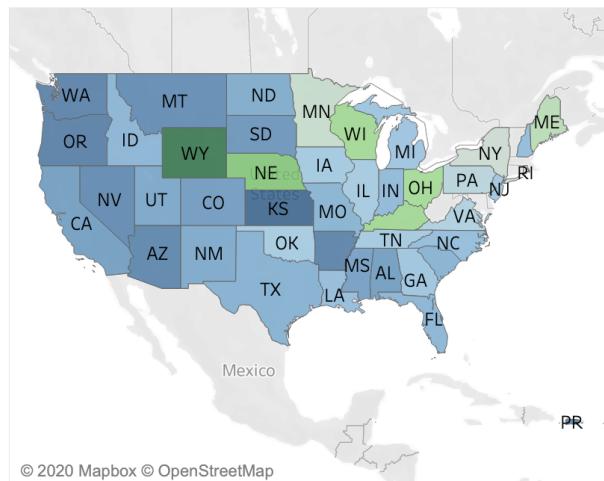
Avg. Late Aircraft Delay
0.00 56.07

Avg. Carrier Delay
2.30 32.70

Avg. Nas Delay
6.82 27.76

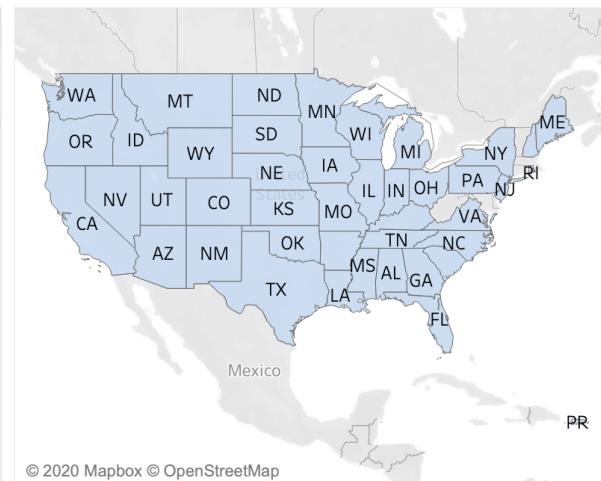
Avg. Security Delay
0

NAS Delay



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Security Delay

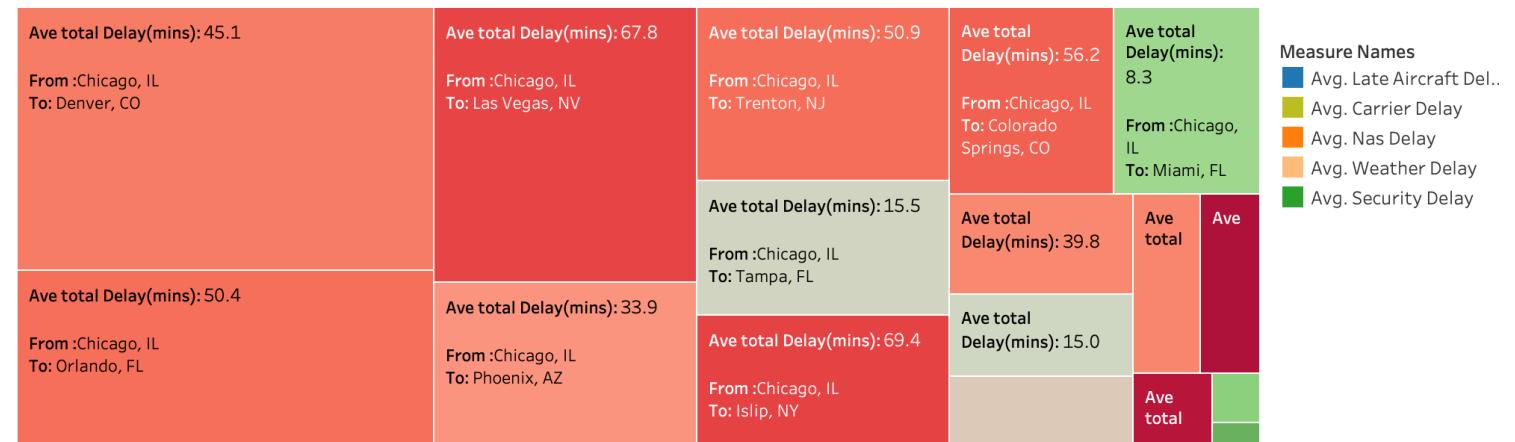


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2.Comp Selection	3.Flight Indicator	4.Delay Reason-State	5.Delay time- City and Airport	6.Delay time- Day and Month	7.Airline Average Delay	8.Delay Trend Compare
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Delay time by City and Airport

Analysing Departure and Arrival Delays by Routes



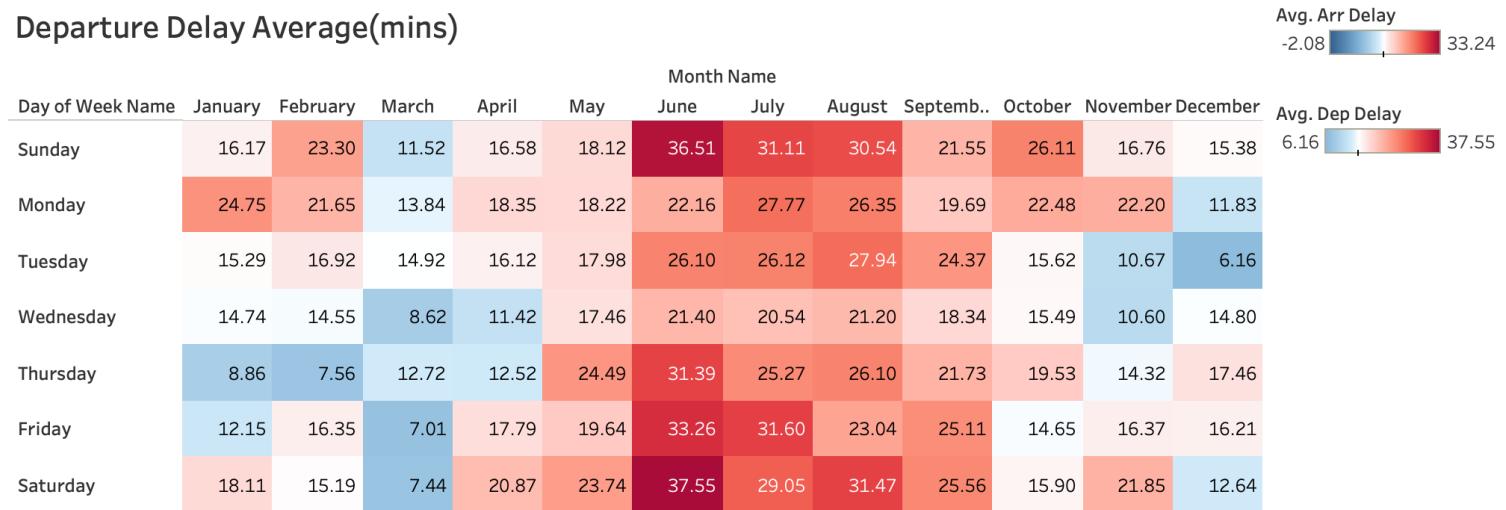
Arrival Delay Reasons For Top 5 Busiest Airport



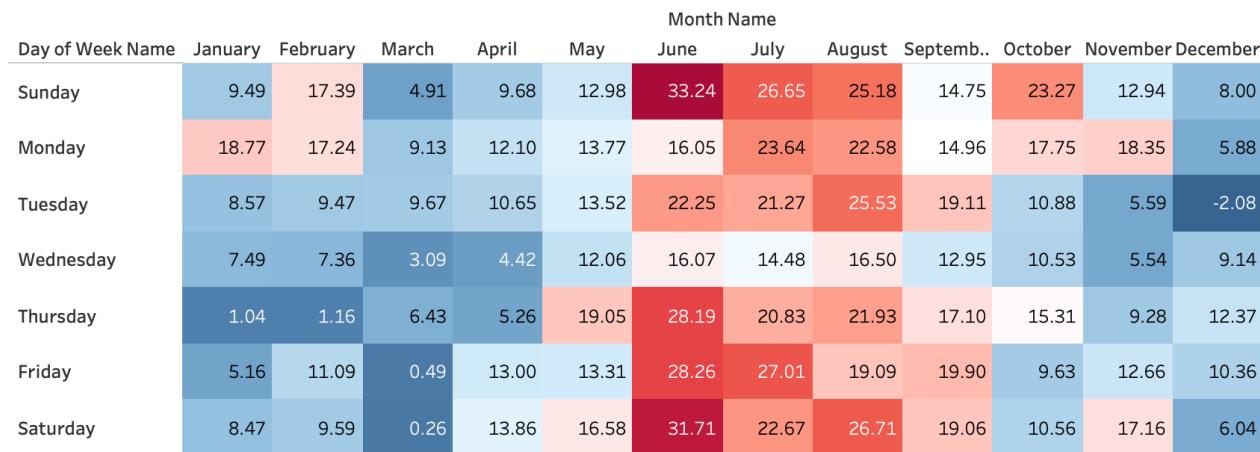
3.Flight Indicator	4.Delay Reason-State	5.Delay time- City and Airport	6.Delay time- Day and Month	7.Airline Average Delay	8.Delay Trend Compare	9.Cancel Flights Compare
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Delay time HeatMap

Departure Delay Average(mins)

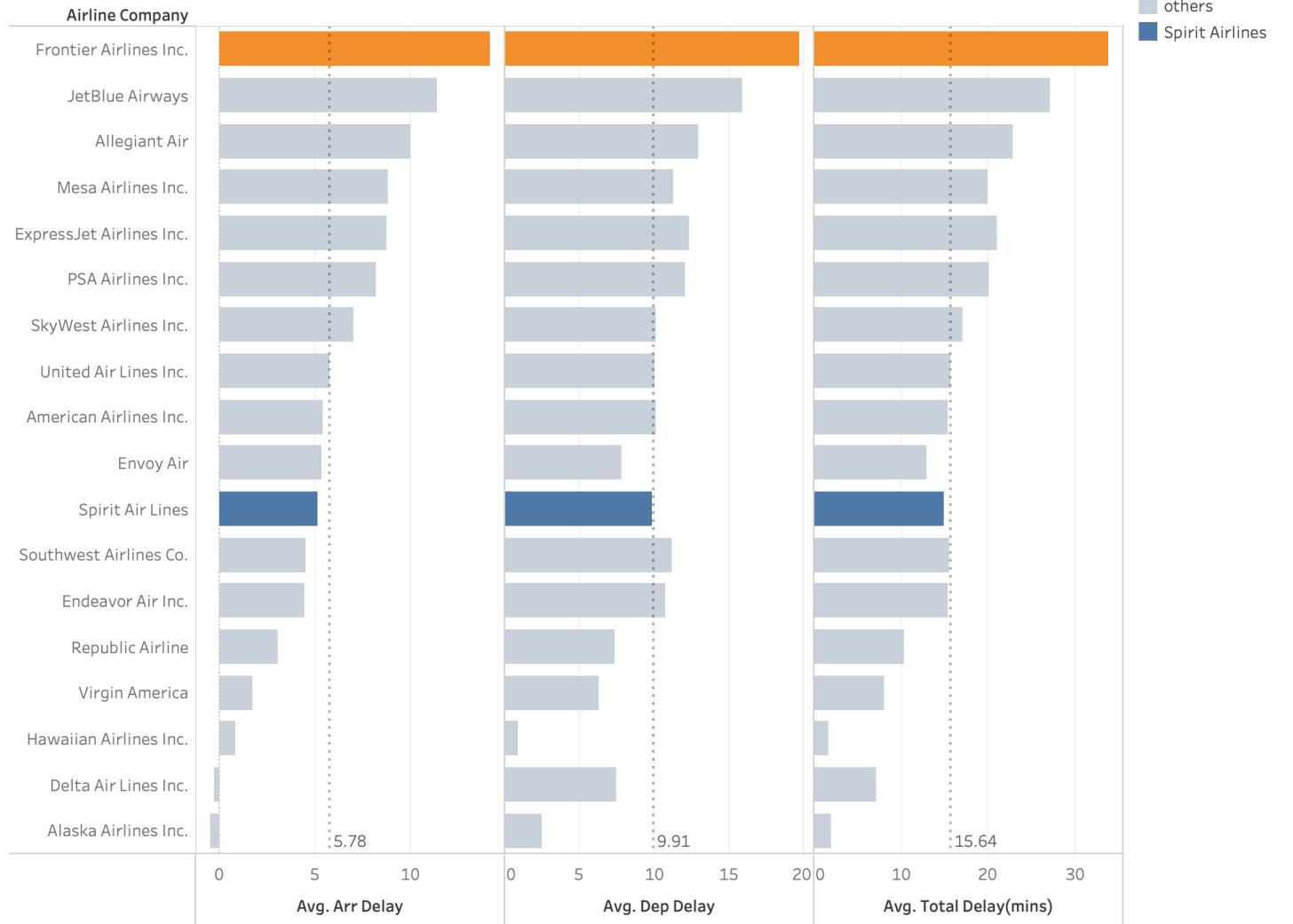


Arrival Delay Average(mins)



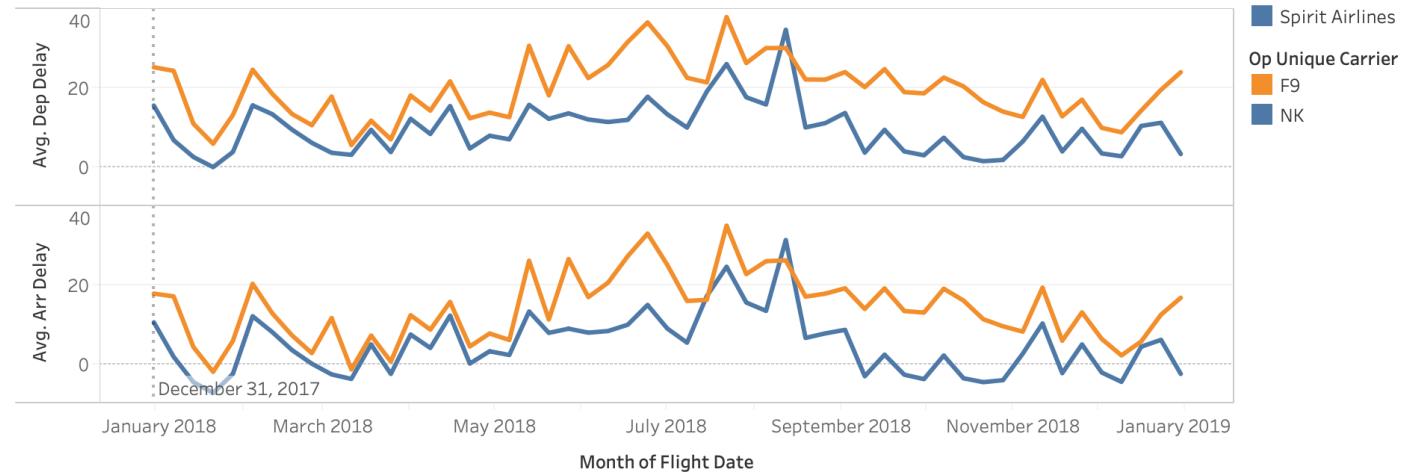
4.Delay Reason-State	5.Delay time- City and Airport	6.Delay time- Day and Month	7.Airline Average Delay	8.Delay Trend Compare	9.Cancel Flights Compare	10.Route Compare
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Average Delay(min) For All Airline

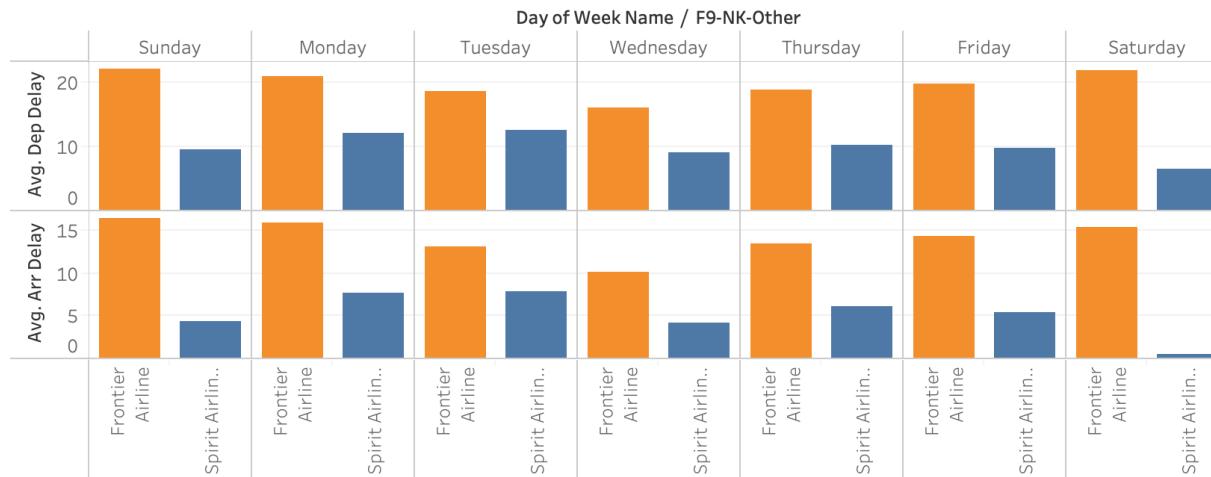


Delay Trend Comparison

By Month of Year



By Day of Week



F9-NK-Other

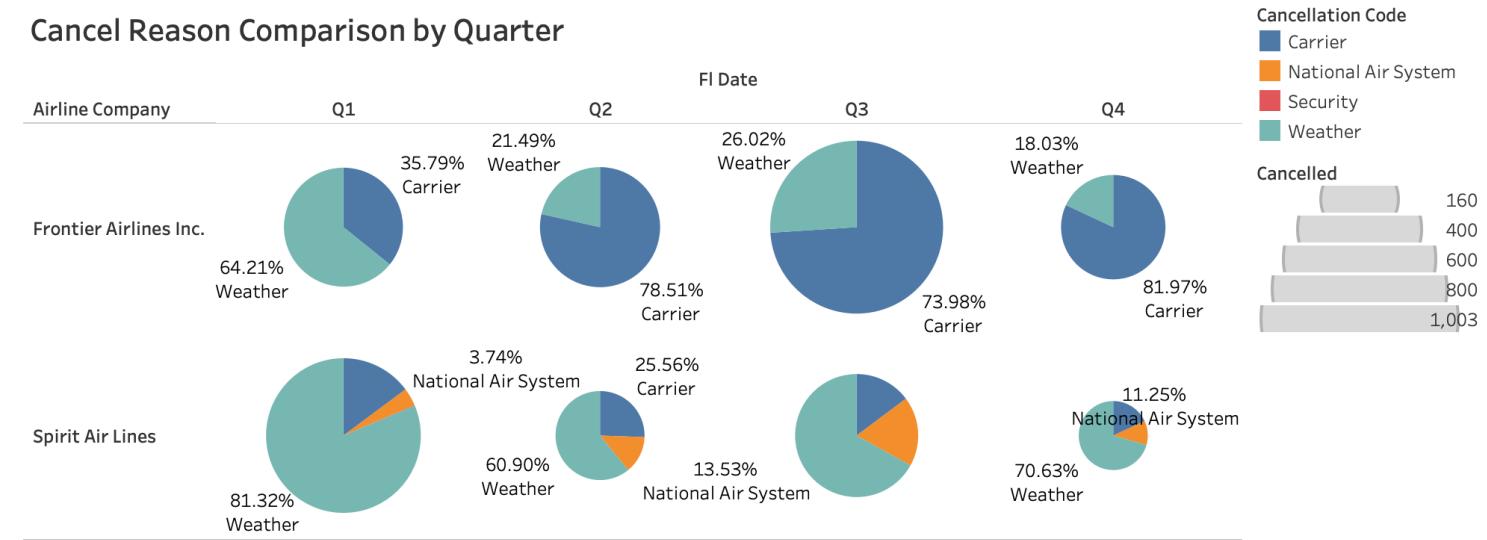
Frontier Airlines
Spirit Airlines

Op Unique Carrier

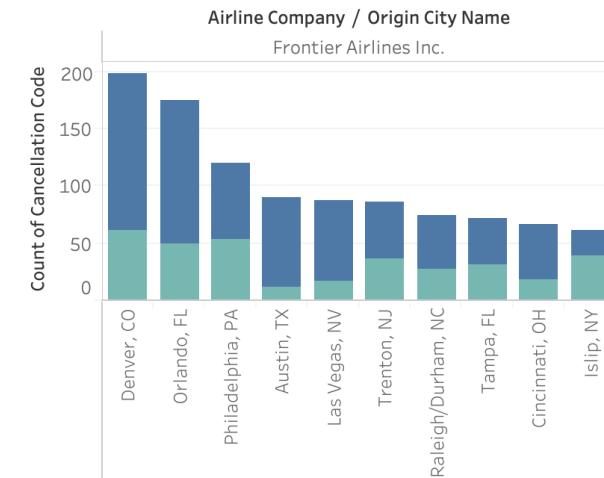
F9
NK

Cancel Flights Comparison

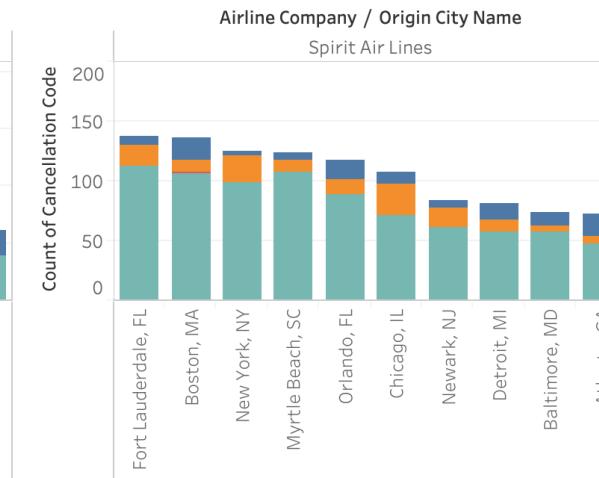
Cancel Reason Comparison by Quarter



Frontier Airlines Top 10 Cancel City



Spirit Airlines Top 10 Cancel City



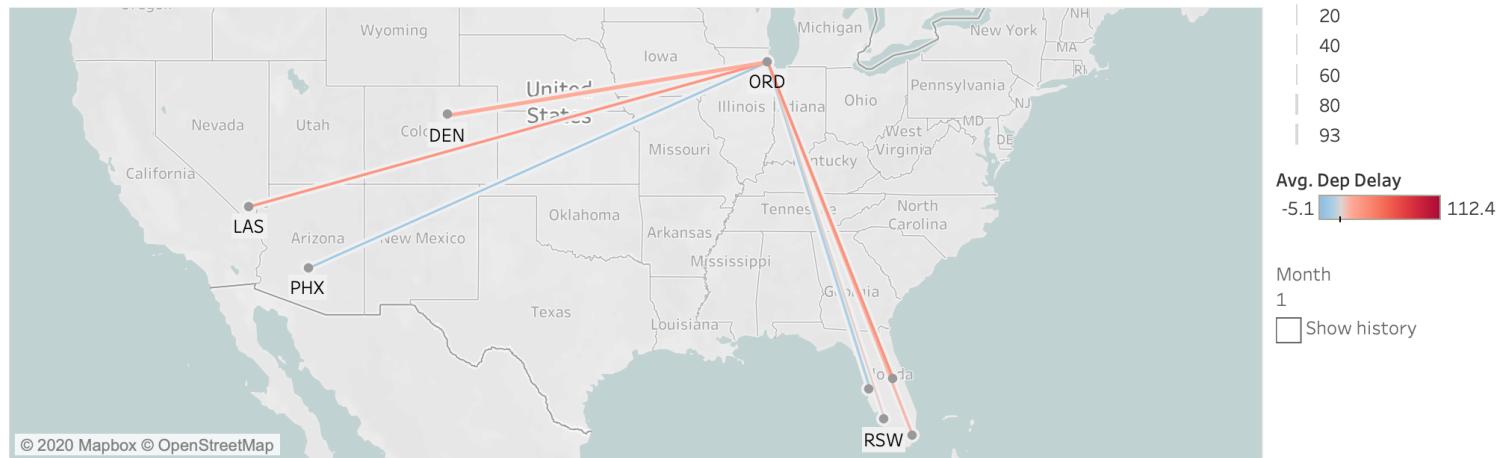
5.Delay time-
City and
Airport6.Delay time- Day and
Month7.Airline Average
Delay8.Delay Trend
Compare9.Cancel Flights
Compare

10.Route Compare

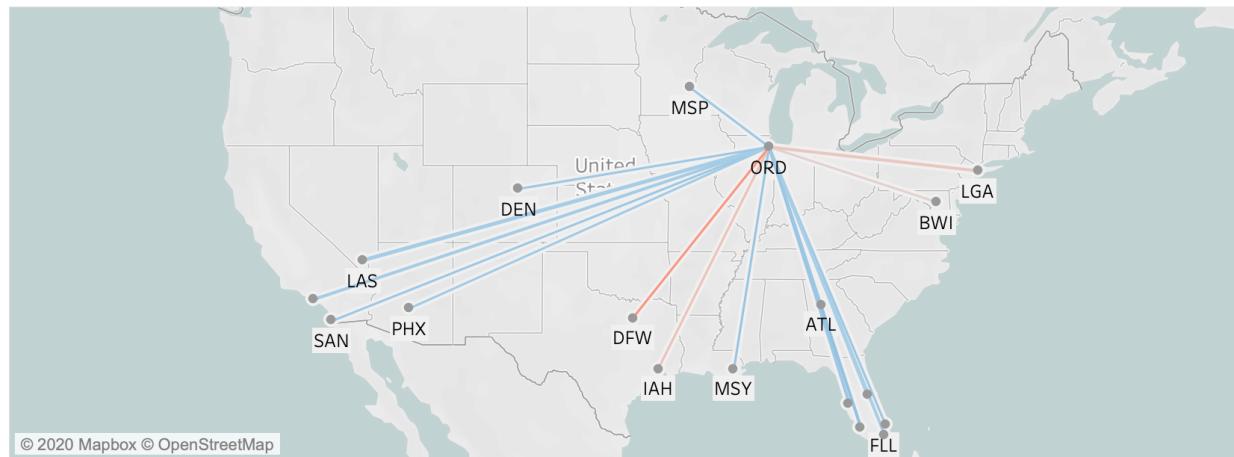
11. Summary

Airline Comparison by Route

Frontier - 1



Spirit - 1



5.Delay time-City and Airport

6.Delay time- Day and Month

7.Airline Average Delay

8.Delay Trend Compare

9.Cancel Flights Compare

10.Route Compare

11. Summary

Summary

1.Delay Time: Frontier Airlines has an average delay time of 33.8 minutes which is the highest among all airline carriers.

2.Cause of Delay: Frontier Airline's primary reason for delays is carrier problems throughout the year except during the first quarter, during which it's the main reason for the delay is the weather.

3.Bottleneck City: There is a flight from Chicago to Las Vegas every day and the average delay time is 68 minutes. Solve the issue of this route might be the priority on Frontier's plan.

4.Canceled Flights: From our analysis, we observed that flights from Chicago to Denver and Florida get canceled the most. This is mostly due to carrier problems and therefore, Frontier has the opportunity to resolve these issues.

5.Customer Suggestion: From our analysis, we recommend consumers to book Frontier Airline tickets departing on Wednesdays during the Summer and avoid weekend departures as they have the most average delay times.