



AIRFLY INSIGHTS

- .Overview
- .Delay Analysis
- .Cancellation Analysis
- .Route Analysis
- .Seasonal & Monthly Trends
- .Airport-Level Performance Analysis
- .Flight Distribution & Patterns
- .Airline Performance Comparison
- .Weather Impact Analysis
- .Insights & Recommendations

~ Krithika M



AIRFLY INSIGHTS | Overview

Year

2019

Month

All

Airline

All

484,551

Total Flights

12

Total Airlines

274

Total Airports

752.14

Average Distance

60.91

Average Arrival Delay

24079

Total Cancelled Flights

4.97

% Cancelled Flights



AIRFLY INSIGHTS | Delay Analysis

Year

2019

Month

All

Airline

All

60.91

Avg Arrival Delay (mins)

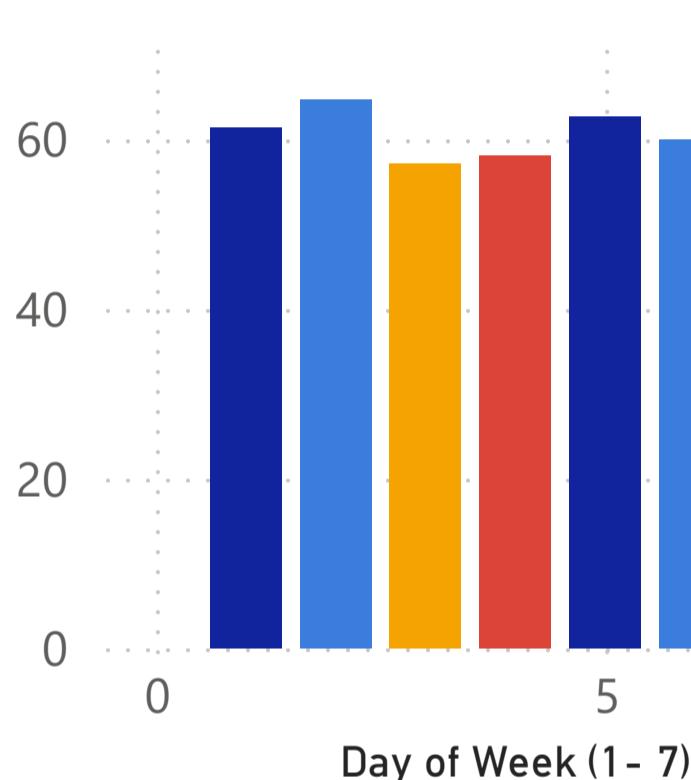
57.49

Avg Departure Delay (min)

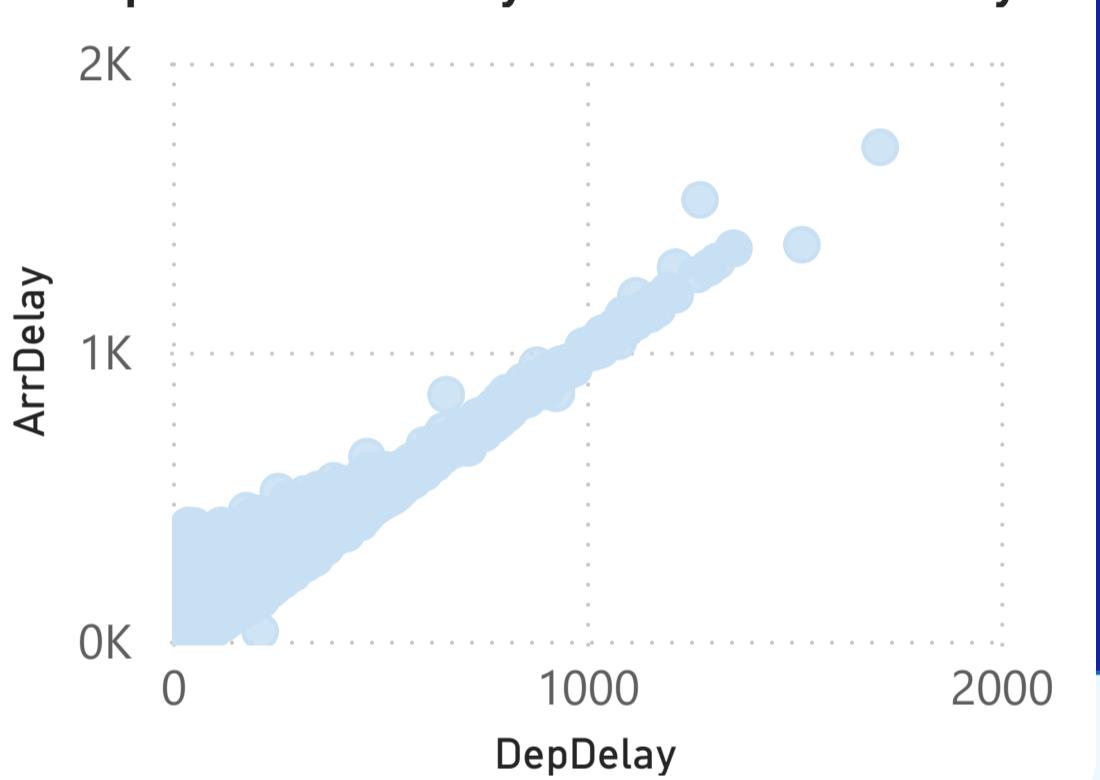
460472

Total Delayed Flights

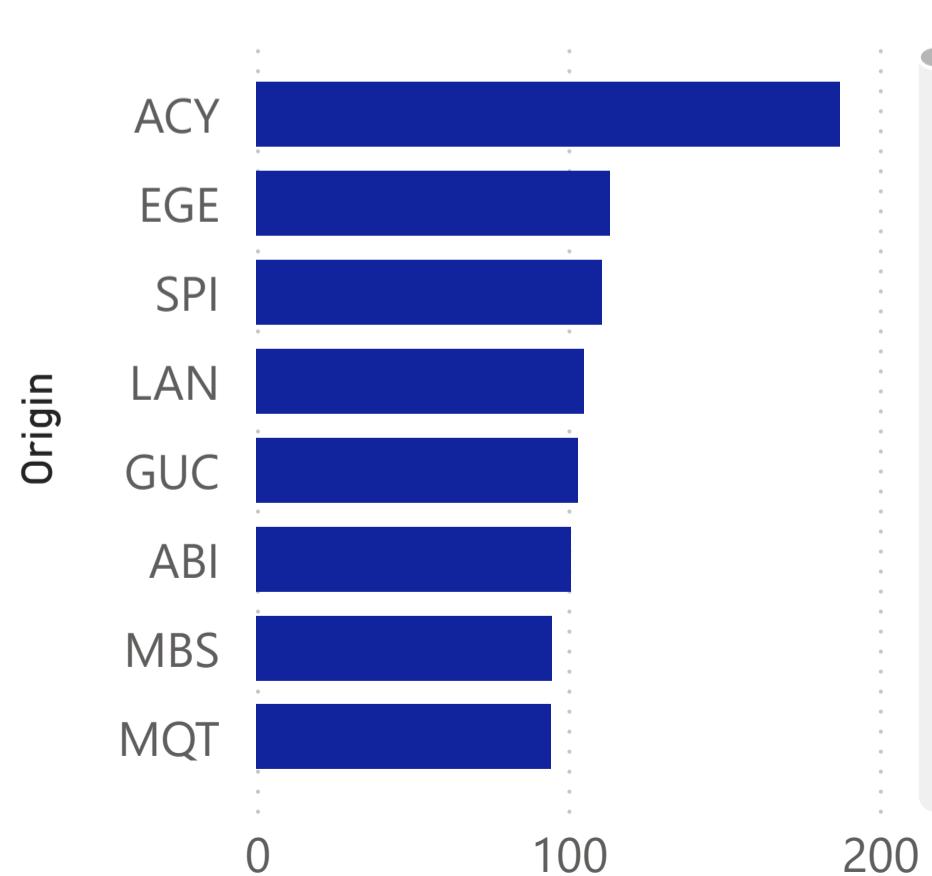
Delay by Day of Week



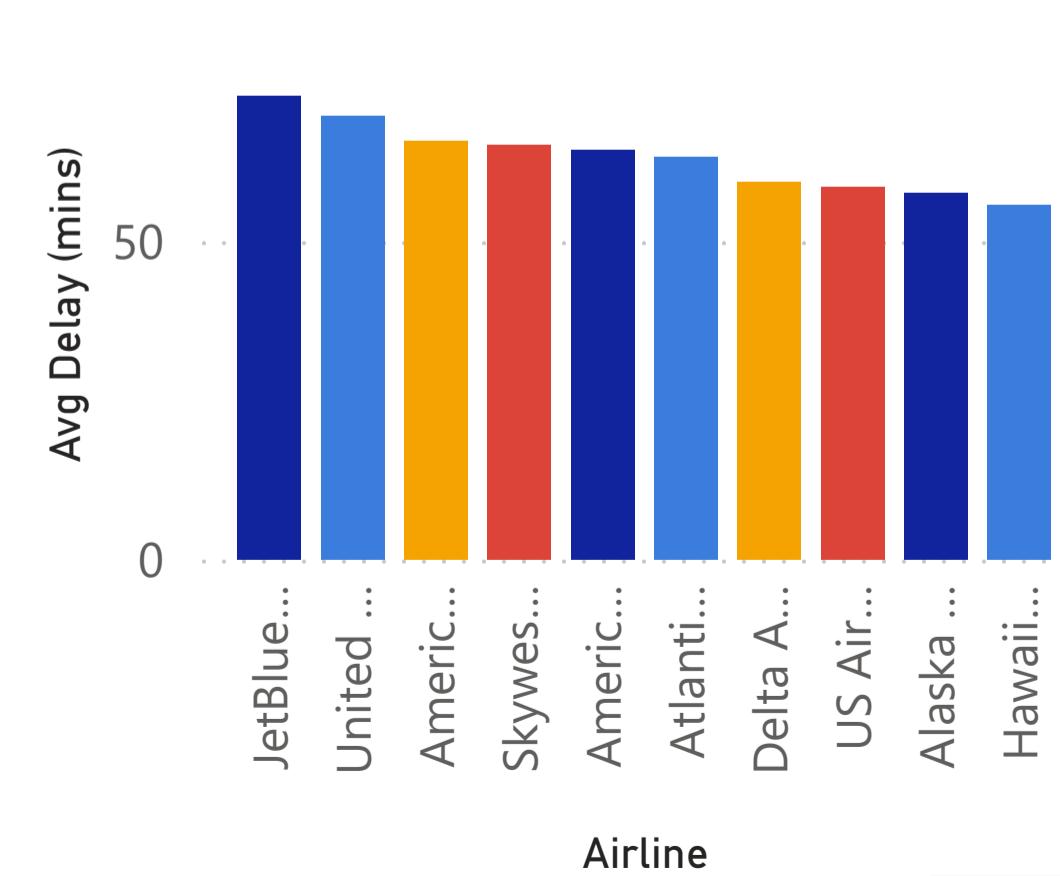
Departure Delay vs Arrival Delay



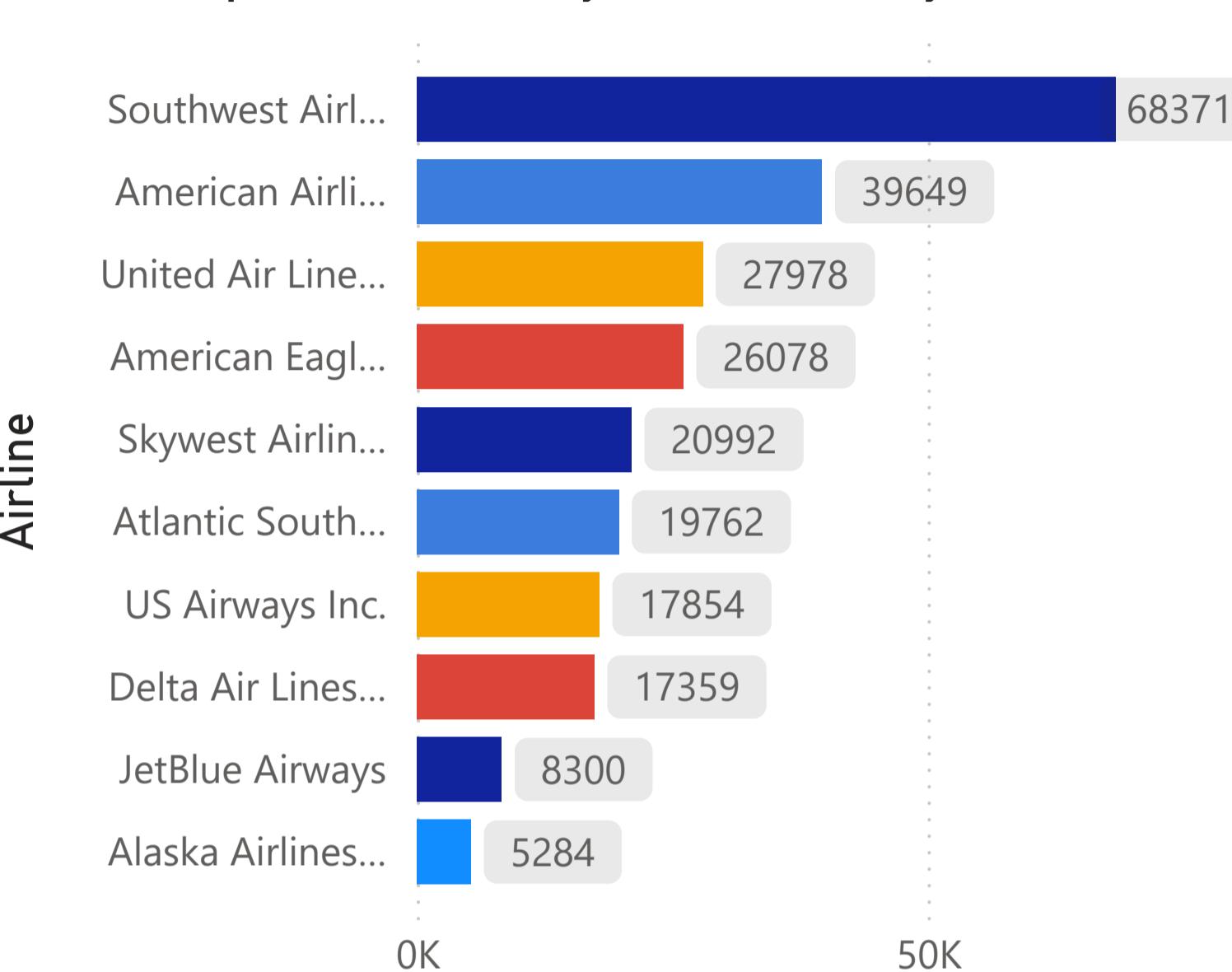
Average Delay by Airport



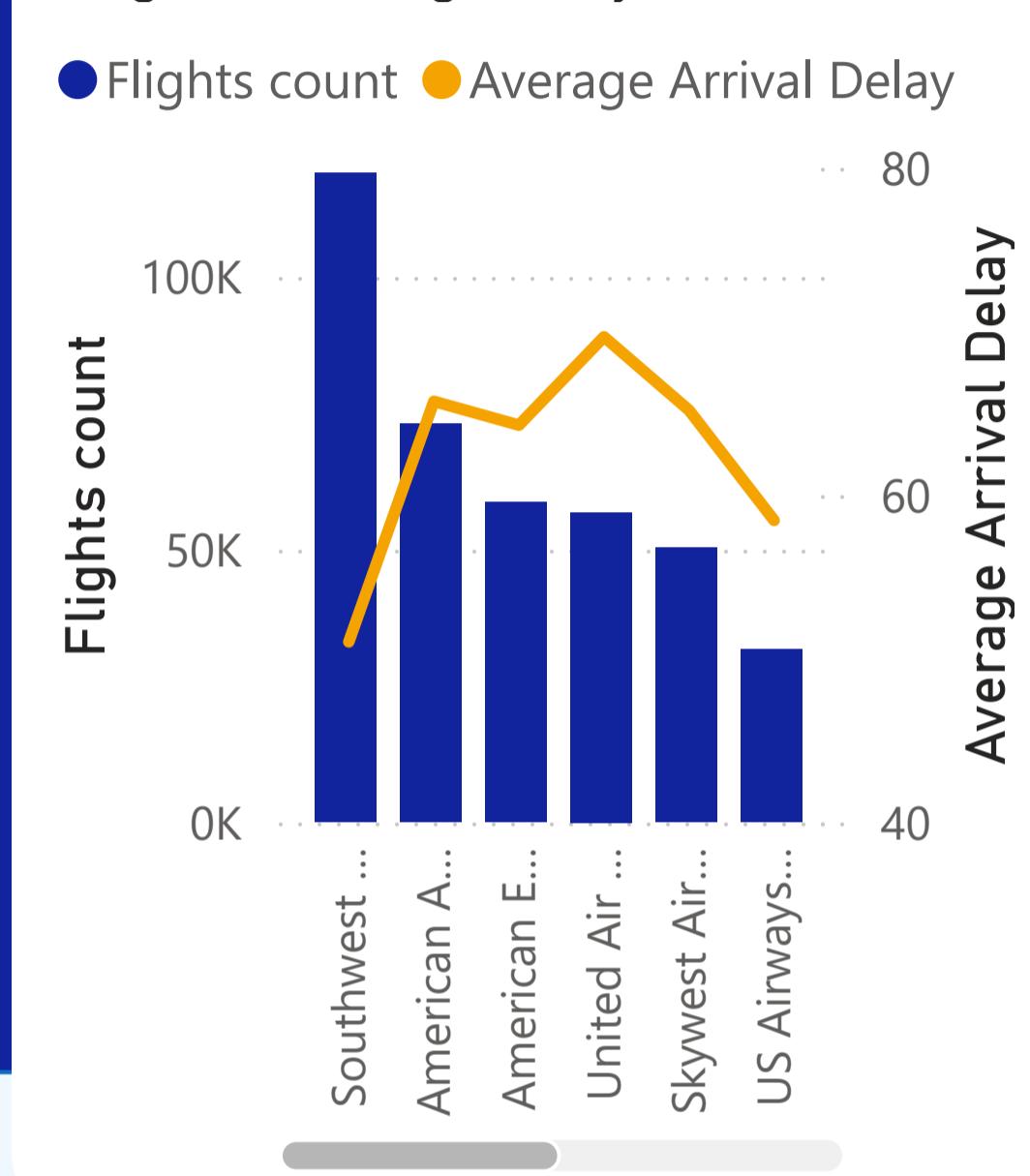
Average Delay by Airline



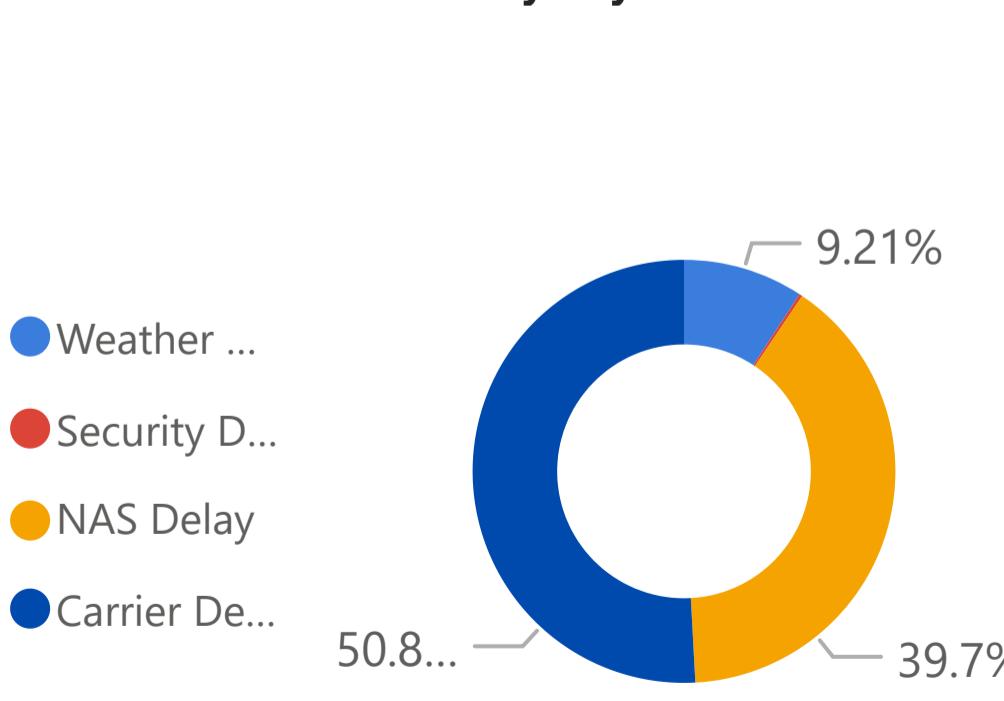
Top 10 Airlines by Carrier Delay Count



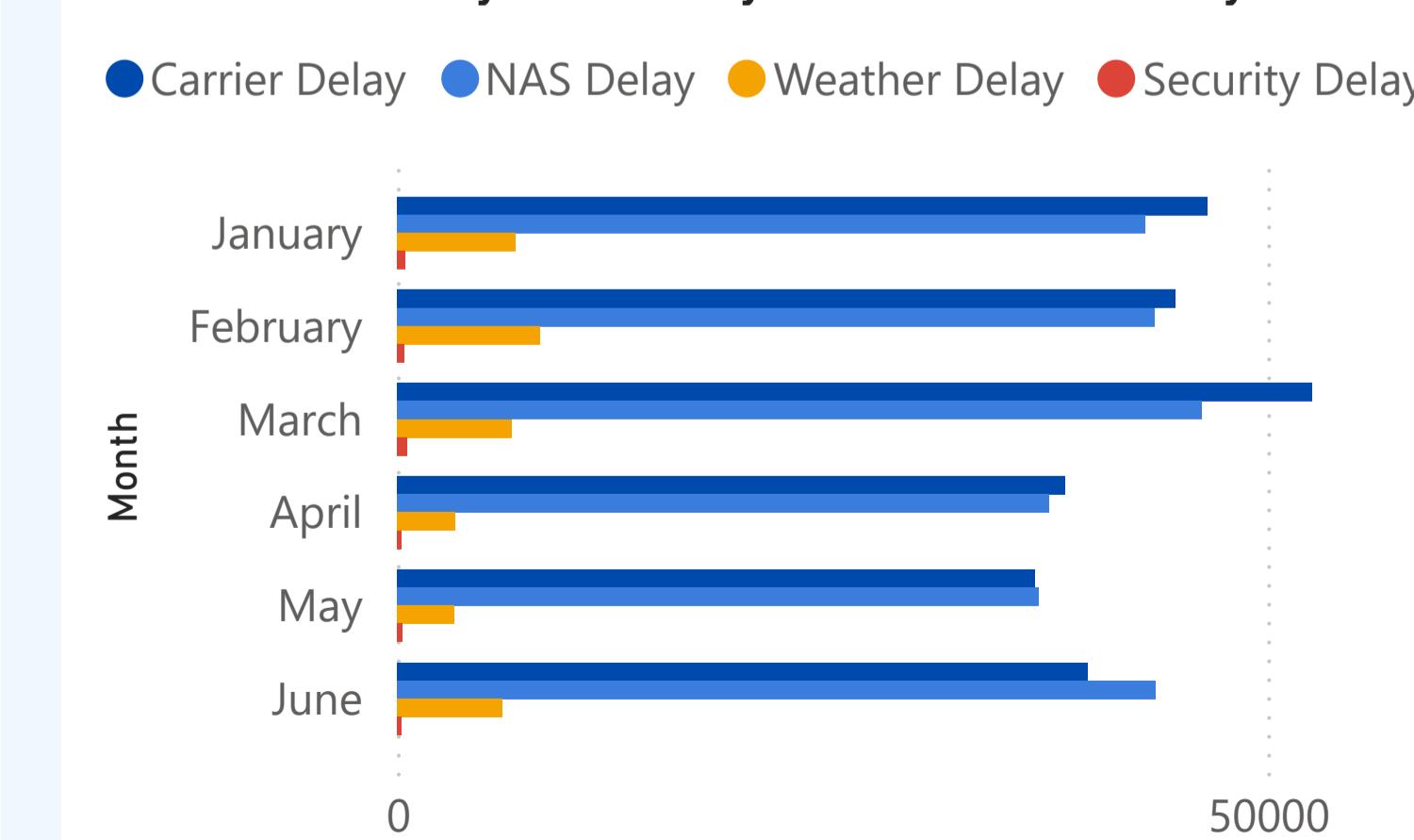
Flights vs Avg Delay



Total Delay by Cause



Delay Count by Reason (Monthly)





AIRFLY INSIGHTS | Cancellation Analysis

Year

2019

Month

All

Airline

All

24079

Total Cancelled Flights

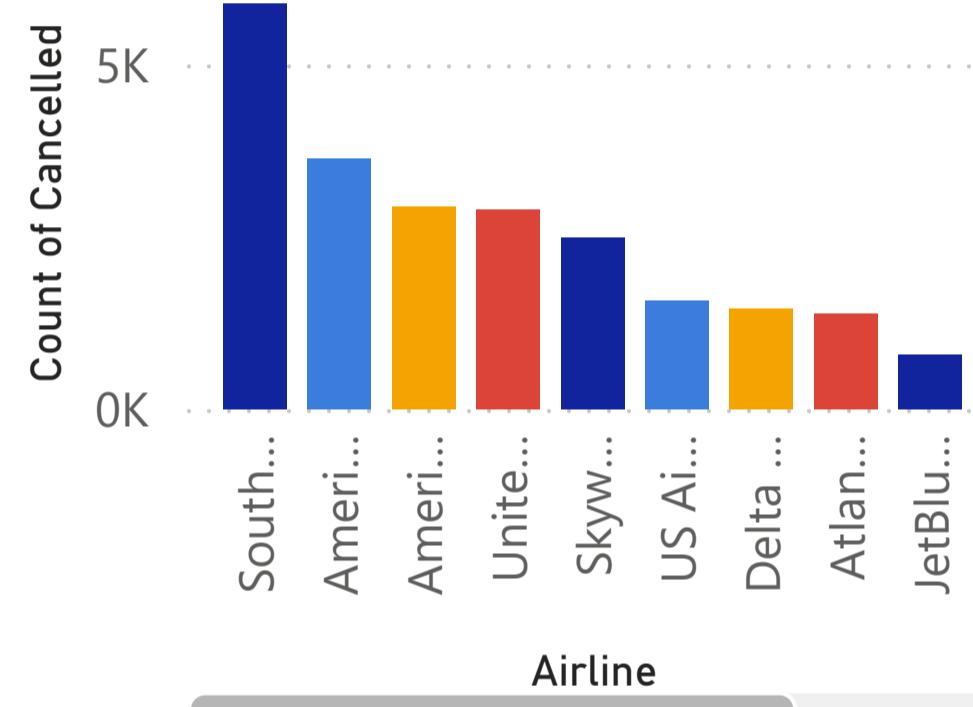
4.97

% Cancelled Flights

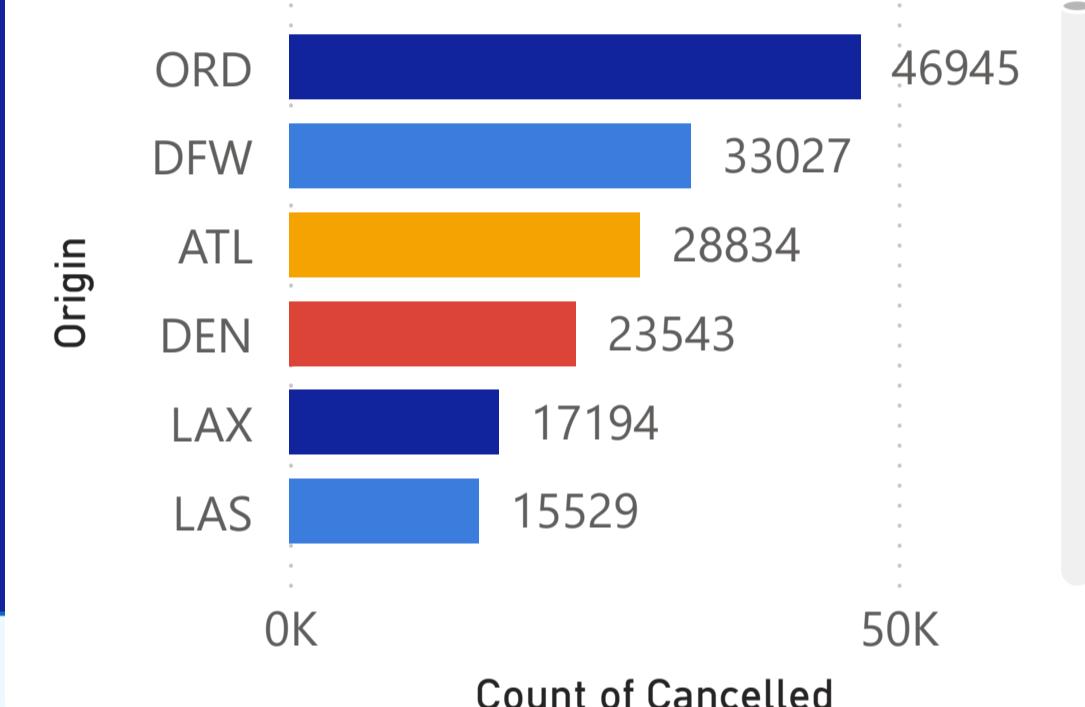
57.74

Avg Delay (Cancelled Flights)

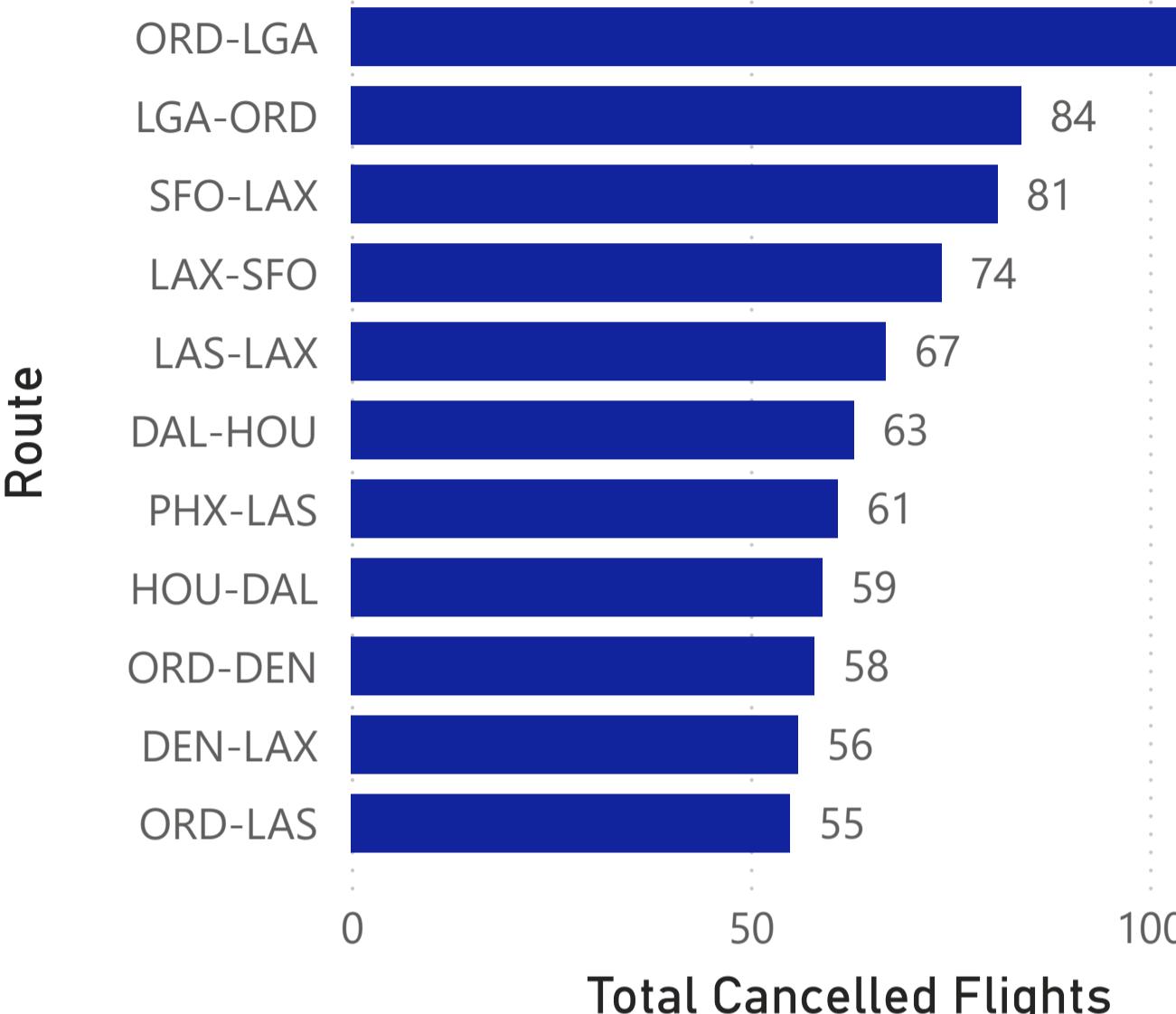
Cancellations by Airline



Cancellations by Airport

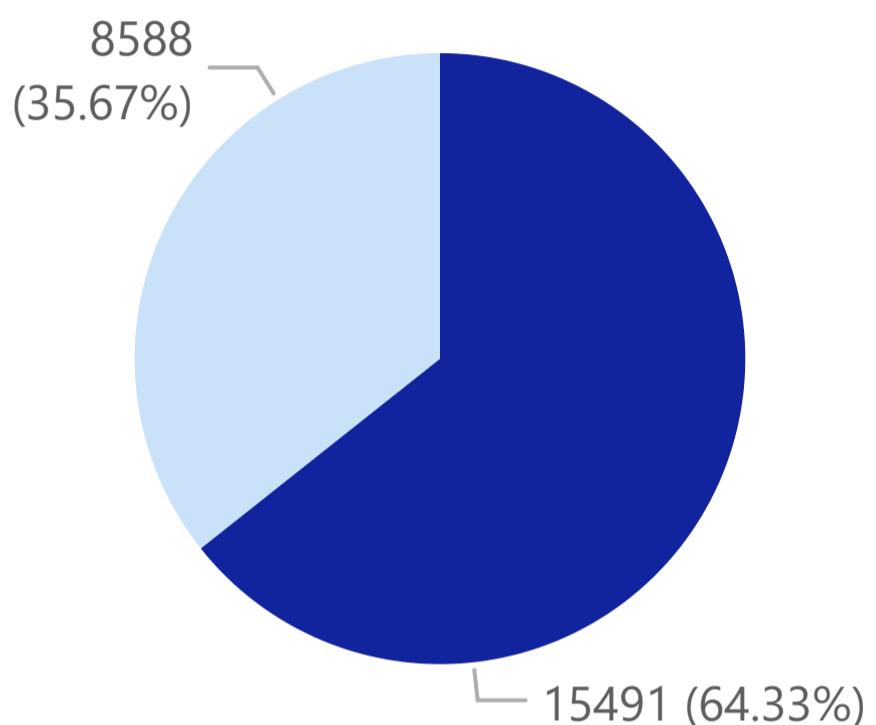


Routes Affected by Cancellations

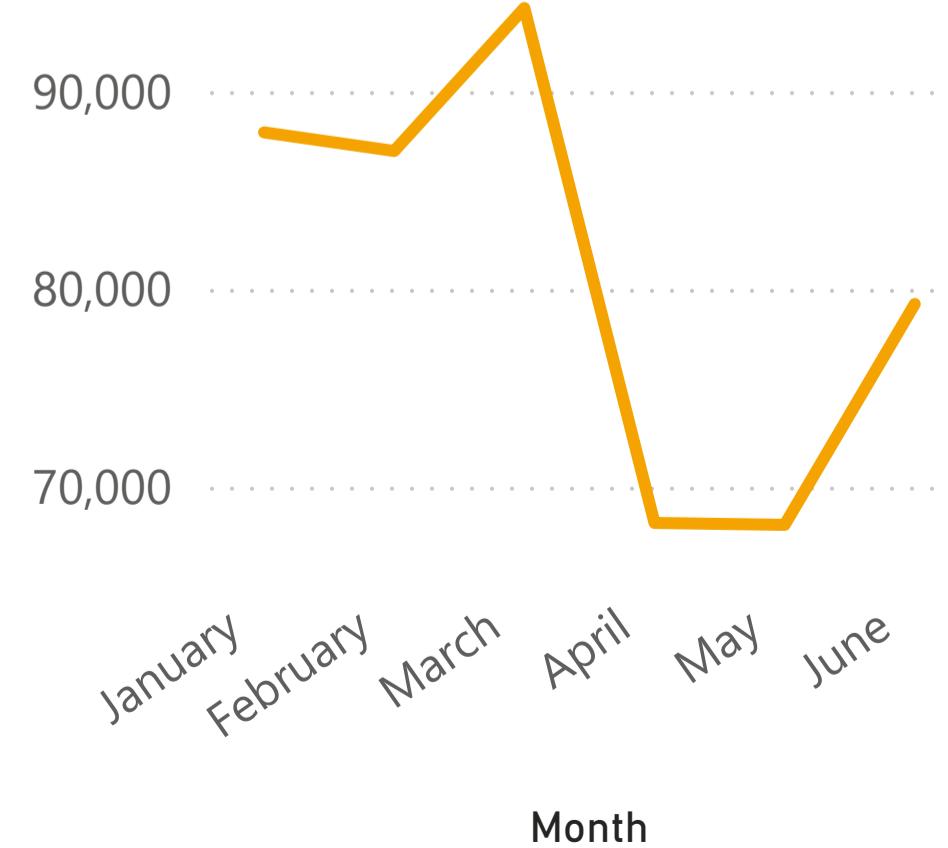


Seasonal Cancellation

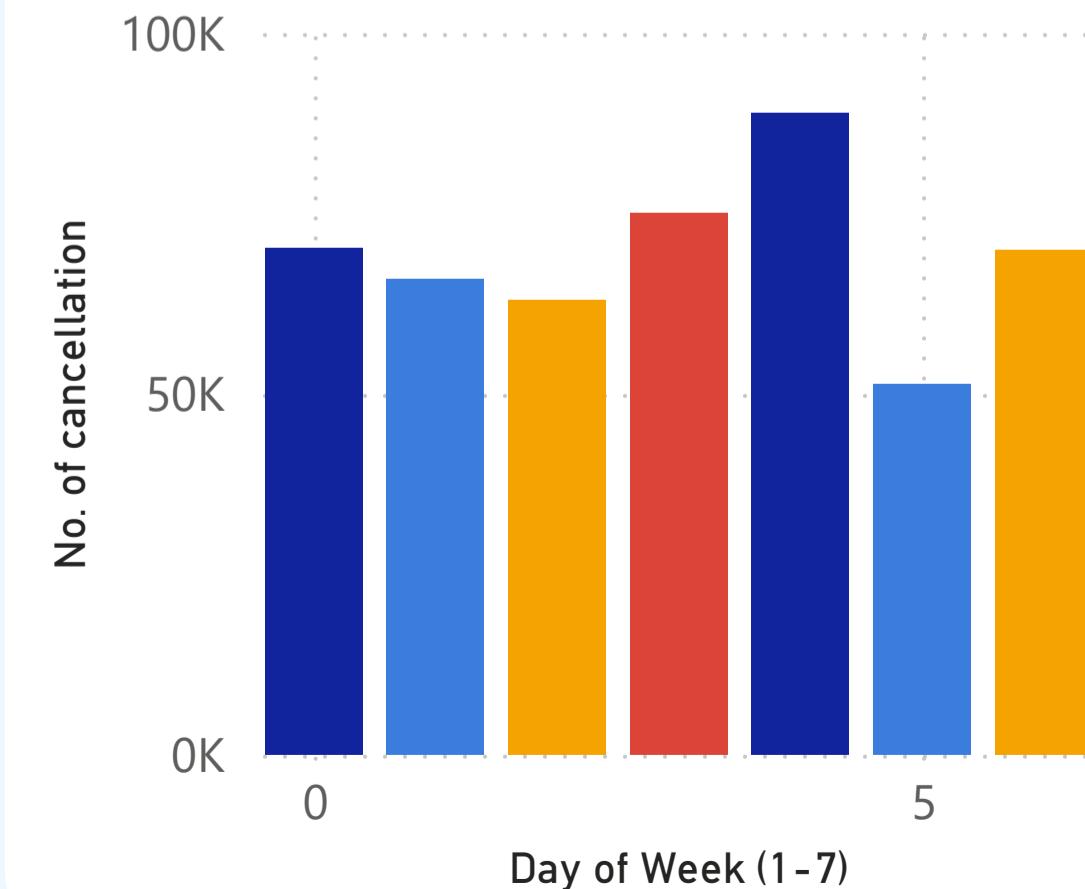
Season ● Non-Winter ● Winter



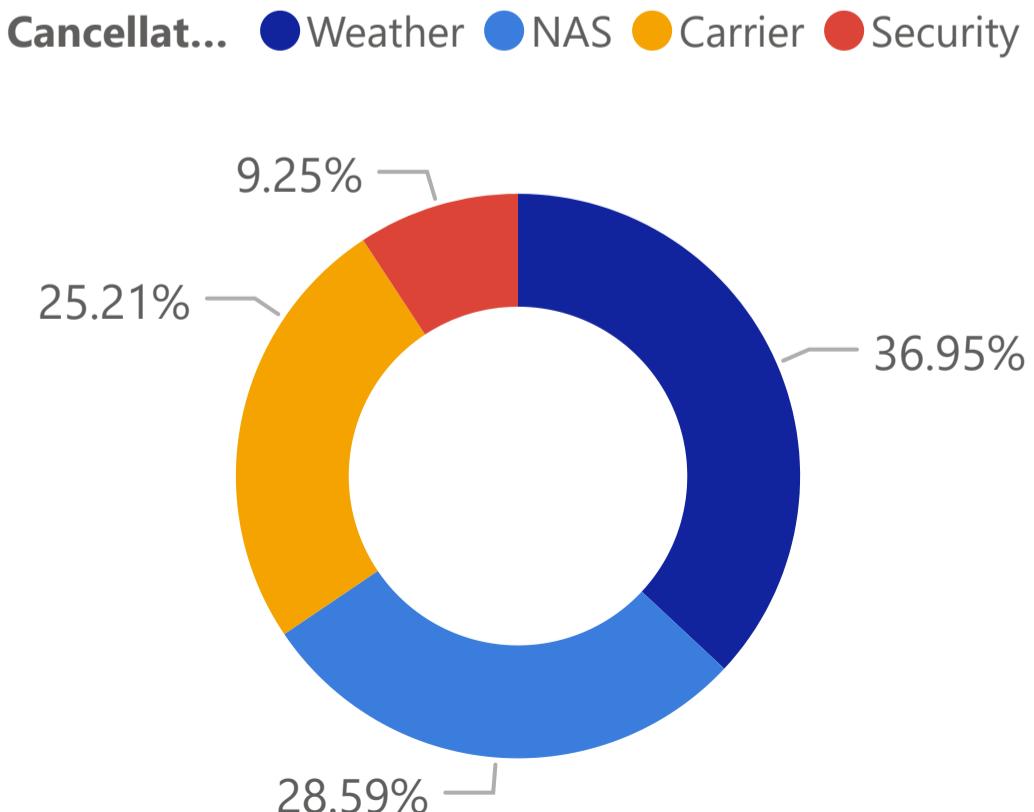
Cancellations Over Time



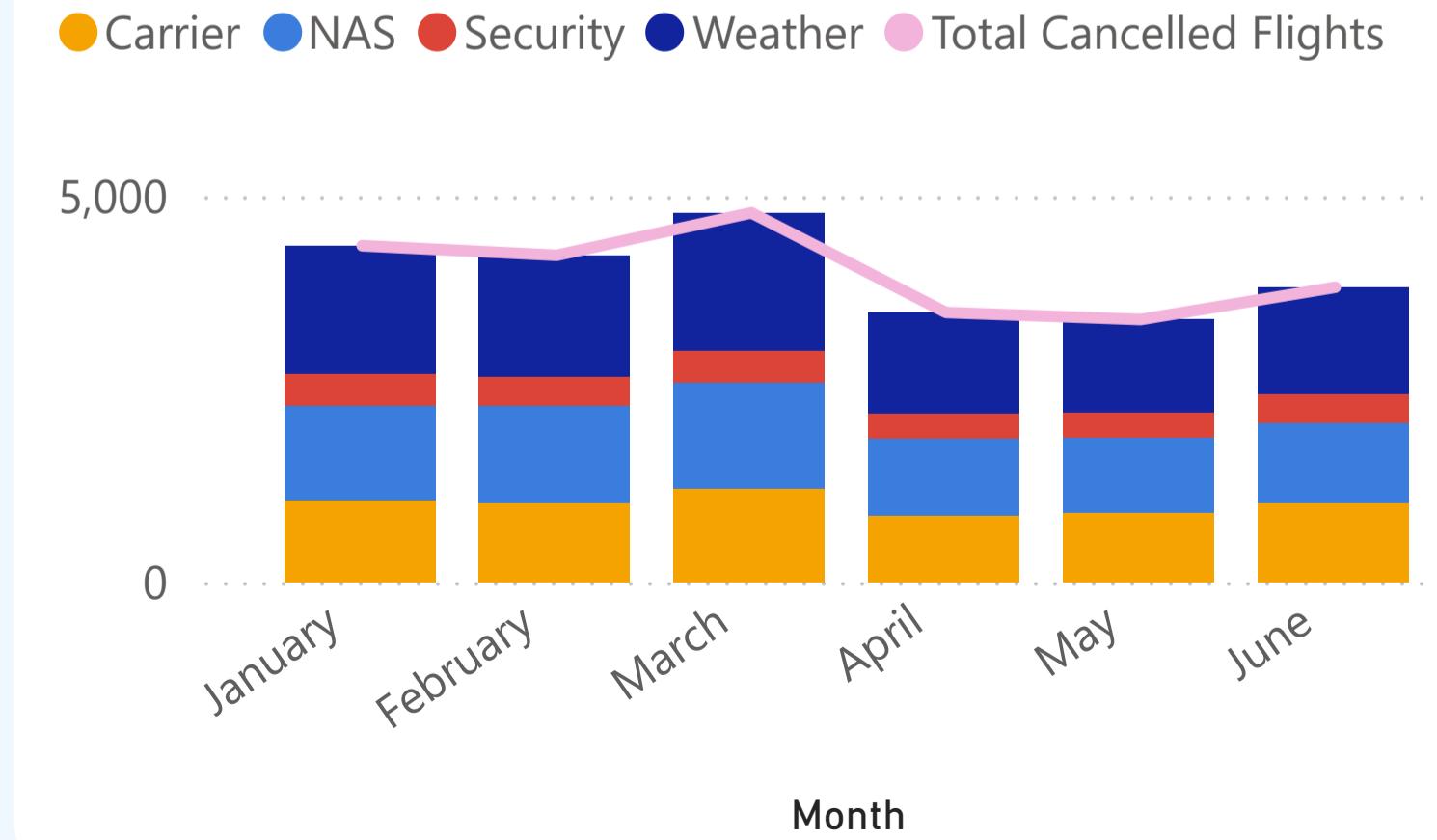
Cancellations by Day of Week



Cancellations by Cause



Monthly Cancellation Trends by Cause





AIRFLY INSIGHTS | Route Analysis

Year

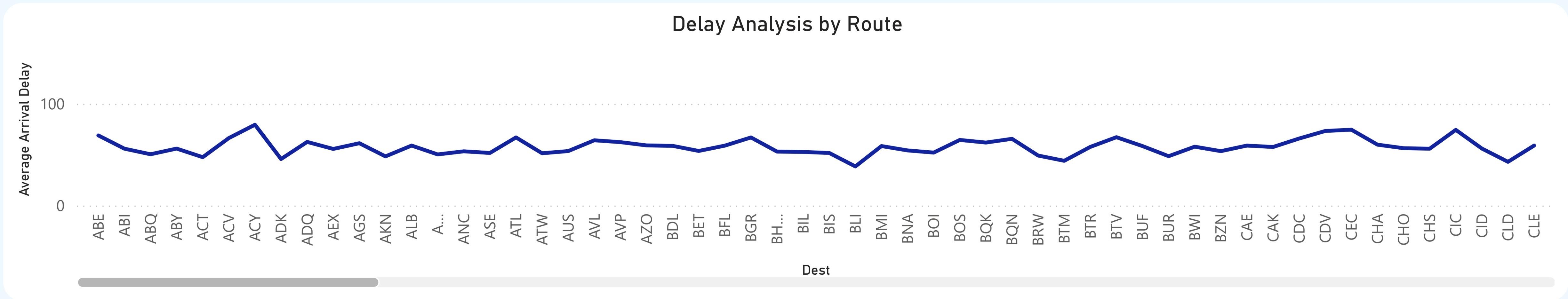
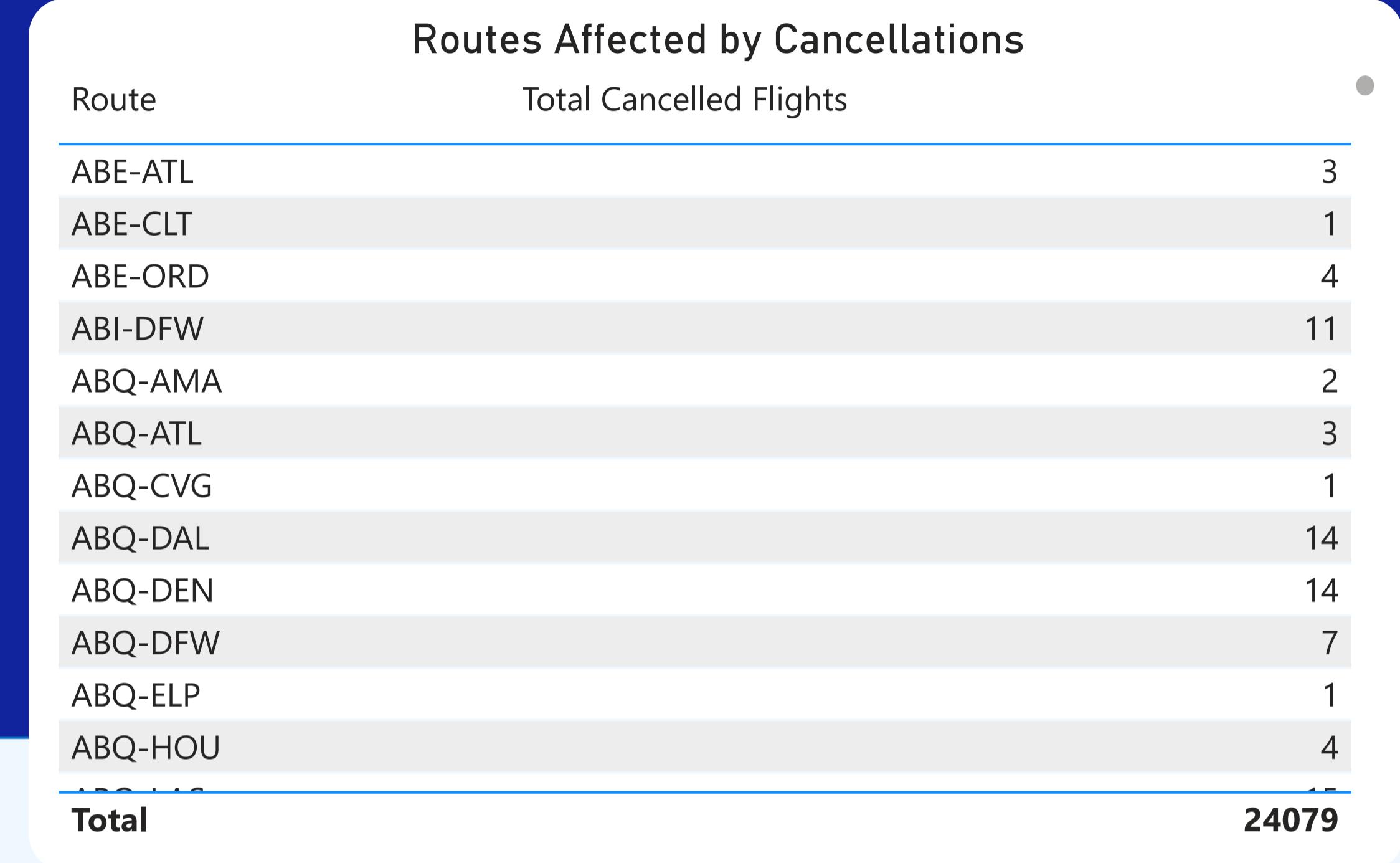
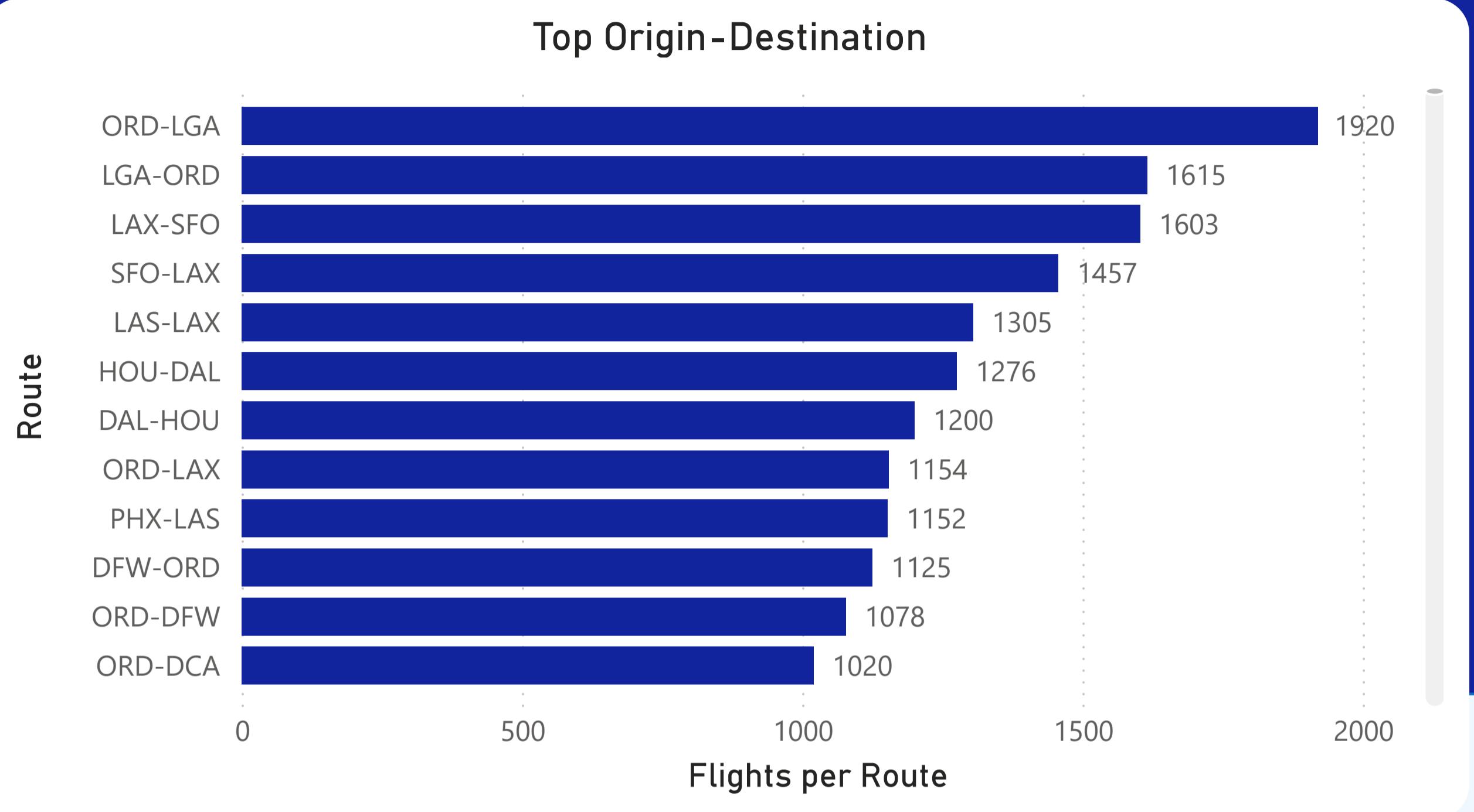
2019

Month

All

Airline

All





AIRFLY INSIGHTS | Seasonal & Monthly Trends

Year

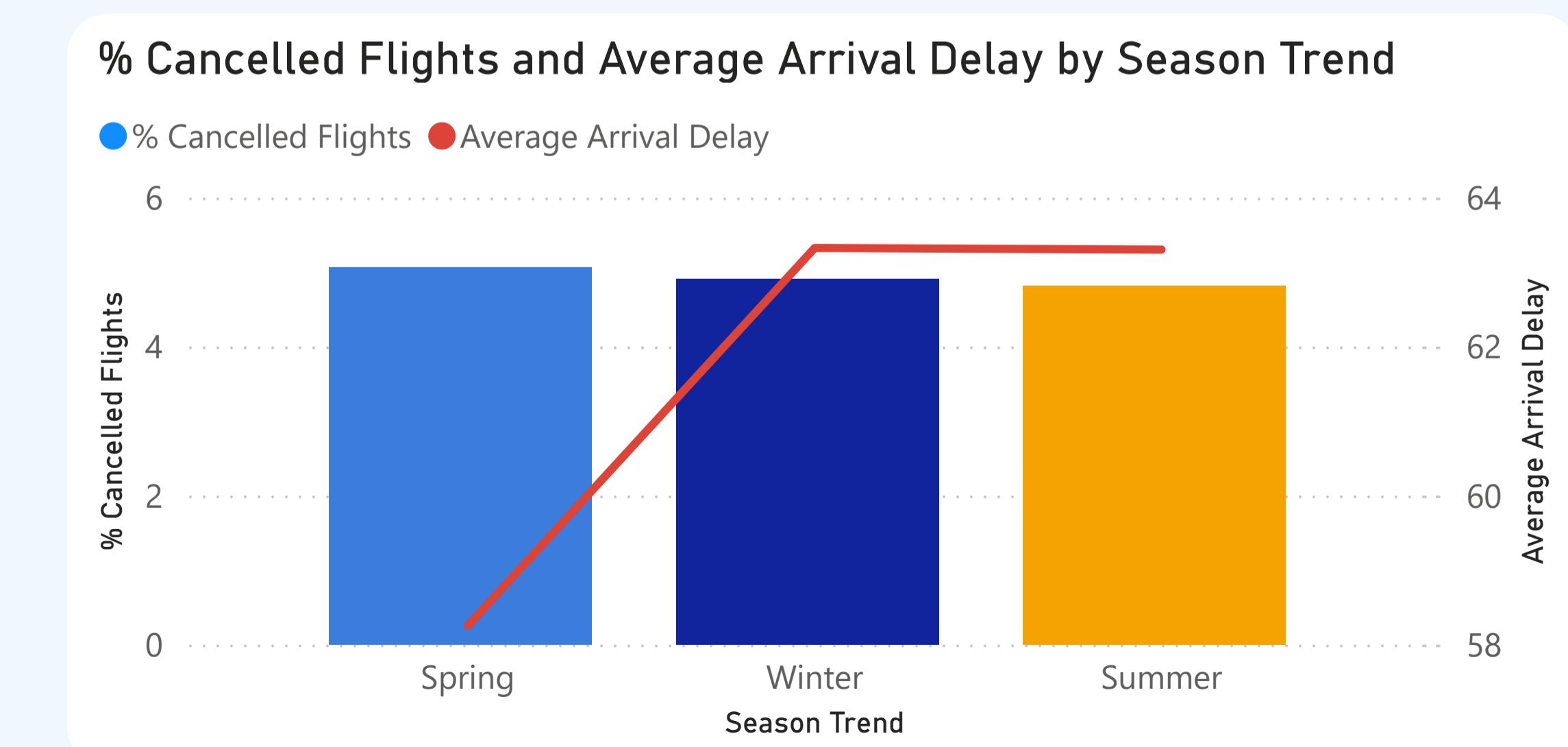
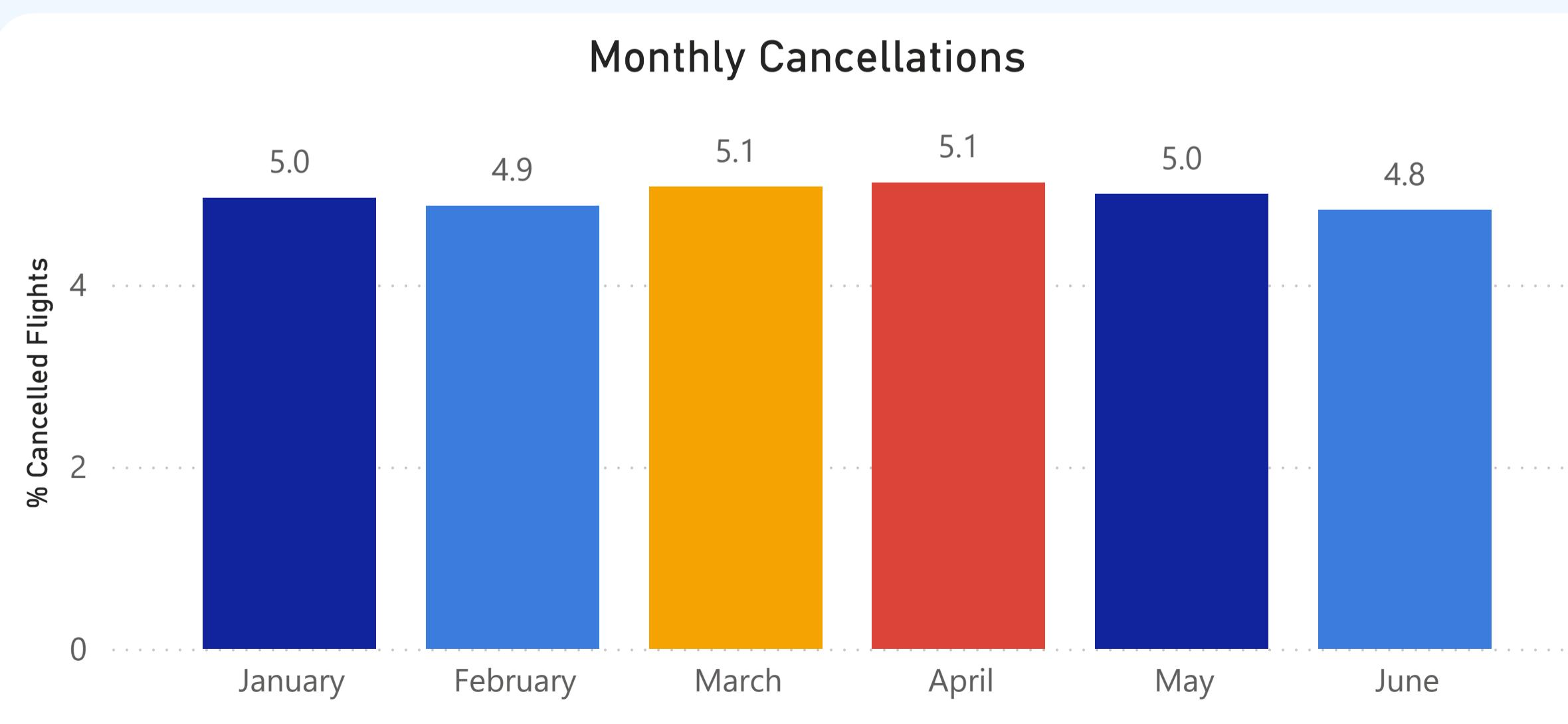
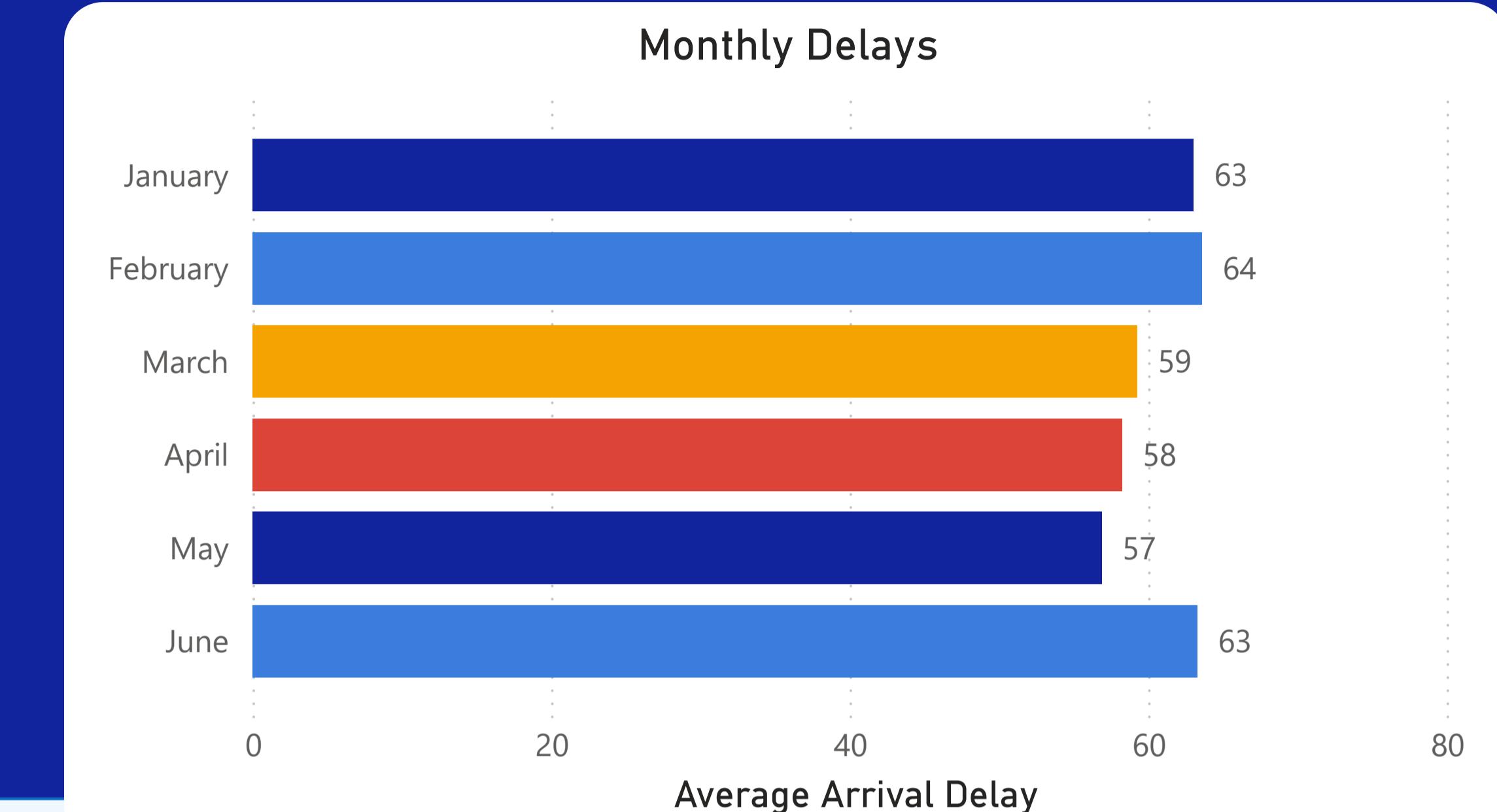
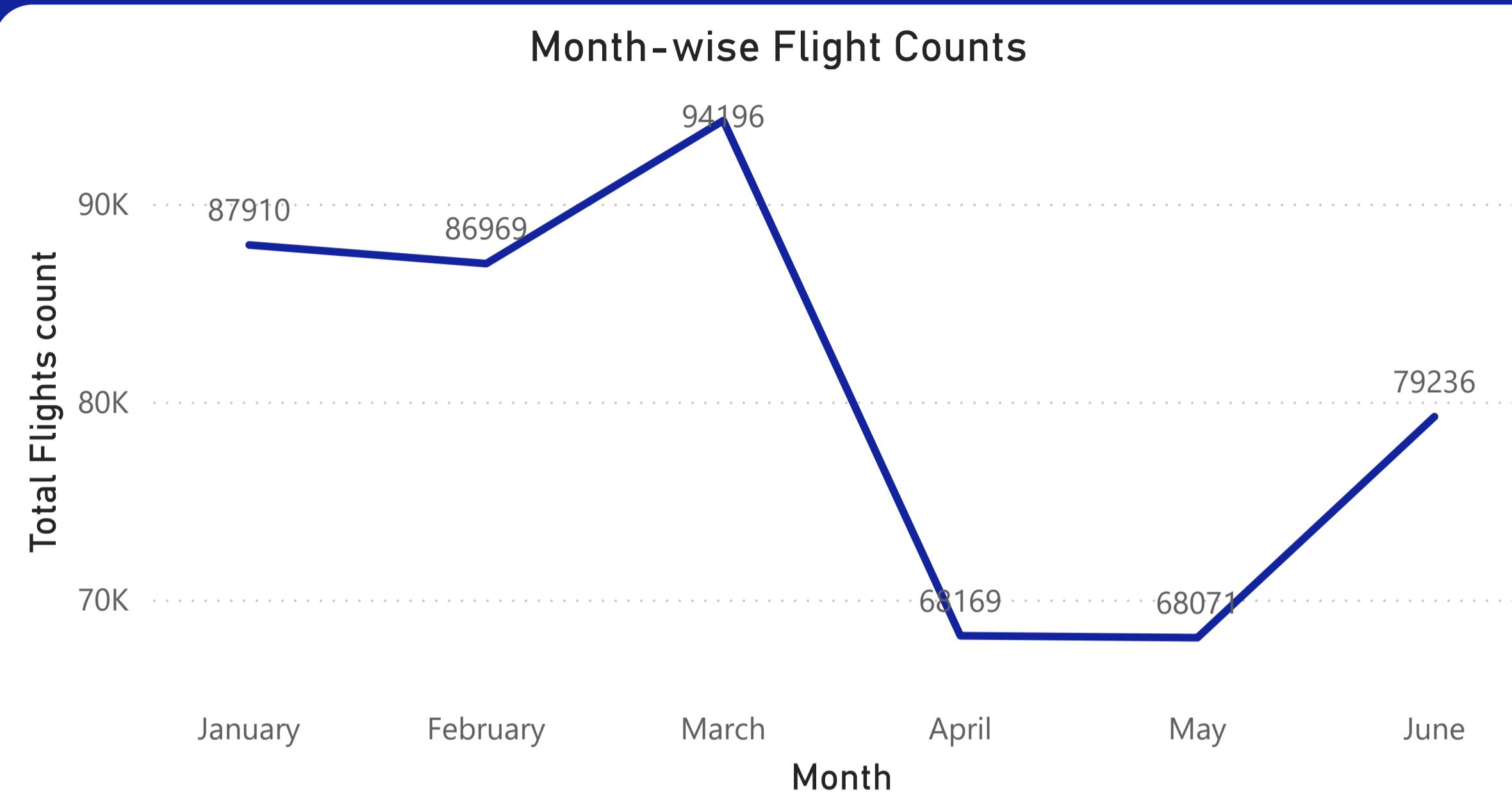
2019

Month

All

Airline

All





AIRFLY INSIGHTS | Airport-Level Performance Analysis

Year

2019

Month

All

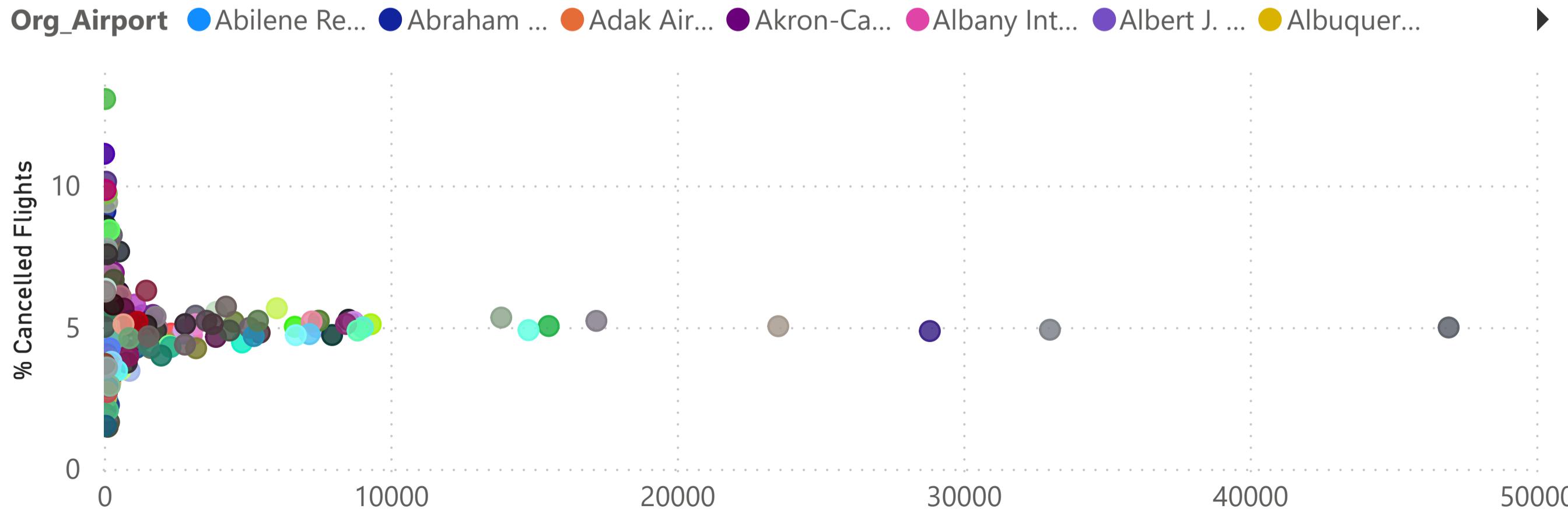
Airline

All

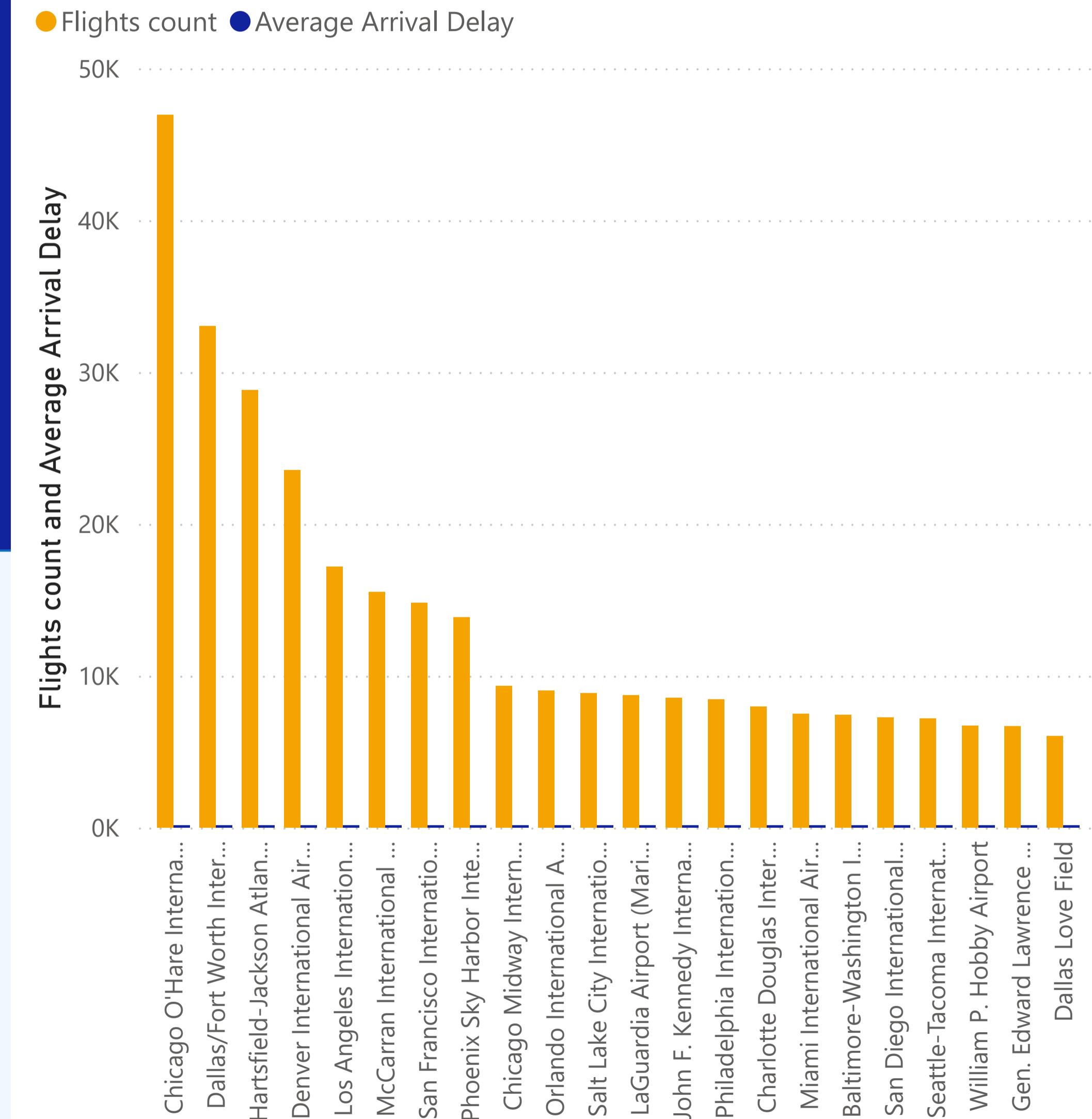
Airport with Avg delay

Org_Airport	Dest_Airport	Average Arrival Delay
Abilene Regional Airport	Dallas/Fort Worth International Airport	100.90
Abraham Lincoln Capital Airport	Chicago O'Hare International Airport	111.09
Adak Airport	Ted Stevens Anchorage International Airport	50.43
Akron-Canton Regional Airport	Chicago O'Hare International Airport	117.63
Akron-Canton Regional Airport	Cincinnati/Northern Kentucky International Airport	16.00
Akron-Canton Regional Airport	Denver International Airport	77.00
Akron-Canton Regional Airport	Hartsfield-Jackson Atlanta International Airport	74.88
Albany International Airport	Baltimore-Washington International Airport	57.01
Albany International Airport	Charlotte Douglas International Airport	46.88
Albany International Airport	Chicago Midway International Airport	58.48
Albany International Airport	Chicago O'Hare International Airport	70.87
Total		60.91

Cancellation % vs Airport Traffic



Flights vs Avg Delay





AIRFLY INSIGHTS | Flight Distribution & Patterns

Year

2019

Month

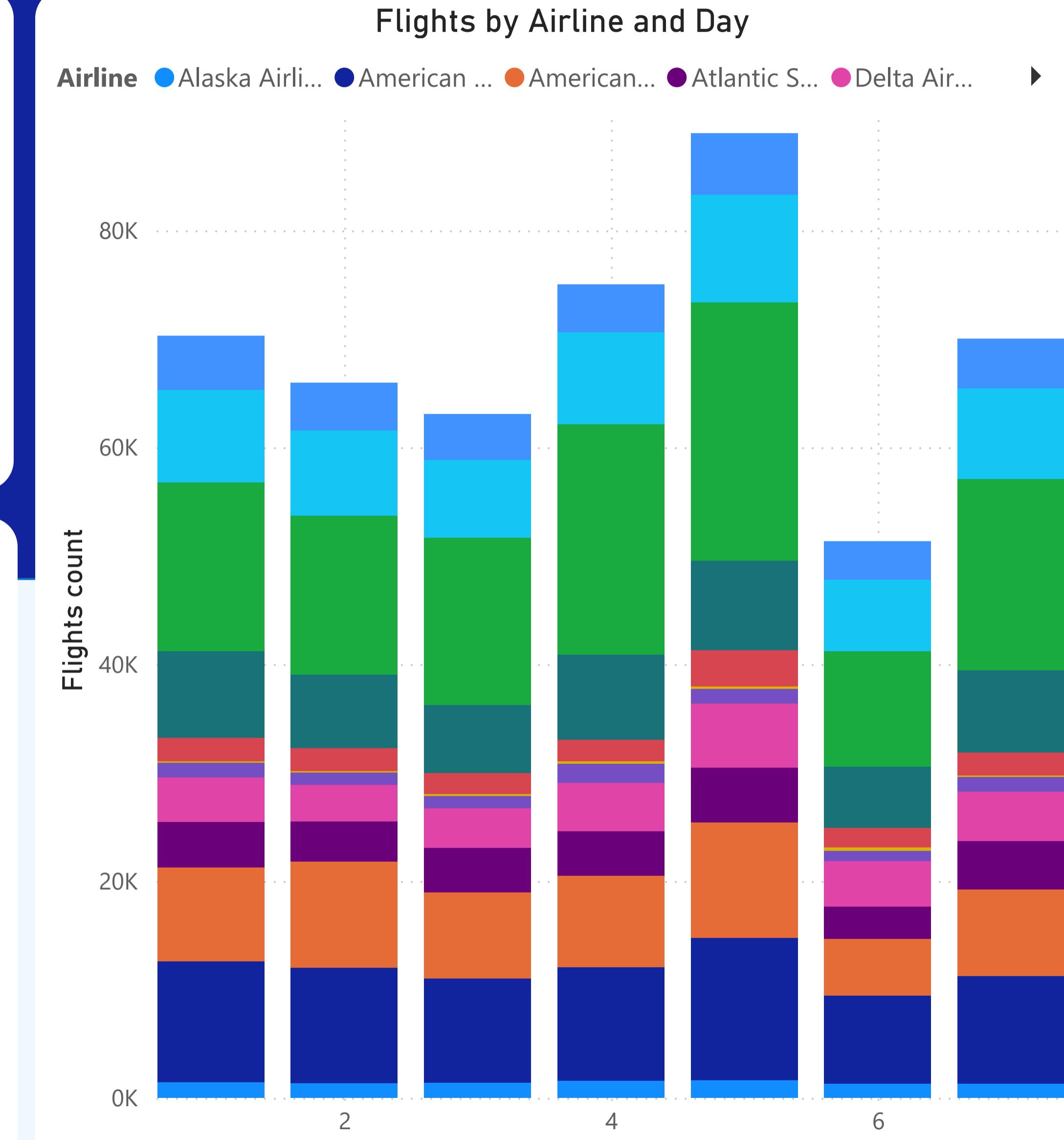
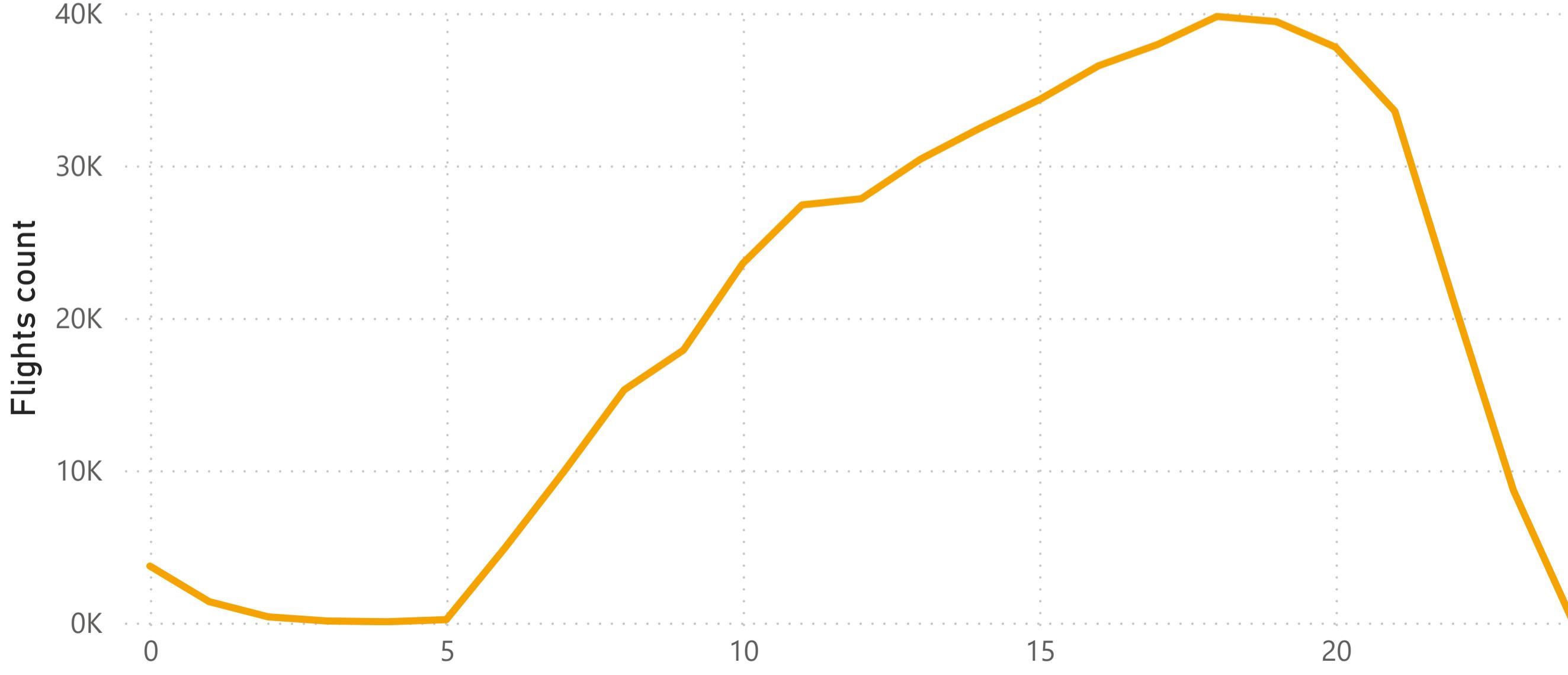
All

Airline

All

DayOfWeek	0	1	2	3	4	5	6	7	8	9	10	11	12	13
1	426	170	40	15	4	30	763	1632	2431	2796	3775	4208	4363	4503
2	453	164	47	7	8	21	682	1509	2182	2642	3273	3877	3796	4242
3	434	192	57	16	7	26	657	1415	2091	2555	3164	3612	3592	3922
4	601	190	49	13	6	29	709	1321	2192	2502	3436	3912	3892	4415
5	798	289	60	17	10	26	856	1753	2601	3067	3995	4806	4920	5410
6	344	156	59	18	12	31	724	1312	2039	2317	3011	3453	3522	3676
7	653	212	60	17	7	29	563	1052	1731	2001	2907	3537	3727	4242
Total	3709	1373	372	103	54	192	4954	9994	15267	17880	23561	27405	27812	30410

Hourly Flight Pattern





AIRFLY INSIGHTS | Airline Performance Comparison

Year

2019

Month

All

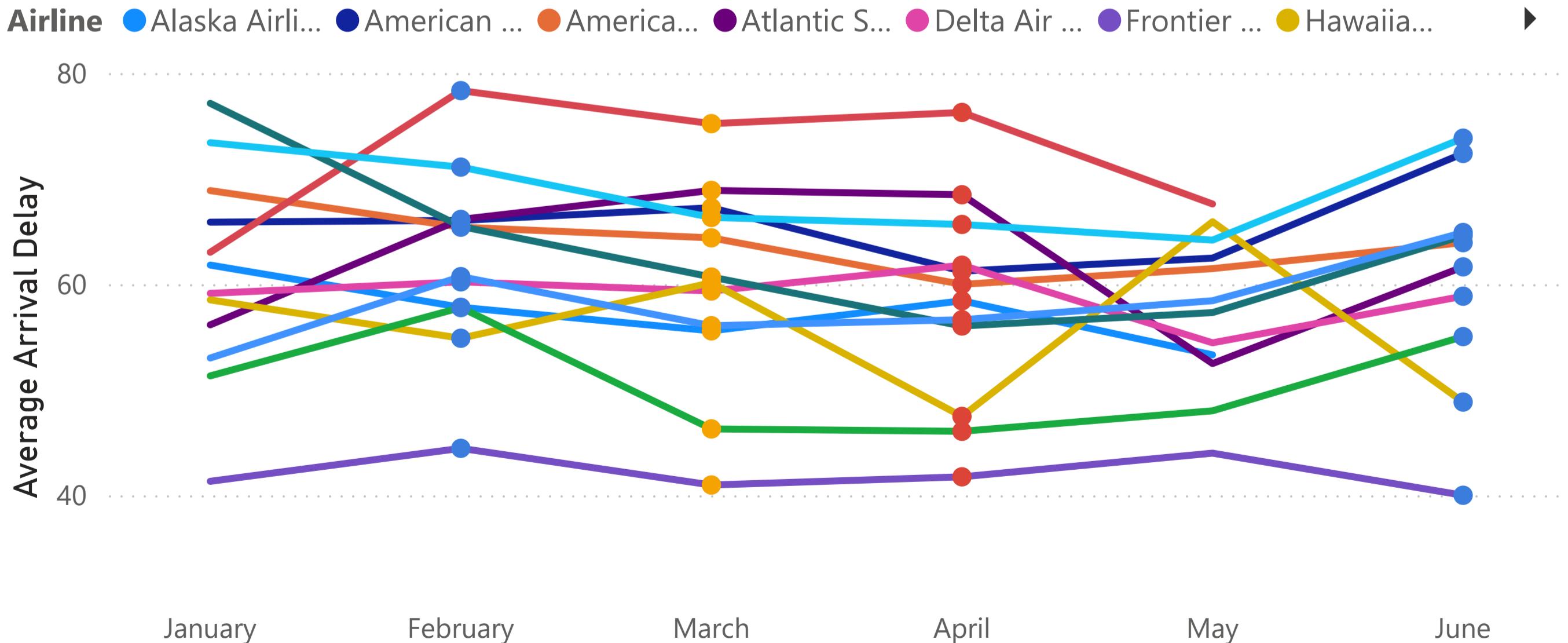
Airline

All

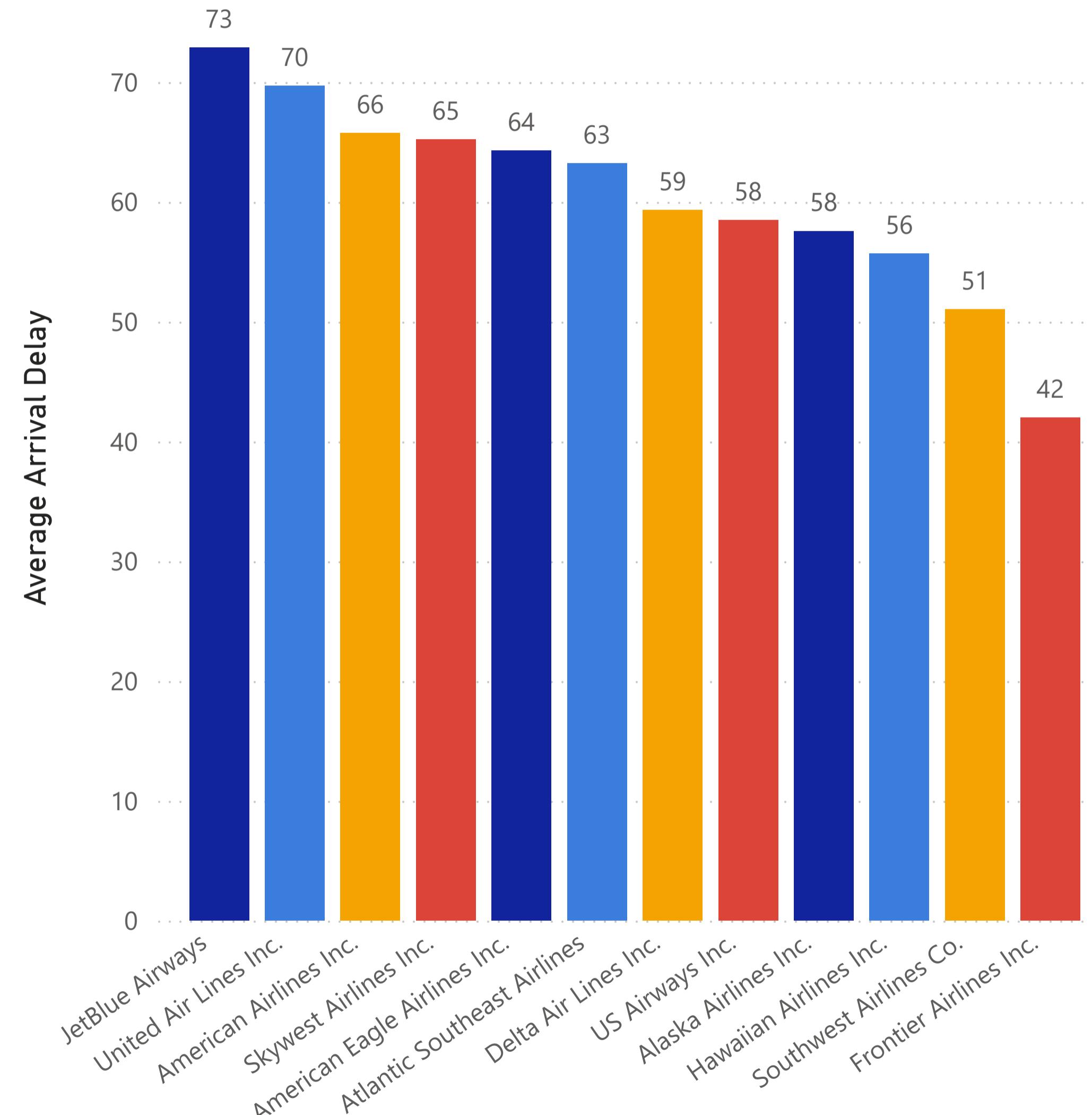
Monthly Cancellation % by Airline

Airline	January	February	March	April	May	June	Total
Alaska Airlines Inc.	4.46	5.65	5.64	5.35	4.83		5.16
American Airlines Inc.	4.95	5.10	5.08	4.91	5.06	4.63	4.97
American Eagle Airlines Inc.	4.83	4.86	4.86	5.44	5.27	4.91	5.00
Atlantic Southeast Airlines	4.94	4.50	4.59	5.38	4.89	4.90	4.84
Delta Air Lines Inc.	4.56	4.87	5.01	4.83	4.84	4.50	4.81
Frontier Airlines Inc.	4.98	3.81	5.46	5.67	4.43	5.09	4.90
Hawaiian Airlines Inc.	7.04	5.66	8.86	5.61	3.61	2.33	4.93
JetBlue Airways	5.06	5.20	5.59	4.67	4.94		5.14
Total	4.96	4.87	5.08	5.12	4.99	4.82	4.97

Monthly Delay Trend by Airline



Average Delay per Airline





 AIRFLY INSIGHTS | Weather Impact Analysis

Year

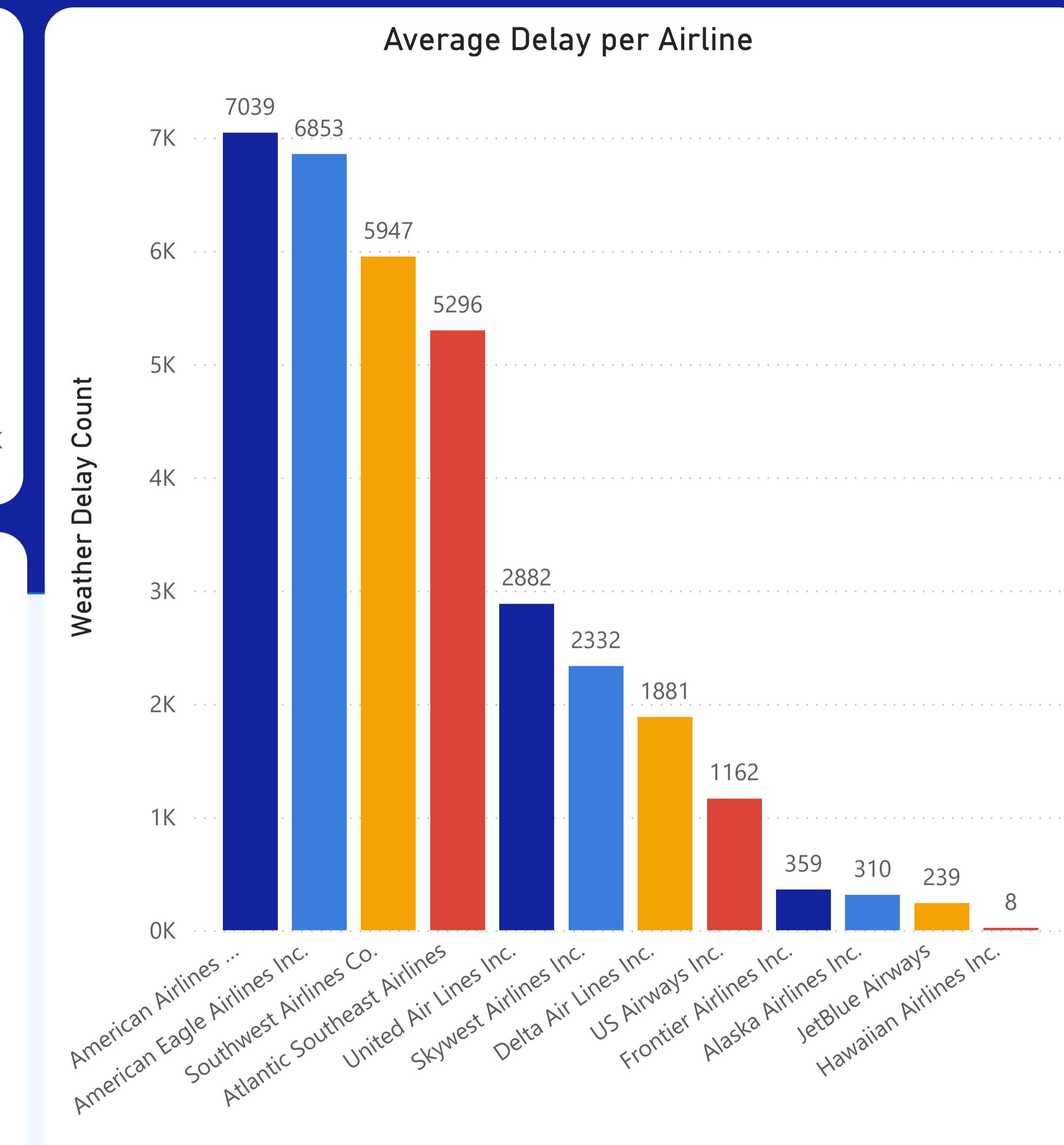
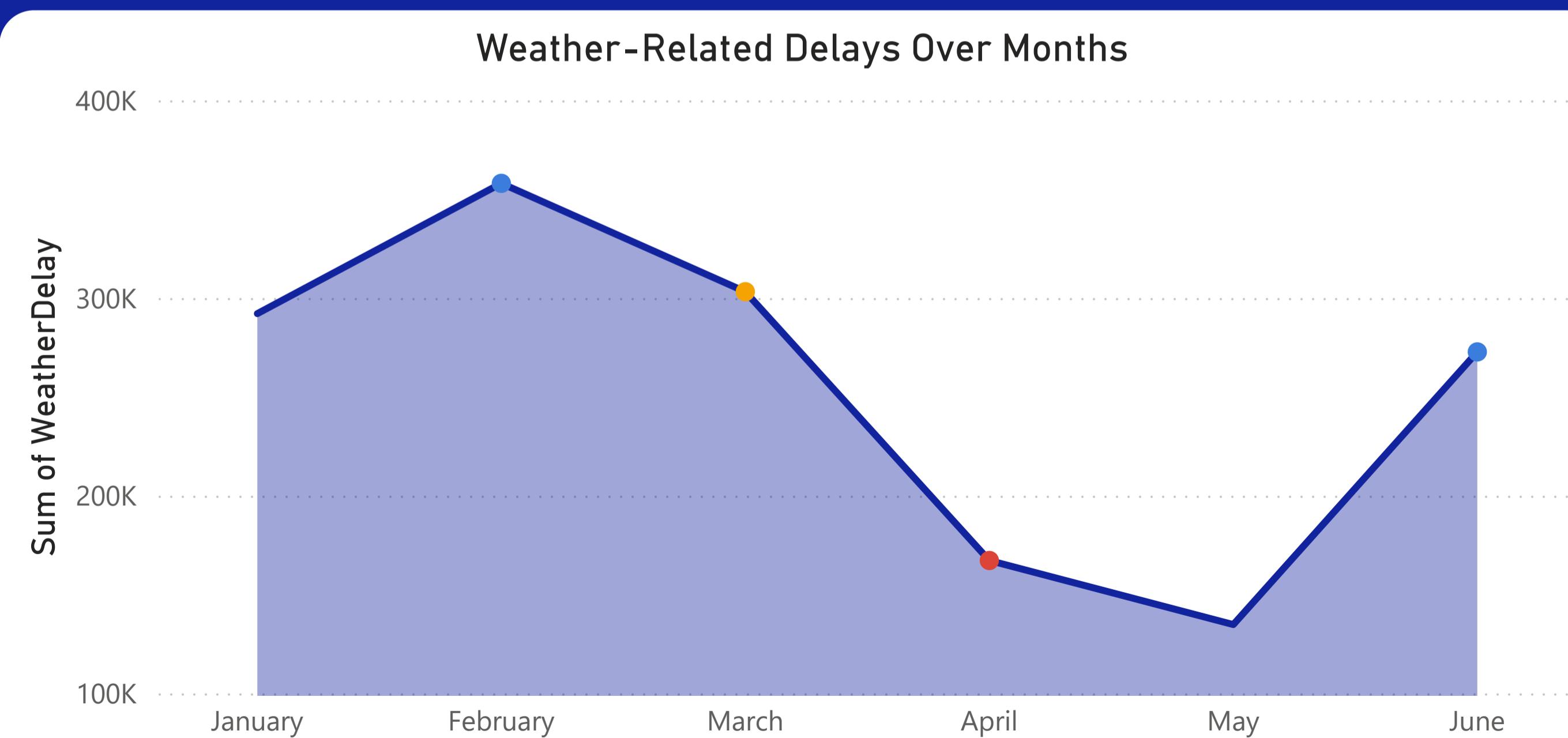
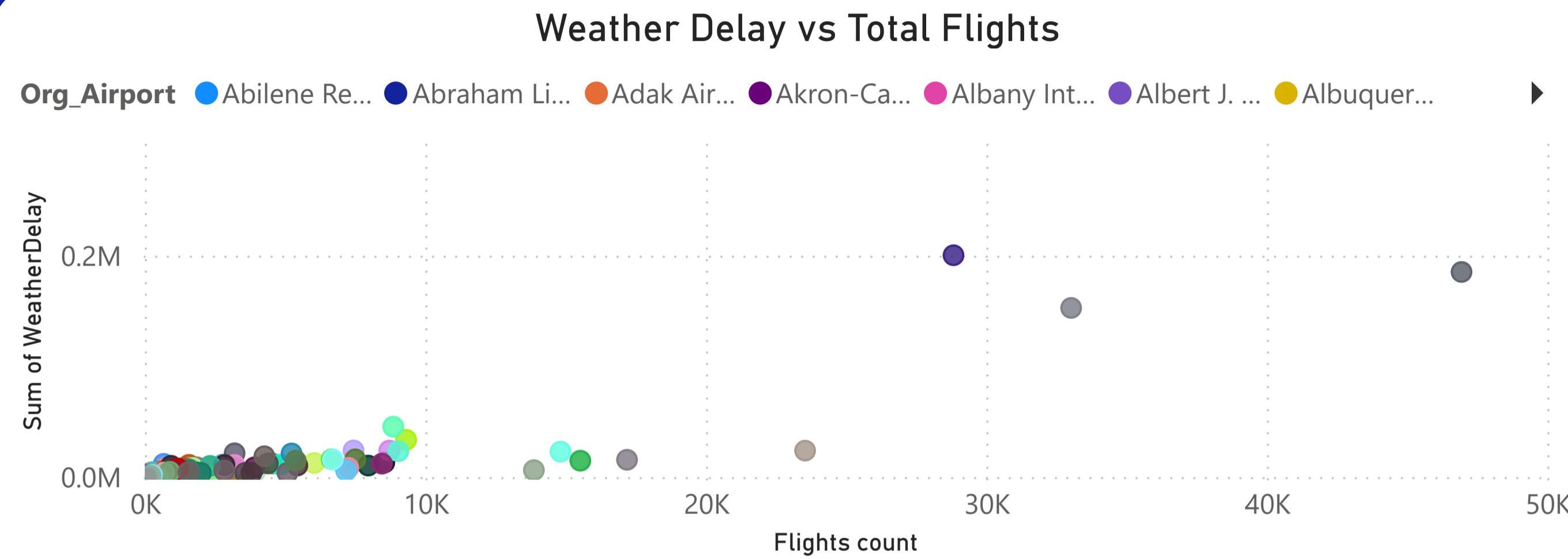
Month

Airline

2019

1

✓





AIRFLY INSIGHTS | Insights & Recommendations

Carrier delays contribute more to overall delays compared to NAS, weather, or security delays.

ORD (Chicago O'Hare) has the **maximum cancelled flights**, especially on the **ORD → LGA** route.

Southwest Airlines experiences the **highest carrier delays** and also records the **maximum number of cancellations**.

March shows the **highest carrier delays**, indicating seasonal operational challenges.

ORD - LGA has top origin to destination though it has most cancelled flights.

American Airlines Inc. has highest weather-related delays.

Frontier Airline Inc. has least above cancellation and average delay.

Hawaiian Airlines has least weather impact & lowest cancellations.

WYS Airport has very least delayed and cancelled flights.

February has highest average delayed flights and in **March** has highest cancelled flights.

Hawaiian Airlines has highest airline performance.