

Flights Operation Summary

YEAR
2015

1.54%
Cancellation Rate %

Number of Airports
322

Number of Flights
5.82M

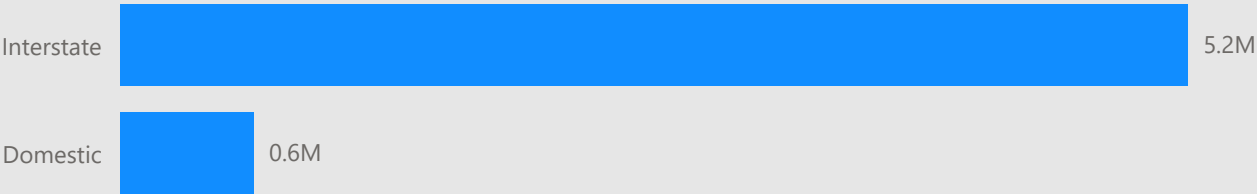
Number of Airlines
14

Number of States
54

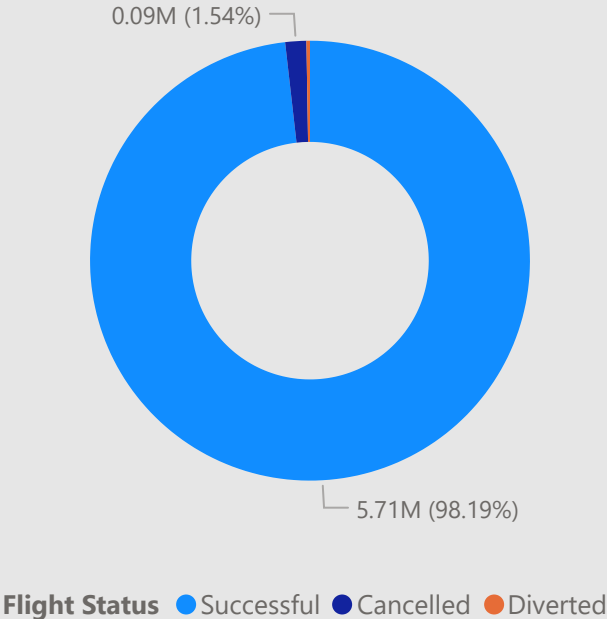
Number of Routes
4696

Number of Aircraft
4895

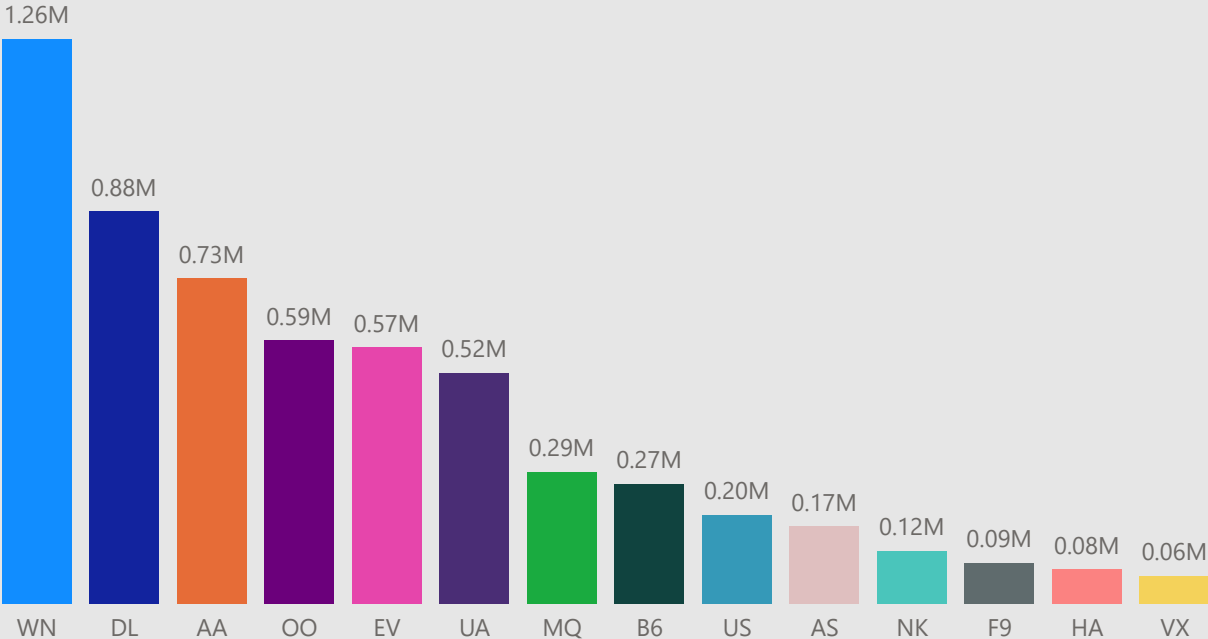
Amount of Flights by Flight Type



Flight Status Ratio

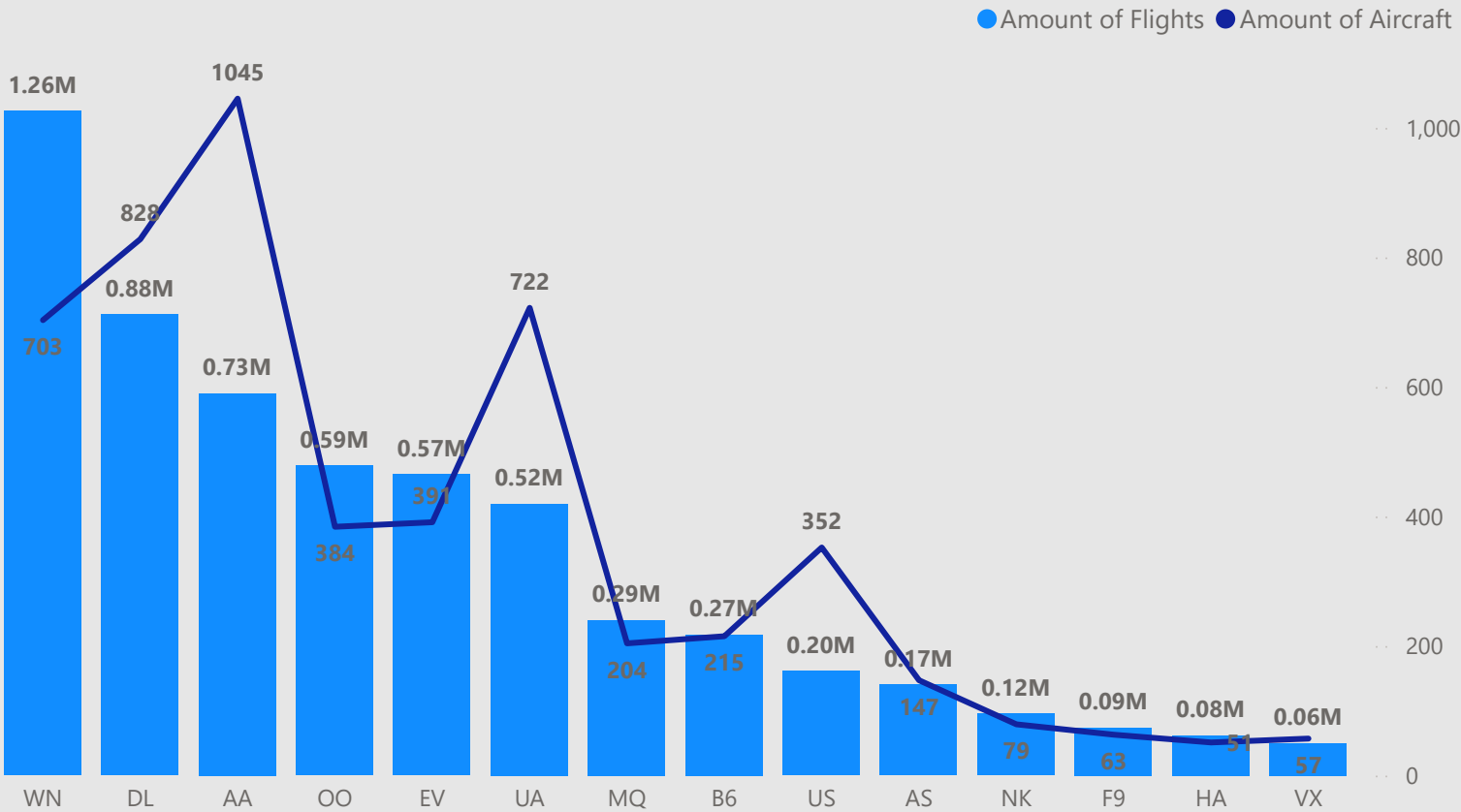


Amount of Flights by Airline

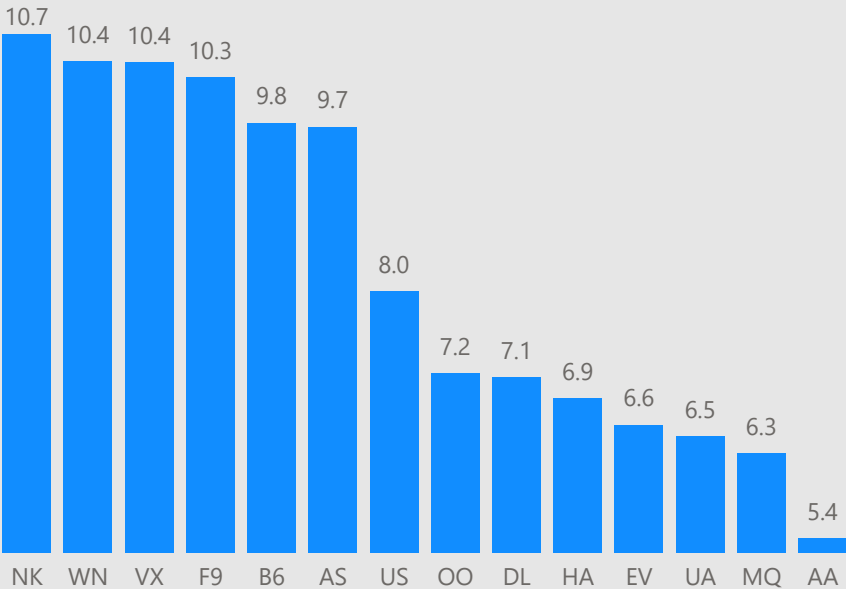


Efficiency Metrics

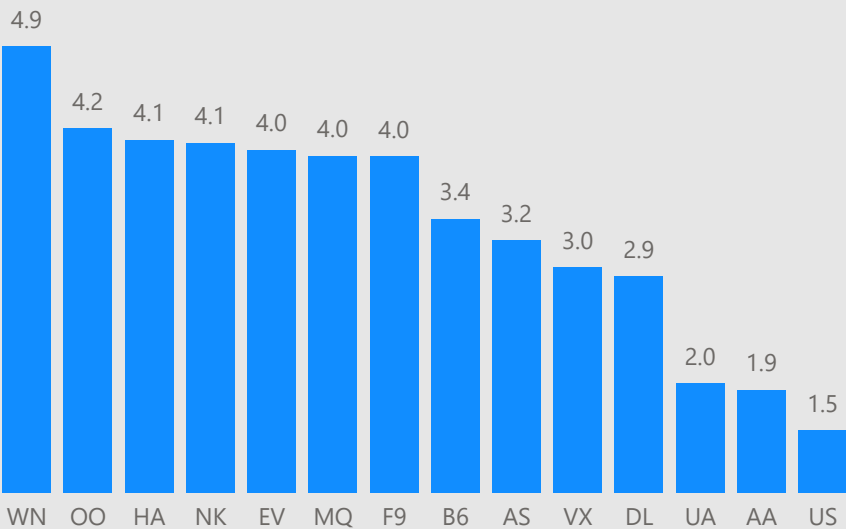
Amount of Flights by Airline vs Amount of Aircraft



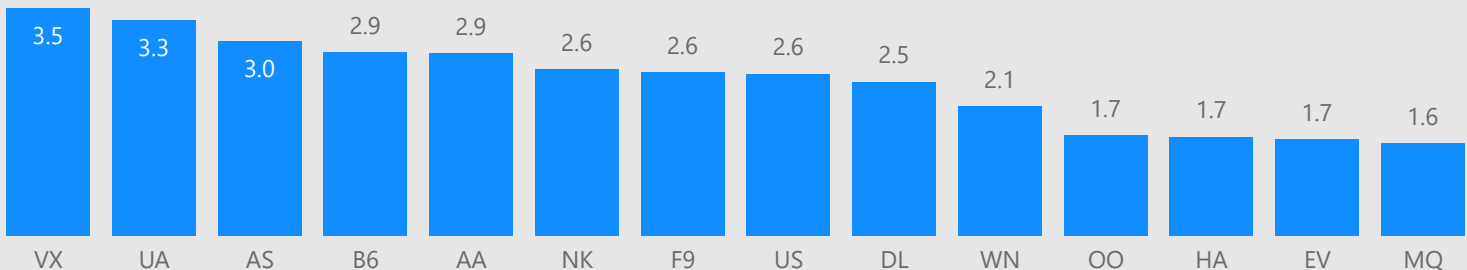
Aircraft Utilization: Daily Air Time (hour)



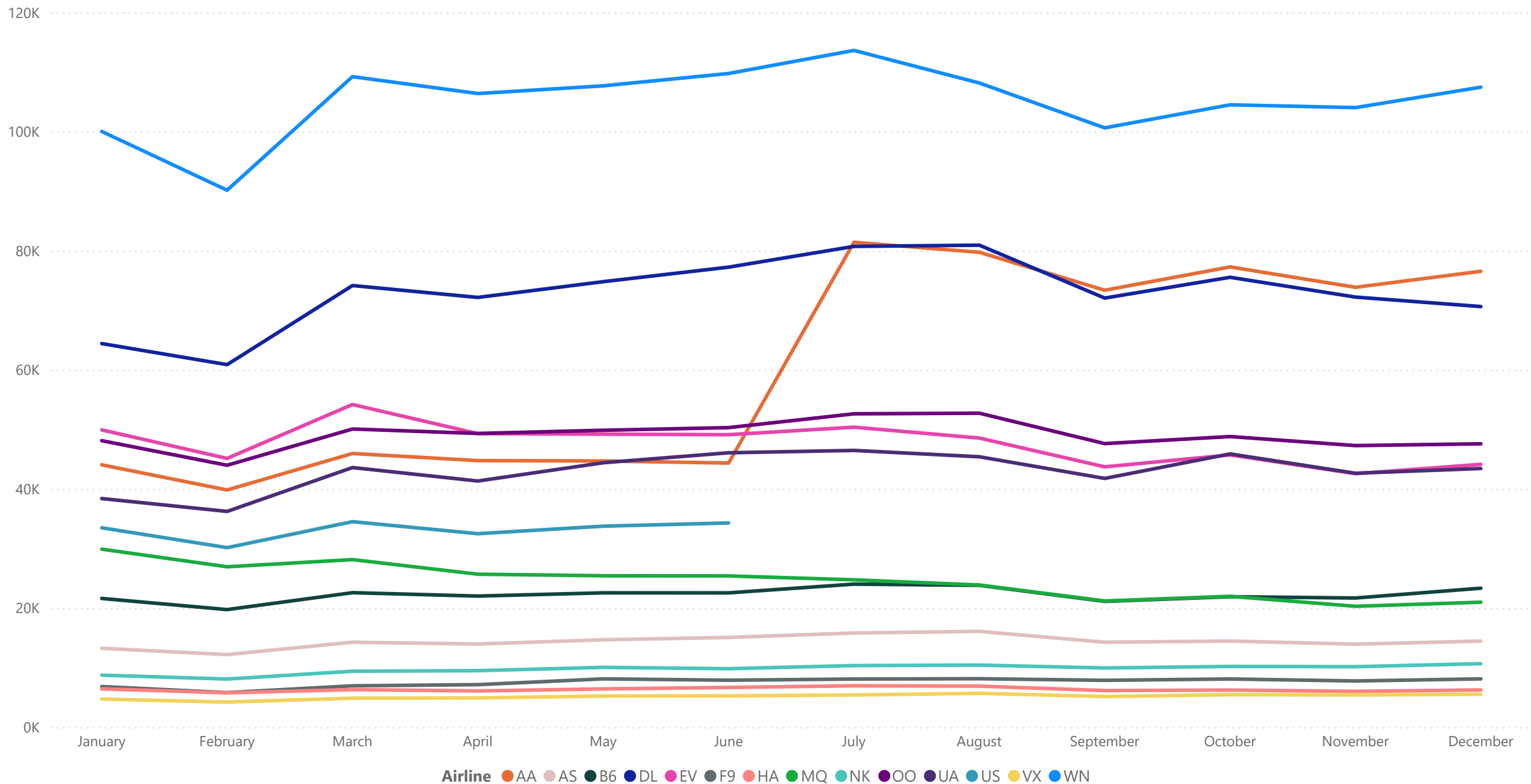
Daily Amount of Flights per Aircraft by Airline



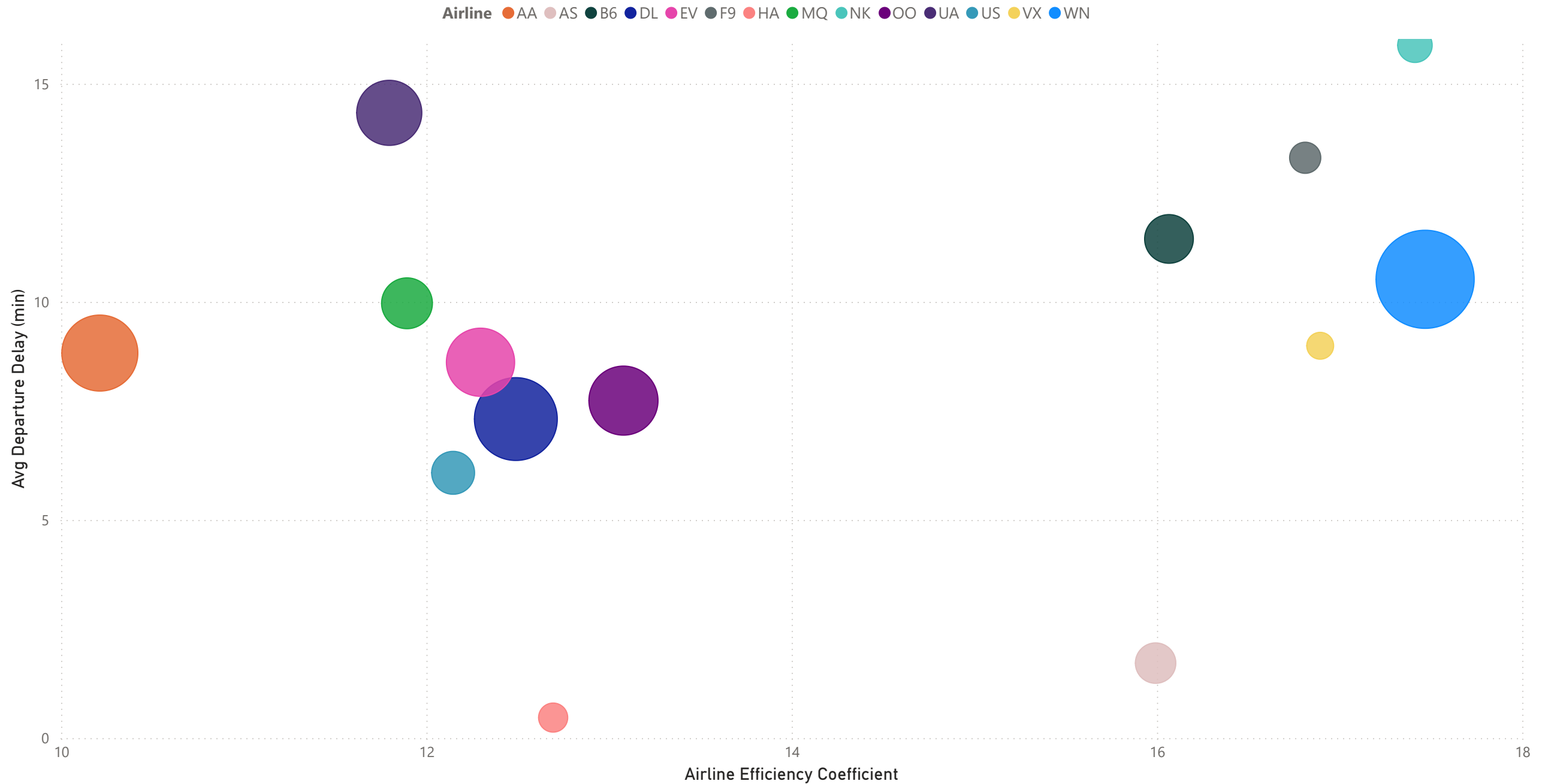
Avg Flight Duration by Airline (hour)



Amount of Flights by Airline per Month



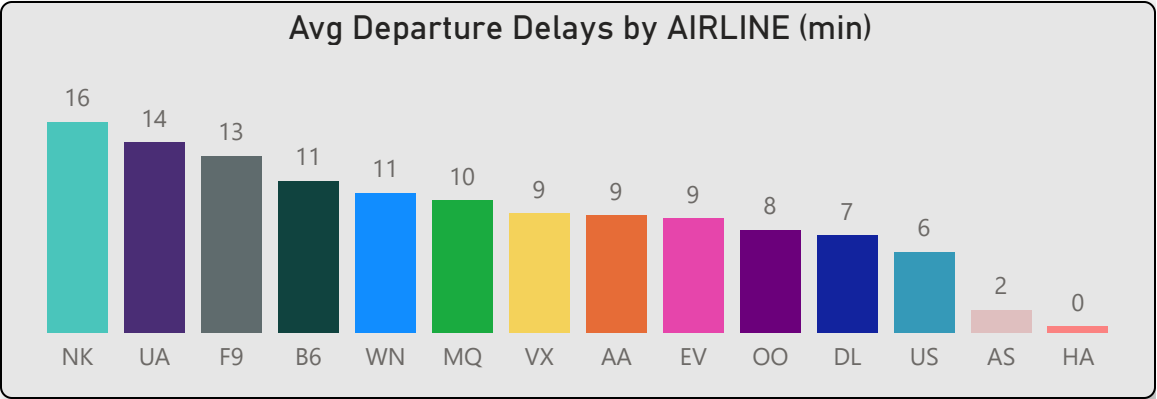
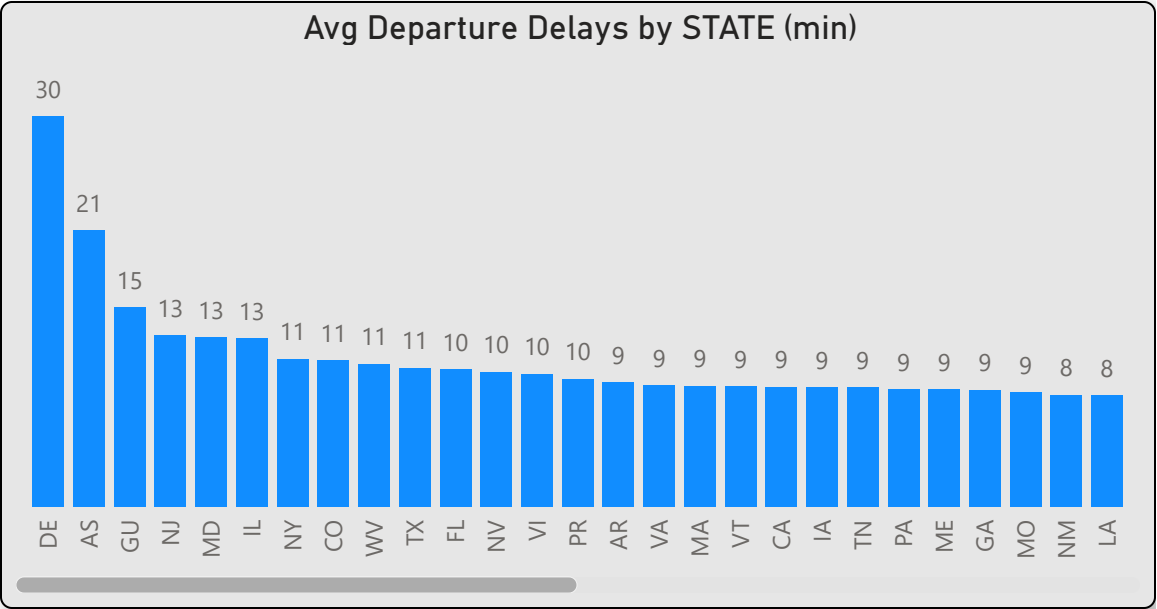
Efficiency & Delays



Departure Delays Analysis

Avg Departure Delay (min)	Avg Departure Delay per Flight Number (min)	Median Departure Delay (min)	Total Mins of Departure Delays	Total Number of Departure Delays
9.29	9.20	-2.00	53.11M	5,714K

Average Departure Delays by State (min)



Arrival Delays Analysis

Avg Arrival Delay
(min)

4.41

Avg Arrival Delay per Flight
Number (min)

4.85

Median Arrival Delay (min)

-5.00

Total Mins of Arrival Delays

25.18M

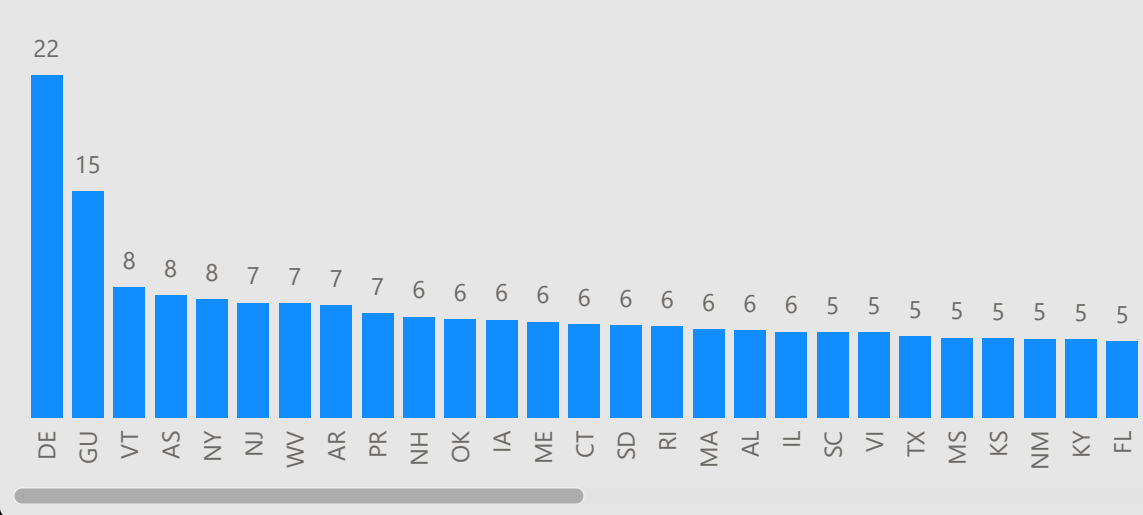
Total Number of Arrival
Delays

5,714K

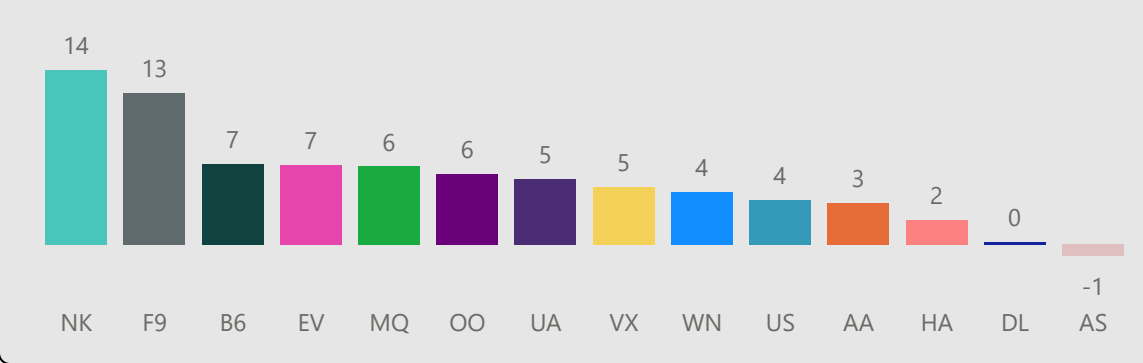
Average Arrival Delays by State (min)



Avg Arrival Delays by STATE (min)



Avg Arrival Delays by AIRLINE (min)



1888

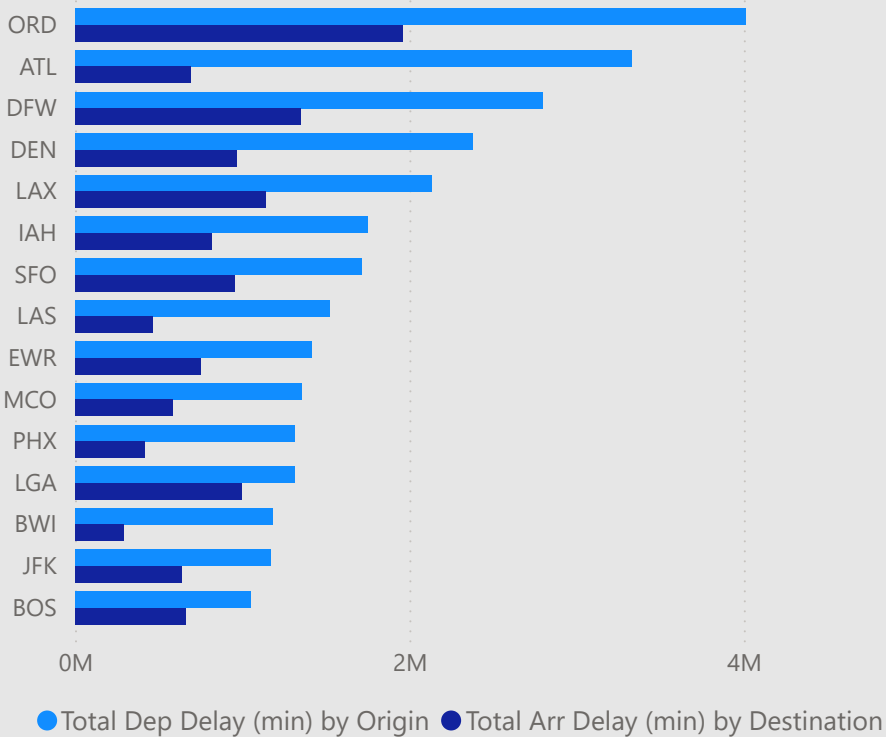
Heatmap: AVG Departure Delay(min) by Hour x Weekday																									
day_name	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
Sunday	52.70	73.46	107.60	80.99	-0.47	-3.51	-1.44	0.21	1.50	3.22	4.14	5.11	6.93	7.60	9.81	9.80	11.28	11.18	13.72	14.78	18.51	22.07	28.59	42.96	9.33
Monday	56.71	75.42	99.36	73.61	-0.03	-3.22	-1.26	1.06	3.26	5.31	6.13	8.08	9.18	10.11	11.74	11.62	13.09	12.63	15.35	16.98	20.90	25.49	31.16	49.90	10.76
Tuesday	55.71	70.80	84.59	76.99	-1.55	-3.80	-1.93	0.28	2.29	4.60	5.45	6.99	7.59	8.37	9.80	10.17	11.27	10.88	13.51	14.44	19.12	22.14	28.66	45.89	9.10
Wednesday	47.66	58.44	76.11	66.79	-2.40	-3.89	-2.12	0.31	1.93	3.92	5.17	6.35	7.68	7.82	9.74	9.62	10.74	10.68	13.44	14.14	18.21	20.61	25.73	40.39	8.60
Thursday	53.84	68.48	90.32	87.59	-2.50	-3.60	-2.06	0.22	1.78	4.04	4.61	6.63	7.88	8.88	10.60	11.09	12.55	12.45	15.99	16.23	21.25	25.07	30.64	44.62	9.88
Friday	53.02	65.70	81.10	70.21	-1.41	-3.44	-1.71	0.16	2.03	4.03	5.15	6.76	8.11	8.82	10.44	10.74	11.76	11.29	14.06	14.51	19.66	22.63	27.40	43.66	9.37
Saturday	39.46	49.14	69.86	46.20	-2.41	-3.43	-1.30	0.24	1.83	3.99	4.58	5.64	6.34	7.41	8.70	8.91	10.40	10.12	13.30	14.10	16.81	21.74	25.39	34.90	7.73
Total	51.60	66.45	87.81	71.71	-1.57	-3.57	-1.71	0.36	2.09	4.17	5.04	6.53	7.69	8.45	10.15	10.31	11.62	11.36	14.24	15.07	19.32	22.89	28.40	43.56	9.29

Heatmap: % Departure Delay more than 120 min by Hour x Weekday																										
day_name	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total	
Sunday	18.4%	25.4%	39.5%	29.8%	1.5%	0.1%	0.1%	0.1%	0.4%	0.8%	1.0%	1.0%	1.4%	1.5%	1.8%	1.8%	2.1%	2.1%	2.4%	2.7%	3.5%	4.8%	7.1%	12.1%	2.0%	
Monday	20.7%	25.0%	31.9%	27.5%	1.8%	0.1%	0.1%	0.1%	0.7%	1.1%	1.3%	1.7%	1.9%	2.1%	2.3%	2.2%	2.5%	2.6%	3.1%	3.6%	4.5%	6.2%	8.3%	14.9%	2.4%	
Tuesday	20.2%	25.5%	29.1%	25.7%	1.1%	0.0%	0.0%	0.1%	0.6%	1.0%	1.2%	1.3%	1.5%	1.7%	1.8%	1.9%	2.2%	2.1%	2.6%	3.1%	4.3%	5.5%	7.7%	14.5%	2.1%	
Wednesday	16.8%	20.2%	27.3%	22.1%	0.8%	0.0%	0.0%	0.2%	0.6%	0.9%	1.2%	1.3%	1.5%	1.5%	1.8%	1.8%	2.0%	2.1%	2.3%	2.8%	3.8%	4.8%	6.3%	11.3%	1.9%	
Thursday	19.5%	23.5%	31.0%	25.0%	0.8%	0.1%	0.0%	0.1%	0.5%	0.8%	0.9%	1.3%	1.5%	1.7%	1.8%	1.9%	2.1%	2.3%	2.8%	3.0%	4.3%	5.6%	7.8%	12.6%	2.1%	
Friday	19.2%	22.8%	27.0%	24.1%	0.9%	0.0%	0.0%	0.1%	0.4%	0.8%	1.0%	1.2%	1.5%	1.6%	1.7%	1.7%	1.9%	1.9%	2.3%	2.5%	3.9%	5.1%	6.7%	13.2%	1.9%	
Saturday	13.2%	15.0%	21.1%	12.2%	0.6%	0.1%	0.1%	0.1%	0.5%	0.9%	1.0%	1.2%	1.2%	1.4%	1.6%	1.7%	1.9%	2.1%	2.6%	2.9%	3.4%	5.1%	6.9%	10.5%	1.7%	
Total	18.4%	22.7%	29.8%	23.8%	1.1%	0.1%	0.0%	0.1%	0.5%	0.9%	1.1%	1.3%	1.5%	1.6%	1.8%	1.9%	2.1%	2.2%	2.6%	2.9%	3.9%	5.3%	7.3%	12.8%	2.0%	

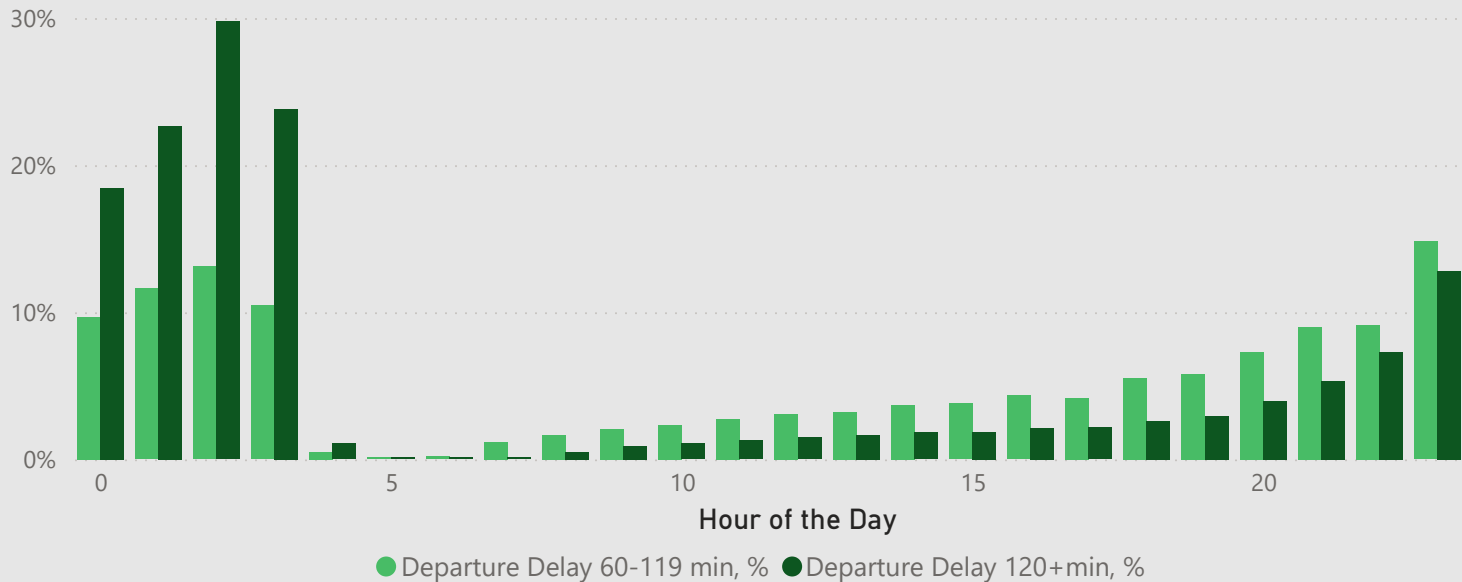
[illegible]

Airports & Time

Airports by Total Departure Delay and Total Arrival Delay, min (TOP 15)



Severe Departure Delay % by Hour (60–119, 120+ min)



AIRLINE

- ☐ Select all
- ☐ AA
- ☐ AS
- ☐ B6
- ☐ DL
- ☐ EV
- ☐ F9
- ☐ HA
- ☐ MQ

3.69%

Departure Delay 60-119 min, %

2.0%

Departure Delay 120+min, %

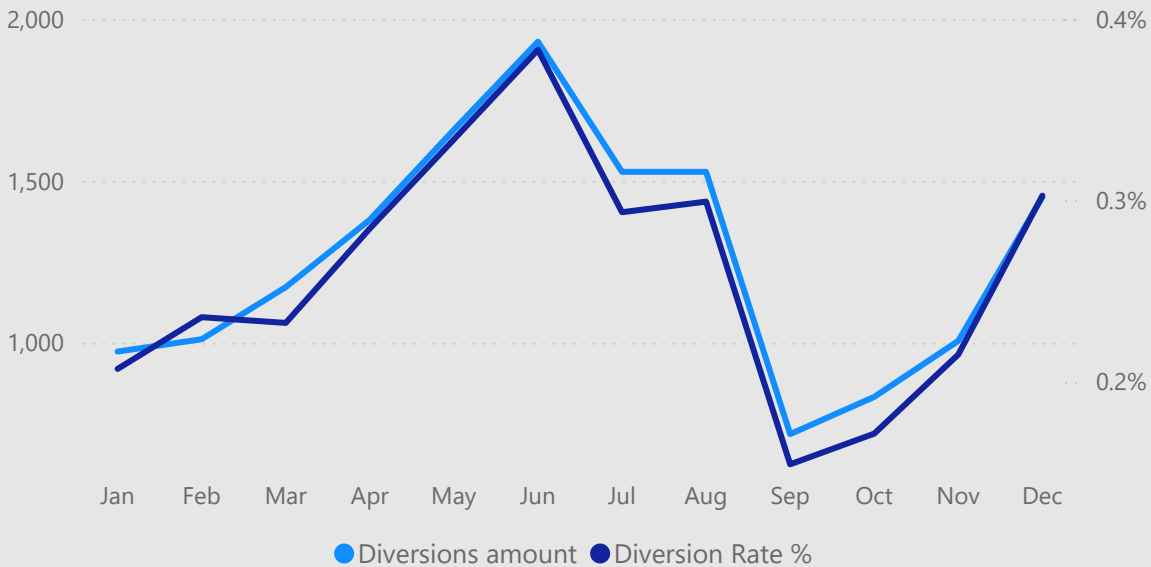
MONTH

- ☐ Select all
- ☐ Jan
- ☐ Feb
- ☐ Mar
- ☐ Apr
- ☐ May
- ☐ Jun
- ☐ Jul
- ☐ Aug
- ☐ Sep
- ☐ Oct
- ☐ Nov
- ☐ Dec

0.26%

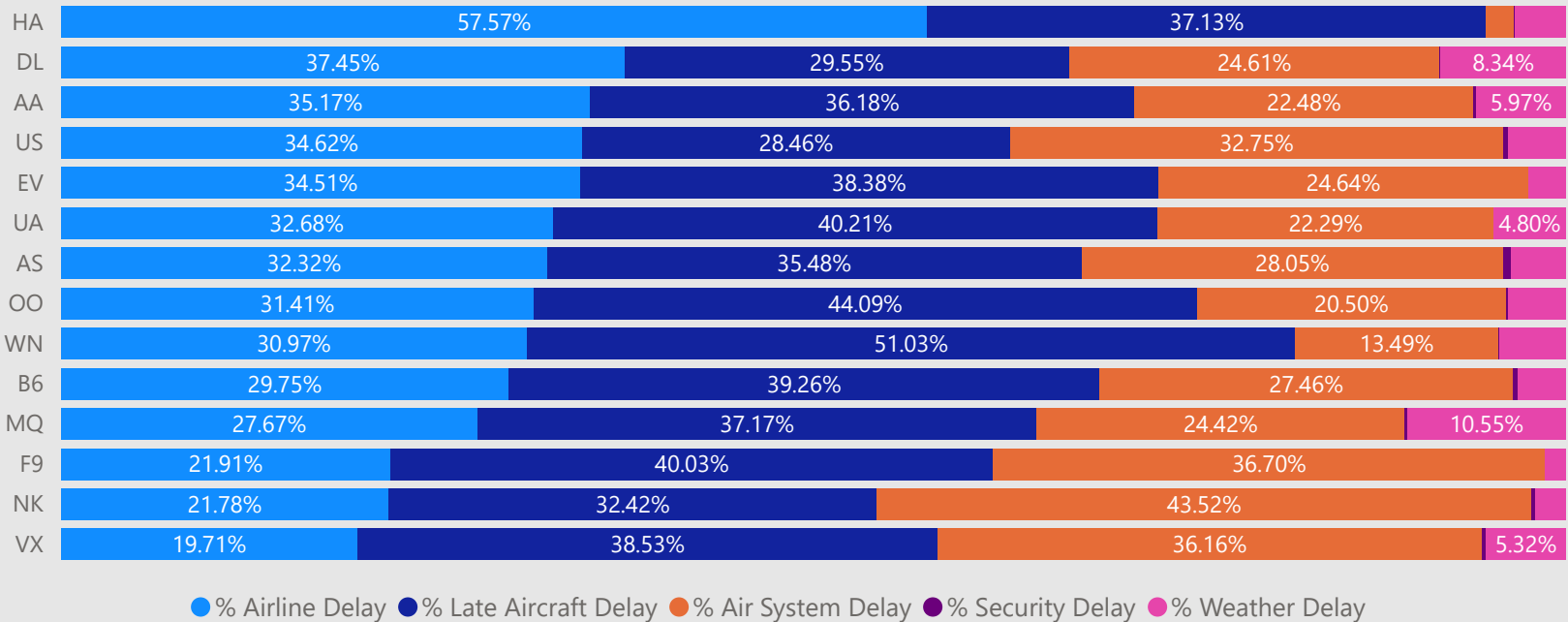
Diversion Rate %

Diversions by Month



Causes & Reliability

Share of Delay Minutes by Cause (within Airline), %



Avg Departure Delay (min)

9.29

Avg Arrival Delay (min)

4.41

Delayed Flights

5,714K

Total Delay Mins

53.11M

MONTH

Jan

Jul

Feb

Aug

Mar

Sep

Apr

Oct

May

Nov

Jun

Dec

AIRLINE

☐ Select all

☐ AA

☐ AS

☐ B6

☐ DL

☐ EV

☐ F9

☐ HA

☐ MQ

☐ NK

☐ OO

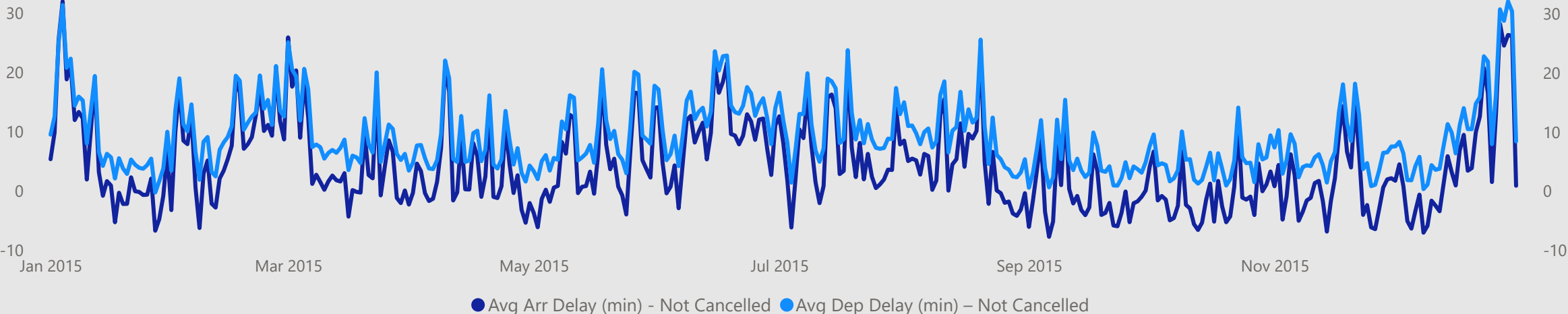
☐ UA

☐ US

☐ VX

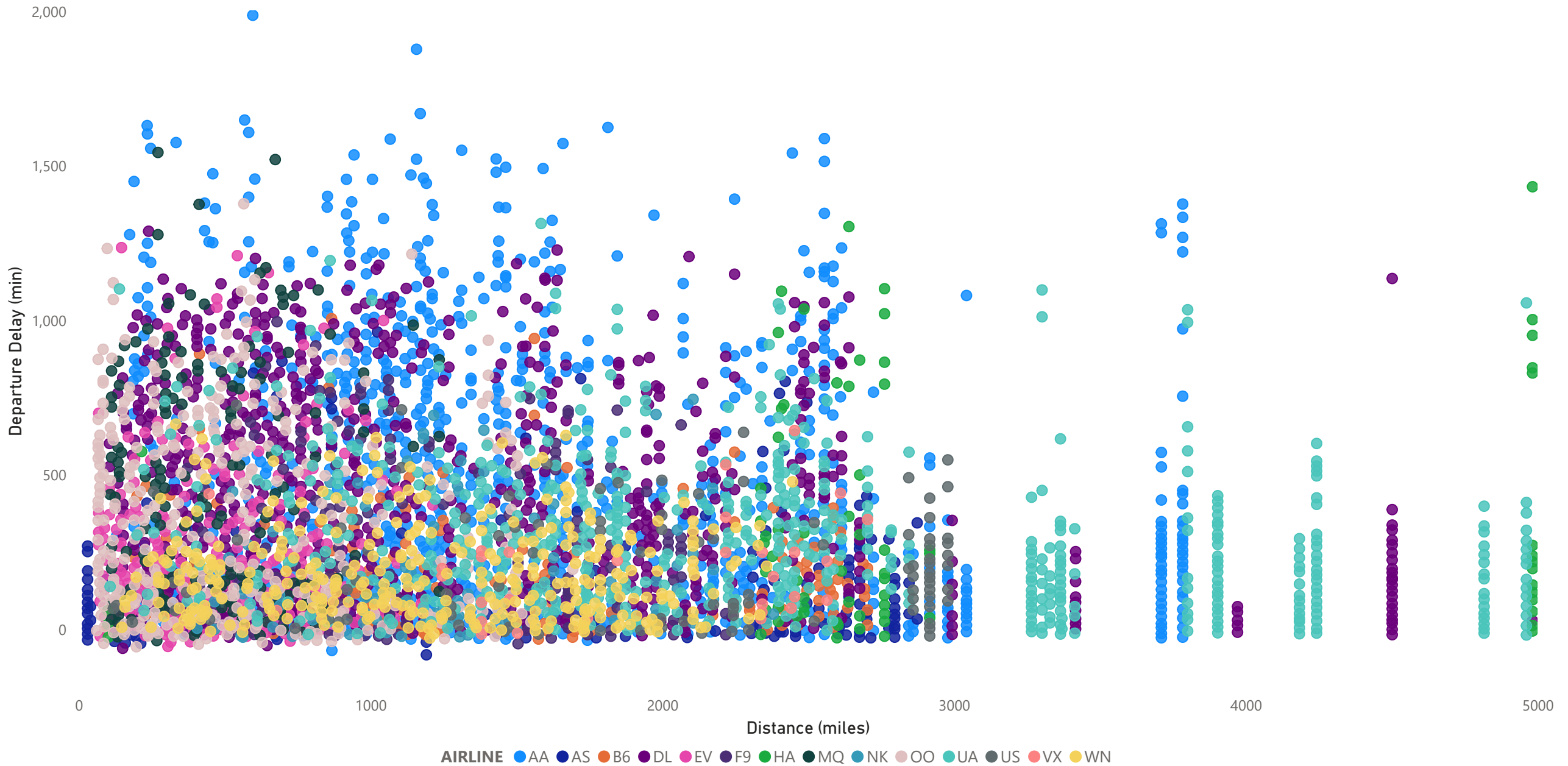
☐ WN

Avg Arrival Delay (min) and Avg Departure Delay (min) by Months



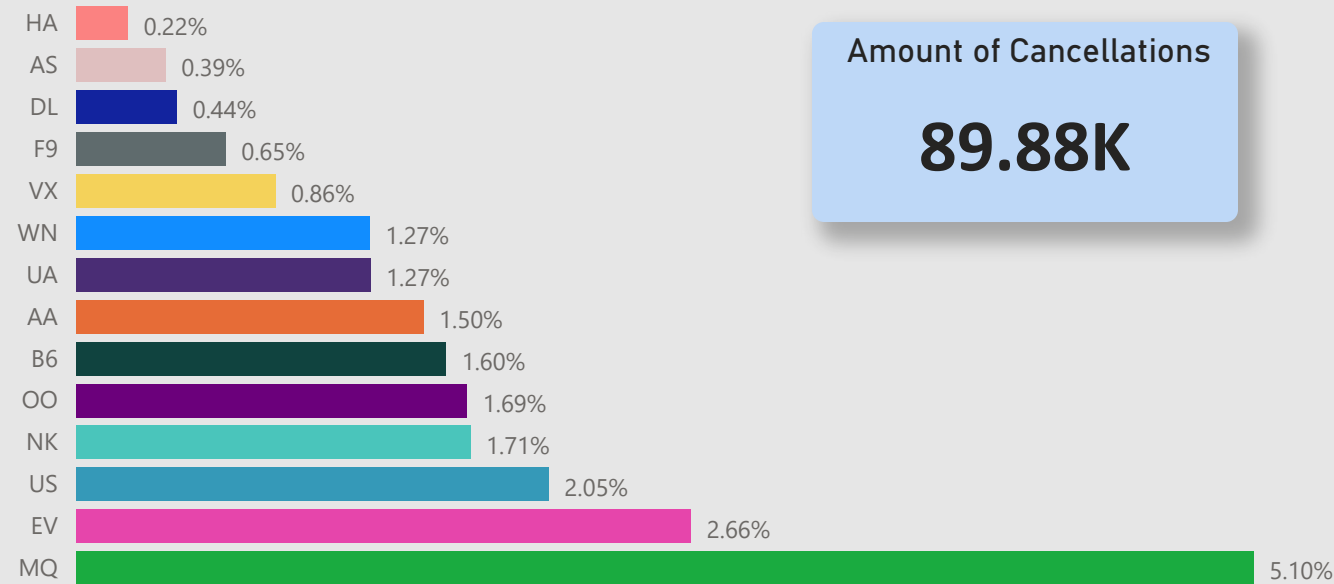
Delay & Distance

Departure Delay vs Flight Distance by Airline

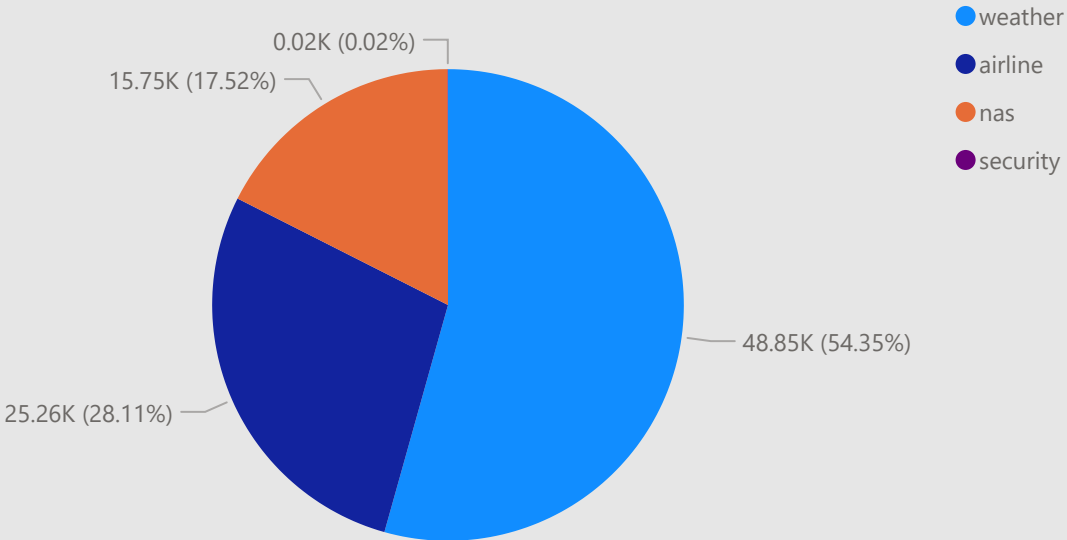


Cancellations

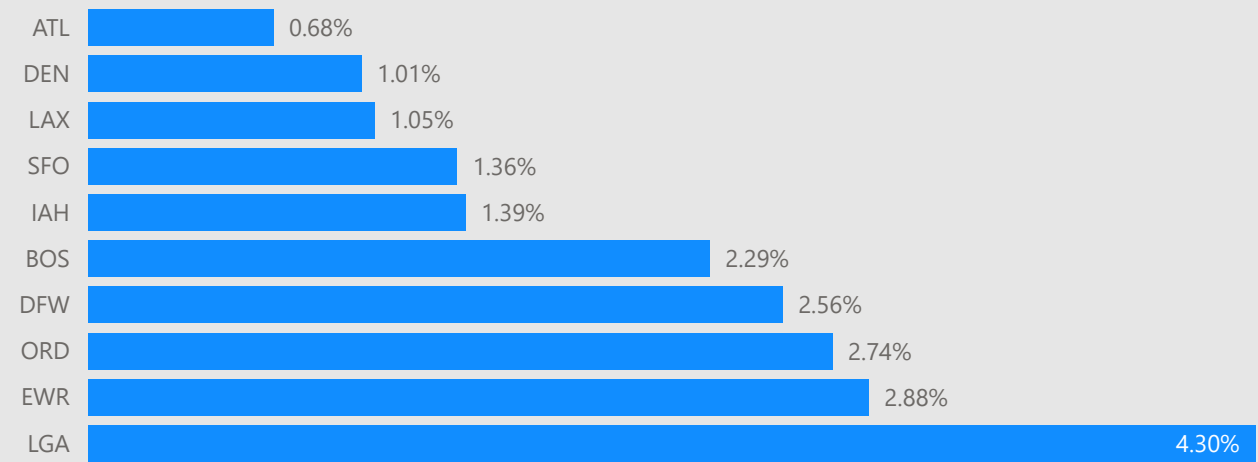
Cancellations by Airline



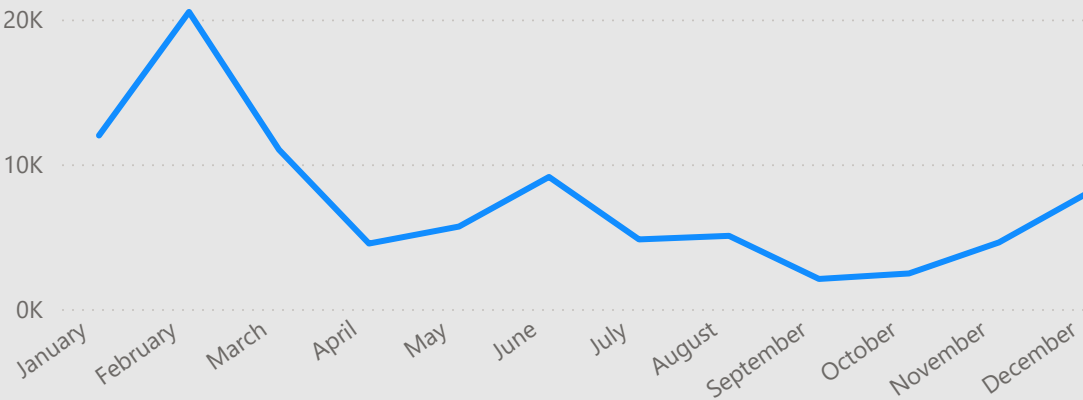
Cancellation Causes



Cancellation by Airport (Top 10)



Amount of Cancellations per Month



Flight Performance Overview

Flight Type ×

Domestic

CANCELLED ×

0

Flight category ×

2. Medium Flight

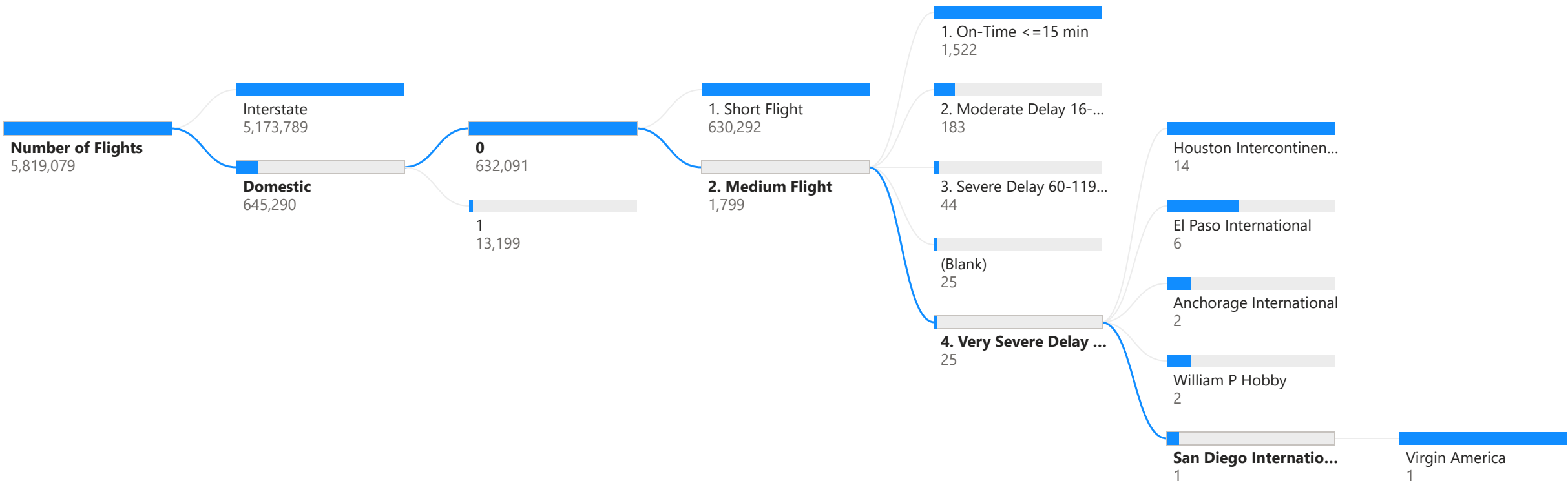
Departure Delay ... ×

4. Very Severe Delay 1...

Airport ×

San Diego Internation...

Airline ×



Airline	Airline name
VX	Virgin America
US	US Airways Inc.
UA	United Air Lines Inc.
NK	Spirit Air Lines
WN	Southwest Airlines Co.
OO	Skywest Airlines Inc.
B6	JetBlue Airways
HA	Hawaiian Airlines Inc.
F9	Frontier Airlines Inc.
DL	Delta Air Lines Inc.
EV	Atlantic Southeast Airlines
MQ	American Eagle Airlines Inc.
AA	American Airlines Inc.
AS	Alaska Airlines Inc.